AYDOGAN OZCAN, Ph.D.

Chancellor's Professor & Volgenau Chair for Engineering Innovation - UCLA HHMI Professor - Howard Hughes Medical Institute

Curriculum Vitae

Office Address: UCLA Electrical & Computer Engineering Department, Engineering IV Building

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Research Webpages: http://org.ee.ucla.edu/ HHMI Profile

EDUCATION

2005, Ph.D. Stanford University, Stanford, CA, USA

Electrical Engineering Department

2002, M.S. Stanford University, Stanford, CA, USA

Electrical Engineering Department

2000, B.S. Bilkent University, Ankara, Turkey

Electrical and Electronics Engineering Department

ACADEMIC APPOINTMENTS - RESEARCH EXPERIENCE

- 07/2019 present, Volgenau Chair for Engineering Innovation, University of California, Los Angeles, Electrical & Computer Engineering Department, Los Angeles CA, USA
- 07/2014 present, HHMI Professor, The Howard Hughes Medical Institute (HHMI)
- 07/2013 present, Chancellor's Professor, University of California, Los Angeles, Electrical & Computer Engineering Department, Los Angeles CA, USA
- 07/2013 present, Professor, University of California, Los Angeles, Electrical & Computer Engineering Department, Los Angeles CA, USA
- 07/2013 present, Professor, University of California, Los Angeles, Bioengineering Department, Los Angeles CA, USA (joint appointment)
- 07/2013 present, Professor, University of California, Los Angeles, Department of Surgery, Los Angeles CA, USA (joint appointment)
- 07/2013-present, Associate Director, California NanoSystems Institute (CNSI), University of California, Los Angeles, CA, USA
- 07/2011 07/2013, Associate Professor (tenured), University of California, Los Angeles, Electrical Engineering Department, Los Angeles CA, USA
- 07/2011 07/2013, Associate Professor, University of California, Los Angeles, Bioengineering Department, Los Angeles CA, USA (joint appointment)
- 07/2011 07/2013, Associate Professor, University of California, Los Angeles, Department of Surgery, Los Angeles CA, USA (joint appointment)
- 07/2010 07/2011, Assistant Professor, University of California, Los Angeles, Department of Surgery, Los Angeles CA, USA (joint appointment)
- 07/2007 07/2011, Assistant Professor, University of California, Los Angeles, Electrical Engineering Department, Los Angeles CA, USA

- 01/2006 07/2007, Research Faculty Instructor, Harvard Medical School, Massachusetts General Hospital, Wellman Center for Photomedicine, Boston MA, USA
- 06/2005 01/2006, Post-doctoral Fellow, Stanford University, Electrical Engineering Department, CA, USA
- 09/2000 06/2005, Research Assistant, Stanford University, Electrical Engineering Department, CA, USA

PROFESSIONAL SOCIETIES

- The National Academy of Inventors, Fellow & Lifetime Member
- The American Association for the Advancement of Science (AAAS), Fellow & Lifetime Member
- The International Society for Optical Engineering (SPIE), Fellow & Lifetime Member
- Optical Society of America (OSA), Fellow & Lifetime Member
- Institute of Electrical and Electronics Engineers (IEEE), Fellow
- IEEE Photonics Society, Fellow Member
- IEEE Engineering in Medicine and Biology Society (EMBS), Fellow Member
- The American Institute for Medical and Biological Engineering (AIMBE), Fellow
- Royal Society of Chemistry (RSC), Fellow
- American Physical Society (APS), Fellow & Lifetime Member

MAJOR AWARDS & HONORS

Federal Awards & Honors

- Presidential Early Career Award for Scientists and Engineers (PECASE), 2011
- Army Research Office (ARO), Young Investigator Award, 2011
- NSF CAREER Award, 2010
- NIH Director's New Innovator Award, 2009
- Office of Naval Research (ONR), Young Investigator Award, 2009

Professional Society Awards

- Dennis Gabor Award, The International Society for Optical Engineering, 2023
- Joseph Fraunhofer Award & Robert M. Burley Prize, Optica (OSA), 2022
- Fellow, Asia-Pacific Artificial Intelligence Association (AAIA), 2021
- Fellow, American Physical Society (APS), 2019
- Fellow, The National Academy of Inventors (NAI), 2018
- Fellow, The American Association for the Advancement of Science (AAAS), 2018
- Fellow, The Royal Society of Chemistry (RSC), 2017
- Fellow, IEEE Institute of Electrical and Electronics Engineers, 2017
- Fellow, American Institute for Medical and Biological Engineering (AIMBE), 2017
- Distinguished Lecturer Award, IEEE Photonics Society, 2016
- ICO Prize, The International Commission for Optics (ICO), 2015
- Fellow, Optical Society of America (OSA), 2014
- Fellow, The International Society for Optical Engineering (SPIE), 2013
- *Biophotonics Technology Innovator Award*, The International Society for Optical Engineering (SPIE), 2013 {Inaugural Recipient}
- *Early Career Achievement Award*, The International Society for Optical Engineering (SPIE), 2011
- IEEE Photonics Society Young Investigator Award, 2009

Foundation Awards & Honors

- Guggenheim Fellow, The John Simon Guggenheim Memorial Foundation, 2017
- *Rahmi M. Koç Science Medal*, Koç University & Vehbi Koç Foundation, 2016 {Inaugural Recipient}
- Ernst Abbe Lecture and Award, Carl Zeiss Foundation, 2016
- Vodafone Americas Foundation, Wireless Innovation Award, 2016
- Mary Kay Foundation, Cancer Research Award, 2016
- *National Academy of Engineering (NAE)*, The Grainger Foundation Frontiers of Engineering Award, 2012
- Rockefeller Foundation and mHealth Alliance, Innovators Challenge Winner, 2011
- Bill & Melinda Gates Foundation, Grand Challenges Explorations Award, 2010
- Vodafone Americas Foundation, Wireless Innovation Award, 2009
- Okawa Foundation Award, Japan, 2008

Other Awards & Honors

- V.M. Watanabe Excellence in Research Award, UCLA, 2024
- ITK Bahattin Tatiş Science Award, 2024
- Highly Cited Researcher, Web of Science Clarivate, 2020, 2021, 2022, 2023
- Researcher of the Year Award, The Southern California Biomedical Council (SoCalBio), 2020
- Blavatnik Awards, National Award Finalist, 2020
- Volgenau Chair for Engineering Innovation, UCLA, 2019
- UCLA Health Innovation, Med-Tech Challenge Winner, 2019
- UCLA Innovation Fund Competition Winner, 2018
- The Stillman Lecture, University of Illinois, Urbana-Champaign (UIUC), 2018
- TASSA President's Service Award, TASSA, 2018
- Turkish Science Academy, Member, 2017
- Biocom Life Science Catalyst Award, 2017
- *U.S. National Academy of Engineering (NAE)*, EU-US Frontiers of Engineering Symposium Committee Member, Session Chair, 2016
- U.S. National Academy of Sciences, Arab-American Frontiers of Science Fellowship, 2016
- Blavatnik Awards, National Award Finalist, 2016
- *Technology Pioneer, The World Economic Forum*, 2015 {Holomic LLC is selected as a Technology Pioneer, among the most promising early-stage companies in the world}
- Postdoctoral Scholars Mentoring Award, UCLA, 2015
- *U.S. National Academy of Sciences*, Arab-American Frontiers of Science, Engineering, and Medicine Symposium, Invited Speaker, 2015
- The President's Cancer Panel, The Connected Cancer Patient Workshop, Invited Speaker and Panelist, 2015
- The White House Office of Science and Technology Policy, Microbiome Workshop, Invited Participant and Panelist, 2015
- NIH Common Fund, Strategic Planning Workshop, Invited Participant and Panelist, 2015
- *The Kavli Foundation*, *Kavli Futures Symposium on Microbiome*, Invited Participant and Panelist, 2015
- Microscopy Today Innovation Award, 2015
- Blavatnik Awards, National Award Finalist, 2015
- Best Paper Award, SPIE Translational Research Symposium (Photonics West Conference), 2015
- HHMI Professor, The Howard Hughes Medical Institute (HHMI), 2014

- *National Academy of Engineering (NAE)*, Japan-America Frontiers of Engineering Symposium Invited Participant, 2014
- Blavatnik Awards, National Award Finalist, 2014
- Chancellor's Professorship (UCLA), 2013
- Microscopy Today Innovation Award, 2013
- *JALA Ten* (presented by the Journal of Laboratory Automation), Selected Among 10 Breakthrough Technologies of The Year, 2013
- World Technology Award on Health & Medicine, presented by the World Technology Network in association with TIME, CNN, AAAS, Science, Technology Review, Fortune and Kurzweil, 2012
- Popular Science, Brilliant 10 Award, 2012
- IEEE NANOMED Conference, Best Paper Award, 2012
- The Scientist, Top Innovation of the Year, 2011
- Regional Health Care Innovation Challenge Award, The von Liebig Center, UCSD, 2011
- National Academy of Engineering (NAE), U.S. Frontiers of Engineering Symposium Invited Participant, 2011
- Innovation Competition Award, World Reconstruction Conference, Geneva, 2011
- Outstanding Young Person of the Year Medical Innovations, JCI (Junior Chamber International) Turkey, 2011
- *LAUNCH Health Innovation Award*, presented by NASA, USAID, Department of State, and NIKE, 2010
- National Geographic Emerging Explorer Award, 2010
- Popular Mechanics Breakthrough Award, 2010
- Netexplorateur Award, Netexplorateur Observatory and Forum, France, 2010
- PopTech Science and Public Leaders Fellowship, 2010
- University of Southern California Body Computing Slam Prize, 2010
- MIT's Technology Review Magazine, TR 35 Award, 2009
- Outstanding paper award, Annual Meeting of Biomedical Engineering Society (BMES), 2008
- Outstanding paper award, Gordon Research Conference, Lasers in Medicine & Biology, 2006.
- Turkish Ministry of Education, Presidential Fellowship, 1996 (declined)

EDITORIAL BOARDS & PROFESSIONAL SERVICE

- 2024-present, Editorial Board Member, Biophotonics Discovery (SPIE)
- 2024, Editor, Special Issue on Biomedical Imaging: Low-cost and portable imaging systems for rural and low-cost environments, *Current Opinion in Biomedical Engineering* (Elsevier)
- 2024, Program Committee Member, Optica Conference on Lasers and Electro-Optics (CLEO)
- 2023, Session Chair, Optica Frontiers of Optics Conference, Machine Learning Theme
- 2023, Session Chair, IEEE Nanotechnology Materials and Devices Conference (IEEE NMDC)
- 2023-present, Program Committee Member, "Computational Optical Imaging and Artificial Intelligence in Biomedical Sciences", SPIE Photonics West Conference
- 2023, Program Committee Member, IEEE International Conference on Computational Photography
- 2023, Session Chair, SPIE Digital Optical Technologies Conference
- 2023, Program Committee Member, IEEE Photonics Conference
- 2022-present, Biomedical Imaging Section Editor, *Current Opinion in Biomedical Engineering* (Elsevier)
- 2022-current, Committee Member, SPIE Digital Optical Technologies Conference

- 2022-current, Guest Editor, Holography Collection, Scientific Reports
- 2022, Organizer & Chair, International Workshop on Photonics, Neuroscience and AI, at UCLA
- 2022, OSA/Optica Frontiers of Optics Conference, Machine Learning Theme Organizer
- 2022, Program Committee Member, IEEE International Conference on Computational Photography
- 2022-present, Program Committee Member, "AI and Optical Data Sciences", SPIE Photonics West Conference
- 2021-present, Editorial Board Member, *Journal of Nanobiotechnology* (Springer Nature)
- 2021-present, Senior Advisory Panel Member, JPhys Photonics (IOP)
- 2021, Guest Editor, Biosensors and Bioelectronics, Special Issue on Molecular & Cell Imaging
- 2021, OSA/Optica Frontiers of Optics Conference, Machine Learning Theme Organizer
- 2021, Session Chair, IEEE Photonics Conference
- 2020-2021, Program Committee Member, Biosensors Congress, Elsevier
- 2020-2021, Guest Editor, *Biosensors and Bioelectronics*, Special Issue on COVID-19 Biosensing Technologies
- 2020, 2021, Award Committee Chair, Rising Stars of Light Awards, *Light: Science & Applications*
- 2020-present, Editorial Board Member, ACS Photonics
- 2020-present, Editor in Chief, *eLight* (Springer Nature)
- 2020-present, Faculty Executive Committee Member, UCLA School of Engineering
- 2020, Program Committee Member, IEEE International Conference on Computational Photography
- 2019-present, Conference Chair & Session Chair "Emerging Topics in Artificial Intelligence", SPIE Optics + Photonics Conference
- 2019, Program Committee Member, OSA Computational Optical Sensing and Imaging (COSI) Conference
- 2019, Program Committee Member, IEEE International Conference on Computational Photography
- 2019-2020, Committee Member, SPIE Biophotonics Technology Achievement Award Committee
- 2019, Session Chair, International Vacuum Congress (IVC)
- 2019, Session Chair, ECI Advances in Optics for Biotechnology, Medicine and Surgery Conference
- 2019, AIMBE Fellow Selection Subcommittee
- 2019, Program Committee Member, "Optical Data Science", SPIE Photonics West Conference
- 2019, Program Committee Member, OSA Conference on Lasers and Electro-optics (CLEO)
- 2019, Program Committee Member, "Label-free Biomedical Imaging and Sensing", SPIE Photonics West Conference
- 2018-current, Member of the Board of Trustees, Koç University, Turkey
- 2018, Program Committee Member, IEEE International Conference on Computational Photography
- 2018, Program Committee Member, Session Chair, OSA Computational Optical Sensing and Imaging (COSI) Conference
- 2018, Session Chair Discussion Leader, Gordon Research Conference on Lasers in Medicine and Biology
- 2018, Session Chair, OSA Digital Holography & 3-D Imaging Conference
- 2018, Program Committee Member, Session Chair, Biosensors Congress, Elsevier

- 2018, Session Chair, Molecular Medicine Tri-Conference, Molecular Diagnostics for Infectious Diseases
- 2018, Session Chair, SPIE Photonics West Conference, Quantitative Phase Imaging
- 2018, Session Chair, SPIE Photonics West Conference, Optics and Biophotonics in Low-Resource Settings
- 2018, Session Chair, SPIE Photonics West Conference, Optical Components and Materials
- 2018, Session Chair, SPIE Photonics West Conference, Optical Data Science: Trends Shaping the Future of Photonics
- 2017-current, Executive Committee Member, co-PI, NSF Engineering Research Center (ERC), Precise Advanced Technologies and Health Systems for Underserved Populations
- 2017, Co-Chair, Light Conference (Changchun, China)
- 2017-present, Editorial Board Member, *Light: Science and Applications* (Springer Nature)
- 2017, Co-organizer, ACS Nano Kavli Foundation Futures Symposium
- 2017, Member, IEEE Engineering in Medicine and Biology Society (EMBS) Fellows Committee
- 2017-2018, Chair, OSA Mees Medal Committee
- 2017, Program Committee Member, IEEE International Conference on Computational Photography
- 2017, Program Committee Member, OSA Computational Optical Sensing and Imaging (COSI) Conference
- 2017, Session Chair, SPIE Optical Metrology Conference
- 2017, Session Chair, International Congress on Analytical Nanoscience and Nanotechnology
- 2017, Member, Faculty Search Committee, UCLA Bioengineering Department
- 2016-2017, Member, Promotion Review Committee, UCLA Electrical Engineering Department
- 2016-present, Editorial Advisory Board Member, ACS Nano
- 2016, Program Committee Member, OSA Conference on Lasers and Electro-optics (CLEO)
- 2016, Session Chair, Biosensors Congress, Elsevier
- 2016-2018, Committee Member, OSA Mees Medal Committee
- 2016-2017, IEEE Photonics Society Distinguished Lecturer
- 2016-present, OSA Traveling Lecturer
- 2016-present, Member of the UCLA Postdoctoral Scholars Advisory Council
- 2015, Program Committee Member, Zeiss Symposium, Optics in the Digital World
- 2015, Host & Program Committee Member, OSA Incubator Meeting on Optical Biosensors for Medical Diagnostics
- 2015-current, Editorial Board Member, Scientific Reports Journal (Springer Nature)
- 2015-current, Editorial Board Member, Sensors Journal
- 2015, Session Chair, OSA Frontiers in Optics (FiO) Conference
- 2015, Session Chair, International Label-Free Technologies Conference (Elsevier)
- 2015-present, Conference Chair & Session Chair "Optics and Biophotonics In Low-Resource Settings", SPIE Photonics West Conference
- 2015, Program Committee Member, OSA Frontiers in Optics (FiO) Conference
- 2015, Session Chair, ECI Conference on Photonics for Biology, Medicine and Surgery
- 2015-present, Program Committee Member, "Optical Diagnostics and Sensing XV: Toward Pointof-Care Diagnostics", SPIE Photonics West Conference
- 2015-present, Program Committee Member, "Quantitative Phase Imaging", SPIE Photonics West Conference
- 2014, Organizer and Chair, Workshop on Diagnostics Technologies for Point of Care and Resource Limited Settings - International Conference on Miniaturized Systems for Chemistry and Life

- Sciences (micro-TAS 2014)
- 2014-2020, Member of the Research Committee, Consortium of Universities for Global Health (CUGH)
- 2014-2016, Member, Space Assignment Committee, California NanoSystems Institute (CNSI)
- 2014, Session Chair, OSA Imaging Systems (IS) and Applications Topical Meeting
- 2014, Program Committee Member, IEEE Photonics Conference, Biophotonics
- 2014, Session Chair, "Point-of-care Sensing and Imaging" SPIE Photonics West Conference
- 2014-2021, Editorial Board Member, *Diagnostics* Journal
- 2014, Program Committee Member, OSA Frontiers in Optics (FiO) Conference
- 2014, Program Committee Member, IEEE Photonics Conference, Nanophotonics
- 2014, MIT's Technology Review TR35 Award Turkey, Selection Committee Member
- 2014, General Chair, TASSA Annual Conference
- 2014-present, Chair, TASSA Young Scholar Awards Committee
- 2014, Committee Member, Kadir Has Awards Committee
- 2013, Founding Faculty Advisor, IEEE Engineering in Medicine and Biology Society (EMBS) Student Chapter at UCLA
- 2013, Program Committee Member, IEEE Photonics Conference, Nanophotonics
- 2013, Program Committee Member, OSA Frontiers in Optics (FiO) Conference
- 2013, Session Chair, OSA Frontiers in Optics (FiO) Conference
- 2013-present, Associate Director, California NanoSystems Institute (CNSI)
- 2013-present, Member of the Advisory Board, BioPhotonics Magazine
- 2013-present, Program Committee Member, International Conference on Photonics, Optics and Laser Technology
- 2013-present, Associate Editor, Nanophotonics Journal
- 2013, Program Committee Member, SPIE Optical Metrology Conference
- 2013, Session Chair, The Society for Laboratory Automation and Screening (SLAS) Annual Conference
- 2012-2020, Member of the Board of Directors, TASSA
- 2012-present, Awards Committee Member, SPIE
- 2012, General Conference Co-Chair, The International Conference on Advanced Laser Applications in Science and Engineering (Nanjing, China)
- 2012, Program Committee Member, mHealthSys, ACM Conference on Embedded Networked Sensor Systems (SenSys)
- 2012-2015, Senior Member Selection Committee Member, SPIE
- 2012, Session Chair, SPIE Defense, Security and Sensing (DSS) Conference
- 2012, Program Committee Member, OSA Frontiers in Optics (FiO) Conference
- 2012, Program Committee Member, OSA Digital Holography and 3-D Imaging
- 2012, Program Committee Member, IEEE Photonics Society Annual Meeting
- 2012, Engineering Awards Committee Member, UCLA School of Engineering
- 2011, Session Chair, OSA Frontiers in Optics (FiO) Conference
- 2011, Session Chair, IEEE Engineering in Medicine and Biology Society Annual International Conference (EMBC)
- 2011, Session Chair, UC Systemwide Bioengineering Symposium
- 2011, Session Chair, Optical Society of America (OSA) Topical Meeting, Novel Techniques in Microscopy
- 2011, Organizer, UCLA National Taiwan University (NTU) Joint Workshop
- 2011-present, Faculty Mentor, Regents Scholar Society at UCLA

- 2010, General Chair, IEEE Photonics Society, Winter Topical Meeting on Advanced Imaging in Bio-Photonics
- 2010, Program Committee Member, SPIE International Symposium on Defense, Security and Sensing
- 2010, Session Chair, "BioPhotonics", BMES Annual Fall Meeting
- 2010, Founding Faculty Advisor, SPIE Student Chapter at UCLA
- 2009-present, SPIE Visiting Lecturer
- 2009-present, Program Committee Member, IEEE Photonics Society Annual Meeting
- 2008, General Chair, UCLA BioPhotonics Workshop
- 2008-present, Member of Scientific Advisory Board, Lifeboat Foundation
- 2008, Session Chair, "Microarrays and Protein Chips", BMES Annual Fall Meeting
- 2008-present, Program Committee Member, SPIE Photonics West Conference
- 2008-present, Session Chair, "Photonic Devices" SPIE Photonics West Conference
- 2008-present, Reviewer, National Institutes of Health (NIH)
- 2008-present, Panelist and Reviewer, NSF Biophotonics Program
- 2008-present, Research Committee Member, UCLA California NanoSystems Institute (CNSI)
- 2008-present, Reviewer, Harvard-MIT Innovative Technology for Medicine Program (CIMIT)
- 2004-present, Ad hoc reviewer for various academic journals, including e.g., IEEE Journal of Quantum Electronics, IEEE Journal of Lightwave Technology, IEEE Photonics Technology Letters, Journal of Optical Society of America, A and B, Optics Letters, Electronics Letters, Micro & Nano Letters, Optics Express, IEEE Journal of Selected Topics in Quantum Electronics, Applied Physics Letters, Optical Materials, Proceedings of the National Academy of Sciences (PNAS), IEEE Transactions on Signal Processing, IEEE Transactions on Biomedical Engineering, Sensors, Integrative Biology, Analyst, Sensors and Actuators A & B, Lab on a Chip, Journal of Biomedical Optics, Biomedical Microdevices, Nature Protocols, Nature Communications, Applied Optics, Nano Letters, Nature Nanotechnology, ACS Nano, Nature Methods, Nature Chemistry, Nature Medicine, Nature Biomedical Engineering, Nature, Science Translational Medicine, Science Advances

REFEREED JOURNAL PUBLICATIONS

- 1. Y. Li, N. Pillar, J. Li, T. Liu, D. Wu, S. Sun, G. Ma, K. de Haan, L. Huang, Y. Zhang, S. Hamidi, A. Urisman, T.K. Haran, W.D. Wallace, J.E. Zuckerman, and **A. Ozcan**, "Virtual histological staining of unlabeled autopsy tissue," *Nature Communications* DOI: 10.1038/s41467-024-46077-2 (2024)
- 2. J. Hu, D. Mengu, D.C. Tzarouchis, B. Edwards, N. Engheta and **A. Ozcan**, "Diffractive Optical Computing in Free Space," *Nature Communications* DOI: 10.1038/s41467-024-45982-w (2024)
- 3. H.C. Koydemir and **A. Ozcan**, "Low-cost and portable systems for biomedical imaging and sensing," *Current Opinion in Biomedical Engineering* DOI: 10.1016/j.cobme.2024.100527 (2024)
- 4. N. Pillar, Y. Li, Y. Zhang, and A. Ozcan, "Virtual Staining of Non-Fixed Tissue Histology," *Modern Pathology* DOI: 10.1016/j.modpat.2024.100444 (2024)
- 5. Ç. Işıl, T. Gan, F.O. Ardic, K. Mentesoglu, J. Digani, H. Karaca, H. Chen, J. Li, D. Mengu, M. Jarrahi, K. Akşit, and **A. Ozcan**, "All-optical image denoising using a diffractive visual processor," *Light: Science & Applications* (Nature Publishing Group) DOI: 10.1038/s41377-024-01385-6 (2024)
- 6. M.S.S. Rahman, and A. Ozcan, "OAM-based diffractive all-optical classification," *Advanced Photonics* DOI: 10.1117/1.AP.6.1.010501 (2024)

- 7. X. Yang, M.S.S. Rahman, B. Bai, J. Li, and **A. Ozcan**, "Complex-valued universal linear transformations and image encryption using spatially incoherent diffractive networks," *Advanced Photonics Nexus* DOI: 10.1117/1.APN.3.1.016010 (2024)
- 8. X. Li, D. Mengu, N.T. Yardimci, D. Turan, A. Charkhesht, **A. Ozcan**, and M. Jarrahi, "Plasmonic photoconductive terahertz focal-plane array with pixel super-resolution," *Nature Photonics* DOI:10.1038/s41566-023-01346-2 (2024)
- 9. L. Huang, J. Li, X. Ding, Y. Zhang, H. Chen and A. Ozcan, "Cycle Consistency-based Uncertainty Quantification of Neural Networks in Inverse Imaging Problems," *Intelligent Computing* (AAAS) DOI: 10.34133/icomputing.0071 (2023)
- 10. V.N. Astratov, et al., "Roadmap on Label-Free Super-Resolution Imaging," Laser & Photonics Reviews DOI: 10.1002/lpor.202200029 (2023) (Cover Article)
- 11. S.S. Rahman, T. Gan, E.A. Deger, Ç. Işıl, M. Jarrahi and **A. Ozcan**, "Learning Diffractive Optical Communication Around Arbitrary Opaque Occlusions," *Nature Communications* DOI: 10.1038/s41467-023-42556-0 (2023)
- 12. J. Li, X. Li, N.T. Yardimci, J. Hu, Y. Li, J. Chen, Y. Hung, M. Jarrahi, and **A. Ozcan**, "Rapid Sensing of Hidden Objects and Defects using a Single-Pixel Diffractive Terahertz Sensor," *Nature Communications* DOI: 10.1038/s41467-023-42554-2 (2023)
- 13. V. Shah, X. Yang, A. Arnheim, S. Udani, D. Tseng, Y. Luo, M. Ouyang, G. Destgeer, O. Garner, H.C. Koydemir, A. Ozcan, D. Di Carlo, "Amphiphilic particle-stabilized nanoliter droplet reactors with a multi-modal portable reader for distributive biomarker quantification," *ACS Nano* DOI: 10.1021/acsnano.3c04994 (2023)
- 14. Y. Li, J. Li, Y. Zhao, T. Gan, J. Hu, M. Jarrahi, A. Ozcan "Universal Polarization Transformations: Spatial programming of polarization scattering matrices using a deep learning-designed diffractive polarization transformer," *Advanced Materials* DOI: 10.1002/adma.202303395 (2023)
- 15. L. Huang, H. Chen, T. Liu, and **A. Ozcan**, "Self-supervised learning of hologram reconstruction using physics consistency," *Nature Machine Intelligence* DOI: 10.1038/s42256-023-00704-7 (2023)
- 16. C-Y. Shen, J. Li, D. Mengu, and **A. Ozcan** "Multispectral Quantitative Phase Imaging Using a Diffractive Optical Network," *Advanced Intelligent Systems* DOI: 10.1002/aisy.202300300 (2023)
- 17. M.J. Fanous, N. Pillar, and A. Ozcan, "Digital Staining Facilitates Biomedical Microscopy," *Frontiers in Bioinformatics* DOI: 10.3389/fbinf.2023.1243663 (2023)
- 18. Y. Li, T. Gan, B. Bai, Ç. Işıl, M. Jarrahi, and **A. Ozcan**, "Optical information transfer through random unknown diffusers using electronic encoding and diffractive decoding," *Advanced Photonics* DOI: 10.1117/1.AP.5.4.046009 (2023)
- 19. S.S. Rahman, X. Yang, J. Li, B. Bai, and **A. Ozcan**, "Universal Linear Intensity Transformations Using Spatially Incoherent Diffractive Processors," *Light: Science & Applications* (Nature Publishing Group) DOI: 10.1038/s41377-023-01234-y (2023)
- 20. X. Li, J. Li, Y. Li, A. Ozcan, M. Jarrahi, "High-throughput terahertz imaging: progress and challenges," *Light: Science & Applications* (Nature Publishing Group) DOI: s41377-023-01278-0 (2023)
- 21. J. Park, B. Bai, D. Ryu, T. Liu, C. Lee, Y. Luo, M. Jae Lee, L. Huang, J. Shin, Y. Zhang, D. Ryu, Y. Li, G. Kim, H. Min, **A. Ozcan**, and Y. Park, "Artificial intelligence-enabled Quantitative Phase Imaging Methods for Life Sciences," *Nature Methods* DOI: 10.1038/s41592-023-02041-4 (2023)
- 22. M.J. Fanous, A. Ozcan, "In-flow holographic tomography boosts lipid droplet quantification," *Opto-Electronic Advances* DOI: 10.29026/oea.2023.230083 (2023)
- 23. Y. Li, Y. Luo, D. Mengu, B. Bai, and A. Ozcan, "Quantitative phase imaging (QPI) through

- random diffusers using a diffractive optical network," *Light: Advanced Manufacturing* DOI: 10.37188/lam.2023.017 (2023)
- 24. B. Bai, H. Wei, X. Yang, T. Gan, D. Mengu, M. Jarrahi, and **A. Ozcan**, "Data class-specific alloptical transformations and encryption," *Advanced Materials* DOI:10.1002/adma.202212091 (2023)
- 25. T. Liu, Y. Li, H.C. Koydemir, Y. Zhang, E. Yang, M. Eryilmaz, H. Wang, J. Li, B. Bai, G. Ma, and **A. Ozcan**, "Rapid and stain-free quantification of viral plaque via lens-free holography and deep learning," *Nature Biomedical Engineering* DOI: 10.1038/s41551-023-01057-7 (2023)
- 26. A. Goncharov, H-A. Joung, R. Ghosh, G-R. Han, Z.S. Ballard, Q. Maloney, A. Bell, C.T.Z. Aung, O.B. Garner, D. Di Carlo, and **A. Ozcan**, "Deep learning-enabled multiplexed point-of-care sensor using a paper-based fluorescence vertical flow assay," *Small* DOI: 10.1002/smll.202300617 (2023) (*Cover Article*)
- 27. J. Li, T. Gan, Y. Zhao, B. Bai, C-Y. Shen, S. Sun, M. Jarrahi and **A. Ozcan**, "Unidirectional Imaging using Deep Learning-Designed Materials," *Science Advances* (AAAS) <u>DOI:</u> 10.1126/sciadv.adg1505 (2023)
- 28. D. Mengu, A. Tabassum, and M. Jarrahi and **A. Ozcan**, "Snapshot Multispectral Imaging Using a Diffractive Optical Network," *Light: Science & Applications* (Nature Publishing Group) <u>DOI:</u> 10.1038/s41377-023-01135-0 (2023)
- 29. B. Bai, X. Yang, Y. Li, Y. Zhang, N. Pillar and **A. Ozcan**, "Deep Learning-enabled Virtual Histological Staining of Biological Samples," *Light: Science & Applications* (Nature Publishing Group) DOI: 10.1038/s41377-023-01104-7 (2023)
- 30. H. Chen, L. Huang, T. Liu, and **A. Ozcan**, "eFIN: Enhanced Fourier Imager Network for Generalizable Autofocusing and Pixel Super-Resolution in Holographic Imaging," *IEEE Journal of Selected Topics in Quantum Electronics (IEEE JSTQE)* DOI: 10.1109/JSTQE.2023.3248684 (2023)
- 31. B. Bai, Y. Li, Y. Luo, X. Li, E. Cetintas, M. Jarrahi and **A. Ozcan**, "All-optical image classification through unknown random diffusers using a single-pixel diffractive network," *Light: Science & Applications* (Nature Publishing Group) DOI: 10.1038/s41377-023-01116-3 (2023)
- 32. J. Budd, B. Miller, et al., "Lateral flow test engineering and lessons learned from COVID-19" Nature Reviews Bioengineering DOI: 10.1038/s44222-022-00007-3 (2023)
- 33. J. Li, T. Gan, B. Bai, Y. Luo, M. Jarrahi, and **A. Ozcan**, "Massively Parallel Universal Linear Transformations using a Wavelength-Multiplexed Diffractive Optical Network," *Advanced Photonics* DOI: 10.1117/1.AP.5.1.016003 (2023)
- 34. S.S. Rahman, and A. Ozcan, "Time-lapse image classification using a diffractive neural network," *Advanced Intelligent Systems* DOI: 10.1002/aisy.202200387 (2023)
- 35. N. Pillar and **A. Ozcan**, "Virtual tissue staining in pathology using machine learning," *Expert Review of Molecular Diagnostics* DOI: 10.1080/14737159.2022.2153040 (2022)
- 36. Y. Luo, Y. Zhang, T. Liu, A. Yu, Y. Wu, and **A. Ozcan**, "Virtual impactor-based label-free pollen detection using holography and deep learning," *ACS Sensors* <u>DOI:</u> 10.1021/acssensors.2c01890 (2022)
- 37. C. Isıl, D. Mengu, Y. Zhao, A. Tabassum, J. Li, Y. Luo, M. Jarrahi and **A. Ozcan**, "Superresolution image display using diffractive decoders," *Science Advances* (AAAS) <u>DOI:</u> 10.1126/sciadv.add3433 (2022)
- 38. S. Belsare, D. Tseng, **A. Ozcan**, and G. Coté, "Monitoring gestational diabetes at the point-of-care via dual glycated albumin lateral flow assays in conjunction with a handheld reader," *Analyst* DOI: 10.1039/D2AN01238C (2022)
- 39. Y. Zhang, L. Huang, T. Liu, K. Cheng, K. de Haan, Y. Li, B. Bai, and A. Ozcan, "Virtual staining of defocused autofluorescence images of unlabeled tissue using deep neural networks,"

- Intelligent Computing (AAAS) DOI: 10.34133/2022/9818965 (2022)
- 40. Y. Rivenson and **A. Ozcan**, "Deep learning accelerates whole slide imaging for next generation digital pathology applications," *Light: Science & Applications* (Nature Publishing Group) DOI:10.1038/s41377-022-00999-y (2022)
- 41. B. Bai, H. Wang, Y. Li, K. de Haan, F. Colonnese, Y. Wan, J. Zuo, N.B. Doan, X. Zhang, Y. Zhang, J. Li, X. Yang, W. Dong, M. Angus Darrow, E. Kamangar, H. Sung Lee, Y. Rivenson, **A. Ozcan**, "Label-free virtual HER2 immunohistochemical staining of breast tissue using deep learning," *BME Frontiers* DOI: 10.34133/2022/9786242 (2022)
- 42. D. Mengu, Y. Zhao, A. Tabassum, M. Jarrahi, and **A. Ozcan**, "Diffractive Interconnects: All-Optical Permutation Operation Using Diffractive Networks," *Nanophotonics* DOI: 10.1515/nanoph-2022-0358 (2022)
- 43. X. Yang, B. Bai, Y. Li, Y. Zhang, T. Liu, K. de Haan, and **A. Ozcan**, "Virtual stain transfer in histology via cascaded deep neural networks" *ACS Photonics* DOI: 10.1021/acsphotonics.2c00932 (2022)
- 44. B. Bai, Y. Luo, T. Gan, J. Hu, Y. Li, Y. Zhao, D. Mengu, M. Jarrahi, and **A. Ozcan**, "To image, or not to image: Class-specific diffractive cameras with all-optical erasure of undesired objects," *eLight* DOI: 10.1186/s43593-022-00021-3 (2022)
- 45. H. Chen, L. Huang, T. Liu and **A. Ozcan**, "Fourier Imager Network (FIN): A deep neural network for hologram reconstruction with superior external generalization," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-022-00949-8 (2022)
- 46. Y. Li, Y. Luo, B. Bai, and **A. Ozcan**, "Analysis of Diffractive Neural Networks for Seeing Through Random Diffusers," *IEEE Journal of Selected Topics in Quantum Electronics (IEEE JSTQE)* DOI: 10.1109/JSTQE.2022.3194574 (2022)
- 47. Y. Li, T. Liu, H.C. Koydemir, H. Wang, K. O'Riordan, B. Bai, Y. Haga, J. Kobashi, H. Tanaka, T. Tamaru, K. Yamaguchi, and **A. Ozcan**, "Deep Learning-enabled Detection and Classification of Bacterial Colonies Using a Thin Film Transistor (TFT) Image Sensor" *ACS Photonics* DOI: 10.1021/acsphotonics.2c00572 (2022)
- 48. L. Huang, X. Yang, T. Liu, and **A. Ozcan**, "Few-shot Transfer Learning for Holographic Image Reconstruction using a Recurrent Neural Network" *APL Photonics* DOI: 10.1063/5.0090582 (2022)
- 49. J. Li, Y. Hung, O. Kulce, D. Mengu and A. Ozcan, "Polarization Multiplexed Diffractive Computing: All-Optical Implementation of a Group of Linear Transformations Through a Polarization-Encoded Diffractive Network," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-022-00849-x (2022)
- 50. D. Mengu, M. Veli, Y. Rivenson and **A. Ozcan**, "Classification and reconstruction of spatially overlapping phase images using diffractive optical networks" *Scientific Reports* DOI: 10.1038/s41598-022-12020-y (2022)
- 51. D. Mengu and **A. Ozcan**, "All-optical phase recovery: diffractive computing for quantitative phase imaging" *Advanced Optical Materials* DOI: 10.1002/adom.202200281 (2022)
- 52. Y. Luo, D. Mengu and **A. Ozcan**, "Cascadable all-optical NAND gates using diffractive networks" *Scientific Reports* DOI: 10.1038/s41598-022-11331-4 (2022)
- 53. D. Mengu, S.S. Rahman, Y. Luo, J. Li and **A. Ozcan**, "At the intersection of optics and deep learning: statistical inference, computing, and inverse design" *Advances in Optics and Photonics* DOI: 10.1364/AOP.450345 (2022)
- 54. J. Leonard, H.C. Koydemir, V.S. Koutnik, D. Tseng, **A. Ozcan**, and S. Mohanty, "Smartphone-enabled rapid quantification of microplastics" *Journal of Hazardous Materials Letters* <u>DOI:</u> 10.1016/j.hazl.2022.100052 (2022)
- 55. B.S. Miller, M.R. Thomas, M. Banner, J. Kim, Y. Chen, Q.Wei, D.K. Tseng, Z.S. Göröcs, A. Ozcan, M.M. Stevens, R.A. McKendry "Sub-picomolar lateral flow antigen detection with

- two-wavelength imaging of composite nanoparticles," *Biosensors and Bioelectronics* DOI: 10.1016/j.bios.2022.114133 (2022)
- 56. E. Cetintas, Y. Luo, C. Nguyen, Y. Guo, L. Li, Y. Zhu, A. Ozcan, "Characterization of exhaled e-cigarette aerosols in a vape shop using a field-portable holographic on-chip microscope," *Scientific Reports* DOI: 10.1038/s41598-022-07150-2 (2022)
- 57. Y. Luo, Y. Zhao, J. Li, E. Cetintas, Y. Rivenson, M. Jarrahi, A. Ozcan, "Computational Imaging Without a Computer: Seeing Through Random Diffusers at the Speed of Light," *eLight* DOI: 10.1186/s43593-022-00012-4 (2022)
- 58. V.S. Koutnik, A. Borthakur, J. Leonard, S. Alkidim, H. Ceylan Koydemir, D. Tseng, **A. Ozcan**, S. Ravi, S.K. Mohanty, "Mobility of polypropylene microplastics in stormwater biofilters under freeze-thaw cycles" *Journal of Hazardous Materials Letters* DOI: 10.1016/j.hazl.2022.100048 (2022)
- 59. V.S. Koutnik, J. Leonard, J.B. Glasman, H. Ceylan Koydemir, A. Novoselov, J. Brar, R. Bertel, D. Tseng, **A. Ozcan**, S. Ravi, S.K. Mohanty, "Microplastics retained in stormwater control measures: Where do they come from and where do they go?" *Water Research* DOI: 10.1016/j.watres.2021.118008 (2021)
- 60. J. Li, J. Garfinkel, X. Zhang, D. Wu, Y. Zhang, K. de Haan, H. Wang, T. Liu, B. Bai, Y. Rivenson, G. Rubinstein, P. Scumpia and **A. Ozcan**, "Biopsy-free *in vivo* virtual histology of skin using deep learning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-021-00674-8 (2021)
- 61. S.S. Rahman, and **A. Ozcan**, "Computer-free, all-optical reconstruction of holograms using diffractive networks," *ACS Photonics* DOI: 10.1021/acsphotonics.1c01365 (2021)
- 62. O. Kulce, D. Mengu, Y. Rivenson and **A. Ozcan**, "All-Optical Synthesis of an Arbitrary Linear Transformation Using Diffractive Surfaces," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-021-00623-5 (2021)
- 63. B. Javidi, et al., "Roadmap on Digital Holography," Optics Express DOI: 10.1364/OE.435915 (2021) (Invited Paper)
- 64. J.R. Bobe, B.L. Jutras, E.J. Horn, M.E. Embers, A. Bailey, R.L. Moritz, Y. Zhang, M.J. Soloski, R.S. Ostfeld, R.T. Marconi, J. Aucott, A. Ma'ayan, F. Keesing, K. Lewis, C.B. Mamoun, A.W. Rebman, M.E. McClune, E.B. Breitschwerdt, P.J. Reddy, R. Maggi, F. Yang, B. Nemser, A. Ozcan, O. Garner, D. Di Carlo, Z. Ballard, H-A. Joung, A. Garcia-Romeu, R.R. Griffiths, N. Baumgarth and B.A. Fallon, "Recent Progress in Lyme Disease and Remaining Challenges," *Frontiers in Medicine* DOI: 10.3389/fmed.2021.666554 (2021)
- 65. K. de Haan, Y. Zhang, J.E. Zuckerman, T. Liu, A.E. Sisk, M.F.P. Diaz, K. Jen, A. Nobori, S. Liou, S. Zhang, R. Riahi, Y. Rivenson, W.D. Wallace, and **A. Ozcan**, "Deep learning-based transformation of H&E stained tissues into special stains," *Nature Communications* DOI: 10.1038/s41467-021-25221-2 (2021)
- 66. J. Hambalek, J. Kong, C. Brown, H. Munoz, T. Horn, M. Bogumil, E. Quick, **A. Ozcan**, and D. Di Carlo, "Methylation Sensitive LAMP: Nucleic Acid Methylation Detection Through Loop-Mediated Isothermal Amplification with Mobile Fluorescence Readout," *ACS Sensors* DOI: 10.1021/acssensors.1c00902 (2021)
- 67. Y. Luo, H. Joung, S. Esparza, J. Rao, O. Garner, and A. Ozcan "Quantitative particle agglutination assay for point-of-care testing using mobile holographic imaging and deep learning," *Lab on a Chip* DOI: 10.1039/D1LC00467K (2021)
- 68. Z. Ballard, C. Brown, A.M. Madni, and **A. Ozcan**, "Machine learning and computation enabled intelligent sensor designs," *Nature Machine Intelligence* DOI: 10.1038/s42256-021-00360-9 (2021)
- 69. Y. Zhang, T. Liu, M. Singh, E. Çetintaş, Y. Luo, Y. Rivenson, K.V. Larin, and **A. Ozcan**, "Neural network-based image reconstruction in swept-source optical coherence tomography using

- undersampled spectral data," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-021-00594-7 (2021)
- 70. X. Yang, L. Huang, Y. Luo, Y. Wu, H. Wang, Y. Rivenson, and **A. Ozcan**, "Deep-learning-based virtual refocusing of images using an engineered point-spread function," *ACS Photonics* DOI: 10.1021/acsphotonics.1c00660 (2021)
- 71. Y. Luo, Y. Wu, L. Li, Y. Guo, E. Cetintas, Y. Zhu, and **A. Ozcan**, "Dynamic Imaging and Characterization of Volatile Aerosols in E-Cigarette Emissions Using Deep Learning-Based Holographic Microscopy," *ACS Sensors* DOI: 10.1021/acssensors.1c00628 (2021)
- 72. L. Huang, T. Liu, X. Yang, T. Luo, Y. Rivenson, and **A. Ozcan**, "Holographic image reconstruction with phase recovery and autofocusing using recurrent neural networks," *ACS Photonics* DOI: 10.1021/acsphotonics.1c00337 (2021)
- 73. J. Li, D. Mengu, N.T. Yardimci, Y. Luo, X. Li, M. Veli, Y. Rivenson, M. Jarrahi and **A. Ozcan**, "Spectrally-Encoded Single-Pixel Machine Vision Using Diffractive Networks," *Science Advances* DOI: 10.1126/sciadv.abd7690 (2021)
- 74. Ç. Işıl, K. de Haan, Z. Göröcs, H. Ceylan Koydemir, S. Peterman, D. Baum, F. Song, T. Skandakumar, E. Gumustekin, and **A. Ozcan**, "Phenotypic analysis of microalgae populations using label-free imaging flow cytometry and deep learning," *ACS Photonics* <u>DOI:</u> 10.1021/acsphotonics.1c00220 (2021)
- 75. L. Huang, H. Chen, Y. Luo, Y. Rivenson and A. Ozcan, "Recurrent neural network-based volumetric fluorescence microscopy," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-021-00506-9 (2021)
- 76. K. Trofymchuk, V. Glembockyte, L. Grabenhorst, F. Steiner, C. Vietz, C. Close, M. Pfeiffer, L. Richter, M.L. Schütte, F. Selbach, R. Yaadav, J. Zähringer, Q. Wei, A. Ozcan, B. Lalkens, G.P. Acuna, and P. Tinnefeld, "Addressable Nanoantennas with Cleared Hotspots for Single-Molecule Detection on a Portable Smartphone Microscope," *Nature Communications* DOI: 10.1038/s41467-021-21238-9 (2021)
- 77. C. Brown, A. Goncharov, Z. Ballard, M. Fordham, A. Clemens, Y. Qiu, Y. Rivenson, **A. Ozcan**, "Neural Network-Based On-Chip Spectroscopy Using a Scalable Plasmonic Encoder," *ACS Nano* DOI: 10.1021/acsnano.1c00079 (2021)
- 78. O. Kulce, D. Mengu, Y. Rivenson and **A. Ozcan**, "All-Optical Information Processing Capacity of Diffractive Surfaces," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-020-00439-9 (2021)
- 79. Y. Luo, L. Huang, Y. Rivenson, and **A. Ozcan**, "Single-shot autofocusing of microscopy images using deep learning," *ACS Photonics* DOI: 10.1021/acsphotonics.0c01774 (2021)
- 80. S.S. Rahman, J. Li, D. Mengu, Y. Rivenson, and **A. Ozcan**, "Ensemble learning of diffractive optical networks," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-020-00446-w (2021)
- 81. M. Veli, D. Mengu, N.T. Yardimci, Y. Luo, J. Li, Y. Rivenson, M. Jarrahi, and **A. Ozcan**, "Terahertz Pulse Shaping Using Diffractive Surfaces," *Nature Communications* DOI: 10.1038/s41467-020-20268-z (2021)
- 82. M. Zell, T. Aung, M. Kaldas, A.K. Rosenthal, B. Bai, T. Liu, **A. Ozcan**, and J.D. FitzGerald, "Calcium pyrophosphate crystal size and characteristics," *Osteoarthritis and Cartilage Open* DOI: 10.1016/j.ocarto.2020.100133 (2021)
- 83. D. Mengu, Y. Rivenson, and **A. Ozcan**, "Scale-, shift- and rotation-invariant diffractive optical networks," *ACS Photonics* DOI: 10.1021/acsphotonics.0c01583 (2020)
- 84. G. Wetzstein, **A. Ozcan**, S. Gigan, S. Fan, D. Englund, M. Soljačić, C. Denz, D.A.B. Miller, and D. Psaltis, "Inference in artificial intelligence with deep optics and photonics," *Nature* DOI:10.1038/s41586-020-2973-6 (2020)
- 85. T. Liu, K. de Haan, B. Bai, Y. Rivenson, Y. Luo, H. Wang, D. Karalli, H. Fu, Y. Zhang, J.

- FitzGerald, and **A. Ozcan**, "Deep learning-based holographic polarization microscopy," *ACS Photonics* DOI: 10.1021/acsphotonics.0c01051 (2020)
- 86. Z. Göröcs, D. Baum, F. Song, K. DeHaan, H.C. Koydemir, Y. Qiu, Z. Cai, T. Skandakumar, S. Peterman, M. Tamamitsu, and **A. Ozcan**, "Label-free detection of *Giardia lamblia* cysts using a deep learning-enabled portable imaging flow cytometer," *Lab on a Chip* DOI: 10.1039/D0LC00708K (2020)
- 87. Y. Rivenson, K. de Haan, W.D. Wallace, A. Ozcan, "Emerging advances to transform histopathology using virtual staining," *BME Frontiers* DOI: 10.34133/2020/9647163 (2020)
- 88. F. Ghaderinezhad, H.C. Koydemir, D. Tseng, D. Karinca, K. Liang, **A. Ozcan**, and S. Tasoglu, "Sensing of electrolytes in urine using a miniaturized paper-based device," *Scientific Reports* DOI: 10.1038/s41598-020-70456-6 (2020)
- 89. C. Brown, D. Tseng, P. Larkin, S. Realegeno, L. Mortimer, A. Subramonian, D. Di Carlo, O. Garner, and **A. Ozcan**, "Automated, Cost-Effective Optical System for Accelerated Antimicrobial Susceptibility Testing (AST) using Deep Learning," *ACS Photonics* DOI: 10.1021/acsphotonics.0c00841 (2020) *Cover Article*
- 90. D. Mengu, Y. Zhao, N.T. Yardimci, Y. Rivenson, M. Jarrahi, and **A. Ozcan**, "Misalignment Resilient Diffractive Optical Networks," *Nanophotonics* DOI: 10.1515/nanoph-2020-0291 (2020)
- 91. H. Wang, H.C. Koydemir, Y. Qiu, B. Bai, Y. Zhang, Y. Jin, S. Tok, E.C. Yilmaz, E. Gumustekin, Y. Rivenson, and **A. Ozcan**, "Early-detection and classification of live bacteria using time-lapse coherent imaging and deep learning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-020-00358-9 (2020)
- 92. Z. Ballard, H. Joung, A. Goncharov, J. Liang, K. Nugroho, D. Di Carlo, O. Garner, and **A. Ozcan**, "Deep learning-enabled point-of-care sensing using multiplexed paper-based sensors," *npj Digital Medicine* DOI: 10.1038/s41746-020-0274-y (2020)
- 93. Y. Zhang, K. de Haan, Y. Rivenson, J. Li, A. Delis, and **A. Ozcan**, "Digital synthesis of histological stains using micro-structured and multiplexed virtual staining of label-free tissue," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-020-0315-y (2020)
- 94. K. de Haan, H.C. Koydemir, Y. Rivenson, D. Tseng, E. Van Dyne, L.S. Bakic, D. Karinca, K. Liang, M. Ilango, E. Gumustekin, and **A. Ozcan**, "Automated screening of sickle cells using a smartphone-based microscope and deep learning," *npj Digital Medicine* DOI: 10.1038/s41746-020-0282-y (2020)
- 95. Z. Ballard, S. Bazargan, D. Jung, S. Sathianathan, A. Clemens, D. Shir, S. Al-Hashimi, and A. Ozcan, "Contact lens-based lysozyme detection in tear using a mobile sensor," *Lab on a Chip* DOI: 10.1039/C9LC01039D (2020)
- 96. A. Ray, M.A. Khalid, A. Demčenko, M. Daloglu, D. Tseng, J. Reboud, J.M. Cooper and A. Ozcan, "Holographic Detection of Nanoparticles using Acoustically Actuated Nanolenses," *Nature Communications* DOI: 10.1038/s41467-019-13802-1 (2020)
- 97. A. Ray, S. Esparza, D. Wu, M.R. Hanudel, H. Joung, B. Gales, D. Tseng, I.B. Salusky, and A. Ozcan, "Measurement of Serum Phosphate Levels Using a Mobile Sensor," *Analyst* DOI: 10.1039/C9AN02215E (2020)
- 98. H. Munoz, C. Riche, J. Kong, M. van Zee, O. Garner, **A. Ozcan**, D. Di Carlo, "Fractal-LAMP: Label-free analysis of fractal precipitate for digital loop-mediated isothermal nucleic acid amplification," *ACS Sensors* DOI: 10.1021/acssensors.9b01974 (2020)
- 99. H.C. Koydemir, S. Rajpal, E. Gumustekin, D. Karinca, K. Liang, Z. Gorocs, D. Tseng, and A. Ozcan, "Smartphone-based turbidity reader," *Scientific Reports* DOI: 10.1038/s41598-019-56474-z (2019)
- 100. H. Joung, Z. Ballard, J. Wu, D. Tseng, H. Teshome, L. Zhang, E. Horn, P. Arnaboldi, R.

- Dattwyler, O.B. Garner, D. Di Carlo, and **A. Ozcan**, "Point-of-Care Serodiagnostic Test for Early-Stage Lyme Disease Using a Multiplexed Paper-Based Immunoassay and Machine Learning," *ACS Nano* DOI: 10.1021/acsnano.9b08151 (2019)
- 101. Y. Luo, D. Mengu, N.T. Yardimci, Y. Rivenson, M. Veli, M. Jarrahi and **A. Ozcan**, "Design of task-specific optical systems using broadband diffractive neural networks," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-019-0223-1 (2019)
- 102. K. de Haan, Y. Rivenson, Y. Wu, and **A. Ozcan**, "Deep learning-based image reconstruction and enhancement in optical microscopy," *Proceedings of the IEEE* DOI: 10.1109/JPROC.2019.2949575 (2019)
- 103. Y. Wu, Y. Rivenson, H. Wang, Y. Luo, E. Ben-David, L.A. Bentolila, C. Pritz and **A. Ozcan**, "Three-dimensional virtual refocusing of fluorescence microscopy images using deep learning," *Nature Methods* DOI: 10.1038/s41592-019-0622-5 (2019)
- 104. B. Bai, H. Wang, T. Liu, Y. Rivenson, J. FitzGerald, and **A. Ozcan**, "Pathological crystal imaging with single-shot computational polarized light microscopy," *Journal of Biophotonics* DOI: 10.1002/jbio.201960036 (2019)
- 105. Y. Rivenson, Y. Wu, and A. Ozcan, "Deep Learning in Holography and Coherent Imaging," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-019-0196-0 (2019)
- 106. M.A. Khalid, A. Ray, S. Cohen, M. Tassieri, D. Andriejus, D. Tseng, J. Reboud, **A. Ozcan**, and J. Cooper, "Computational Image Analysis of Guided Acoustic Waves Enables Rheological Assessment of Sub-Nanoliter Samples," *ACS Nano* DOI: 10.1021/acsnano.9b03219 (2019)
- 107. Y. Zhang, M. Ouyang, A. Ray, T. Liu, J. Kong, B. Bai, D. Kim, A. Guziak, Y. Luo, A. Feizi, K. Tsai, Z. Duan, X. Liu, D.H. Kim, C. Cheung, S. Yalcin, H. Ceylan Koydemir, O. Garner, D. Di Carlo, and **A. Ozcan**, "Computational cytometer based on magnetically-modulated coherent imaging and deep learning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-019-0203-5 (2019)
- 108. K. de Haan, Z.S. Ballard, Y. Rivenson, Y. Wu, and **A. Ozcan**, "Resolution enhancement in scanning electron microscopy using deep learning," *Scientific Reports* DOI: 10.1038/s41598-019-48444-2 (2019)
- 109. J. Li, D. Mengu, Y. Luo, Y. Rivenson, and A. Ozcan, "Class-specific Differential Detection in Diffractive Optical Neural Networks Improves Inference Accuracy," *Advanced Photonics* DOI: 10.1117/1.AP.1.4.046001 (2019)
- 110. S. Tok, K. de Haan, D. Tseng, C.F. Usanmaz, H.C. Koydemir, and **A. Ozcan**, "Early detection of *E. coli* and total coliform using an automated, colorimetric and fluorometric fiber optics-based device," *Lab on a Chip*, DOI: 10.1039/C9LC00652D (2019)
- 111. T. Liu, Z. Wei, Y. Rivenson, K. de Haan, Y. Zhang, Y. Wu, and **A. Ozcan**, "Deep learning-based color holographic microscopy," *Journal of Biophotonics* DOI:10.1002/jbio.201900107 (2019)
- 112. D. Mengu, Y. Luo, Y. Rivenson, and **A. Ozcan**, "Analysis of Diffractive Optical Neural Networks and Their Integration with Electronic Neural Networks," *IEEE Journal of Selected Topics in Quantum Electronics* DOI: 10.1109/JSTQE.2019.2921376 (2019)
- 113. G. Barbastathis, **A. Ozcan** and G. Situ, "On the use of Deep Learning for Computational Imaging," *Optica* DOI: 10.1364/OPTICA.6.000921 (2019)
- 114. T. Ghonge, H. Ceylan Koydemir, E. Valera, J. Berger, C. Garcia, N. Nawar, J. Tiao, G. Damhorst, A. Ganguli, U. Hassan, **A. Ozcan**, R. Bashir, "Smartphone-Imaged Microfluidic Biochip for Measuring CD64 Expression from Whole Blood," *Analyst* DOI: 10.1039/C9AN00532C (2019) *Cover Article*
- 115. Y. Rivenson, H. Wang, Z. Wei, K. de Haan, Y. Zhang, Y. Wu, H. Günaydın, J.E. Zuckerman,

- T. Chong, A.E. Sisk, L. M. Westbrook, W.D. Wallace, and **A. Ozcan**, "Virtual histological staining of unlabelled tissue-autofluorescence images via deep learning," *Nature Biomedical Engineering* DOI: 10.1038/s41551-019-0362-y (2019)
- 116. T. Liu, K. de Haan, Y. Rivenson, Z. Wei, X. Zeng, Y. Zhang, and **A. Ozcan**, "Deep learning-based super-resolution in coherent imaging systems," *Scientific Reports* DOI: 10.1038/s41598-019-40554-1 (2019)
- 117. Y. Wu, Y. Luo, G. Chaudhari, Y. Rivenson, A. Calis, K. de Haan, and **A. Ozcan**, "Bright-field holography: Cross-modality deep learning enables snapshot 3D imaging with bright-field contrast using a single hologram," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-019-0139-9 (2019)
- 118. H. Joung, Z.S. Ballard, A. Ma, D.K. Tseng, H. Teshome, S. Burakowski, O.B. Garner, D. Di Carlo, A. Ozcan, "Paper-based multiplexed vertical flow assay for point-of-care testing," *Lab on a Chip* DOI: 10.1039/C9LC00011A (2019)
- 119. M.U. Daloglu, A. Ray, M.J. Collazo, C. Brown, D. Tseng, B. Chocarro-Ruiz, L.M. Lechuga, D. Cascio and **A.Ozcan**, "Low-cost and portable UV holographic microscope for high-contrast protein crystal imaging," *APL Photonics* DOI: 10.1063/1.5080158 (2019)
- 120. J.W. Snow, H.C. Koydemir, D.K. Karinca, K. Liang, D. Tseng, **A. Ozcan**, "Rapid imaging, detection, and quantification of *Nosema ceranae* spores in honey bees using mobile phone-based fluorescence microscopy," *Lab on a Chip* DOI: 10.1039/C8LC01342J (2019)
- 121. C. Vietz, M.L. Schütte, Q. Wei, L. Richter, B. Lalkens, **A. Ozcan**, P. Tinnefeld and G.P. Acuna, "Benchmarking Smartphone Based Microscopy with DNA Origami Nanobeads: Reducing the Gap Towards Single Molecule Sensitivity," *ACS Omega* DOI: 10.1021/acsomega.8b03136 (2019)
- 122. Y. Rivenson, T. Liu, Z. Wei, Y. Zhang, K. de Haan, and **A. Ozcan**, "PhaseStain: The digital staining of label-free quantitative phase microscopy images using deep learning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-019-0129-y (2019)
- 123. Y. Wu, A. Ray, Q. Wei, A. Feizi, X. Tong, E. Chen, Y. Luo, and **A. Ozcan**, "Deep learning enables high-throughput analysis of particle-aggregation-based bio-sensors imaged using holography," *ACS Photonics* DOI: 10.1021/acsphotonics.8b01479 (2018) *Cover Article*
- 124. H.C. Koydemir, J.T. Coulibaly, D. Tseng, I.I. Bogoch, and **A. Ozcan**, "Design and Validation of a Wide-Field Mobile Phone Microscope for the Diagnosis of Schistosomiasis," *Travel Medicine and Infectious Disease* DOI: 10.1016/j.tmaid.2018.12.001 (2018)
- 125. Y. Zhang, H.C. Koydemir, M.M. Shimogawa, S. Yalcin, A. Guziak, T. Liu, I. Oguz, Y. Huang, B. Bai, Y. Luo, Y. Luo, Z. Wei, H. Wang, V. Bianco, B. Zhang, R. Nadkarni, K. Hill, and A. Ozcan, "Motility-based label-free detection of parasites in bodily fluids using holographic speckle analysis and deep learning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-018-0110-1 (2018)
- 126. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Günaydın, L.A. Bentolila, C. Kural, and A. Ozcan, "Deep learning enables cross-modality super-resolution in fluorescence microscopy," *Nature Methods* DOI: 10.1038/s41592-018-0239-0 (2018)
- 127. V. Müller, J.M. Sousa, H.C. Koydemir, M. Veli, D. Tseng, L. Cerqueira, A. Ozcan, N.F. Azevedo, F. Westerlund, "Identification of Pathogenic Bacteria in Complex Samples Using a Smartphone Based Fluorescence Microscope," *RSC Advances* DOI: 10.1039/c8ra06473c (2018)
- 128. Y. Zhang, T. Liu, Y. Huang, D. Teng, Y. Bian, Y. Wu, Y. Rivenson, A. Feizi, and **A. Ozcan**, "Accurate color imaging of pathology slides using holography and absorbance spectrum estimation of histochemical stains," *Journal of Biophotonics* DOI: 10.1002/jbio.201800335 (2018) *Cover Article*
- 129. Y. Bian, Y. Zhang, P. Yin, H. Li, and A. Ozcan, "Optical refractometry using lensless

- holography and autofocusing," Optics Express DOI: 10.1364/OE.26.029614 (2018)
- 130. M.U. Daloglu, F. Lin, B. Chong, D. Chien, M. Veli, W. Luo, and **A. Ozcan**, "3D imaging of sex-sorted bovine spermatozoon locomotion, head spin and flagellum beating," *Scientific Reports* DOI:10.1038/s41598-018-34040-3 (2018)
- 131. Y. Wu, A. Calis, Y. Luo, C. Chen, M. Lutton, Y. Rivenson, X. Lin, H.C. Koydemir, Y. Zhang, H. Wang, Z. Göröcs, and **A. Ozcan**, "Label-free bio-aerosol sensing using mobile microscopy and deep learning," *ACS Photonics* DOI: 10.1021/acsphotonics.8b01109 (2018)
- 132. Z. Ballard, and **A. Ozcan**, "Nucleic acid quantification in the field," *Nature Biomedical Engineering* DOI: 10.1038/s41551-018-0292-0 (2018)
- 133. Z. Göröcs, M. Tamamitsu, V. Bianco, P. Wolf, S. Roy, K. Shindo, K. Yanny, Y. Wu, H.C. Koydemir, Y. Rivenson, and **A. Ozcan**, "A deep learning-enabled portable imaging flow cytometer for cost-effective, high-throughput and label-free analysis of natural water samples," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/s41377-018-0067-0 (2018)
- 134. X. Lin, Y. Rivenson, N.T. Yardimci, M. Veli, Y. Luo, M. Jarrahi and **A. Ozcan**, "All-Optical Machine Learning Using Diffractive Deep Neural Networks," *Science* DOI: 10.1126/science.aat8084 (2018)
- 135. I. Hernández-Neuta, F. Neumann, J. Brightmeyer, T. Ba Tis, N. Madaboosi, Q. Wei, A. Ozcan and M. Nilsson, "Smartphone-based clinical diagnostics: Towards democratization of evidence-based health care," *Journal of Internal Medicine* DOI: 10.1111/joim.12820 (2018)
- 136. S. Kahkeshani, J.E. Kong, Q. Wei, D. Tseng, O.B. Garner, **A. Ozcan**, and D. Di Carlo, "Ferrodrop dose-optimized-digital quantification of biomolecules in low-volume samples," *Analytical Chemistry* DOI: 10.1021/acs.analchem.8b00958 (2018)
- 137. M. Shimogawa, S. Ray, N. Kisalu, Y. Zhang, Q. Geng, **A. Ozcan**, and K. Hill, "Parasite motility is critical for virulence of African trypanosomes," *Scientific Reports* DOI: 10.1038/s41598-018-27228-0 (2018)
- 138. Y. Wu, Y. Rivenson, Y. Zhang, Z. Wei, H. Gunaydin, X. Lin, and **A. Ozcan**, "Extended depth-of-field in holographic imaging using deep learning based auto-focusing and phase-recovery," *Optica* DOI: 10.1364/OPTICA.5.000704 (2018)
- 139. Y. Zhang, M. Alexander, S. Yang, Y. Bian, E. Botvinick, J.R.T. Lakey, and **A. Ozcan**, "High-throughput screening of encapsulated islets using wide-field lens-free on-chip imaging," *ACS Photonics* DOI: 10.1021/acsphotonics.8b00343 (2018)
- 140. H.C. Koydemir and **A. Ozcan**, "Smartphones Democratize Advanced Biomedical Instruments and Foster Innovation," *Clinical Pharmacology & Therapeutics* DOI: 10.1002/cpt.1081 (2018)
- 141. Z. Ballard, C. Brown and **A. Ozcan**, "Mobile Technologies for the Discovery, Analysis and Engineering of the Global Microbiome," *ACS Nano* DOI: 10.1021/acsnano.7b08660 (2018)
- 142. Y. Rivenson, H.C. Koydemir, H. Wang, Z. Wei, Z. Ren, H. Gunaydin, Y. Zhang, Z. Gorocs, K. Liang, D. Tseng and A. Ozcan, "Deep learning enhanced mobile-phone microscopy," ACS Photonics DOI: 10.1021/acsphotonics.8b00146 (2018)
- 143. M. Veli, and **A. Ozcan**, "Computational Sensing of *Staphylococcus aureus* on Contact Lenses using 3D Imaging of Curved Surfaces and Machine Learning," *ACS Nano* <u>DOI:</u> 10.1021/acsnano.7b08375 (2018)
- 144. H.C. Koydemir and **A. Ozcan**, "Wearable and Implantable Sensors for Biomedical Applications," *Annual Review of Analytical Chemistry* DOI: 10.1146/annurev-anchem-061417-125956 (2018)
- 145. D. Kim, Q. Wei, D.H. Kim, D. Tseng, J. Zhang, E. Pan, O. Garner, A. Ozcan, D. Di Carlo, "Enzyme-free Nucleic Acid Amplification Assay Using a Cellphone-Based Well Plate Fluorescence Reader," *Analytical Chemistry* DOI: 10.1021/acs.analchem.7b03848 (2017)
- 146. Y. Rivenson, Z. Gorocs, H. Gunaydin, Y. Zhang, H. Wang, and A. Ozcan, "Deep Learning

- Microscopy," Optica DOI: 10.1364/OPTICA.4.001437 (2017)
- 147. Y. Rivenson, Y. Zhang, H. Günaydın, D. Teng, and **A. Ozcan**, "Phase recovery and holographic image reconstruction using deep learning in neural networks," *Light: Science & Applications* (Nature Publishing Group) DOI: 10.1038/lsa.2017.141 (2017)
- 148. Y. Zhang, H. Wang, Y. Wu, M. Tamamitsu, and **A. Ozcan**, "Edge sparsity criterion for robust holographic autofocusing," *Optics Letters* DOI: 10.1364/OL.42.003824 (2017)
- 149. Y. Wu and **A. Ozcan**, "Lensless digital holographic microscopy and its applications in biomedicine and environmental monitoring," *Methods* DOI: 10.1016/j.ymeth.2017.08.013 (2017)
- 150. E. McLeod and **A. Ozcan**, "Microscopy without lenses," *Physics Today* <u>DOI:</u> 10.1063/PT.3.3693 (2017)
- 151. M. Daloglu, W. Luo, F. Shabbir, F. Lin, K. Kim, I. Lee, J. Jiang, W. Cai, V. Ramesh, and M. Yu, and **A. Ozcan**, "Label-free 3D computational imaging of spermatozoon locomotion, head spin and flagellum beating over a large volume," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/lsa.2017.121 (2017) *Cover Article*
- 152. D.Y. Joh, A.M. Hucknall, Q. Wei, K.A. Mason, C.M. Fontes, R.T. Hill, R. Blair, Z. Zimmers, R.K. Achar, D. Tseng, R. Gordan, M. Freemark, A. Ozcan, A. Chilkoti, "Inkjet Printed Point-of-Care Immunoassay on a Nanoscale Polymer Brush Enables Sub-Picomolar Detection of Analytes in Blood," *Proceedings of the National Academy of Sciences (PNAS)* DOI:10.1073/pnas.1703200114 (2017)
- 153. Y. Zhang, Y. Shin, K. Sung, S. Yang, H. Chen, H. Wang, D. Teng, Y. Rivenson, R.P. Kulkarni, and **A. Ozcan**, "3D Imaging of Optically Cleared Tissue Using a Simplified CLARITY Method and On-Chip Microscopy," *Science Advances (AAAS)* DOI: 10.1126/sciadv.1700553 (2017)
- 154. M.U. Daloglu and **A. Ozcan**, "Computational Imaging of Sperm Locomotion," *Biology of Reproduction* DOI: 10.1093/biolre/iox086 (2017)
- 155. Z.S. Ballard, Y. Zhang and **A. Ozcan**, "Off-axis holography and micro-optics improve lab-on-a-chip imaging," *Light: Science & Applications (Nature Publishing Group)*DOI:10.1038/lsa.2017.105 (2017)
- 156. A. Ray, M.U. Daloglu, J. Ho, A. Torres, E. McLeod and **A. Ozcan**, "Computational sensing of herpes simplex virus using a cost-effective on-chip microscope," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/s41598-017-05124-3 (2017)
- 157. P. Minzioni, R. Osellame, C. Sada, S. Zhao, F.G. Omenetto, K.B. Gylfason, T. Haraldsson, Y. Zhang, A. Ozcan, A. Wax, F. Mugele, H. Schmidt, G. Testa, R. Bernini, J. Guck, C. Liberale, K. Berg-Sørensen, J. Chen, M. Pollnau, S. Xiong, A. Qun Liu, C. Shiue, S. Fan, D. Erickson and D. Sinton, "Roadmap for optofluidics," *Journal of Optics* DOI:10.1088/2040-8986/aa783b (2017)
- 158. A. Ray, S. Li, T. Segura, and **A. Ozcan**, "High-throughput quantification of nanoparticle degradation using computational microscopy and its application to drug delivery nanocapsules," *ACS Photonics* DOI: 10.1021/acsphotonics.7b00122 (2017)
- 159. H.C. Koydemir, and **A. Ozcan**, "Mobile phones create new opportunities for microbiology research and clinical applications," *Future Microbiology* DOI:10.2217/fmb-2017-0046 (2017)
- 160. H.C. Koydemir, S. Feng, K. Liang, R. Nadkarni, P. Benien, and A. Ozcan, "Comparison of Supervised Machine Learning Algorithms for Waterborne Pathogen Detection using Mobile-Phone Fluorescence Microscopy," *Nanophotonics* DOI: nanoph-2017-0001 (2017)
- 161. Q. Wei, G. Acuna, S. Kim, C. Vietz, D. Tseng, J. Chae, D. Shir, W. Luo, P. Tinnefeld, and A. Ozcan, "Plasmonics Enhanced Smartphone Fluorescence Microscopy," *Scientific Reports* (Nature Publishing Group) DOI: 10.1038/s41598-017-02395-8 (2017)
- 162. Y. Wu, A. Shiledar, Y. Li, J. Wong, S. Feng, X. Chen, C. Chen, K. Jin, S. Janamian, Z. Yang, Z.S. Ballard, Z. Göröcs, A. Feizi, and **A. Ozcan**, "Air Quality Monitoring Using Mobile

- Microscopy and Machine Learning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/lsa.2017.46 (2017)
- 163. J. Kong, Q. Wei, D. Tseng, J. Zhang, E. Pan, M. Lewinski, O. Garner, A. Ozcan, and D. Di Carlo, "Highly stable and sensitive nucleic acid amplification and cell-phone based readout," ACS Nano DOI: 10.1021/acsnano.6b08274 (2017)
- 164. I. Bogoch, H.C. Koydemir, D. Tseng, R. Ephraim, E. Duah, J. Tee, J. Andrews, and **A. Ozcan**, "Evaluation of a mobile phone-based microscope for screening of Schistosoma haematobium infection in rural Ghana," *American Journal of Tropical Medicine & Hygiene* DOI:10.4269/ajtmh.16-0912 (2017)
- 165. M. Daloglu, A. Ray, Z. Gorocs, M. Xiong, R. Malik, G. Bitan, E. McLeod and A. Ozcan, "Computational On-Chip Imaging of Nanoparticles and Biomolecules using Ultraviolet Light," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep44157 (2017)
- 166. Z. Ballard, D. Shir, A. Bhardwaj, S. Bazargan, S. Sathianathan, and A. Ozcan, "Computational Sensing Using Low-Cost and Mobile Plasmonic Readers Designed by Machine Learning," ACS Nano, DOI: 10.1021/acsnano.7b00105
- 167. M. Kühnemund, Q. Wei, E. Darai, Y. Wang, I. Hernandez-Neuta, Z. Yang, D. Tseng, A, Ahlford, L. Mathot, T. Sjöblom, A. Ozcan, and M. Nilsson, "Targeted DNA sequencing and in situ mutation analysis using mobile phone microscopy," Nature Communications DOI: 10.1038/NCOMMS13913 (2017)
- 168. S. Feng, D. Tseng, D. Di Carlo, O. Garner and **A. Ozcan**, "High-throughput and automated diagnosis of antimicrobial resistance using a cost-effective cellphone-based micro-plate reader," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep39203 (2016)
- 169. H. Wang, Z. Gorocs, W. Luo, Y. Zhang, Y. Rivenson, L.A. Bentolila, and **A. Ozcan**, "Computational out-of-focus imaging increases the space-bandwidth product in lens-based coherent microscopy," *Optica* DOI: 10.1364/OPTICA.3.001422 (2016)
- 170. Y. Rivenson, Y. Wu, H. Wang, Y. Zhang, A. Feizi and **A. Ozcan**, "Sparsity-based multi-height phase recovery in holographic microscopy," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep37862 (2016)
- 171. Z. Gorocs, Y. Rivenson, H.C. Koydemir, D. Tseng, T. Troy, V. Demas, and **A. Ozcan**, "Quantitative fluorescence sensing through highly autofluorescent, scattering and absorbing media using mobile microscopy," *ACS Nano* DOI: 10.1021/acsnano.6b05129 (2016)
- 172. A. Feizi, Y. Zhang, A. Greenbaum, A. Guziak, M. Luong, R.Y. Chan, B. Berg, H. Ozkan, W. Luo, M. Wu, Y. Wu, and **A. Ozcan**, "Rapid, portable and cost-effective yeast cell viability and concentration analysis using lensfree on-chip microscopy and machine learning," *Lab on a Chip* DOI: 10.1039/C6LC00976J (2016)
- 173. D. Kim, O. Garner, **A. Ozcan** and D. Di Carlo, "Homogenous Entropy-driven Amplified Detection of Biomolecular Interactions," *ACS Nano* DOI: 10.1021/acsnano.6b02060 (2016)
- 174. Y. Wu, Y. Zhang, W. Luo and **A. Ozcan**, "Demosaiced pixel super-resolution for multiplexed holographic color imaging," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep28601 (2016)
- 175. Y. Zhang, S.Y. Lee, Y. Zhang, D. Furst, J. Fitzgerald and **A. Ozcan**, "Wide-field imaging of birefringent synovial fluid crystals using lens-free polarized microscopy for gout diagnosis," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep28793 (2016)
- 176. Y. Zhang, Y. Wu, Y. Zhang, and A. Ozcan, "Color calibration and fusion of lens-free and mobile-phone microscopy images for high-resolution and accurate color reproduction," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep27811 (2016)
- 177. E. McLeod and **A. Ozcan**, "Unconventional methods of imaging: computational microscopy and compact implementations," *Reports on Progress in Physics* DOI:10.1088/0034-4885/79/7/076001 (2016)

- 178. B. Munos, *et al.*, "Mobile health: the power of wearables, sensors, and apps to transform clinical trials," *Annals of the New York Academy of Sciences*, DOI: 10.1111/nyas.13117 (2016)
- 179. W. Luo, Y. Zhang, Z. Gorocs, A. Feizi and **A. Ozcan**, "Propagation phasor approach for holographic image reconstruction," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep22738 (2016)
- 180. **A. Ozcan** and E. McLeod, "Lensless Imaging and Sensing," *The Annual Review of Biomedical Engineering* DOI: 10.1146/annurev-bioeng-092515-010849 (2016)
- 181. T-W. Su, I. Choi, J. Feng, K. Huang and **A. Ozcan**, "High-throughput analysis of horse sperms' 3D swimming patterns using computational on-chip imaging," *Animal Reproduction Science*, DOI: 10.1016/j.anireprosci.2015.12.012 (2016)
- 182. W. Luo, Y. Zhang, A. Feizi, Z. Gorocs, and **A. Ozcan**, "Pixel super-resolution using wavelength scanning," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/lsa.2016.60 (2015)
- 183. J.S. Biteen, P.C. Blainey, Z.G. Cardon, M. Chun, G.M. Church, P.C. Dorrestein, S.E. Fraser, J.A. Gilbert, J.K. Jansson, R. Knight, J.F. Miller, **A. Ozcan**, K.A. Prather, S.R. Quake, E.G. Ruby, P.A. Silver, S. Taha, G. van den Engh, P.S. Weiss, G.C.L. Wong, A.T. Wright, T.D. Young, "Tools for the Microbiome: Nano and Beyond," *ACS Nano* DOI: 10.1021/acsnano.5b07826 (2015)
- 184. D. Shir, Z.S. Ballard, and A. Ozcan, "Flexible Plasmonic Sensors," *IEEE Journal of Selected Topics in Quantum Electronics* DOI: 10.1109/JSTQE.2015.2507363 (2015) (*Invited Manuscript*)
- 185. J.C. Contreras-Naranjo, Q. Wei, and **A. Ozcan**, "Mobile Phone Based Microscopy, Sensing, and Diagnostics," *IEEE Journal of Selected Topics in Quantum Electronics* DOI: 10.1109/JSTQE.2015.2478657 (2015) (*Invited Manuscript*)
- 186. A.P. Alivisatos, *et al.*, "A unified initiative to harness Earth's microbiomes," *Science* DOI: 10.1126/science.aac8480 (2015)
- 187. S.K. Vashist, P.B. Luppa, L.Y. Yeo, **A. Ozcan**, J.H.T. Luong, "Emerging technologies for next-generation point-of-care testing," *Trends in Biotechnology*, <u>DOI: 10.1016/j.tibtech.2015.09.00</u> (2015)
- 188. S.K.J. Ludwig, C. Tokarski, S. Lang, L.A. Ginkel, H. Zhu, **A. Ozcan** and M.W.F. Nielen, "Calling biomarkers in milk using a protein microarray on your smartphone," *PLoS ONE* <u>DOI:</u> 10.1371/journal.pone.0134360 (2015)
- 189. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, S. Feng, Q. Wei, R. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O.B. Garner, and A. Ozcan, "Cellphone-Based Hand-Held Micro-Plate Reader for Point-of-Care Testing of Enzyme-Linked Immunosorbent Assays," ACS Nano DOI: 10.1021/acsnano.5b03203 (2015)
- 190. E. McLeod, Q. Wei and A. Ozcan, "Democratization of Nanoscale Imaging and Sensing Tools using Photonics," *Analytical Chemistry* DOI: 10.1021/acs.analchem.5b01381 (2015)
- 191. Z. Göröcs, E. McLeod, and **A. Ozcan**, "Enhanced light collection in fluorescence microscopy using self-assembled micro-reflectors," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep10999 (2015)
- 192. Y. Zhang, A. Greenbaum, W. Luo, and **A. Ozcan**, "Wide-field Pathology Imaging using Onchip Microscopy," *Virchows Archiv The Journal of the European Society of Pathology* DOI: 10.1007/s00428-015-1782-z (2015) *Invited Review Article*
- 193. W. Luo, F. Shabbir, C. Gong, C. Gulec, J. Pigeon, J. Shaw, A. Greenbaum, S. Tochitsky, C. Joshi, and **A. Ozcan**, "High throughput on-chip analysis of high-energy charged particle tracks using lensfree imaging," *Applied Physics Letters* DOI: 10.1063/1.4918741 (2015)

- 194. E. McLeod, T.U. Dincer, M. Veli, Y.N. Ertas, C. Nguyen, W. Luo, A. Greenbaum, A. Feizi, and **A. Ozcan**, "High-Throughput and Label-Free Single Nanoparticle Sizing Based on Time-Resolved On-Chip Microscopy," *ACS Nano* DOI: 10.1021/acsnano.5b00388 (2015)
- 195. B. Cortazar, H.C. Koydemir, D. Tseng, S. Feng and A. Ozcan, "Quantification of Plant Chlorophyll Content Using Google Glass," *Lab on a Chip* DOI: 10.1039/C4LC01279H (2015)
- 196. W. Luo, A. Greenbaum, Y. Zhang, and **A. Ozcan**, "Synthetic aperture based on-chip microscopy," *Light: Science & Applications (Nature Publishing Group)* DOI: 10.1038/lsa.2015.34 (2015)
- 197. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, D. Tseng, R. Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, S. Feng, and **A. Ozcan**, "Imaging and Sizing of Single DNA Molecules on a Mobile-Phone," *ACS Nano* DOI: 10.1021/nn505821y (2014)
- 198. H.C. Koydemir, Z. Gorocs, D. Tseng, B. Cortazar, S. Feng, R.Y.L. Chan, J. Burbano, E. McLeod, and **A. Ozcan**, "Rapid imaging, detection and quantification of Giardia lamblia cysts using mobile-phone based fluorescent microscopy and machine learning," *Lab on a Chip* DOI: 10.1039/C4LC01358A (2014) *Cover Article*
- 199. A. Greenbaum, Y. Zhang, A. Feizi, P. Chung, W. Luo, S.R. Kandukuri, and **A. Ozcan**, "Widefield Computational Imaging of Pathology Slides using Lensfree On-Chip Microscopy," *Science Translational Medicine (AAAS)* DOI: 10.1126/scitranslmed.3009850 (2014) *Cover Article*
- 200. A.F. Coskun, A.E. Cetin, B.C. Galarreta, D.A. Alvarez, H. Altug, and **A. Ozcan**, "Lensfree optofluidic plasmonic sensor for real-time and label-free monitoring of molecular binding events over a wide field-of-view," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep06789 (2014)
- 201. E. McLeod and **A. Ozcan**, "Nano-imaging enabled via self-assembly," *Nano Today* DOI: 10.1016/j.nantod.2014.08.005 (2014)
- 202. Z. Göröcs and **A. Ozcan**, "Biomedical Imaging and Sensing using Flatbed Scanners," *Lab on a Chip* DOI:10.1039/C4LC00530A (2014)
- 203. E. McLeod, C. Nguyen, P. Huang, W. Luo, M. Veli, and **A. Ozcan**, "Tunable vapor-condensed nanolenses," *ACS Nano* DOI: 10.1021/nn502453h (2014)
- 204. S.K.J. Ludwig, H. Zhu, S. Phillips, A. Shiledar, S. Feng, D. Tseng, L.A. van Ginkela, M.W.F. Nielen, and **A. Ozcan**, "Cellphone-based detection platform for rbST biomarker analysis in milk extracts using a microsphere fluorescence immunoassay," *Analytical and Bioanalytical Chemistry* DOI: 10.1007/s00216-014-7984-4 (2014)
- 205. **A. Ozcan**, "Educational games for malaria diagnosis," *Science Translational Medicine (AAAS)* DOI:10.1126/scitranslmed.3009172 (2014)
- 206. I. Pushkarsky, Y. Lyb, W. Weaver, T-W. Su, O. Mudanyali, **A. Ozcan**, and D. Di Carlo "Automated single-cell motility analysis on a chip using lensfree microscopy," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep04717 (2014)
- 207. S. Feng, R. Caire, B. Cortazar, M. Turan, A. Wong, and **A. Ozcan**, "Immunochromatographic Diagnostic Test Analysis using Google Glass," *ACS Nano* DOI:10.1021/nn500614k (2014)
- 208. **A. Ozcan**, "Mobile Phones Democratize and Cultivate Next-Generation Imaging, Diagnostics and Measurement Tools," *Lab on a Chip* DOI:10.1039/C4LC00010B (2014)
- 209. I. Sencan, A.F. Coskun, U. Sikora, and **A. Ozcan**, "Spectral Demultiplexing in Holographic and Fluorescent On-chip Microscopy," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep03760 (2014)
- 210. Q. Wei, R. Nagi, K. Sadeghi, S. Feng, E. Yan, S. Ki, R. Caire, D. Tseng, and **A. Ozcan**, "Detection and Spatial Mapping of Mercury Contamination in Water Samples using a Smart-Phone," *ACS Nano* DOI: 10.1021/nn406571t (2014)

- 211. A.E. Cetin, A.F. Coskun, B.C. Galarreta, M. Huang, D. Herman, **A. Ozcan** and H. Altug, "Handheld High-Throughput Plasmonic Biosensor using Computational On-Chip Imaging," *Light: Science & Applications (Nature Publishing Group)* DOI:10.1038/lsa.2014.3 (2014)
- 212. S. K. Vashist, O. Mudanyali, E. M. Schneidere, R. Zengerle, and **A. Ozcan**, "Cellphone-based devices for bioanalytical sciences," *Analytical and Bioanalytical Chemistry* DOI: 10.1007/s00216-013-7473-1 (2013)
- 213. Q. Wei, H. Qi, W. Luo, D. Tseng, S. Jung Ki, Z. Wan, Z. Göröcs, L.A. Bentolila, T. Wu, R. Sun, and **A. Ozcan**, "Fluorescent Imaging of Single Nanoparticles and Viruses on a Smart-Phone," *ACS Nano* DOI:10.1021/nn4037706 (2013)
- 214. Z. Göröcs, Y. Ling, M. Dai Yu, D. Karahalios, K. Mogharabi, K. Lu, Q. Wei, and **A. Ozcan**, "Giga-pixel fluorescent imaging over an ultra-large field-of-view using a flatbed scanner," *Lab on a Chip* DOI:10.1039/C3LC51005K (2013)
- 215. A. Greenbaum, N. Akbari, A. Feizi, W. Luo, and **A. Ozcan**, "Field-Portable Pixel Super-Resolution Colour Microscope," *PLoS ONE* DOI:10.1371/journal.pone.0076475 (2013)
- 216. A.F. Coskun, and **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics for Global Health Applications," *Current Opinion in Biotechnology* DOI:10.1016/j.copbio.2013.08.008 (2013)
- 217. A.F. Coskun, R. Nagi, K. Sadeghi, S. Phillips and **A. Ozcan**, "Albumin testing in urine using a smart-phone," *Lab on a Chip* DOI:10.1039/C3LC50785H (2013)
- 218. Y. Hennequin, C.P. Allier, E. McLeod, O. Mudanyali, D. Migliozzi, A. Ozcan and J.-M. Dinten "Optical detection and sizing of single nano-particles using continuous wetting films," *ACS Nano* DOI: 10.1021/nn403431y (2013)
- 219. I. Navruz, A.F. Coskun, J. Wong, S. Mohammad, D. Tseng, R. Nagi, S. Phillips, and **A. Ozcan**, "Smart-phone based computational microscopy using multi-frame contact imaging on a fiber-optic array," *Lab on a Chip* DOI:10.1039/C3LC50589H (2013) *Cover Article*
- 220. A. Greenbaum, A. Feizi, N. Akbari, and **A. Ozcan**, "Wide-field computational color imaging using pixel super-resolved on-chip microscopy," *Optics Express* DOI:10.1364/OE.21.012469 (2013)
- 221. A. Greenbaum, W. Luo, B. Khademhosseinieh, T-W. Su, A.F. Coskun, and **A. Ozcan**, "Increased space-bandwidth product in pixel super-resolved lensfree on-chip microscopy," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep01717 (2013)
- 222. Q. Wei, E. McLeod, H. Qi, Z. Wan, R. Sun, and A. Ozcan, "On-Chip Cytometry using Plasmonic Nanoparticle Enhanced Lensfree Holography," *Scientific Reports (Nature Publishing Group)* DOI:10.1038/srep01699 (2013)
- 223. K-W. Huang, T-W. Su, **A. Ozcan**, and P-Y. Chiou "Optoelectronic Tweezers Integrated with Lens-free Holographic Microscopy for Wide-field Interactive Cell and Particle Manipulation on a Chip," *Lab on a Chip* DOI:10.1039/C3LC50168J (2013) *Cover Article*
- 224. T. Su, I. Choi, J. Feng, K. Huang, E. McLeod, and A. Ozcan, "Sperm Trajectories Form Chiral Ribbons," *Scientific Reports (Nature Publishing Group)* DOI: 10.1038/srep01664 (2013)
- 225. E. McLeod, W. Luo, O. Mudanyali, A. Greenbaum, and **A. Ozcan**, "*Toward Giga-pixel Nanoscopy On a Chip:* A computational wide-field look at the nano-scale without the use of lenses," *Lab on a Chip* DOI:10.1039/C3LC50222H (2013) *Cover Article*
- 226. O. Mudanyali, E. McLeod, W. Luo, A. Greenbaum, A.F. Coskun, Y. Hennequin, C. Allier and **A. Ozcan**, "Wide-field optical detection of nano-particles using on-chip microscopy and self-assembled nano-lenses," *Nature Photonics* <u>DOI: 10.1038/NPHOTON.2012.337</u> (2013)
- 227. H. Zhu, I. Sencan, J. Wong, S. Dimitrov, D. Tseng, K. Nagashimaa, and **A. Ozcan**, "Costeffective and Rapid Blood Analysis on a Cell-phone," *Lab on a Chip* DOI:10.1039/C3LC41408F (2013)

- 228. H. Zhu, and **A. Ozcan**, "Wide-field fluorescent microscopy and fluorescent imaging flow cytometry on a cell-phone," *Journal of Visualized Experiments (JoVE)* DOI:10.3791/50451 (2013)
- 229. A.F. Coskun, J. Wong, D. Khodadadi, R. Nagi, A. Tey, and **A. Ozcan**, "A personalized food allergen testing platform on a cellphone," *Lab on a Chip* DOI:10.1039/C2LC41152K (2012)
- 230. S. Mavandadi, S. Feng, F. Yu, S. Dimitrov, R. Yu, and **A. Ozcan**, "BioGames: A Platform for Crowd-sourced Bio-Medical Image Analysis and Tele-Diagnosis," *Games for Health Journal* DOI: 10.1089/g4h.2012.0054 (2012)
- 231. J. Weidling, S.O. Isikman, A. Greenbaum, A. Ozcan, and E. Botvinick, "Lensfree Computational Imaging of Capillary Morphogenesis within 3D Substrates," *Journal of Biomedical Optics* DOI:10.1117/1.JBO.17.12.126018 (2012)
- 232. Z. Göröcs, and **A. Ozcan**, "On-Chip Biomedical Imaging," *IEEE Reviews in Biomedical Engineering* DOI: 10.1109/RBME.2012.2215847 (2012) (*Invited Manuscript*)
- 233. S. A. Arpali, C. Arpali, A.F. Coskun, H. Chiang, and **A. Ozcan**, "High-throughput screening of large volumes of whole blood using structured illumination and fluorescent on-chip imaging," *Lab on a Chip* DOI:10.1039/C2LC40894E (2012)
- 234. S. Mavandadi, S. Feng, F. Yu, S. Dimitrov, K. Nielsen, W.R. Prescott, and **A. Ozcan**, "A Mathematical Framework for Combining Decisions of Multiple Experts toward Accurate and Remote Diagnosis of Malaria Using Tele-Microscopy," *PLoS ONE* DOI:10.1371/journal.pone.0046192 (2012)
- 235. H. Zhu, S.O. Isikman, O. Mudanyali, A. Greenbaum, and **A. Ozcan**, "Optical Imaging Techniques for Point-of-care Diagnostics," *Lab on a Chip* DOI: 10.1039/C2LC40864C (2012) (*Invited Manuscript*)
- 236. S.O. Isikman, A. Greenbaum, W. Luo, A.F. Coskun, and **A. Ozcan**, "Giga-Pixel Lensfree Holographic Microscopy and Tomography using Color Image Sensors," *PLoS ONE* DOI: 10.1371/journal.pone.0045044 (2012)
- 237. T-W. Su, L. Xue and **A. Ozcan**, "High-throughput lensfree 3D tracking of human sperms reveals rare statistics of helical trajectories," *Proceedings of the National Academy of Sciences* (*PNAS*) DOI: 10.1073/pnas.1212506109 (2012)
- 238. S. Mavandadi, S. Dimitrov, S. Feng, F. Yu, R. Yu, U. Sikora, and **A. Ozcan**, "Crowd-sourced BioGames: Managing The Big Data Problem for Next-Generation Lab-on-a-Chip Platforms," *Lab on a Chip* DOI:10.1039/C2LC40614D (2012)
- 239. A. Greenbaum, W. Luo, T-W. Su, Z. Göröcs, L. Xue, S.O. Isikman, A.F. Coskun, O. Mudanyali, and **A. Ozcan**, "Imaging without lenses: achievements and remaining challenges of wide-field on-chip microscopy," *Nature Methods* DOI:10.1038/nmeth.2114 (2012)
- 240. S. Mavandadi, S. Dimitrov, S. Feng, F. Yu, U. Sikora, O. Yaglidere, S. Padmanabhan, K. Nielsen, and **A. Ozcan**, "Distributed Medical Image Analysis and Diagnosis through Crowd-Sourced Games: A Malaria Case Study," *PLoS ONE* DOI:10.1371/journal.pone.0037245 (2012)
- 241. S.O. Isikman, W. Bishara, and A. Ozcan, "Lensfree On-chip Tomographic Microscopy employing Multi-Angle Illumination and Pixel Super-Resolution," *Journal of Visualized Experiments (JoVE)* (66), e4161, DOI:10.3791/4161 (2012)
- 242. E. McLeod, and **A. Ozcan**, "Nanofabrication using near-field optical probes," *Journal of the Association for Laboratory Automation (JALA)* DOI: 10.1177/2211068212450289 (2012) (*Invited Manuscript*)
- 243. O. Mudanyali, S. Dimitrov, U. Sikora, S. Padmanabhan, I. Navruz, and **A. Ozcan**, "Integrated Rapid-Diagnostic-Test Reader Platform on a Cellphone," *Lab on a Chip* DOI:10.1039/C2LC40235A (2012)

- 244. S.O. Isikman, A. Greenbaum, M. Lee, W. Bishara, O. Mudanyali, T. Su and **A. Ozcan**, "Lensfree computational microscopy tools for cell and tissue imaging at the point-of-care and in low-resource settings", *Anal. Cell. Pathology*, vol. 36, pp. 1–19, <u>DOI:10.3233/ACP-2012-0057</u> (2012) (*Invited Manuscript*)
- 245. H. Zhu, U. Sikora, and **A. Ozcan**, "Quantum dot enabled detection of *Escherichia coli* using a cell-phone," *Analyst* DOI: 10.1039/C2AN35071H (2012) (*Cover Article*)
- 246. A. Greenbaum, U. Sikora and **A. Ozcan**, "Field-portable wide-field microscopy of dense samples using multi-height pixel super-resolution based lensfree imaging," *Lab on a Chip* DOI: 10.1039/c2lc21072j (2012)
- 247. A. Greenbaum and **A. Ozcan**, "Maskless imaging of dense samples using pixel super-resolution based multi-height lensfree on-chip microscopy," *Optics Express* DOI: 10.1364/OE.20.003129 (2012)
- 248. S.B. Kim, H. Bae, K. Koo, M.R. Dokmeci, **A. Ozcan** and A. Khademhosseini, "Lensfree Imaging for Biological Applications," *Journal of the Association for Laboratory Automation* (*JALA*) DOI: 10.1177/2211068211426695 (2012) (*Cover Article*)
- 249. S.O. Isikman, W. Bishara and A. Ozcan, "Partially Coherent Lensfree Tomographic Microscopy," *Applied Optics* Vol. 50 Issue 34, pp.H253-H264 DOI Link (2011) (*Invited Manuscript*)
- 250. W. Bishara, S.O. Isikman, and **A. Ozcan**, "Lensfree Optofluidic Microscopy and Tomography," *Annals of Biomedical Engineering (ABME)* DOI: 10.1007/s10439-011-0385-3 (2011) (*Invited Manuscript*)
- 251. M. Lee, O. Yaglidere, and **A. Ozcan**, "Field-portable reflection and transmission microscopy based on lensless holography," *Biomedical Optics Express* DOI:10.1364/BOE.2.002721 (2011)
- 252. O. Mudanyali, W. Bishara, and **A. Ozcan**, "Lensfree super-resolution holographic microscopy using wetting films on a chip," *Optics Express* DOI:10.1364/OE.19.017378 (2011)
- 253. H. Zhu, S. Mavandadi, A.F. Coskun, O. Yaglidere, and **A. Ozcan**, "Optofluidic fluorescent imaging cytometry on a cell-phone," *Analytical Chemistry* DOI: 10.1021/ac201587a (2011)
- 254. S.O. Isikman, W. Bishara, O. Mudanyali, I. Sencan, T. Su, D. Tseng, O. Yaglidere, U. Sikora, A. Ozcan, "Lensfree On-Chip Microscopy and Tomography for Bio-Medical Applications," *IEEE Journal of Selected Topics in Quantum Electronics* DOI: 10.1109/JSTQE.2011.2161460 (2011) (*Invited Manuscript*)
- 255. G. Biener, A. Greenbaum, S.O. Isikman, K. Lee, D. Tseng and A. Ozcan, "Combined Reflection and Transmission Microscope for Telemedicine Applications in Field Settings," *Lab on a Chip* DOI:10.1039/C1LC20169G (2011)
- 256. A.F. Coskun, T. Su, I. Sencan, and **A. Ozcan**, "Lensless Fluorescent Microscopy on a Chip," *Journal of Visualized Experiments (JoVE)* DOI: 10.3791/3181 (2011)
- 257. S.O. Isikman, W. Bishara, U. Sikora, O. Yaglidere, J. Yeah, and **A. Ozcan**, "Field-Portable Lensfree Tomographic Microscope," *Lab on a Chip* DOI:10.1039/C1LC20127A (2011)
- 258. S.O. Isikman, W. Bishara, S. Mavandadi, F.W. Yu, S. Feng, R. Lau and **A. Ozcan**, "Lensfree Optical Tomographic Microscope with a Large Imaging Volume on a Chip," *Proceedings of the National Academy of Sciences (PNAS)* DOI: 10.1073/pnas.1015638108 (2011)
- 259. W. Bishara, U. Sikora, O. Mudanyali, T. Su, O. Yaglidere, S. Luckhart, and **A. Ozcan**, "Holographic pixel super-resolution in portable lensless on-chip microscopy using a fiber-optic array," *Lab on a Chip* DOI:10.1039/C0LC00684J (2011)
- 260. S.O. Isikman, W. Bishara, H. Zhu, and **A. Ozcan**, "Opto-fluidic Tomography On a Chip," *Applied Physics Letters* DOI: 10.1063/1.3548564 (2011)
- 261. A.F. Coskun, I. Sencan, T. Su, and **A. Ozcan**, "Wide-field Lensless Fluorescent Microscopy Using a Tapered Fiber-optic Faceplate On a Chip," *Analyst* DOI:10.1039/C0AN00926A (2011) (*Cover Article*)

- 262. A.F. Coskun, I. Sencan, T. Su, and **A. Ozcan**, "Lensfree Fluorescent On-Chip Imaging of Transgenic *Caenorhabditis elegans* Over an Ultra-Wide Field-of-View," *PLoS ONE* DOI:10.1371/journal.pone.0015955 (2011)
- 263. W. Bishara, H. Zhu, and **A. Ozcan**, "Holographic Opto-fluidic Microscopy," *Optics Express* DOI:10.1364/OE.18.027499 (2010)
- 264. B. Khademhosseini, G. Biener, I. Sencan, and **A. Ozcan**, "Lensfree Color Imaging On a Nanostructured Chip using Compressive Decoding," *Applied Physics Letters* D0I:10.1063/1.3521410 (2010)
- 265. B. Khademhosseini, G. Biener, I. Sencan, T. Su, A.F. Coskun and **A. Ozcan**, "Lensfree Sensing on a Micro-fluidic Chip using Plasmonic Nano-apertures," *Applied Physics Letters* DOI:10.1063/1.3521390 (2010)
- 266. H. Zhu, O. Yaglidere, T. Su, D. Tseng, and **A. Ozcan**, "Cost-effective and Compact Wide-field Fluorescent Imaging on a Cell-phone," *Lab on a Chip*, DOI:10.1039/C0LC00358A (2010)
- 267. A.F. Coskun, I. Sencan, T. Su, and **A. Ozcan**, "Lensfree Fluorescent On-Chip Imaging Over an Ultra-Wide Field-of-View using Compressive Sampling," Special Issue of "*Optics in 2010*" *Optics & Photonics News*, 21(12), 27-27 (2010) DOI:10.1364/OPN.21.12.000027
- 268. T. Su, A. Erlinger, D. Tseng, and **A. Ozcan**, "A Compact and Light-weight Automated Semen Analysis Platform using Lensfree On-Chip Microscopy" *Analytical Chemistry* DOI:10.1021/ac101845q (2010)
- 269. O. Mudanyali, C. Oztoprak, D. Tseng, A. Erlinger, and **A. Ozcan**, "Detection of Waterborne Parasites using Field-portable and Cost-effective Lensfree Microscopy" *Lab on a Chip*, DOI:10.1039/c004829a (2010) Selected as part of *Emerging Investigators* Special Issue: DOI: 10.1039/c0lc90044c
- 270. T. Su, S.O. Isikman, W. Bishara, D. Tseng, A. Erlinger and **A. Ozcan**, "Multi-angle lensless digital holography for depth resolved imaging on a chip" *Optics Express* Vol. 18, pp. 9690-9711 doi:10.1364/OE.18.009690 (2010)
- 271. A.F. Coskun, I. Sencan, T. Su, and **A. Ozcan**, "Lensfree wide-field fluorescent imaging on a chip using compressive decoding of sparse objects," *Optics Express*, Vol. 18, Issue 10, pp. 10510-10523 doi:10.1364/OE.18.010510 (2010)
- 272. S. Seo, S.O. Isikman, I. Sencan, O. Mudanyali, T. Su, W. Bishara, A. Erlinger, **A. Ozcan**, "High-throughput Lensfree Blood Analysis On a Chip," *Analytical Chemistry* DOI: 10.1021/ac1007915 (2010)
- 273. W. Bishara, T. Su, A.F. Coskun, and **A. Ozcan**, "Lensfree on-chip microscopy over a wide field-of-view using pixel super-resolution," *Optics Express* Vol. 18, Issue 11, pp. 11181-11191 doi:10.1364/OE.18.011181 (2010)
- 274. B. Khademhosseini, I. Sencan, G. Biener, T. Su, A.F. Coskun, D. Tseng, **A. Ozcan**, "Lensfree On-chip Imaging using Nano-structured Surfaces," *Applied Physics Letters* 96, 171106; doi:10.1063/1.3405719 (2010)
- 275. D. Tseng, O. Mudanyali, C. Oztoprak, S.O. Isikman, I. Sencan, O. Yaglidere and **A. Ozcan**, "Lensfree Microscopy on a Cell-phone" *Lab on a Chip* DOI:10.1039/c003477k (2010) (*Cover Article*)
- 276. O. Mudanyali, D. Tseng, C. Oh, S.O. Isikman, I. Sencan, W. Bishara, C. Oztoprak, S. Seo, B. Khademhosseini, and **A. Ozcan**, "Compact, Light-weight and Cost-effective Microscope based on Lensless Incoherent Holography for Telemedicine Applications" *Lab on a Chip*, DOI:10.1039/C000453G (2010)
- 277. G.Stybayeva, O. Mudanyali, S. Seo, J. Silangcruz, M. Macal, E. Ramanculov, S. Dandekar, A. Erlinger, **A. Ozcan**, A. Revzin, "Lensfree Holographic Imaging of Antibody Microarrays for High-Throughput Detection of Leukocyte Numbers and Function," *Analytical Chemistry* DOI: 10.1021/ac100142a (2010)

- 278. S.O. Isikman, I. Sencan, O. Mudanyali, W. Bishara, C. Oztoprak and **A. Ozcan**, "Color and Monochrome Lensless On-chip Imaging of *Caenorhabditis Elegans* Over a Wide Field-of-View" *Lab on a Chip*, DOI:10.1039/C001200A (2010)
- 279. C. Oh, S. O. Isikman, B. Khademhosseini and **A. Ozcan**, "On-chip differential interference contrast microscopy using lensless digital holography," *Optics Express*, Vol. 18 Issue 5, 4717-4726 doi:10.1364/OE.18.004717 (2010)
- 280. A.F. Coskun, T. Su, and **A. Ozcan**, "Wide field-of-view lens-free fluorescent imaging on a chip" *Lab on a Chip*, DOI: 10.1039=b926561a (2010)
- 281. O. Mudanyali, A. Erlinger, S. Seo, T. Su, D. Tseng, **A. Ozcan**, "Lensless On-chip Imaging of Cells Provides a New Tool for Cell-Biology and Diagnostics" *Journal of Visualized Experiments* (JoVE). http://www.jove.com/index/details.stp?id=1650, doi: 10.3791/1650 (2009)
- 282. S. Seo, T. Su, D.K. Tseng, A. Erlinger, and **A. Ozcan**, "Lensfree Holographic Imaging for On-Chip Cytometry and Diagnostics," *Lab on a Chip*, DOI:10.1039/B813943A (2009)
- 283. S. Moon, H. Keles, **A. Ozcan**, et al., "Integrating microfluidics and lensless imaging for point-of-care testing," *Biosensors and Bioelectronics*, 24, Issue 11, pp. 3208-3214 (2009)
- 284. T. Su, S. Seo, A. Erlinger, D. Tseng, and **A. Ozcan**, "Lensless on-chip cytometry merges high-throughput with point-of-care," Special Issue of "Optics in 2008" Optics & Photonics News, December 2008
- 285. T. Su, S. Seo, A. Erlinger, and **A. Ozcan**, "Multi-color LUCAS: Lensfree on-chip cytometry using tunable monochromatic illumination and digital noise reduction," *Cellular and Molecular Bioengineering* (2008) DOI:10.1007/s12195-008-0018-6 *Outstanding Paper Award*
- 286. T. Su, S. Seo, A. Erlinger, and **A. Ozcan**, "High-throughput Imaging and Characterization of a Heterogeneous Cell Solution On a Chip," *Biotechnology and Bioengineering* (2008) DOI:10.1002/bit.22116 *Highlighted in the Spotlight Feature of the Journal*
- 287. A. Bilenca, J. Cao. M. Colice, **A. Ozcan**, B.E. Bouma, L. Raftery, G.J. Tearney, "Fluorescence Interferometry: Principles and Applications in Biology," *Annals of the New York Academy of Sciences*, 1130: 68–77 (2008). doi: 10.1196/annals.1430.038
- 288. **A. Ozcan**, and U. Demirci, "Ultra wide-field lens-free monitoring of cells on-chip," *Lab on a Chip*, DOI: 10.1039/b713695a (2007)
- 289. **A. Ozcan**, E. Cubukcu, B.E. Bouma, F. Capasso, G.J. Tearney, "Differential Near-field Scanning Optical Microscopy using Sensor Arrays," *IEEE Journal of Selected Topics in Quantum Electronics* 13, 1721 (2007) (*Invited Manuscript*)
- 290. **A. Ozcan**, A. Bilenca, A.E. Desjardin, B. E. Bouma, G. J. Tearney, "A study of speckle reduction in optical coherence tomography images using digital filtering," *Journal of Optical Society of America*, A 24, 1901 (2007)
- 291. A. Bilenca, T. Lasser, A. Ozcan, R. Leitgeb, B. E. Bouma, G. J. Tearney, "Image formation in fluorescence coherence-gated imaging through scattering media," *Optics Express* 15, 2810 (2007)
- 292. **A. Ozcan**, E. Cubukcu, A. Bilenca, K.B. Crozier, B.E. Bouma, F. Capasso, and G.J. Tearney, "Differential Near-field scanning optical microscopy," *Nano Letters* 6, 2609 (2006)
- 293. **A. Ozcan** and U. Demirci, "Rewritable self-assembled long-period gratings in photonic bandgap fibers using microparticles," *Optics Communications* 270, 225 (2007) (published online 10/2006)
- 294. **A. Ozcan**, A. Bilenca, B. E. Bouma, G. J. Tearney, "Mirror tunnel microscope," *Applied Physics Letters* 89, 131124 (2006)
- 295. **A. Ozcan**, A. Tewary, M. J. F. Digonnet, and G. S. Kino, "Observation of mode coupling in bitapered air-core fibers," *Optics Communications* 271, 391 (2007) (published online 11/2006)

- 296. A. Bilenca, **A. Ozcan**, B. E. Bouma, G. J. Tearney, "Fluorescence coherence tomography," *Optics Express* 14, 7134-7143 (2006) *Selected to appear in The Virtual Journal for Biomedical Optics*, Vol. 1, Issue 9, 2006.
- 297. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Quasi-phase-matched grating characterization using minimum-phase functions," *Optics Communications* 269, 199 (published online 8/2006)
- 298. **A. Ozcan**, "Characterization of nonlinear thin films using logarithmic Hilbert transform," *Electronics Letters* 42, 647-648 (2006)
- 299. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Minimum-phase function based processing in frequency-domain optical coherence tomography systems," *Journal of Optical Society of America*, A 23, 1669-1677 (2006) *Selected to appear in The Virtual Journal for Biomedical Optics*, Vol. 1, Issue 8, 2006
- 300. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Characterization of fiber Bragg gratings using spectral interferometry based on minimum-phase functions," *IEEE Journal of Lightwave Technology* 24, 1739-1757 (2006)
- 301. **A. Ozcan**, M. J. F. Digonnet, L. Lablonde, D. Pureur and G. S. Kino, "A new iterative technique to characterize and design transmission fiber Bragg gratings," *IEEE Journal of Lightwave Technology* 24, 1913-1921 (2006)
- 302. U. Demirci, and **A. Ozcan**, "Droplet ejection by femtosecond laser micromachined multiple orifice membrane based 2-D ejector arrays" *Electronics Letters* 41, 1219-1220 (2005)
- 303. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Detailed analysis of inverse Fourier transform techniques to uniquely infer second-order nonlinearity profile of thin films" *Journal of Applied Physics* 97, 013502 (2005)
- 304. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, F. Ay, and A. Aydinli, "Characterization of thermally poled germanosilicate thin films" *Optics Express* 12, 4698-4708 (2004)
- 305. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Group delay recovery using iterative processing of amplitude of transmission spectra of fibre Bragg gratings" *Electronics Letters* 40, 1104-1105 (2004)
- 306. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Iterative processing of second-order optical nonlinearity depth profiles," *Optics Express* 12, 3367-3376 (2004)
- 307. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Simplified inverse Fourier transform technique to measure optical nonlinearity profiles using reference sample," *Electronics Letters* 40, 551-552 (2004)
- 308. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Improved technique to determine second-order optical nonlinearity profiles using two different samples" *Appl. Phys. Lett.* 84, 681-683 (2004)
- 309. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Cylinder-assisted Maker fringe technique" *Electronics Letters* 39, 1834-1835 (2003)
- 310. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Inverse Fourier Transform technique to determine second-order optical nonlinearity spatial profiles" *Appl. Phys. Lett.* 82, 1362-1364 (2003)

REFEREED CONFERENCE PUBLICATIONS / ABSTRACTS

- 1. E.A. Deger, S.S. Rahman, T. Gan, Ç. Işıl, M. Jarrahi, and A. Ozcan, "Optical Data Transfer Around Opaque Occlusions Using Electronic Encoding and Diffractive Decoding," National Conference on Undergraduate Research (NCUR), April 8-10, 2024, Long Beach, CA
- 2. F.O. Ardic, K. Mentesoglu, C. Isil, and A. Ozcan, "All-Optical Image Denoising Using a Diffractive Visual Processor," National Conference on Undergraduate Research (NCUR), April 8-10, 2024, Long Beach, CA
- 3. X. Li, D. Mengu, A. Ozcan, and M Jarrahi, "High-speed and super-resolution terahertz imaging with a plasmonic photoconductive focal-plane array," Asia Light Conference, March 5-8, 2024,

- Singapore
- 4. S.S. Rahman, T. Gan, E.A. Deger, Ç. Işıl, M. Jarrahi and A. Ozcan, "Information transfer around arbitrary opaque occlusions using programmed diffraction", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-57 (*Invited Talk*)
- 5. S.S. Rahman, X. Yang, J. Li, B. Bai, and A. Ozcan, "Universal linear processing of spatially incoherent light with diffractive optical processors", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-36
- 6. Y. Li, Y. Luo, D. Mengu, B. Bai, and A. Ozcan, "Diffractive optical networks enable quantitative phase imaging through random, unknown diffusers", SPIE Photonics West, Computational Optical Imaging and Artificial Intelligence in Biomedical Sciences, January 27- February 1, 2024, San Francisco, CA, Paper # 12857-32
- 7. Y. Li, T. Gan, B. Bai, Ç. Işıl, M. Jarrahi, and A. Ozcan, "Transferring optical information through random unknown diffusers using a diffractive decoder with electronic encoding", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-60
- 8. J. Li, X. Li, N.T. Yardimci, J. Hu, Y. Li, J. Chen, Y. Hung, M. Jarrahi, and A. Ozcan, "Single-pixel diffractive terahertz sensor enables rapid detection of hidden defects and structures", SPIE Photonics West, Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XVII, January 27- February 1, 2024, San Francisco, CA, Paper # 12885-57
- 9. L. Huang, H. Chen, T. Liu, and A. Ozcan, "Experiment-data-free self-supervised neural network for holographic microscopy imaging", SPIE Photonics West, Quantitative Phase Imaging X, January 27- February 1, 2024, San Francisco, CA, Paper # 12852-42
- 10. A. Goncharov, H-A. Joung, R. Ghosh, G-R. Han, Z.S. Ballard, Q. Maloney, A. Bell, C.T.Z. Aung, O.B. Garner, D. Di Carlo, and A. Ozcan, "Multiplexed quantification of biomarkers using deep learning-based fluorescent vertical flow assay", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings X, January 27- February 1, 2024, San Francisco, CA, Paper # 12832-25
- 11. Y. Ma, L. Huang, C. Sen, S. Burri, C. Bruschini, X. Yang, R.B. Cameron, G.A. Fishbein, B.N. Gomperts, A. Ozcan, E. Charbon, and L. Gao, "Light-field tomographic fluorescence lifetime imaging microscopy", SPIE Photonics West, Computational Optical Imaging and Artificial Intelligence in Biomedical Sciences, January 27- February 1, 2024, San Francisco, CA, Paper # 12857-46
- 12. A. Ozcan, "Diffractive visual processors", SPIE Photonics West, Computational Optical Imaging and Artificial Intelligence in Biomedical Sciences, January 27- February 1, 2024, San Francisco, CA, Paper # 12857-34 (*Keynote Talk*)
- 13. C. Shen, J. Li, D. Mengu and A. Ozcan, "Snapshot multispectral quantitative phase imaging (QPI) using diffractive networks", SPIE Photonics West, Quantitative Phase Imaging X, January 27-February 1, 2024, San Francisco, CA, Paper # 12852-41
- 14. B. Bai, H. Wei, X. Yang, T. Gan, D. Mengu, M. Jarrahi, and A. Ozcan, "Data class-specific image encryption and transformation through diffractive optical networks", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-58
- 15. Y. Li, J. Li, Y. Zhao, T. Gan, J. Hu, M. Jarrahi, A. Ozcan, "Universal polarization transformations using diffractive optical networks", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-59
- 16. A. Ozcan, "Virtual staining of label-free tissue using deep learning", SPIE Photonics West, Quantitative Phase Imaging X, January 27- February 1, 2024, San Francisco, CA, Paper # 12852-44 (*Invited Talk*)

- 17. L. Huang, J. Li, X. Ding, Y. Zhang, H. Chen and A. Ozcan, "Neural network uncertainty quantification in inverse imaging problems based on cycle consistency", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-56
- S.S. Rahman and A. Ozcan, "Time-lapse image classification boosts diffractive optical network inference accuracy", SPIE Photonics West, AI and Optical Data Sciences V, January 27-February 1, 2024, San Francisco, CA, Paper # 12903-16
- 19. J. Li, T. Gan, Y. Zhao, B. Bai, C-Y. Shen, S. Sun, M. Jarrahi and A. Ozcan, "Diffractive unidirectional imager designed by deep learning", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-61 (*Invited Talk*)
- 20. J. Li, T. Gan, B. Bai, Y. Luo, M. Jarrahi, and A. Ozcan, "Massively parallel all-optical visual computing using a wavelength-multiplexed diffractive optical processor", SPIE Photonics West, AI and Optical Data Sciences V, January 27- February 1, 2024, San Francisco, CA, Paper # 12903-62
- 21. H-A. Joung, R. Ghosh, A. Goncharov, B. Palanisamy, K. Ngo, K. Pejcinovic, N. Krockenberger, E.J. Horn, R.J. Dattwyler, P.M. Arnaboldi, O.B. Garner, D. Di Carlo and A. Ozcan, "Peptide-based point-of-care serodiagnosis of Lyme disease enabled by deep-learning", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings X, January 27- February 1, 2024, San Francisco, CA, Paper # 12832-26
- 22. D. Mengu, A. Tabassum, J. Li and M. Jarrahi and A. Ozcan, "Diffractive multispectral imager designed by deep learning", SPIE Photonics West, AI and Optical Data Sciences V, January 27-February 1, 2024, San Francisco, CA, Paper # 12903-63
- 23. A. Ozcan, "Computational Label-free Microscopy and Point-of-care Sensing," The 7th IEEE Internet of Things Summit, Intelligent Biomedical Applications, January 24-February 2, 2024, San Antonio, TX, USA (*Invited Talk*)
- 24. A. Ozcan and J. Li, "Diffractive Processing of Visual Information," Electronic Imaging Conference, Society for Imaging Science and Technology, January 21-25, 2024, San Francisco, USA (*Invited Talk*)
- 25. A. Ozcan, "Diffractive Information Processing and Computational Imaging," The 54th Winter Colloquium on the Physics of Quantum Electronics (PQE), January 7-12, 2024, Utah, USA (*Invited Talk*)
- 26. A. Ozcan, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," International Symposium on Imaging, Sensing, and Optical Memory (ISOM), November 19-22, 2023, Kagawa, Japan (*Keynote Talk*)
- 27. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," IEEE Asilomar Conference on Signals, Systems, and Computers, October 29-November 1, 2023, Asilomar, CA (*Invited Talk*)
- 28. A. Ozcan, "Deep Learning-designed Diffractive Materials for Optical Computing and Computational Imaging," IEEE Nanotechnology Materials and Devices Conference (IEEE NMDC), October 22-25, 2023, Paestum, Italy (*Keynote Talk*)
- 29. A. Ozcan, "Virtual Staining of Label-free Tissue Using Deep Learning," Nano-Balkan International Conference, October 16-20, 2023, Tirana, Albania (*Plenary Talk*)
- 30. A. Ozcan, "Diffractive Optical Processors," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA (*Visionary Talk*)
- 31. C. Shen, J. Li, D. Mengu, and A. Ozcan, "Single-Shot Multispectral Quantitative Phase Imaging (QPI) using a Diffractive Optical Processor," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle, WA
- 32. Y. Li, J. Li, Y. Zhao, T. Gan, J. Hu, M. Jarrahi, and A. Ozcan, "Universal polarization transformations using a deep learning-designed diffractive processor," Optica Frontiers in Optics

- (FiO) Conference, October 9-12, 2023, Seattle WA
- 33. Y. Li, Y. Luo, D. Mengu, B. Bai, and A. Ozcan, "All-optical quantitative phase imaging (QPI) through random unknown diffusers using a diffractive network," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 34. B. Bai, H. Wei, X. Yang, T. Gan, D. Mengu, M. Jarrahi, and A. Ozcan, "All-optical data class-specific image encryption using diffractive neural networks," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 35. H. Chen, L. Huang, T. Liu, and A. Ozcan, "Deep Learning-enabled Autofocusing and Pixel Super-Resolution in Holographic Imaging," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 36. J. Li, X. Li, N.T. Yardimci, J. Hu, Y. Li, J. Chen, Y. Hung, M. Jarrahi, and A. Ozcan, "Single-Pixel Diffractive Terahertz Processor for Nondestructive Detection of Hidden Objects and Defects," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 37. J. Li, T. Gan, Y. Zhao, B. Bai, C. Shen, S. Sun, M. Jarrahi, and A. Ozcan, "Unidirectional Imaging Using Diffractive Materials," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 38. Y. Li, T. Liu, H. Ceylan Koydemir, Y. Zhang, E. Yang, M. Eryilmaz, H. Wang, J. Li, B. Bai, G. Ma, and A. Ozcan, "Stain-free, rapid, and automated viral plaque assay using time-lapse holographic imaging and deep learning," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 39. S.S. Rahman, T. Gan, E.A. Deger, C. Isil, M. Jarrahi, and A. Ozcan, "Optical Communication Around Opaque Occlusions Using Electronic Encoding and Diffractive Decoding," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 40. S.S. Rahman, X. Yang, J. Li, B. Bai, and A. Ozcan, "Universal Linear Transformations of Intensity Patterns under Spatially Incoherent Illumination," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 41. S.S. Rahman, and A. Ozcan, "Time-lapse Image Classification through a Diffractive Optical Network," Optica Frontiers in Optics (FiO) Conference, October 9-12, 2023, Seattle WA
- 42. A. Ozcan, "Diffractive optical networks & computational imaging without a computer," 28th Microoptics Conference, September 24-27, 2023, Miyazaki, Japan (*Invited Talk*)
- 43. J. FitzGerald, T. Liu, C. Barrios, B. Bai, G. McCarthy, A. Rosenthal, and A. Ozcan, "Validation of single-shot computational polarized microscopy for crystal analysis of synovial fluid," American College of Rheumatology (ACR) Converge Annual Meeting, November 10–15, 2023, San Diego, CA, USA
- 44. C. Barrios, A. Rosenthal, G. McCarthy, T. Liu, B. Bai, G. Ma, A. Ozcan, and J. D. FitzGerald, "Using a new engineering method, single-shot computational polarized light microscopy (SCPLM) in identifying crystals in synovial fluid," Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN) 9th Annual Research Symposium, November 7-8, 2023, La Jolla, CA, USA
- 45. A. Ozcan, "Virtual Staining of Label-free Tissue Using Deep Learning," International Forum on Microscopy (IFM), September 8-10, 2023, Zhongshan, China (*Plenary Talk*)
- 46. A. Ozcan, "Diffractive optical networks," International Conference on Materials Science, Engineering & Technology, September 7-9, 2023, Singapore (*Keynote Talk*)
- 47. A. Ozcan, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," Royal Society of Chemistry (RSC), Tokyo International Conference, September 7-8, 2023, Chiba, Japan (*Plenary Lecture*)
- 48. A. Goncharov, H-A. Joung, R. Ghosh, G-R. Han, Z.S. Ballard, Q. Maloney, A. Bell, C.T.Z. Aung, O.B. Garner, D. Di Carlo, and A. Ozcan, "Deep learning-enabled fluorescent point-of-care sensor

- for multiplexed quantification of biomarkers from serum," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-53
- 49. A. Ozcan, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," SPIE-CLP Conference on Advanced Photonics, August 22-23, 2023, San Diego CA, USA (*Invited Talk*)
- 50. Y. Li, Y. Luo, D. Mengu, B. Bai, and A. Ozcan, "All-optical quantitative phase imaging through random diffusers using a diffractive network," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-47
- 51. J. Li, T. Gan, B. Bai, Y. Luo, M. Jarrahi, and A. Ozcan, "All-optical Computation of a large group of linear transformations using a broadband diffractive optical network," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-42
- 52. J. Li, T. Gan, Y. Zhao, B. Bai, C-Y. Shen, S. Sun, M. Jarrahi and A. Ozcan, "Deep learning-designed unidirectional imagers," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-37
- 53. H-A. Joung, R. Ghosh, A. Goncharov, B. Palanisamy, K. Ngo, K. Pejcinovic, N. Krockenberger, E.J. Horn, R.J. Dattwyler, P.M. Arnaboldi, O.B. Garner, D. Di Carlo and A. Ozcan, "Deeplearning enabled point-of-care sensor for Lyme disease diagnosis," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-19
- 54. X. Li, D. Mengu, A. Ozcan, M. Jarrahi, "Plasmonic photoconductive terahertz focal-plane array for super-resolution and high-speed imaging," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12683-25 (*Invited Talk*)
- 55. B. Bai, H. Wei, X. Yang, T. Gan, D. Mengu, M. Jarrahi, and A. Ozcan, "Data class-specific alloptical transformations using diffractive computing," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-49
- 56. S.S. Rahman, A. Ozcan, "Time-lapse image classification using a diffractive optical network," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA, Paper # 12655-45
- 57. A. Ozcan, "Diffractive optical networks & computational imaging without a computer," SPIE Optics and Photonics, August 20-24, 2023, San Diego CA, USA (*Invited Talk*)
- 58. A. Ozcan, "Diffractive optical networks & computational imaging without a computer," Conference on Visible Light Communication and Optical Computing, Chinese Optical Society, August 18-20, 2023, Shenzhen, China (*Plenary Talk*)
- 59. A. Ozcan, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," Gordon Research Conference (GRC) Chemical Imaging, July 30 August 4, 2023, Boston, MA, USA (*Invited Talk*)
- 60. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," International Conference on Optical MEMS and Nanophotonics (OMN), July 30 August 3, 2023, Unicamp, Brazil (*Plenary Talk*)
- 61. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," International Conference on Quantum Engineered Sensing and Information Technology, June 27-30, 2023, Paris, France (*Invited Talk*)
- 62. A. Ozcan, "Virtual Staining of Label-free Tissue using Deep Learning," SPIE Optical Metrology Conference, June 26-29, 2023, Munich, Germany (*Invited Talk*)
- 63. A. Goncharov, H-A. Joung, R. Ghosh, G. Han, Z.S. Ballard, Q. Maloney, A. Bell, C.T.Z. Aung, O.B. Garner, D. Di Carlo and A. Ozcan, "Paper-based fluorescence assay for multiplexed quantification of biomarkers using deep learning," 23rd Annual UC Systemwide Bioengineering Symposium, June 22-23, 2023, University of California, Berkeley, CA, USA
- 64. H-A. Joung, R. Ghosh, A. Goncharov, B. Palanisamy, K. Ngo, K. Pejcinovic, N. Krockenberger, E.J. Horn, R.J. Dattwyler, P.M. Arnaboldi, O.B. Garner, D. Di Carlo and A. Ozcan, "Deeplearning enabled peptide-based serodiagnostic assay for point-of-care testing of Lyme disease,"

- 23rd Annual UC Systemwide Bioengineering Symposium, June 22-23, 2023, University of California, Berkeley, CA, USA
- 65. Y. Li, T. Liu, H. C. Koydemir, Y. Zhang, E. Yang, M. Eryilmaz, H. Wang, J, Li, B. Bai, G. Ma, and A. Ozcan, "Rapid, automated, and stain-free viral plaque assay using deep learning and holography," 23rd Annual UC Systemwide Bioengineering Symposium, June 22-23, 2023, University of California, Berkeley, CA, USA
- 66. Y. Zhang, L. Huang, T. Liu, K. de Haan, Y. Li, B. Bai and A. Ozcan, "Neural network-based virtual staining of defocused autofluorescence images of label-free tissue," 23rd Annual UC Systemwide Bioengineering Symposium, June 22-23, 2023, University of California, Berkeley, CA, USA
- 67. X. Yang, B. Bai, Y. Li, Y. Zhang, T. Liu, K. de Haan, and A. Ozcan, "Virtual histological stain transfer through a cascaded deep neural network," 23rd Annual UC Systemwide Bioengineering Symposium, June 22-23, 2023, University of California, Berkeley, CA, USA
- 68. X. Li, D. Mengu, A. Ozcan, M. Jarrahi, "16 Frames-per-Second Terahertz Time-Domain Imaging through a Plasmonic Photoconductive Focal-Plane Array," IEEE MTT International Microwave Symposium IMS, June 11-16, 2023, San Diego, USA
- 69. Y. Li, B. Bai, Y. Luo, E. Cetintas, A. Ozcan, "All-optical object classification through unknown phase diffusers using a single-pixel diffractive machine vision system" OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 70. C. Isil, D. Mengu, Y. Zhao, A. Tabassum, J. Li, Y. Luo, M. Jarrahi, A. Ozcan, "Super-resolution image projection using a diffractive optical decoder," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 71. H.-A. Joung, R. Ghosh, A. Goncharov, K. Ngo, B. Palanisamy, E. J. Horn, P. M. Arnaboldi, R. J. Dattwyler, O. B. Garner, D. Di Carlo, A. Ozcan, "Computational optical sensor with a paper-based peptide panel assay for point-of-care testing of Lyme disease," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 7-12, 2023, San Jose, CA USA
- 72. D. Zhang, D. Xu, Y. Li, Y. Luo, J. Hu, Y. Huang, A. Ozcan, X. Duan, "Nonlinear Optoelectronic Filter-Array for Intelligent Glare Reduction," OSA/Optica Conference on Lasers and Electrooptics (CLEO), May 07-12, 2023, San Jose, CA, USA
- 73. X. Li, D. Mengu, A. Ozcan, M. Jarrahi, "Time-Domain Terahertz Video Captured With a Plasmonic Photoconductive Focal-Plane Array," OSA/Optica Conference on Lasers and Electrooptics (CLEO), May 07-12, 2023, San Jose, CA, USA
- 74. L. Huang, H. Chen, T. Liu, A. Ozcan, "Self-supervised neural network for holographic microscopy," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 75. X. Li, D. Mengu, A. Ozcan, M. Jarrahi, "Super-Resolution Terahertz Imaging Through a Plasmonic Photoconductive Focal-Plane Array," OSA/Optica Conference on Lasers and Electrooptics (CLEO), May 07-12, 2023, San Jose, CA, USA
- 76. B. Bai, Y. Luo, T. Gan, J. Hu, Y. Li, Y. Zhao, D. Mengu, M. Jarrahi, A. Ozcan, "Data class-specific imaging using diffractive computing," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA, USA
- 77. Y. Zhang, Luzhe Huang, Tairan Liu, Keyi Cheng, Kevin de Haan, Yuzhu Li, Bijie Bai, A. Ozcan, "Neural network-based virtual staining of defocused autofluorescence images of label-free tissue," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 78. D. Mengu, A. Tabassum, M. Jarrahi, A. Ozcan, "Multispectral Imaging Using a Diffractive Network," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA

- 79. J. Li, Y. Hung, O. Kulce, D. Mengu, A. Ozcan, "All-Optical Computing of a Group of Linear Transformations Using a Polarization Multiplexed Diffractive Neural Network," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 7-12, 2023, San Jose, CA, USA
- 80. D. Mengu, Y. Zhao, A. Tabassum, M. Jarrahi, A. Ozcan, "All-Optical Interconnects: Diffractive Permutation Networks," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 81. Y. Zhang, Yi Luo, Tairan Liu, Alan Yu, Yichen Wu, A. Ozcan, "Label-free bio-aerosol detection and classification using a virtual impactor, holography, and deep learning," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 82. D. Mengu, A. Ozcan, "All-Optical Phase Recovery: Quantitative Phase Imaging Using Diffractive Optical Networks," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 07-12, 2023, San Jose, CA USA
- 83. J. Li, B. Bai, Y. Luo, A. Ozcan, "Massively-Parallel Broadband Diffractive Processor for All-Optical Computation of a Large Set of Linear Transformations," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 7-12, 2023, San Jose, CA, USA
- 84. A. Goncharov, H.-A. Joung, R. Ghosh, G.-R. Han, Z. S. Ballard, Q. Maloney, A. Bell, C. T. Z. Aung, O. B. Garner, D. Di Carlo and A. Ozcan, "Fluorescence-based multiplexed point-of-care sensor using deep learning," OSA/Optica Biophotonics Congress, April 23-27, 2023, Vancouver, Canada
- 85. A. Ozcan, "Deep-learning-enabled computational microscopy and diffractive imaging," Optics and Photonics International Congress (OPIC), Biomedical Imaging and Sensing Conference (SPIE), April 17 21, 2023, Pacifico Yokohama, Japan (*Invited Talk*)
- 86. H. Joung, R. Ghosh, A. Goncharov, Z. Ballard, R. Dattwyler, P. Arnaboldi, O. Garner, D. Carlo, A. Ozcan, "Computational paper-based vertical flow assay for Lyme disease diagnosis" SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IX, January 28 February 2, 2023, San Francisco, CA, Paper # 12369-19
- 87. X. Yang, B. Bai, Y. Li, Y. Zhang, T. Liu, K. de Haan, and A. Ozcan, "Virtual stain-to-stain transformations via cascaded deep neural networks", SPIE Photonics West, Multimodal Biomedical Imaging XVIII, January 28-February 2, 2023, San Francisco, CA, Paper # 12371-17
- 88. B. Bai, H. Wang, Y. Li, K. de Haan, Y. Zhang, J. Li, X. Yang, M. Darrow, E. Kamangar, H. Lee, Y. Rivenson, and A. Ozcan, "Virtual HER2 staining of Label-free Breast Tissue using Autofluorescence Imaging and Deep Learning", SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic and Surgical Guidance Systems XXI, January 28- February 2, 2023, San Francisco, CA, Paper # 12368-26
- 89. B. Bai, Y. Luo, T. Gan, J. Hu, Y. Li, Y. Zhao, D. Mengu, M. Jarrahi, and A. Ozcan, "Data class-specific imaging with all-optical erasure of undesired objects using diffractive computing", SPIE Photonics West, AI and Optical Data Sciences IV, January 28- February 2, 2023, San Francisco, CA, Paper # 12438-77
- 90. Ç. Işıl, D. Mengu, Y. Zhao, A. Tabassum, J. Li, Y. Luo, M. Jarrahi, and A. Ozcan, "Diffractive decoders project super-resolved images", SPIE Photonics West, AI and Optical Data Sciences IV, January 31 February 2, 2023, San Francisco, CA, Paper # 12438-1
- 91. A. Ozcan, "Deep-learning-enabled computational microscopy and diffractive imaging," SPIE Photonics West, Biophotonics Plenary Session, January 31 February 2, 2023, San Francisco, CA (*Plenary Talk*)
- 92. A. Ozcan, "Diffractive Optical Networks and Computational Imaging Without a Computer," SPIE Photonics West, Practical Holography XXXVII: Displays, Materials, and Applications, January 31 February 2, 2023, San Francisco, CA (*Invited Talk*)

- 93. K. de Haan, Y. Rivenson, A. Ozcan, "Deep learning-based virtual staining of histological tissues," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IX, January 31 February 2, 2023, San Francisco, CA (*Invited Talk*)
- 94. J. Li, J. Garfinkel, X. Zhang, D. Wu, Y. Zhang, K. de Haan, H. Wang, T. Liu, B. Bai, Y. Rivenson, G. Rubinstein, P. O. Scumpia and A. Ozcan, "Label-free, in vivo virtual histology of skin using reflectance confocal microscopy and deep learning", SPIE Photonics West, Label-free Biomedical Imaging and Sensing (LBIS), January 28 February 2, 2023, San Francisco, CA, Paper # 12391-54
- 95. X. Li, D. Mengu, A. Ozcan and M. Jarrahi, "Terahertz pixel-super-resolution imaging with a plasmonic focal-plane array", SPIE Photonics West, Terahertz, RF, Millimeter, and Submillimeter-Wave Technology and Applications XVI, January 28 February 2, 2023, San Francisco, CA, Paper # 12420-22
- 96. J. Li, Y. Hung, O. Kulce, D. Mengu and A. Ozcan, "Polarization diffractive networks: performing multiple linear transformations using a polarization-encoded diffractive optical network", SPIE Photonics West, AI and Optical Data Sciences IV, January 28 February 2, 2023, San Francisco, CA, Paper # 12438-9
- 97. D. Mengu, Y. Zhao, A. Tabassum, M. Jarrahi and A. Ozcan, "Diffractive optical permutation networks", SPIE Photonics West, AI and Optical Data Sciences IV, January 28 February 2, 2023, San Francisco, CA, Paper # 12438-6
- 98. L. Huang, X. Yang, T. Liu, and A. Ozcan, "Few-shot transfer learning using a recurrent neural network for hologram reconstruction", SPIE Photonics West, AI and Optical Data Sciences IV, January 28 February 2, 2023, San Francisco, CA, Paper # 12438-14
- 99. D. Mengu and A. Ozcan, "Quantitative phase imaging and all-optical phase recovery using diffractive optical networks", SPIE Photonics West, Quantitative Phase Imaging IX, January 28 February 2, 2023, San Francisco, CA, Paper # 12389-28
- 100. Y. Li, T. Liu, H. C. Koydemir, H. Wang, K. O'Riordan, B. Bai, Y. Haga, J. Kobashi, H. Tanaka, T. Tamaru, K. Yamaguchi and A. Ozcan, "Rapid detection and classification of bacterial colonies using a thin film transistor (TFT) image sensor and deep learning", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IX, January 28-February 2, 2023, San Francisco, CA, Paper # 12369-16
- 101. Y. Li, T. Liu, H. C. Koydemir, Y. Zhang, E. Yang, H. Wang, J, Li, B. Bai, and A. Ozcan, "Stainfree, rapid, and quantitative viral plaque assay using deep learning and time-lapse holographic imaging", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IX, January 28-February 2, 2023, San Francisco, CA, Paper # 12369-20
- 102. H. Chen, L. Huang, T. Liu and A. Ozcan, "Deep learning-based hologram reconstruction with superior external generalization", SPIE Photonics West, QPI Methodologies III, January 28-February 2, 2023, San Francisco, CA, Paper # 12389-33
- 103. B. Bai, Y. Li, Y. Luo, X. Li, E. Cetintas, M. Jarrahi and A. Ozcan, "Object classification through unknown random diffusers using a single-pixel diffractive network and spectrum encoding", SPIE Photonics West, AI and Optical Data Sciences IV, January 28 February 2, 2023, San Francisco, CA, Paper # 12438-24
- 104. Y. Li, Y. Luo, B. Bai and A. Ozcan, "Diffractive imagers see through random unknown diffusers", SPIE Photonics West, AI and Optical Data Sciences IV, January 28 February 2, 2023, San Francisco, CA, Paper # 12438-74
- 105. Y. Zhang, L. Huang, T. Liu, K. Cheng, K. de Haan, Y. Li, B. Bai and A. Ozcan, "Deep learning-based virtual staining of defocused autofluorescence images of label-free tissue", SPIE Photonics West, Optical Biopsy XXI: Toward Real-Time Spectroscopic Imaging and Diagnosis, January 31- February 1, 2023, San Francisco, CA, Paper # 12373-23

- 106. Y. Luo, Y. Zhang, T. Liu, A. Yu, Y. Wu and A. Ozcan, "Label-free bio-aerosol detection and classification using a virtual impactor and deep learning", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IX, January 28-29, 2023, San Francisco, CA, Paper # 12369
- 107. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," Electronic Imaging Conference, Society for Imaging Science and Technology, January 16-19, 2023, San Francisco, USA (*Invited Talk*)
- 108. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," The 53rd Winter Colloquium on the Physics of Quantum Electronics (PQE), January 9-13, 2023, Utah, USA (*Invited Talk*)
- 109. B. Palanisamy, J. Jeon, H. Joung, K. Ngo, R. Ghosh, A. Ozcan, D. Di Carlo, "Simulation-driven Engineering Design of Vertical Flow Assays," IEEE EMBS Micro and Nanotechnology in Medicine Conference, December 5-9, 2022, Hawaii, USA
- 110. V. Shah, X. Yang, M. Ouyang, G. Destgeer, S. Udani, A. Arnheim, H. Koydemir, A. Ozcan, D. Di Carlo, "Lab-on-a-Particle-based NT-proBNP Assay and Portable Reader," IEEE EMBS Micro and Nanotechnology in Medicine Conference, December 5-9, 2022, Hawaii, USA
- 111. A. Goncharov, H.-A. Joung, Z. S. Ballard, O. Garner, D. Di Carlo, A. Ozcan, "Deep Learning-Enabled Point-of-Care Sensing Using Multiplexed Paper-Based Sensors", World Point of Care & At Home Diagnostics Summit, Nov 30 - Dec 1, 2022, San Diego, CA, USA (*Invited Talk*)
- 112. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," International Conference on Optical and Photonic Engineering (icOPEN), November 24-27, 2022, Virtual (*Plenary Talk*)
- 113. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," SPIE Conference on Advanced Photonics, November 21-23, 2022, Virtual (*Invited Talk*)
- 114. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," IEEE Photonics Conference, November 13-17, 2022, Vancouver, Canada (*Invited Talk*)
- 115. V. Shah, X. Yang, M. Ouyang, A. Arnheim, H. Koydemir, D. Tseng, Y. Luo, S. Udani, G. Destgeer, A. Ozcan, D. Di Carlo, "Lab-on-a-particle assay and portable reader for accessible monitoring of heart failure," MicroTAS 2022 The 26th International Conference on Miniaturized Systems for Chemistry and Life Sciences, October 23-27, 2022, Hangzhou, China
- 116. J. Li, J. Garfinkel, X. Zhang, D. Wu, Y. Zhang, K. de Haan, H. Wang, T. Liu, B. Bai, Y. Rivenson, P. Scumpia, and A. Ozcan, "Deep Learning Enables Noninvasive, Biopsy-free Virtual Histology of Skin Using Reflectance Confocal Microscopy," BMES (Biomedical Engineering Society) Annual Meeting, October 12-15, 2022, San Antonio, TX, USA
- 117. H-A. Joung, Y. Luo, and A. Ozcan, "Neural Network-enabled Quantitative Particle Agglutination Assay Using Lensfree Microscopy," BMES (Biomedical Engineering Society) Annual Meeting, October 12-15, 2022, San Antonio, TX, USA
- 118. B. Bai, H. Wang, Y. Li, K. de Haan, Y. Zhang, J. Li, M. Darrow, E. Kamangar, Y. Rivenson and A. Ozcan, "Virtual Immunohistochemical Staining of Label-free Breast Tissue Using Deep Learning," BMES (Biomedical Engineering Society) Annual Meeting, October 12-15, 2022, San Antonio, TX, USA
- 119. R. Ghosh, H-A. Joung, A. Goncharov, B. Palanisamy, K. Pejcinovic, N. Krockenberger, E. Horn, P. Arnaboldi, O. Garner, A. Ozcan, and D. Di Carlo, "Multiplexed Point-of-care Vertical Flow Assay for Lyme Disease Diagnosis," BMES (Biomedical Engineering Society) Annual Meeting, October 12-15, 2022, San Antonio, TX, USA
- 120. Y. Li, Y. Luo, B. Bai and A. Ozcan, "Diffractive optical imagers can see through random unknown diffusers," Optica/OSA Frontiers in Optics + Laser Science (FiO-LS) Conference, October 17-20, 2022, Rochester, NY USA

- 121. X. Yang, B. Bai, Y. Li, Y. Zhang., T. Liu, K. de Haan, A. Ozcan, "Virtual histological stain transformations through cascaded deep neural networks," Optica/OSA Frontiers in Optics + Laser Science (FiO-LS) Conference, October 17-20, 2022, Rochester, NY USA
- 122. Y. Li, T. Liu, H. C. Koydemir, H. Wang, K. O'Riordan, B. Bai, Y. Haga, J. Kobashi, H. Tanaka, T. Tamaru, K. Yamaguchi and A. Ozcan, "Early Detection and Classification of Bacterial Colonies Using a Thin-Film-Transistor (TFT)-Based Image Sensor and Deep Learning," Optica/OSA Frontiers in Optics + Laser Science (FiO-LS) Conference, October 17-20, 2022, Rochester, NY USA
- 123. L. Huang, X. Yang, T. Liu, A. Ozcan, "Few-shot Transfer Learning of a Recurrent Neural Network (RNN) for Holographic Image Reconstruction," Optica/OSA Frontiers in Optics + Laser Science (FiO-LS) Conference, October 17-20, 2022, Rochester, NY USA
- 124. H. Chen, L. Huang, T. Liu and A. Ozcan, "A Broadly Generalizable Deep Neural Network for Rapid Phase Recovery and Hologram Reconstruction," Optica/OSA Frontiers in Optics + Laser Science (FiO-LS) Conference, October 17-20, 2022, Rochester, NY USA
- 125. H.-A. Joung, R. Ghosh, A. Goncharov, K. Ngo, B. Palanisamy, M. Veszpremi, E. Horn, P. Arnaboldi, R. Dattwyler, O. Garner, D. Di Carlo, A. Ozcan, "Paper-Based Computational Multi-Peptide Optical Sensor for Point-of-Care Testing of Lyme Disease", Optica/OSA Frontiers in Optics + Laser Science (FiO-LS) Conference, October 17-20, 2022, Rochester, NY USA (*Postdeadline Paper*)
- 126. A. Ozcan, "Deep Learning-enabled computational microscopy for biophotonics" SPIE Translational Biophotonics & Additive Manufacturing, September 12-14, 2022, Los Angeles, CA, USA (*Invited Talk*)
- 127. A. Goncharov, H. Joung, Z.S. Ballard, D. Di Carlo, O.B. Garner, and A. Ozcan, "Computational sensing with a multiplexed paper-based vertical flow assay for point-of-care applications "SPIE Translational Biophotonics & Additive Manufacturing, September 12-14, 2022, Los Angeles, CA, USA
- 128. A. Ozcan, "Diffractive Optical Computing," 25th Congress of the International Commission for Optics (ICO), September 5-9, 2022, Dresden, Germany (*Invited Talk*)
- 129. X. Li, D. Mengu, A. Ozcan, M. Jarrahi, "Super-Resolution Terahertz Imaging with Plasmonic Focal-Plane Arrays", International Conference on Infrared, Millimeter, and Terahertz Waves, August 28- September 2, 2022, Delft, Netherlands (*Keynote Talk*)
- 130. Y. Luo, D. Mengu, A. Ozcan, "Diffractive computing using cascadable all-optical NAND gates," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-3
- 131. M.S.S. Rahman, A. Ozcan, "All-optical reconstruction of holograms using diffractive networks," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-25
- 132. Y. Luo, Y. Zhao, J. Li, E. Çetintaş, Y. Rivenson, M. Jarrahi, A. Ozcan, "Imaging through unknown, random diffusers using diffractive all-optical computing," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-26
- 133. L. Huang, X. Yang, T. Liu, A. Ozcan, "Few-shot generalizable hologram reconstruction model using a recurrent neural network (RNN)," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-29
- 134. D. Mengu, A. Ozcan, "Quantitative phase imaging using diffractive optical networks," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-32
- 135. J. Li, J. Garfinkel, X. Zhang, D. Wu, Y. Zhang, K. de Haan, H. Wang, T. Liu, B. Bai, Y. Rivenson, G. Rubinstein, P. Scumpia, A. Ozcan, "Deep learning-enabled, non-invasive virtual histology of skin using reflectance confocal microscopy," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-35

- 136. B. Bai, H. Wang, Y. Li, K. de Haan, F. Colonnese, Y. Wan, J. Zuo, N.B. Doan, X. Zhang, Y. Zhang, J. Li, W. Dong, M.A. Darrow, E. Kamangar, H. Sung Lee, Y. Rivenson, A. Ozcan, "Virtual immunohistochemical (IHC) staining of unlabeled tissue using deep learning," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-36
- 137. H. Wang, Y. Rivenson, A. Ozcan, "Virtual histological staining via deep learning," SPIE Optics and Photonics, August 21-25, 2022, San Diego CA, USA, Paper # 12204-38 (*Invited Talk*)
- 138. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," ACS Fall Meeting, August 21-25, 2022, Chicago, IL, USA (*Invited Talk*)
- 139. Y. Li, T. Liu, H. C. Koydemir, H. Wang, K. O'Riordan, B. Bai, A. Ozcan, "Deep learning-based early detection and classification of bacteria using a thin film transistor array", ACS Fall Meeting, August 21-25, 2022, Chicago, IL, USA
- 140. K. de Haan, Y. Zhang, J. E. Zuckerman, T. Liu, Y. Rivenson, W. Dean Wallace, A. Ozcan, "Deep learning-based transformation from H&E into special stains," 22nd Annual UC Systemwide Bioengineering Symposium, August 8-10, 2022, University of California, Santa Barbara, CA, USA
- 141. C. Isil, K. de Haan, Z. Gorocs, H. C. Koydemir, S. Peterman, D. Baum, F. Song, T. Skandakumar, E. Gumustekin, A. Ozcan, "Phenotypic analysis of microalgae populations through label-free imaging flow cytometry," 22nd Annual UC Systemwide Bioengineering Symposium, August 8- 10, 2022, University of California, Santa Barbara, CA, USA
- 142. Y. Zhang, T. Liu, M. Singh, E. Çetintaş, Y. Luo, Y. Rivenson, K. V. Larin, A. Ozcan, "Deep learning-based image reconstruction in optical coherence tomography using undersampled spectral data," 22nd Annual UC Systemwide Bioengineering Symposium, August 8-10, 2022, University of California, Santa Barbara, CA, USA
- 143. B. Bai, H. Wang, Y. Li, K. de Haan, F. Colonnese, Y. Wan, J. Zuo, N. Doan, X. Zhang, Y. Zhang, J. Li, X. Yang, W. Dong, M. Darrow, E. Kamangar, H. Lee, Y. Rivenson, A. Ozcan, "Deep learning-enabled virtual immunohistochemical (IHC) staining of label-free breast tissue sections," 22nd Annual UC Systemwide Bioengineering Symposium, August 8-10, 2022, University of California, Santa Barbara, CA, USA
- 144. Y. Li, T. Liu, H. C. Koydemir, H. Wang, K. O'Riordan, B. Bai, Y. Haga, J. Kobashi, H. Tanaka, T. Tamaru, K. Yamaguchi, A. Ozcan, "Deep learning-based detection and classification of coliform bacterial colonies using a thin film transistor (TFT) image sensor," 22nd Annual UC Systemwide Bioengineering Symposium, August 8-10, 2022, University of California, Santa Barbara, CA, USA
- 145. H. A. Joung, Y. Luo, S. Esparza, J. Rao, O. Garner, A. Ozcan, "Quantitative particle agglutination sensor enabled by deep learning and holography," 22nd Annual UC Systemwide Bioengineering Symposium, August 8 10, 2022, University of California, Santa Barbara, CA, USA
- 146. J. Li, J. Garfinkel, X. Zhang, D. Wu, Y. Zhang, K. de Haan, H. Wang, T. Liu, B. Bai, Y. Rivenson, G. Rubinstein, P. O. Scumpia and A. Ozcan, "Deep learning-based non-invasive skin virtual histology using reflectance confocal microscopy," 22nd Annual UC Systemwide Bioengineering Symposium, August 8 10, 2022, University of California, Santa Barbara, CA, USA
- 147. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," 13th International Conference on Optics-Photonics Design and Fabrication (ODF), August 3-5, 2022, Sapporo, Japan (*Invited Talk*)
- 148. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," IEEE International Conference on Computational Photography (ICCP), Caltech, August 1-3, 2022, Pasadena, CA, USA (*Invited Talk*)

- 149. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," Optica Imaging and Applied Optics Congress, July 11-15, 2022, Vancouver, Canada (*Invited Talk*)
- 150. D. Mengu, M. Veli, Y. Rivenson, A. Ozcan, "Classification and Reconstruction of Spatially Overlapping Phase Objects Through Diffractive Networks," Optica Imaging and Applied Optics Congress, July 11-15, 2022, Vancouver, Canada
- 151. O. Kulce, D. Mengu, Y. Rivenson, A. Ozcan, "All-Optical Computation of an Arbitrary Linear Transform Using Diffractive Networks," Optica Imaging and Applied Optics Congress, July 11-15, 2022, Vancouver, Canada
- 152. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer," Gordon Research Conference (GRC) Image Science, June 5-10, 2022, Newry, ME, USA (*Invited Talk*)
- 153. Y. Zhang, K. de Haan, J. Li, Y. Rivenson, A. Ozcan, "Neural network-based multiplexed and microstructured virtual staining of unlabeled tissue," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 154. L. Huang, T. Liu, X. Yang, Y. Luo, Y. Rivenson, A. Ozcan, "Phase Recovery and Holographic Imaging using Recurrent Neural Networks (RNNs)," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 155. X. Yang, L. Huang, Y. Luo, Y. Wu, H. Wang, Y. Rivenson and A. Ozcan, "3D Virtual Refocusing of Point Spread Function (PSF) Engineered Images Using Cascaded Neural Networks" OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 156. Y. Luo, H. Joung, S. Esparza, J. Rao, O. Garner, A. Ozcan, "Quantitative particle agglutination assay using mobile holographic imaging and neural networks," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 157. Y. Luo, Y. Zhao, J. Li, E. Çetintaş, Y. Rivenson, M. Jarrahi, A. Ozcan, "Seeing through unknown, random diffusers using diffractive optical networks," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 158. E. Çetintaş, Y. Luo, C. Nguyen, Y. Guo, L. Li, Y. Zhu, A. Ozcan, "Characterization of exhaled e-cigarette aerosols in a vape shop using a field-portable holographic on-chip microscope," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 159. Y. Luo, D. Mengu, A. Ozcan, "Diffractive networks form cascadable all-optical NAND gates," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 160. M.S.S. Rahman and A. Ozcan, "Diffractive Networks All-Optically Reconstruct Holograms," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 161. K. de Haan, Y. Zhang, J.E. Zuckerman, T. Liu, Y. Rivenson, W.D. Wallace and A. Ozcan, "Deep Learning-Based Transformation of H&E Stained Tissue Into Special Stains", OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 162. J. Li, J. Garfinkel, X. Zhang, D. Wu, Y. Zhang, K. D. Haan, H. Wang, T. Liu, B. Bai, Y. Rivenson, G. Rubinstein, P. O. Scumpia and A. Ozcan, "Biopsy-free Virtual Histology of Skin Using Reflectance Confocal Microscopy and Deep Learning," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 163. B. Bai, H. Wang, Y. Li, K. de Haan, F. Colonnese, Y. Wan, J. Zuo, N. Doan, X. Zhang, Y. Zhang, J. Li, W. Dong, M. Darrow, E. Kamangar, H. Lee, Y. Rivenson, A. Ozcan, "Deep Learning-based Virtual Immunohistochemical HER2 staining of Label-Free Breast Tissue,"

- OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 5-10, 2022, San Jose, CA USA
- 164. Y. Zhang, T. Liu, M. Singh, E. Cetintas, Y. Luo, Y. Rivenson, K. Larin, A. Ozcan, "Deep learning-based image reconstruction in optical coherence tomography using undersampled spectral data," OSA/Optica Conference on Lasers and Electro-optics (CLEO), May 15-20, 2022, San Jose, CA USA
- 165. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," 16th International Conference on Laser Applications in Life Sciences (LALS), April 1-2, 2022, Nancy, France (*Keynote Talk*)
- 166. A. Ozcan, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," IEEE International Symposium on Biomedical Imaging (IEEE ISBI), March 29, 2022, Virtual (*Invited Talk*)
- 167. A. Ozcan, "Deep Learning-enabled Optics", SPIE Photonics West, BiOS Hot Topics Plenary Session, January 22-27, 2022, San Francisco, CA (*Plenary Session*)
- 168. M.S.S. Rahman, J. Li, D. Mengu, Y. Rivenson, and A. Ozcan, "Advancing diffractive network-based image classification by ensemble learning", SPIE Photonics West, AI and Optical Data Sciences III, January 22-27, 2022, San Francisco, CA, Paper # 12019-5
- 169. M.S.S. Rahman and A. Ozcan, "Diffractive networks all-optically reconstruct holograms", SPIE Photonics West, Practical Holography XXXVI: Displays, Materials, and Applications, January 22-27, 2022, San Francisco, CA, Paper # 12026-11
- 170. X. Yang, L. Huang, Y. Luo, Y. Wu, H. Wang, Y. Rivenson and A. Ozcan, "Three-dimensional virtual refocusing of point-spread function engineered images using cascaded neural networks", SPIE Photonics West, AI and Optical Data Sciences III, January 22-27, 2022, San Francisco, CA, Paper # 12019-9
- 171. L. Huang, T. Liu, X. Yang, Y. Luo, Y. Rivenson and A. Ozcan, "Phase recovery and autofocusing in holographic imaging using recurrent neural networks (RNNs)", SPIE Photonics West, Quantitative Phase Imaging VIII, January 22-27, 2022, San Francisco, CA, Paper # 11970-28
- 172. Y. Luo, Y. Zhao, J. Li, E. Çetintas, Y. Rivenson, M. Jarrahi and A. Ozcan, "Seeing through unknown, random diffusers using all-optical diffractive networks", SPIE Photonics West, AI and Optical Data Sciences III, January 22-27, 2022, San Francisco, CA, Paper # 12019-38
- 173. K. de Haan, Y. Zhang, J.E. Zuckerman, T. Liu, Y. Rivenson, W.D. Wallace and A. Ozcan, "Transformation of H&E stained tissue into special stains using deep learning", SPIE Photonics West, Optical Biopsy XX: Toward Real-Time Spectroscopic Imaging and Diagnosis, January 22-27, 2022, San Francisco, CA, Paper # 11954-18
- 174. Y. Luo, H. Joung, S. Esparza, J. Rao, O. Garner and A. Ozcan, "Quantitative particle agglutination assay for point-of-care sensing using mobile holographic imaging and neural networks", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VIII, January 22-27, 2022, San Francisco, CA, Paper # 11950-10
- 175. Y. Zhang, T. Liu, M. Singh, E. Çetintas, Y. Luo, Y. Rivenson, K. Larin and A. Ozcan, "Deep learning-based image reconstruction in swept source optical coherence tomography using undersampled spectral data", SPIE Photonics West, Multimodal Biomedical Imaging XVII, January 22-27, 2022, San Francisco, CA, Paper # 11952-18
- 176. D. Mengu, Y. Rivenson, and A. Ozcan, "Diffractive optical networks with scale, shift, and rotation invariance", SPIE Photonics West, AI and Optical Data Sciences III, January 22-27, 2022, San Francisco, CA, Paper # 12019-37
- 177. O. Kulce, D. Mengu, Y. Rivenson, and A. Ozcan, "All-optical implementations of arbitrary linear transformations using diffractive networks", SPIE Photonics West, AI and Optical Data Sciences III, January 22-27, 2022, San Francisco, CA, Paper # 12019-39

- 178. A. Ozcan, "Diffractive optical neural networks", SPIE Photonics West, AI and Optical Data Sciences III, January 22-27, 2022, San Francisco, CA, Paper # 12019-33 (*Keynote Talk*)
- 179. D. Mengu, M. Veli, Y. Rivenson, and A. Ozcan, "Diffractive networks classify and reconstruct overlapping phase objects", SPIE Photonics West, Quantitative Phase Imaging VIII, January 22-27, 2022, San Francisco, CA, Paper # 11970-15
- 180. Y. Luo, Y. Wu, L. Li, Y. Guo, E. Çetintas, Y. Zhu and A. Ozcan, "Volatility measurement of particulate matter using deep learning-based holographic microscopy", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VIII, January 22-27, 2022, San Francisco, CA, Paper # 11950-27
- 181. V. Koutnik, D.J. Leonard, J. Glassman, A. Novoselov, H.C. Koydemir, D. Tseng, A. Ozcan, R. Bertel, S. Ravi, S.K Mohanty, "What Controls the Distribution and Mobility of Microplastics in Stormwater Treatment Systems in Urban Areas?" American Geophysical Union (AGU) Fall Meeting, December 13-17, 2021, New Orleans, LA, USA
- 182. Y. Luo, Y. Wu, L. Li, Y. Guo, E. Çetintaş, Y. Zhu, and A. Ozcan, "Dynamic imaging and characterization of volatile aerosols using deep learning-based holographic microscopy", OSA Frontiers in Optics (FiO) Conference, November 1-4, 2021, Virtual Conference
- 183. O. Kulce, D. Mengu, Y. Rivenson, and A. Ozcan, "Information Processing Capacity of Diffractive Optical Processors", OSA Frontiers in Optics (FiO) Conference, November 1-4, 2021, Virtual Conference
- 184. D. Mengu, Y. Rivenson, and A. Ozcan, "Design of Shift-, Scale- and Rotation Invariant Diffractive Optical Networks", OSA Frontiers in Optics (FiO) Conference, November 1-4, 2021, Virtual Conference
- 185. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," OSA Frontiers in Optics (FiO) Conference, November 1-4, 2021, Virtual Conference (*Invited Talk*)
- 186. C. Isil, K. de Haan, Z. Göröcs, H. C. Koydemir, S. Peterman, D. Baum, F. Song, T. Skandakumar, E. Gumustekin, and A. Ozcan, "Label-free imaging flow cytometry for phenotypic analysis of microalgae populations using deep learning," OSA Frontiers in Optics (FiO) Conference, November 1-4, 2021, Virtual Conference
- 187. A. Ozcan, "Diffractive Optical Networks," IEEE Photonics Conference, Virtual, October 18-21, 2021 (*Invited Talk*)
- 188. A. Ozcan, "Toward intelligent microscopes: deep learning's potential for biomedical imaging applications," Annual Conference of the Society of Biomolecular Imaging and Informatics (SBI²), Virtual, October 4-6, 2021 (*Keynote Talk*)
- 189. A. Ozcan, "Deep Learning-enabled Computational Water Sensors," IEEE International Workshop on Metrology for the Sea (MetroSea'21), Italy, October 4-6, 2021 (*Plenary Talk*)
- 190. A. Ozcan, "Diffractive Optical Neural Networks," Chinese Society of Optical Engineering (CSOE) International Computational Imaging Conference, Hangzhou, China, September 24-26, 2021 (*Plenary Talk*)
- 191. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Institute of Physics (IOP), Machine Learning in Biological Physics Meeting, September 6, 2021, (*Invited Talk*)
- 192. L. Huang, H. Chen, Y. Rivenson, A. Ozcan, "Convolutional recurrent neural network-enabled volumetric fluorescence imaging," SPIE Optics and Photonics, August 1-5, 2021, Virtual Conference, Paper # 11804-35
- 193. X. Yang, L. Huang, Y. Luo, Y. Wu, H. Wang, Y. Rivenson, and A. Ozcan, "Virtual refocusing of fluorescence images using an engineered point-spread function and deep learning", SPIE Optics and Photonics Conference, August 1-5, 2021, Virtual Conference, Paper # 11804-74

- 194. M. Veli, D. Mengu, N.T. Yardimci, Y. Luo, J. Li, Y. Rivenson, M. Jarrahi, and A. Ozcan, "Pulse shaping using diffractive optical networks designed by deep learning," SPIE Optics and Photonics Conference, August 1-5, 2021, Virtual Conference, Paper # 11804-66
- 195. H. Wang, H.C. Koydemir, Y. Qiu, B. Bai, Y. Zhang, Y. Jin, S. Tok, E.C. Yilmaz, E. Gumustekin, Y. Rivenson, and A. Ozcan, "Early identification of live bacteria in water samples using time-lapse holographic imaging and deep learning", SPIE Optics and Photonics Conference, August 1-5, 2021, Virtual Conference, Paper # 11804-64
- 196. A. Ozcan, "Terahertz applications of diffractive optical networks," SPIE Optics and Photonics, August 1-5, 2021, Virtual Conference, Paper # 11827-2 (*Invited Talk*)
- 197. M.S.S. Rahman, J. Li, D. Mengu, Y. Rivenson, A. Ozcan, "Ensemble learning boosts the inference accuracy of diffractive neural networks," SPIE Optics and Photonics, August 1-5, 2021, Virtual Conference, Paper # 11804-12
- 198. J. Li, D. Mengu, N. T. Yardimci, Y. Luo, X. Li, M. Veli, Y. Rivenson, M. Jarrahi, A. Ozcan, "Diffractive network-based single-pixel machine vision," SPIE Optics and Photonics, Emerging Topics in Artificial Intelligence (ETAI), August 1 5, 2021, Virtual Conference, Paper # 11804-8
- 199. O. Kulce, D. Mengu, Y. Rivenson, A. Ozcan, "All-optical information processing capacity of diffractive networks," SPIE Optics and Photonics, August 1-5, 2021, Virtual Conference, Paper # 11804-09
- 200. D. Mengu, Y. Rivenson, A. Ozcan, "Design of Scale-, Shift- and Rotation-Invariant Diffractive Optical Networks," SPIE Optics and Photonics, August 1-5, 2021, Virtual Conference, Paper # 11804-14
- 201. A. Ozcan, "Diffractive Optical Networks," OSA Imaging and Applied Optics Congress, July 19-23, 2021, Virtual Conference (*Keynote Talk*)
- 202. M.S.S. Rahman, J. Li, D. Mengu, Y. Rivenson, A. Ozcan, "Ensemble Learning of Diffractive Optical Neural Networks," OSA Imaging and Applied Optics Congress, July 19-23, 2021, Virtual Conference
- 203. Z. Göröcs, D. Baum, F. Song, K. de Haan, H.C. Koydemir, Y. Qiu, Z. Cai, T. Skandakumar, S. Peterman, M. Tamamitsu, A. Ozcan, "Deep Learning-enabled Holographic Imaging Flow-Cytometry for Label-Free Detection of Giardia Lamblia in Water Samples," OSA Imaging and Applied Optics Congress, July 19-23, 2021, Virtual Conference
- 204. A. Ozcan, "Deep Learning-enabled Computational Microscopy," Royal Microscopical Society (RMS) Microscience Microscopy Congress (MMC), July 5-9, 2021, (*Plenary Talk*)
- 205. A. Ozcan, "Diffractive Optical Networks Designed by Deep Learning," The 5th International Conference on Optoelectronic and Microelectronic Technology and Application (OMTA 2021), Chinese Society for Optical Engineering (CSOE), May 22-24, 2021, Virtual Conference (*Plenary Talk*)
- 206. J. Li, D. Mengu, N. T. Yardimci, Y. Luo, X. Li, M. Veli, Y. Rivenson, M. Jarrahi, A. Ozcan, "Single-Pixel Machine Vision Using Spectral Encoding Through Diffractive Optical Networks," OSA Conference on Lasers and Electro-optics (CLEO), May 9-14, 2021, Virtual Conference
- 207. A. Goncharov, C. Brown, Z. Ballard, M. Fordham, A. Clemens, Y. Qiu, Y. Rivenson, A. Ozcan, "Deep learning-based spectral reconstruction on a chip using a scalable plasmonic encoder," OSA Conference on Lasers and Electro-optics (CLEO), May 9-14, 2021, Virtual Conference
- 208. D. Mengu, Y. Zhao, N.T. Yardimci, Y. Rivenson, M. Jarrahi, A. Ozcan, "Misalignment Tolerant Diffractive Optical Networks," OSA Conference on Lasers and Electro-optics (CLEO), May 09-14, 2021, Virtual Conference
- 209. T. Liu, K. Haan, B. Bai, Y. Rivenson, Y. Luo, H. Wang, D. Karalli, H. Fu, Y. Zhang, J. FitzGerald, and A. Ozcan, "Deep-learning-enabled Holographic Polarization Microscopy," OSA Conference on Lasers and Electro-optics (CLEO), May 09-14, 2021, Virtual Conference

- 210. H. Wang, H.C. Koydemir, Y. Qiu, B. Bai, Y. Zhang, Y. Jin, S. Tok, E.C. Yilmaz, E. Gumustekin, Y. Rivenson, A. Ozcan. "Deep Learning-enabled Coherent Imaging Achieves Early Detection and Classification of Bacteria in Water Samples," OSA Conference on Lasers and Electro-optics (CLEO), May 9-14, 2021, Virtual Conference
- 211. Z. Ballard, S. Bazargan, D. Jung, S. Sathianathan, A. Clemens, D. Shir, S. Al-Hashimi, and A. Ozcan, "Contact lens-based sensing of lysozyme in tear fluid using a mobile well-plate reader," OSA Conference on Lasers and Electro-optics (CLEO), May 9-14, 2021, Virtual Conference
- 212. L. Huang, Y. Luo, Y. Rivenson, A. Ozcan, "Neural Network-Based Single-Shot Autofocusing of Microscopy Images," OSA Conference on Lasers and Electro-optics (CLEO), May 09-14, 2021, Virtual Conference
- 213. L. Huang, H. Chen, Y. Luo, Y. Rivenson, A. Ozcan, "Volumetric Fluorescence Microscopy Using Convolutional Recurrent Neural Networks," OSA Conference on Lasers and Electro-optics (CLEO), May 09-14, 2021, Virtual Conference
- 214. M. Veli, D. Mengu, N. T. Yardimci, Y. Luo, J. Li, Y. Rivenson, M. Jarrahi, and A. Ozcan, "Terahertz Pulse Shaping Using Diffractive Optical Networks", OSA Conference on Lasers and Electro-optics (CLEO), May 09-14, 2021, Virtual Conference
- 215. D.J. Leonard, H. Ceylan Koydemir, V. Smirnova, D. Tseng, A. Ozcan, S. Mohanty, "Rapid detection of microplastics using mobile phone technology". ACS Spring 2021, Division of Environmental Chemistry (ENVR), April 5-16, 2021, Virtual Conference
- 216. A. Ozcan, "Deep learning-enabled computational microscopy," Endocrine Society Annual Meeting (ENDO 2021), Symposium on Thinking Microscopes Artificial Intelligence in Imaging Molecules, Cells and Tumors, March 20-23, 2021, Virtual Conference (*Invited Talk*)
- 217. T. Liu, K. Haan, B. Bai, Y. Rivenson, Y. Luo, H. Wang, D. Karalli, H. Fu, Y. Zhang, J. FitzGerald, and A. Ozcan, "Deep learning enabled holographic polarization microscopy," American Physical Society, APS March Meeting, March 15-19, 2021, Virtual Conference
- 218. D. Mengu, Y. Zhao, N. T. Yardimci, Y. Rivenson, M. Jarrahi, and A. Ozcan, "Misalignment Insensitive Diffractive Optical Networks," American Physical Society, APS March Meeting, March 15-19, 2021, Virtual Conference
- 219. M. Veli, D. Mengu, N.T. Yardimci, Y. Luo, J. Li, Y. Rivenson, M. Jarrahi, and A. Ozcan, "Terahertz Pulse Engineering Using Diffractive Optical Networks," American Physical Society, APS March Meeting, March 15-19, 2021, Virtual Conference
- 220. Z. Göröcs, D. Baum, F. Song, K. DeHaan, H.C. Koydemir, Y. Qiu, Z. Cai, T. Skandakumar, S. Peterman, M. Tamamitsu, and A. Ozcan, "High throughput detection and quantification of Giardia lamblia cysts using holographic imaging flow-cytometry and deep learning," American Physical Society, APS March Meeting, March 15-19, 2021, Virtual Conference
- 221. J. Li, D. Mengu, N. T. Yardimci, Y. Luo, X. Li, M. Veli, Y. Rivenson, M. Jarrahi, and A. Ozcan, "Trainable Diffractive Surfaces for Spectral Encoding of Spatial Information," American Physical Society, APS March Meeting, March 15–19, 2021, Virtual Conference
- 222. M.S.S. Rahman, J. Li, D. Mengu, Y. Rivenson, A. Ozcan, "Ensemble learning enhances the inference accuracy of diffractive deep neural networks," American Physical Society, APS March Meeting, March 15-19, 2021, Virtual Conference
- 223. H. Wang, H.C. Koydemir, Y. Qiu, B. Bai, Y. Zhang, Y. Jin, S. Tok, E.C. Yilmaz, E. Gumustekin, Y. Rivenson, and A. Ozcan, "Early detection and classification of live bacteria using holography and deep learning," American Physical Society, APS March Meeting, March 15-19, 2021, Virtual Conference
- 224. M. Veli, D. Mengu, N. T. Yardimci, Y. Luo, J. Li, Y. Rivenson, M. Jarrahi, and A. Ozcan, "Terahertz pulse shaping using diffractive networks", SPIE Photonics West, AI and Optical Data Sciences II, March 6-11, 2021, Virtual Conference, Paper # 11703-49

- 225. Z. Göröcs, D. Baum, F. Song, K. De Haan, H.C. Koydemir, Y. Qiu, Z. Cai, T. Skandakumar, S. Peterman, M. Tamamitsu, and A. Ozcan, "Label-free detection of Giardia lamblia cysts in water samples using a field-portable imaging flow cytometer and deep learning", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VII, March 6 11, 2021, Virtual Conference, Paper # 116320G
- 226. K. De Haan, Y. Zhang, Y. Rivenson, J. Li, and A. Ozcan, "Deep learning-based multiplexed virtual staining of unlabeled tissue for micro-structured stain blending", SPIE Photonics West, Label-free Biomedical Imaging and Sensing (LBIS), March 6-11, 2021, Virtual Conference, Paper # 116550A
- 227. C. Brown, D. Tseng, P. M. K. Larkin, S. Realegeno, L. Mortimer, A. Subramonian, D. Di Carlo, O. Garner, and A. Ozcan, "A cost-effective system for automated early antimicrobial susceptibility testing using deep learning," SPIE Photonics West, Photonic Diagnosis, Monitoring, Prevention, and Treatment of Infections and Inflammatory Diseases; March 6 11, 2021, Virtual Conference, Paper # 11626-16
- 228. D. Mengu, Y. Zhao, N.T. Yardimci, Y. Rivenson, M. Jarrahi and A. Ozcan, "Misalignment tolerant diffractive optical networks", AI and Optical Data Sciences II, SPIE Photonics West, March 6 11, 2021, Virtual Conference, Paper # 11703-51
- 229. A. Ozcan, "Diffractive optical neural networks," SPIE Photonics West, AI and Optical Data Sciences II, March 6-11, 2021, Virtual Conference (*Invited Talk*)
- 230. O. Kulce, D. Mengu, Y. Rivenson, A. Ozcan, "Information Processing Capacity of Diffractive Surfaces," SPIE Photonics West, AI and Optical Data Sciences II, March 6 11, 2021, Virtual Conference, Paper # 11703-10
- 231. A. Goncharov, C. Brown, Z. Ballard, M. Fordham, A. Clemens, Y. Qui, Y. Rivenson, and A. Ozcan, "Deep-learning-based compact spectrum analyzer on a chip", SPIE Photonics West, AI and Optical Data Sciences II, March 6 11, 2021, Virtual Conference, Paper # 11703-50
- 232. C. Isil, K. De Haan, H. Koydemir, Z. Göröcs, D. Baum, F. Song, T. Skandakumar, E. Gumustekin, and A. Ozcan, "Label-free analysis of micro-algae populations using a high-throughput holographic imaging flow cytometer and deep learning," SPIE Photonics West, Label-free Biomedical Imaging and Sensing, March 6-11, 2021, Virtual Conference, Paper # 116550B
- 233. Y. Luo, D. Mengu, N. Yardimci, Y. Rivenson, M. Veli, M. Jarrahi, and A. Ozcan, "Broadband diffractive optical networks", SPIE Photonics West, SPIE Photonics West, AI and Optical Data Sciences II, March 6 11, 2021, Virtual Conference, Paper # 11703-34
- 234. T. Liu, Y. Zhang, M. Ouyang, A. Ray, J. Kong, B. Bai, D. Kim, A. Guziak, Y. Luo, A. Feizi, K. Tsai, Z. Duan, X. Liu, D. Kim, C. Cheung, S. Yalcin, H. Koydemir, O. Garner, D. Di Carlo, and A. Ozcan, "Deep learning-based computational cytometer using magnetically-modulated coherent imaging," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VII, March 6 11, 2021, Virtual Conference, Paper # 11632-16
- 235. K. De Haan, H. Ceylan Koydemir, Y. Rivenson, D. Tseng, E. Van Dyne, L. Bakic, D. Karinca, K. Liang, M. Ilango, E. Gumustekin, A. Ozcan, "Screening of sickle cell disease using a smartphone-based microscope and deep-learning," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VII, March 6-11, 2021 Virtual Conference, Paper # 11632-9
- 236. J. Li, D. Mengu, N. T. Yardimci, Y. Luo, X. Li, M. Veli, Y. Rivenson, M. Jarrahi, A. Ozcan, "Spectrally encoded single-pixel machine vision using diffractive networks," SPIE Photonics West, AI and Optical Data Sciences II, March 6 11, 2021, Virtual Conference, Paper # 11703-52
- 237. L. Huang, Y. Luo, Y. Rivenson, A. Ozcan, "Deep-learning-based Volumetric Imaging in Fluorescence Microscopy," SPIE Photonics West, Three-Dimensional and Multidimensional

- Microscopy: Image Acquisition and Processing XXVIII, March 6 11, 2021, Virtual Conference, Paper # 11649-2.
- 238. L. Huang, Y. Luo, Y. Rivenson, A. Ozcan, "Deep learning-based single-shot autofocusing of microscopy images," SPIE Photonics West, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues XIX, March 6 - 11, 2021, Virtual Conference, Paper # 11647-24
- 239. T. Liu, K. Haan, B. Bai, Y. Rivenson, Y. Luo, H. Wang, D. Karalli, H. Fu, Y. Zhang, J. FitzGerald, and A. Ozcan, "Holographic polarization microscopy using deep learning," SPIE Photonics West, Quantitative Phase Imaging VII, March 6 11, 2021, Virtual Conference, Paper # 11653-22
- 240. A. Ozcan, "Deep learning-enabled computational microscopy and sensing," SPIE Photonics West, Integrated Sensors for Biological and Neural Sensing, March 6-11, 2021, Virtual Conference (*Invited Talk*)
- 241. A. Ozcan, "Deep Learning-enabled Computational Imaging and Sensing," Biosensors for Pandemics Conference, February 3, 2021, Virtual Conference (*Plenary Talk*)
- 242. A. Ozcan, "Diffractive optical neural networks designed by deep learning," SPIE Advanced Photonics Colloquium, January 12-14, 2021, Virtual Conference
- 243. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," International Symposium on Imaging, Sensing and Optical Memory, organized by The Optical Society of Japan, November 29 December 2, 2020, Virtual Conference (*Invited Talk*)
- 244. A. Ozcan, "Diffractive optical neural networks designed by deep learning," MRS Spring Meeting, November 27-December 4, 2020, Virtual Conference (*Keynote Talk*)
- 245. Y. Luo, D. Mengu, N. Yardimci, Y. Rivenson, M. Veli, M. Jarrahi, and A. Ozcan, "Broadband Diffractive Neural Networks," MRS Spring Meeting, November 27-December 4, 2020, Virtual Conference
- 246. K. de Haan and A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) SciX Conference, October 12-15, 2020, Virtual Conference (*Invited Talk*)
- 247. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," AIChE Bioengineering & Translational Medicine Conference, September 28 October 1, 2020, Virtual Conference (*Keynote Talk*)
- 248. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," IEEE Photonics Conference, September 28 October 1, 2020, Virtual Conference (*Invited Talk*)
- 249. H. Joung, Z. Ballard, J. Wu, D. Tseng, H. Teshome, L. Zhang, E. Horn, P. Arnaboldi, R. Dattwyler, O.B. Garner, D. Di Carlo, and A. Ozcan, "Point-of-Care Serodiagnostic Test for Early-Stage Lyme Disease Using a Multiplexed Paper-Based Immunoassay and Machine Learning," Cohen Lyme and Tickborne Disease Initiative, LymeMIND Consortium Virtual Conference, October 9, 2020
- 250. Y. Luo, D. Mengu, N.T. Yardimci, Y. Rivenson, M. Veli, M. Jarrahi, A. Ozcan, "Optical system design using broadband diffractive neural networks," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-24
- 251. T. Liu, Z. Wei, Y. Rivenson, K. de Haan, Y. Zhang, Y. Wu, A. Ozcan, "Deep learning-based holographic reconstruction for color imaging of pathology slides," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-11
- 252. K. de Haan, Y. Zhang, Y. Rivenson, J. Li, A. Delis, A. Ozcan, "Multiplexed and microstructured virtual staining of unlabeled tissue using deep learning," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-10

- 253. K. de Haan, Z.S. Ballard, Y. Rivenson, Y. Wu, A. Ozcan, "Deep learning-enabled resolution enhancement of scanning electron microscopy images," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-22
- 254. J. Li, D. Mengu, Y. Luo, Y. Rivenson, A. Ozcan, "Class-specific differential detection improves the inference accuracy of diffractive optical neural networks," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-42
- 255. T. Liu, Y. Zhang, M. Ouyang, A. Ray, J. Kong, B. Bai, D. Kim, A. Guziak, Y. Luo, A. Feizi, K. Tsai, Z. Duan, X. Liu, D. Kim, C. Cheung, S. Yalcin, H.C. Koydemir, O.B. Garner, D. Di Carlo, A. Ozcan, "Deep learning-based cytometer using magnetically modulated coherent imaging," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-49
- 256. Y. Luo, Y. Wu, G. Chaudhari, Y. Rivenson, K. De Haan, A. Calis, A. Ozcan, "3D reconstruction of a hologram with brightfield contrast using deep learning," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-41
- 257. D. Mengu, Y. Luo, Y. Rivenson, A. Ozcan, "Diffractive optical neural networks as a trainable front-end for electronic neural networks," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-32
- 258. T. Liu, K. de Haan, Y. Rivenson, Z. Wei, X. Zeng, Y. Zhang, A. Ozcan, "Resolution enhancement in coherent imaging systems using a deep neural network," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-20
- 259. K. de Haan, H.C. Koydemir, Y. Rivenson, D. Tseng, E. Van Dyne, L. Bakic, D. Karinca, K. Liang, M. Ilango, E. Gumustekin, A. Ozcan, "Sickle cell disease screening from thin blood smears using a smartphone-based microscope and deep learning," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-54
- 260. Y. Rivenson, T. Liu, Z. Wei, K. de Haan, Y. Zhang, A. Ozcan, "Virtual staining of unlabeled quantitative phase images using deep learning," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-51
- 261. Z.S. Ballard, H. Joung, J. Wu, D. Tseng, H. Teshome, L. Zhao, E.J. Horn, R. Dattwyler, P.M. Arnaboldi, O. Garner, D. DiCarlo, A. Ozcan, "Deep learning-based point-of-care diagnostic test for Lyme disease," SPIE Optics and Photonics Conference, August 24-28, 2020, Virtual Conference, Paper # 11469-50
- 262. D. Mengu, A. Ozcan, "Diffractive optical neural networks designed by deep learning," IEEE Research and Applications of Photonics in Defense (RAPID) Conference, August 10-12, 2020, Virtual Conference (*Invited Talk*)
- 263. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," 22nd Photonics North Conference, May 26-28, 2020, Virtual Conference (*Keynote Talk*)
- 264. Z. Ballard, H.-A. Joung, A. Goncharov, J. Liang, K. Nugroho, D. Di Carlo, O. Garner, A. Ozcan, "Computational Sensing with a Multiplexed Vertical Flow Assay for High-Sensitivity C-Reactive Protein Quantification," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 265. D. Mengu, Y. Luo, Y. Rivenson, A. Ozcan, "Integration of Diffractive Optical Neural Networks with Electronic Neural Networks" OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 266. C. Brown, D. Tseng, P. Kulling, S. Realgeno, L. Mortimer, D. Di Carlo, O. Garner, A. Ozcan, "An Automated and Cost-Effective System for Early Antimicrobial Susceptibility Testing," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference

- 267. Y. Wu, Y. Rivenson, H. Wang, Y. Luo, E. Ben-David, LA. Bentolila, C. Pritz, A. Ozcan, "Deep-Z: 3D Virtual Refocusing of Fluorescence Images Using Deep Learning," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 268. A. Ozcan, "Diffractive optical neural networks designed by deep learning," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference (*Invited Talk*)
- 269. Y. Luo, D. Mengu, N. Yardimci, Y. Rivenson, M. Veli, M. Jarrahi, A. Ozcan, "Broadband Diffractive Neural Networks," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 270. J. Li, D. Mengu, Y. Luo, Y. Rivenson, A. Ozcan, "Improving the Inference Accuracy of Diffractive Optical Neural Networks Using Class-specific Differential Detection," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 271. K. de Haan, H. Ceylan Koydemir, Y. Rivenson, D. Tseng, E. Van Dyne, L. Bakic, D. Karinca, K. Liang, M. Ilango, E. Gumustekin, A. Ozcan, "Automated Screening of Sickle Cells Using a Smartphone-Based Microscope and Deep Learning," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 272. K. de Haan, Z. S. Ballard, Y. Rivenson, Y. Wu, A. Ozcan, "Resolution Enhancement in Scanning Electron Microscopy using Deep Learning," OSA Conference on Lasers and Electrooptics (CLEO), May 11-15, 2020, Virtual Conference
- 273. T. Liu, Z. Wei, Y. Rivenson, K. Haan, Y. Zhang, Y. Wu, A. Ozcan, "Color Holographic Microscopy Using a Deep Neural Network," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 274. A. Ozcan, "Computational Microscopy and Sensing," Biosensors for Pandemics Conference, May 6, 2020, Virtual Conference (*Plenary Talk*)
- 275. H.A. Joung, Z. Ballard, J. Wu, D. Tseng, H. Teshome, L. Zhang, R. Dattwyler, P. Arnaboldi, O. Garner, D. Di Carlo, A. Ozcan, "Point-of-care test for early-stage Lyme disease using a multiplexed paper-based assay and machine learning," OSA Biophotonics Congress: Biomedical Optics, April 20-23, 2020 Fort Lauderdale, FL USA
- 276. Y. Wu, Y. Rivenson, H. Wang, Y. Luo, E. Ben-David, L. Bentolila, C. Pritz, A. Ozcan, "Deep Learning-based Virtual Refocusing of Fluorescence Microscopy Images for Neuron Imaging in 3D", OSA Biophotonics Congress: Biomedical Optics, April 20-23, 2020, Fort Lauderdale, FL, USA
- 277. B. Bai, H. Wang, T. Liu, Y. Rivenson, J. FitzGerald, A. Ozcan, "Single-shot Computational Polarized Light Microscopy for Imaging of Pathological Crystals," OSA Biophotonics Congress: Biomedical Optics (BioMed), April 20-23, 2020, Fort Lauderdale, FL, USA
- 278. T. Liu, Y. Zhang, M. Ouyang, A. Ray, J. Kong, B. Bai, D. Kim, A. Guziak, Y. Luo, A. Feizi, K. Tsai, Z. Duan, X. Liu, D. Kim, C. Cheung, S. Yalcin, H. Ceylan Koydemir, O. B. Garner, D. Di Carlo, A. Ozcan, "Deep Learning-enabled Computational Cytometer Using Magnetically-modulated Coherent Imaging," 2020 OSA Biophotonics Congress: Biomedical Optics (BioMed 2020), April 20-23, 2020, Fort Lauderdale, FL USA
- 279. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Gunaydin, L. Bentolila, C. Kural, A. Ozcan, "Deep Learning-Based Super-Resolution and Image Transformation Into Structured Illumination Microscopy," OSA Biophotonics Congress: Biomedical Optics (BioMed 2020), April 20-23, 2020, Fort Lauderdale, FL, USA
- 280. K. de Haan, Y. Rivenson, Z. Wei, H. Wang, T. Liu, W. D. Wallace, A. Ozcan, "Deep Learning-Based Virtual Staining of Unlabeled Tissue Samples," OSA Biophotonics Congress: Biomedical Optics (BioMed), April 20-23, 2020, Fort Lauderdale, FL USA
- 281. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," IEEE Aerospace Conference, March 7-14, 2020, Big Sky, Montana, USA (*Plenary Talk*)

- 282. Y. Wu, Y. Rivenson, H. Wang, Y. Luo, E. Ben-David, L.A. Bentolila, C. Pritz, A. Ozcan, "Deep-learning based three-dimensional virtual refocusing of fluorescence microscopy images," SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXVII, 1 February 6 February 2020, San Francisco, CA, Paper # 11245-22
- 283. H.-A. Joung, Z. S. Ballard, D. K. Tseng, O. Garner, D. D. Carlo, A. Ozcan, "Paper-based vertical flow immunoassay and mobile reader for multiplexed point-of-care testing" SPIE Photonics West, Optics for Low Resource Settings, 1 February 6 February 2020, San Francisco, CA, Paper # 11230-6
- 284. H-A. Joung, Z.S. Ballard, J. Wu, D.K. Tseng, H. Teshome, L. Zhang, R.J. Dattwyler, P.M. Arnaboldi, O. Garner, D. Di Carlo, A. Ozcan, "Point-of-care Lyme serodiagnostic using a multiplexed vertical flow assay and deep learning" SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic and Surgical Guidance, 1 February 6 February 2020, San Francisco, CA, USA Paper # 11229-16
- 285. A. Ozcan, "Deep learning-enabled computational microscopy and sensing," SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems, 1 February 6 February 2020, San Francisco, CA, USA (*Invited Talk*)
- 286. A. Ozcan, "A Tale of Three Companies: Commercialization of Computational Imaging and Sensing Technologies," SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic and Surgical Guidance, 1 February 6 February 2020, San Francisco, CA, USA (*Invited Talk*)
- 287. A. Ozcan, "Deep learning-enabled holography," SPIE Photonics West, Label-free Biomedical Imaging and Sensing, 1 February 6 February 2020, San Francisco, CA, USA (*Keynote Talk*)
- 288. J. Li, D. Mengu, Y. Luo, Y. Rivenson, A. Ozcan, "Class-specific differential detection in diffractive optical neural networks," SPIE Photonics West, AI and Optical Data Sciences, 1 February 6 February 2020, San Francisco, CA, USA Paper # 11299-26
- 289. G. Acuna, P. Tinnefeld, Q. Wei, A. Ozcan, M. Pilo-Pais, K. Trofymchuk, V. Glembockyte, S. Ochmann, M. Lakatos, "DNA origami nanotools for biosensing," SPIE Photonics West, Colloidal Nanoparticles for Biomedical Applications, 1 February 6 February 2020, San Francisco, CA, USA Paper # 11299-26
- 290. T. Liu, Z. Wei, Y. Rivenson, K. Haan, Y. Zhang, Y. Wu, A. Ozcan, "Deep learning enables color holographic microscopy of pathology slides from a single hologram," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VI, 1 February 6 February 2020, San Francisco, CA, Paper # 11230-30
- 291. S. Tok, K. de Haan, D. K. Tseng, C.F. Usanmaz, H.C. Koydemir, A. Ozcan, "Early detection of E. coli and total coliform using an automated fiber optics-based sensing system," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VI, 1 February 6 February 2020, San Francisco, CA, Paper # 11230-26
- 292. B. Bai, H. Wang, T. Liu, Y. Rivenson, J. Fitzgerald, A. Ozcan, "Pathological crystal imaging using computational polarized light microscopy," SPIE Photonics West, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues XVIII, 1 February 6 February 2020, San Francisco, CA, Paper # 11243-15
- 293. H. Wang, H. C. Koydemir, Y. Qiu, B. Bai, Y. Zhang, Y. Jin, S. Tok, E. C. Yilmaz, E. Gumustekin, Y. Luo, Y. Rivenson, A. Ozcan, "Deep learning enables high-throughput early detection and classification of bacterial colonies using time-lapse coherent imaging," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VI, 1 February 6 February 2020, San Francisco, CA, Paper # 11230-13
- 294. D. Mengu, Y. Luo, Y. Rivenson, J. Li and A. Ozcan, "Integration of diffractive optical neural networks with electronic neural networks", SPIE Photonics West, Smart Photonic and Optoelectronic Integrated Circuits XXII, 1 February 6 February 2020, San Francisco, CA, Paper # 11284-67

- 295. K. de Haan, T. Liu, Y. Rivenson, Z. Wei, X. Zeng, Y. Zhang, and A. Ozcan, "Enhancing resolution in coherent microscopy using deep learning," SPIE Photonics West, Quantitative Phase Imaging VI, 1 February 6 February 2020, San Francisco, CA, Paper # 11249-3
- 296. Y. Wu, Y. Luo, G. Chaudhari, Y. Rivenson, A. Calis, K. de Haan, A. Ozcan, "Cross-Modality Deep Learning Brings Bright-Field Image Contrast to Digital Holographic Microscopy," SPIE Photonics West, Quantitative Phase Imaging VI, 1 February 6 February 2020, San Francisco, CA, Paper # 11249-15
- 297. Y. Wu, A. Ray, Q. Wei, A. Feizi, X. Tong, E. Chen, Y. Luo, A. Ozcan, "Deep learning-based sensing of viruses using a particle aggregation assay," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings VI, 1 February 6 February 2020, San Francisco, CA, Paper # 11230-29
- 298. H. Ceylan Koydemir, J. T. Coulibaly, D. Tseng, I. I. Bogoch, A. Ozcan, "Field-testing of a mobile microscope for label-free detection of Schistosoma eggs in urine and stool samples", SPIE Photonics West, Optics and Biophotonics in Low Resource Settings VI, February 1-6, 2020, San Francisco, CA, USA
- 299. Z.S. Ballard, S. Bazargan, D. Jung, S. Sathianathan, A. Clemens, D. Shir, S. Al-Hashimi, A. Ozcan, "Contact lens-based lysozyme detection in tear using a mobile and cost-effective sensor", SPIE Photonics West, Optics and Biophotonics in Low Resource Settings VI, February 1-6, 2020, San Francisco, CA, USA
- 300. A. Ray, S. Esparza, D. Wu, M. Hanudel, H-A. Joung, B. Gales, I. Salusky, A. Ozcan, "Smartphone-based measurement of serum phosphate levels for patients with kidney disease,", SPIE Photonics West, Optics and Biophotonics in Low Resource Settings VI, February 1-6, 2020, San Francisco, CA, USA
- 301. H. Ceylan Koydemir, S. Rajpal, E. Gumustekin, D. Karinca, K. Liang, Z. Gorocs, D. Tseng, A. Ozcan, "Turbidity analysis using a smartphone-based reader", SPIE Photonics West, Optics and Biophotonics in Low Resource Settings VI, February 1-6, 2020, San Francisco, CA, USA
- 302. Z.S. Ballard, H-A. Joung, A. Goncharov, J. Liang, K. Nugroho, D. Di Carlo, O. Garner, A. Ozcan, "A computational paper-based point-of-care assay for highsensitivity c-reactive protein quantification", SPIE Photonics West, Optics and Biophotonics in Low Resource Settings VI, February 1-6, 2020, San Francisco, CA, USA
- 303. V. Müller, J.M. Sousa, H. Ceylan Koydemir, M. Veli, D. Tseng, L. Cerqueira, A. Ozcan, N. F. Azevedo, F. Westerlund, "Mobile-phone microscopy-based identification of pathogenic bacteria in complex samples", SPIE Photonics West, Optics and Biophotonics in Low Resource Settings VI, February 1-6, 2020, San Francisco, CA, USA
- 304. H.A. Joung, Z. Ballard, J. We, D. K. Tseng, H. Teshome, L. Zhang, R. J. Dattwyler, P. M. Arnaboldi, O. Garner, D. Di Carlo, A. Ozcan, "Point-of-care Lyme serodiagnostic test using a multiplexed vertical flow assay and machine learning" 4th Annual Lyme Disease in the Era of Precision Medicine Conference, October 19, 2019, New York, NY, USA
- 305. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," The Annual Meeting of The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) SciX Conference, October 13-18, 2019, Palm Springs, California (*Invited Talk*)
- 306. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Günaydın, L.A. Bentolila, C. Kural, and A. Ozcan, "Cross-modality Super-resolution in Fluorescence Microscopy Enabled by Deep Neural Networks," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, PA, USA
- 307. J. Snow, H. Ceylan Koydemir, D. Tseng, D. Karinca, K. Liang, and A. Ozcan, "Rapid and automated detection of Nosema infection in honey bees using a mobile microscope," BMES

- (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, Pennsylvania, USA
- 308. Y. Rivenson, H. Wang, Z. Wei, K. de Haan, W.D. Wallace, and A. Ozcan, "Virtual Histological Staining of Unlabeled Tissue via Deep Learning," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, Pennsylvania, USA
- 309. H. Ceylan Koydemir, S. Rajpal, E. Gumustekin, D. Karinca, K. Liang, Z. Gorocs, D. Tseng, and A. Ozcan, "Water quality analysis using a smartphone-based turbidity reader," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, Pennsylvania, USA
- 310. H. Joung, Z.S. Ballard, J. Wu, D.K. Tseng, H. Teshome, L. Zhang, O.B. Garner, D.D. Carlo, and A. Ozcan, "Point-of-care testing of Lyme disease using a multiplexed-vertical flow assay," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, PA, USA
- 311. Y. Wu, A. Ray, Q. Wei, A. Feizi, X. Tong, E. Chen, Y. Luo, A. Ozcan, "Rapid Analysis of Particle-Aggregation Assays Using On-Chip Holography and Deep Learning," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, PA, USA
- 312. Y. Wu, A. Calis, Y. Luo, C. Chen, M. Lutton, Y. Rivenson, X. Lin, H. Ceylan Koydemir, Y. Zhang, H. Wang, Z. Göröcs, A. Ozcan, "Deep-Learning Based Label-Free Bio-Aerosol Sensing," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, PA, USA
- 313. A. Ray, S. Esparza, D. Wu, M. Hanudel, H. Joung, B. Gales, D. Tseng, I. Salusky, and A. Ozcan, "Cost-Effective Mobile Sensor For Measurement Of Serum Phosphate Concentration," BMES (Biomedical Engineering Society) Annual Meeting, October 16-19, 2019, Philadelphia, Pennsylvania, USA
- 314. Z. Gorocs and A. Ozcan, "Deep Learning-Enabled Computational Microscopy and Sensing," IEEE Photonics Conference, September 29 October 3, 2019, San Antonio, Texas, USA (*Invited Talk*)
- 315. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," International Forum on Microscopy (IFM'19), September 6-8, 2019, Beijing, China (*Plenary Talk*)
- 316. A. Ozcan, "Deep learning in optical microscopy and image reconstruction," Nature Conference on AI and Robotics, organized by Nature Machine Intelligence, Nature Biomedical Engineering and Tencent AI Lab, September 2, 2019, Shenzen, China (*Invited Talk*)
- 317. Z. Ballard, S. Bazargan, D. Jung, S. Sathianathan, A. Clemens, D. Shir, S. Al-Hashimi, and A. Ozcan, "Lysozyme sensing in tear using a contact lens" ACS National Meeting & Exposition, August 25-29, 2019, San Diego, CA, USA, Presentation # 3203231
- 318. A. Ozcan, "Diffractive optical neural networks designed by deep learning," SPIE Optics and Photonics Conference, August 11-15, 2019, San Diego, CA, USA, Paper #11080-89 (*Invited Talk*)
- 319. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Günaydın, L.A. Bentolila, C. Kural, and A. Ozcan, "Cross-modality super-resolution in fluorescence microscopy enabled by generative adversarial networks," SPIE Optics and Photonics Conference, August 11-15, 2019, San Diego, CA, USA, Paper # 11088-13
- 320. A. Ozcan, "Deep learning optics," SPIE Optics and Photonics Conference, August 11-15, 2019, San Diego, CA, USA, Paper #11081-55 (*Invited Talk*)
- 321. Z. Ballard, and A. Ozcan, "Deep learning-enabled computational microscopy and sensing," SPIE Optics and Photonics Conference, August 11-15, 2019, San Diego, CA, USA, Paper # 11087-10 (*Invited Talk*)

- 322. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Günaydın, L.A. Bentolila, C. Kural, and A. Ozcan, "Generative Adversarial Networks Enable Cross-Modality Super-Resolution in Fluorescence Microscopy," Microscopy & Microanalysis, August 4-8, 2019, Portland, Oregon, USA
- 323. D. Mengu and A. Ozcan, "Diffractive Optical Neural Networks," IEEE Photonics Society Summer Topical Meeting, July 8-10, 2019, Ft. Lauderdale, Florida, USA (*Invited Talk*)
- 324. A. Ozcan, "Toward a thinking microscope: Deep learning-enabled computational microscopy," 21st International Vacuum Congress, July 1-5, 2019, Malmo, Sweden (*Invited Talk*)
- 325. Y. Wu, A. Ray, Q. Wei, A. Feizi, X. Tong, E. Chen, Y. Luo, and A. Ozcan, "Deep learning-based particle aggregation sensor for high-throughput virus detection," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 326. Z. Ballard, H. A. Joung, A. Goncharov, J. Liang, K. Nugroho, R. Damoiseaux, D. Di Carlo, O. Garner, A. Ozcan, "Computational sensing with a multiplexed vertical flow assay for high-sensitivity c-reactive protein quantification," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 327. Y. Rivenson, H. Wang, Z. Wei, K. de Haan, W. D. Wallace, and A. Ozcan, "Virtual histological staining of unlabeled tissue via deep learning" 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 328. Y. Luo, Y. Wu, G. Chaudhari, Y. Rivenson, A. Calis, K. de Haan, and A. Ozcan, "Deep Learning Enables 3D Reconstruction of a Hologram with Bright-field Contrast," 20th Annual UC Systemwide Bioengineering Symposium, June 27- 29, 2019, University of California, Merced, CA, USA
- 329. Y. Wu, A. Calis, Y. Luo, C. Chen, M. Lutton, Y. Rivenson, X. Lin, H. Ceylan Koydemir, Y. Zhang, H. Wang, Z. Göröcs, and A. Ozcan, "Mobile label-free bio-aerosol sensing using deep neural networks," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 330. H. Ceylan Koydemir, S. Rajpal, E. Gumustekin, D. Karinca, K. Liang, Z. Gorocs, D. Tseng, and A. Ozcan, "Field portable smartphone based reader for turbidity analysis," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 331. Y. Zhang, H. Ceylan Koydemir, M. M. Schimogawa, S. Yalcin, A. Guziak, T. Liu, I. Oguz, Y. Huang, B. Bai, Y. Luo, Y. Luo, Z. Wei, H. Wang, V. Bianco, B. Zhang, R. Nadkarni, K. Hill, and A. Ozcan, "Label-free and high-throughput detection of motile parasites in bodily fluids using time-resolved speckle imaging," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 332. H. Ceylan Koydemir, J. T. Coulibaly, D. Tseng, I. I. Bogoch, and A. Ozcan, "Field testing of a mobile phone microscope for label-free screening of Schistosoma eggs," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 333. Z. Göröcs, M. Tamamitsu, V. Bianco, P. Wolf, S. Roy, K.Shindo, K. Yanny, Y. Wu, H. Ceylan Koydemir, Y. Rivenson, and A. Ozcan, "Label-free monitoring of algae using a high-throughput, field-portable imaging flow cytometer," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA
- 334. J. Snow, H. Ceylan Koydemir, D. Tseng, D. Karinca, K. Liang, and A. Ozcan, "Detection of Nosema ceranae in honey bees using a mobile microscope," 20th Annual UC Systemwide Bioengineering Symposium, June 27-29, 2019, University of California, Merced, CA, USA

- 335. M.A. Khalid, A. Ray, A. Demcenko, S. Cohen, M. Tassieri, J. Reboud, A. Ozcan, J. Cooper, "Lens-free Microscopy Using Acoustically Actuated Nanolenses and its Applications," OSA Imaging and Applied Optics Congress, June 24-27, 2019, Munich, Germany
- 336. A. Ozcan, "Deep learning in Optical Microscopy and Image Reconstruction," OSA Imaging and Applied Optics Congress, June 24-27, 2019, Munich, Germany (*Invited Talk*)
- 337. A. Ozcan, "Toward a thinking microscope: Deep learning-enabled computational microscopy and sensing," SPIE Optical Metrology and Digital Optical Technologies Symposia, June 24-27, 2019, Munich, Germany (*Keynote Talk*)
- 338. A. Ozcan, "Toward a thinking microscope: Deep learning-enabled computational microscopy and sensing," ECI Advances in Optics for Biotechnology, Medicine and Surgery XVI, June 2-5, 2019, Quebec, Canada (*Invited Talk*)
- 339. A. Ozcan, "Deep Learning in Optical Microscopy and Image Reconstruction", OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA (*Invited Talk*)
- 340. Y. Wu, A. Calis, Y. Luo, C. Chen, M. Lutton, Y. Rivenson, X. Lin, H. Koydemir, Y. Zhang, H. Wang, Z. Göröcs, A. Ozcan, "Label-free Bio-aerosol Sensing Using On-Chip Holographic Microscopy and Deep Learning," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 341. X. Lin, Y. Rivenson, Nezih T. Yardimci, Muhammed Veli, Y. Luo, M. Jarahi, A. Ozcan, "Deep Learning-designed Diffractive Neural Networks," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 342. Y. Zhang, H. Ceylan Koydemir, M. Shimogawa, S. Yalcin, A. Guziak, T. Liu, I. Oguz, Y. Huang, B. Bai, Y. Luo, Y. Luo, Z. Wei, H. Wang, V. Bianco, B. Zhang, R. Nadkarni, K. Hill, A. Ozcan, "High-Throughput and Label-Free Detection of Motile Parasites in Bodily Fluids Using Lensless Time-Resolved Speckle Imaging," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 343. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Gunaydin, L. Bentolila, C. Kural, A. Ozcan, "Cross-Modality Deep Learning Achieves Super-Resolution in Fluorescence Microscopy," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 344. Z. Göröcs, M. Tamamitsu, V. Bianco, P. Wolf, S. Roy, K. Shindo, K. Yanny, Y. Wu, H. C. Koydemir, Y. Rivenson, A. Ozcan, "Portable Imaging Flow-cytometer Using Deep Learning-based Holographic Image Reconstruction," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 345. Y. Rivenson, H. Wang, K. de Haan, Z. Wei, A. Ozcan, "Deep Learning Enables Virtual Histological Staining of Label-free Tissue Sections Using Auto-fluorescence," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 346. A. Ray, M. Khalid, A. Demcenko, M. Daloglu, D. Tseng, J. Reboud, J. Cooper, A. Ozcan, "Holographic Microscopy with Acoustic Modulation for Detection of Nano-sized Particles and Pathogens in Solution", OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 347. Y. Rivenson, T. Liu, Z. Wei, K. de Haan, Y. Zhang, A. Ozcan, "PhaseStain: Deep Learning-based Histological Staining of Quantitative Phase Images," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 348. T. Liu, K. Haan, Y. Rivenson, Z. Wei, X. Zeng, Y. Zhang, A. Ozcan, "Enhancing Resolution in Coherent Microscopy Using Deep Learning," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 349. Y. Luo, Y. Wu, G. Chaudhari, Y. Rivenson, A. Calis, K. Haan, A. Ozcan, "Holographic Reconstruction with Bright-field Microscopy Contrast using Cross-Modality Deep Learning," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA

- 350. T. Liu, Y. Zhang, Y. Huang, D. Teng, Y. Bian, Y. Wu, Y. Rivenson, A. Feizi, A. Ozcan, "An Absorbance Spectrum Estimation-based Accurate Colorization Method for Holographic Imaging of Pathology Slides," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 351. Y. Wu, A. Ray, Q. Wei, A. Feizi, X. Tong, E. Chen, Y. Luo, A. Ozcan, "Particle-Aggregation Based Virus Sensor Using Deep Learning and Lensless Digital Holography," OSA Conference on Lasers and Electro-optics (CLEO), May 5-10, 2019, San Jose, CA USA
- 352. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," OSA Biophotonics Congress: Optics in the Life Sciences, April 14-17, 2019, Tucson, Arizona, USA (*Plenary Talk*)
- 353. A. Ozcan, "Deep learning in optical microscopy and image reconstruction," SPIE Defense & Commercial Sensing (DCS) Conference, April 14-18, 2019, Baltimore, MD, USA (*Invited Talk*)
- 354. A. Ozcan, "Interdisciplinary Undergraduate Research, Training and Innovation Program," National Academy of Inventors, Annual Meeting, April 10-11, 2019, Houston, TX, USA
- 355. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Günaydın, L.A. Bentolila, C. Kural, and A. Ozcan, "Cross-Modality Super-Resolution in Fluorescence Microscopy Enabled by Deep Learning," Keystone Symposia, Imaging Across Scales: Leveraging the Revolution in Resolution, April 7 April 10, 2019, Snowbird, Utah
- 356. A. Ozcan, "Deep-learning-enabled computational microscopy and sensing," Nature Conference on In Vitro Diagnostics, organized by Nature Biomedical Engineering, Shanghai Jiao Tong University, the China Association of In-Vitro Diagnostics, March 22-23, 2019, Nanchang, China (*Invited Talk*)
- 357. A. Ozcan, "Deep Learning-Enabled Computational Microscopy and Sensing," Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Pittcon Conference, March 17-21, 2019, Philadelphia, PA, USA (*Invited Talk*)
- 358. K. Liang, J.W. Snow, H.C. Koydemir, D.K. Karinca, D. Tseng, and A. Ozcan, "Honey Bee Parasite Detection Using a Smartphone," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, February 21-23, 2019, Washington DC, USA
- 359. A. Ozcan, "Deep Learning Optics", SPIE Photonics West, OPTO Plenary Session, February 2 7, 2019, San Francisco, CA (*Plenary Talk*)
- 360. A. Ozcan, "Toward a thinking microscope: Deep-learning-enabled computational microscopy and sensing", SPIE Photonics West, Optical Data Science, February 2 7, 2019, San Francisco, CA (*Keynote Talk*)
- 361. A. Ozcan, "Super-resolution microscopy using deep learning", SPIE Photonics West, Single Molecule Spectroscopy and Superresolution Imaging, February 2 7, 2019, San Francisco, CA (*Invited Talk*)
- 362. A. Ozcan, "Deep learning in optical microscopy and image reconstruction", SPIE Photonics West, Quantitative Phase Imaging, February 2 7, 2019, San Francisco, CA (*Invited Talk*)
- 363. A. Ozcan, "Deep-learning-enabled computational imaging", SPIE Photonics West, Quantum Sensing and Nano Electronics and Photonics, February 2 7, 2019, San Francisco, CA (*Invited Talk*)
- 364. A. Ozcan, "Diffractive deep neural networks for all-optical machine learning", SPIE Photonics West, Complex Light and Optical Forces, February 2 7, 2019, San Francisco, CA (*Invited Talk*)
- 365. Y. Zhang, H. Koydemir, M. Shimogawa, S. Yalcin, A. Guziak, T. Liu, I. Oguz, Y. Huang, B. Bai, Y. Luo, Y. Luo, Z. Wei, H. Wang, V. Bianco, B. Zhang, R. Nadkarni, K. Hill, and A. Ozcan, "Time-resolved holographic speckle analysis for label-free and high-throughput detection of motile parasites in bodily fluids," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2 7, 2019, San Francisco, CA, Paper # 10869-26

- 366. A. Ray, A. Khalid, A. Demcenko, M. Daloglu, D. Tseng, J. Cooper, and A. Ozcan, "Acoustically actuated holographic microscopy for detection of nanoparticles in solution", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2 7, 2019, San Francisco, CA, Paper # 10869-21
- 367. Y. Zhang, T. Liu, Y. Huang, D. Teng, Y. Bian, Y. Wu, Y. Rivenson, A. Feizi, and A. Ozcan, "Accurate colorization for holographic imaging of pathology slides using absorbance spectrum estimation of histochemical stains", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2 7, 2019, San Francisco, CA, Paper # 10869-23
- 368. H. Wang, Y. Rivenson, Y. Jin, Z. Wei, R. Gao, H. Günaydın, L.A. Bentolila, C. Kural, and A. Ozcan, "Deep-learning enables cross-modality super-resolution in fluorescence microscopy," SPIE Photonics West, Optical Data Science II, February 2- 7, 2019, San Francisco, CA, Paper # 10937-13
- 369. Z. Göröcs, M. Tamamitsu, V. Bianco, P. Wolf, S. Roy, K. Shindo, K. Yanny, Y. Wu, H. C. Koydemir, Y. Rivenson, and A. Ozcan, "Deep learning-based label-free imaging flow cytometry for on-site analysis of water samples" SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2-7, 2019, San Francisco, CA, Paper # 10869-20
- 370. Z. Ballard. H. Joung, J. Liang, K. Nugroho, R. Damoiseaux, D. DiCarlo, and A. Ozcan, "Multiplexed paper-based assay for C-Reactive Protein (CRP) quantification using machine learning" SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2-7, 2019, San Francisco, CA, Paper # 10869-19
- 371. M. Veli and A. Ozcan, "Sensing *Staphylococcus aureus* on a contact lens using machine learning and lensfree microscopy", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2 7, 2019, San Francisco, CA, Paper # 10869-18
- 372. M. Daloglu, F. Lin, B. Chong, D. Chien, M. Veli, W. Luo and A. Ozcan, "3D tracking of the head and flagellar motion of sex-sorted bovine sperm using on-chip holography," SPIE Photonics West, Label-free Biomedical Imaging and Sensing (LBIS), February 2-7, 2019, San Francisco, CA, Paper # 10890-75
- 373. Y. Wu, A. Calis, Y. Luo, C. Chen, M. Lutton, Y. Rivenson, X. Lin, H.C. Koydemir, Y. Zhang, H. Wang, Z. Göröcs, and A. Ozcan, "Deep-learning enabled label-free bio-aerosol sensing using mobile microscopy" SPIE Photonics West, Quantitative Phase Imaging V, February 2- 5, 2019, San Francisco, CA, Paper # 10890-70
- 374. Y. Wu, Y. Rivenson, Y. Zhang, Z. Wei, H. Gunaydin, X. Lin, and A. Ozcan, "Auto-focusing and extended depth-of-field holographic reconstruction using deep learning" SPIE Photonics West, Quantitative Phase Imaging V, February 2-5, 2019, San Francisco, CA, Paper # 10887-4
- 375. Z. Ballard, A. Clemens, F. Haque, M. Lucero, S. Sathianathan, D. Shir, and A. Ozcan, "Flexible plasmonic sensors for wearables and one-time use assays" SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2- February 7, 2019, San Francisco, CA, Paper # 10869-7
- 376. H. Ceylan Koydemir, J. Snow, D. Karinca, K. Liang, D. Tseng, and A. Ozcan, "Bee parasite detection using a smartphone", SPIE Photonics West 2019, Optics and Biophotonics in Low Resource Settings V, February 2-7, 2019, San Francisco, CA, USA
- 377. Y. Rivenson, T. Liu, Z. Wei, Y. Zhang, and A. Ozcan, "PhaseStain: deep learning for virtual staining of quantitative phase images," SPIE Photonics West, Quantitative Phase Imaging V, February 2 February 5, 2019, San Francisco, CA, Paper # 10887-32.
- 378. Y. Rivenson, H. Wang, Z. Wei, Y. Zhang, H. Gunaydin, and A. Ozcan, "Deep learning enables virtual staining of unstained tissue sections using auto-fluorescence images," SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic and Surgical Guidance Systems XVII, February 3 February 5, 2019, San Francisco, CA, Paper # 10868-12.

- 379. Y. Rivenson, H. C. Koydemir, H. Wang, Z. Wei, Z. Ren, H. Gunaydin, Y. Zhang, Z. Gorocs, K. Liang, D. Tseng, and A. Ozcan, "Deep learning enhances mobile microscopic imaging," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings V, February 2 February 3, 2019, San Francisco, CA, Paper # 10869-16.
- 380. A. Ozcan, "Innovations at the Interface of Photonics and Medicine to Support Digital Health," Keystone Symposium, Digital Health: From Science to Application, January 21-26, 2019, Colorado, USA (*Invited Talk*)
- 381. A. Ozcan, "Deep Learning Optics," IEEE EMBS Micro and Nanotechnology in Medicine Conference, December 10-14, 2018, Hawaii, USA (*Invited Talk*)
- 382. A. Ozcan, "Deep Learning Optics," OSA Latin America Optics & Photonics Conference, November 12-15, 2018, Lima, Peru (*Plenary Talk*)
- 383. A. Ozcan, "Toward a Thinking Microscope: Deep Learning in Optical Microscopy and Image Reconstruction," OSA Latin America Optics & Photonics Conference, November 12-15, 2018, Lima, Peru (*Invited Talk*)
- 384. Y. Zhang, H. Koydemir, M. Shimogawa, S. Yalcin, K. Hill, A. Ozcan, "Label-Free and High-Throughput Detection of Motile Parasites from Bodily Fluids Using Time-Resolved Speckle Imaging," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 385. T. Ghonge, H. Ceylan Koydemir, E. Valera, J. Berger, A. Ganguli, G. Damhorst, A. Ozcan, R. Bashir, "A Smartphone-assisted Microfluidic Assay for Measuring CD64 Expression on Neutrophils in Suspected Sepsis-positive Patients," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 386. S. Rajpal, H. Koydemir, Z. Gorocs, D. Karnica, A. Ozcan, "Turbidity Measurement Using A Smartphone," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 387. Y. Rivenson, H. Ceylan Koydemir, H. Wang, Z. Wei, Z. Ren, H. Gunaydin, Y. Zhang, Z. Gorocs, K. Liang, D. Tseng, A. Ozcan, "Deep Learning Bridges The Gap Between Mobile And Laboratory Grade Microscopes," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 388. H. Joung, Z. Ballard, A. Ma, D. Tseng, H. Teshome, S. Burakowski, O. Garner, D. Carlo, A. Ozcan, "Multiplexed paper-based vertical flow assay for point-of-care Lyme diagnostics using a mobile-phone," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 389. M. Kühnemund, Q. Wei, E. Darai, Y. Wang, I. Hernandez-Neuta, Z. Yang, D. Tseng, A. Ahlford, A. Ozcan, M. Nilsson, "KRAS Point Mutation Detection and Targeted DNA Sequencing on a Mobile Phone," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 390. Y. Zhang, Y. Shin, K. Sung, S. Yang, H. Chen, H. Wang, D. Teng, Y. Rivenson, R. Kulkarni, A. Ozcan, "3D Imaging of Optically Cleared Tissue Using On-Chip Microscopy," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 391. A. Ray, S. Li, T. Segura, A. Ozcan, "Monitoring the Degradation of Drug Loaded Nanoparticles Using Wide-Field Holographic Imaging," BMES (Biomedical Engineering Society) Annual Meeting, October 17–20, 2018, Atlanta, Georgia, USA
- 392. M. Veli and A. Ozcan, "Quantification of *Staphylococcus aureus* on Contact Lenses using Mobile Holographic Imaging of Curved Surfaces and Machine Learning," OSA Frontiers in Optics (FiO) Conference, September 16-20, 2018, Washington, DC, USA
- 393. A. Ozcan, "Deep Learning-enabled Computational Imaging and Sensing," ASME NanoEngineering for Medicine and Biology Conference, August 21-24, 2018, Los Angeles, CA, USA (*Plenary Talk*)

- 394. Y. Rivenson, H.C. Koydemir, H. Wang, Z. Wei, Z. Ren, H. Gunaydin, Y. Zhang, Z. Gorocs, K. Liang, D. Tseng and A. Ozcan, "Deep learning improves mobile-phone microscopy," SPIE Optics and Photonics Conference, August 19-23, 2018, San Diego, CA, USA
- 395. A. Ozcan, "Machine Learning Enabled Computational Imaging and Sensing for Point-of-Care Medicine and Global Health," Workshop on Artificial Intelligence in Photonics, OSA CLEO Pacific Rim, July 30, 2018, Hong Kong (*Invited Talk*)
- 396. A. Ozcan, "Deep Learning Enabled Computational Imaging and Sensing," 1st International Conference on Engineering Biomedical Breakthroughs (Helmholtz Pioneer Campus), Venice International University, Isola di San Servolo, Venice, Italy, July 3-6, 2018 (*Keynote Talk*)
- 397. A. Ozcan, "Machine Learning Enabled Computational Imaging and Sensing for Point-of-Care Medicine and Global Health," OSA Imaging and Applied Optics Congress, June 25-28, 2018, Orlando, Florida, USA (*Keynote Talk*)
- 398. Y. Wu, Y. Rivenson, Y. Zhang, Z. Wei, H. Gunaydin, X. Lin, and A. Ozcan, "Deep neural network-based phase recovery and auto-focusing extend the depth-of-field in digital holography," OSA Imaging and Applied Optics Congress, June 25-28, 2018, Orlando, Florida, USA (*Postdeadline Paper*)
- 399. H. Wang, Y. Rivenson, H.C. Koydemir, Z. Wei, Z. Ren, H. Gunaydin, Y. Zhang, Z. Gorocs, K. Liang, D. Tseng and A. Ozcan, "Deep learning enhances mobile microscopy," OSA Imaging and Applied Optics Congress, June 25-28, 2018, Orlando, Florida, USA (*Postdeadline Paper*)
- 400. A. Ray, S. Li, T. Segura, and A. Ozcan, "Holographic microscopy monitors the degradation of drug loaded nanoparticles," 19th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2018, University of California, Riverside, CA, USA
- 401. Y. Zhang, T. Liu, Y. Huang, D. Teng, Y. Bian, Y. Wu, Y. Rivenson, A. Feizi, and A. Ozcan, "Accurate-color holographic imaging of pathology slides using absorbance spectrum estimation," 19th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2018, University of California, Riverside, CA, USA
- 402. Y. Zhang, Y. Shin, K. Sung, S. Yang, H. Chen, H. Wang, D. Teng, Y. Rivenson, R.P. Kulkarni, and A. Ozcan, "On-chip microscopy for 3D imaging of optically cleared tissue," 19th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2018, University of California, Riverside, CA, USA
- 403. Y. Wu, Y. Rivenson, Y. Zhang, Z. Wei, H. Gunaydin, X. Lin, and A. Ozcan, "Deep learning achieves auto-focusing and phase recovery to extend the depth-of-field in digital holographic microscopy," 19th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2018, University of California, Riverside, CA, USA
- 404. M. Veli, and A. Ozcan, "Automated detection and quantification of *staphylococcus aureus* on contact lenses using lensfree microscopy and machine learning" 28th World Congress on Biosensors (Biosensors Congress, Elsevier), June 12-15, 2018, Miami, FL, USA (*Keynote Talk*)
- 405. Z. Gorocs, Z. Ballard, C. Brown, D. Tseng, D. DiCarlo, O. Garner, and A. Ozcan, "Computational Sensing Technologies for Point-of-care Diagnostics and Global Health" SPIE Translational Biophotonics, May 14 15, 2018, Houston, TX, USA (*Invited Talk*)
- 406. A. Ozcan, "Deep Learning-enabled Computational Imaging and Sensing," 20th TechConnect World Innovation Conference, Chemical, Physical & Bio-Sensors Symposium, May 13-16, 2018, Anaheim, CA, USA (*Invited Talk*)
- 407. A. Ray, M. Daloglu, J. Ho, E. McLeod, and A. Ozcan, "Mobile holographic sensor for the detection of herpes simplex virus," 20th TechConnect World Innovation Conference, Chemical, Physical & Bio-Sensors Symposium, May 13-16, 2018, Anaheim, CA, USA
- 408. Y. Rivenson, H. Ceylan Koydemir, H. Wang, Z. Wei, Z. Ren, H. Günaydın, Y. Zhang, Z. Göröcs, K. Liang, D. Tseng, A. Ozcan, "Deep Learning Improves Smartphone Microscopy Using

- a Convolutional Neural Network," 20th TechConnect World Innovation Conference, Chemical, Physical & Bio-Sensors Symposium, May 13-16, 2018, Anaheim, CA, USA
- 409. Z. Ballard, D. Shir, A. Bhardwaj, S. Bazargan, S. Santhianathan, and A. Ozcan, "Computational sensing with mobile optical readers designed by machine learning," 20th TechConnect World Innovation Conference, Chemical, Physical & Bio-Sensors Symposium, May 13-16, 2018, Anaheim, CA, USA
- 410. A. Ozcan, "Machine Learning and Computation Enabled Microscopy and Sensing for Point-of-Care Medicine and Global Health," OSA Conference on Lasers and Electro-optics (CLEO), May 13-18, 2018, San Jose, CA USA (*Invited Talk*)
- 411. Y. Rivenson, Z. Göröcs, H. Günaydin, Y. Zhang, H. Wang, A. Ozcan, "Deep Learning Microscopy: Enhancing Resolution, Field-of-View and Depth-of-Field of Optical Microscopy Images Using Neural Networks," OSA Conference on Lasers and Electro-optics (CLEO), May 13-18, 2018, San Jose, CA USA
- 412. Y. Zhang, H. Wang, Y. Wu, M. Tamamitsu, and A. Ozcan, "Robust Holographic Autofocusing Based on Edge Sparsity," OSA Conference on Lasers and Electro-optics (CLEO), May 13-18, 2018, San Jose, CA USA
- 413. Y. Rivenson, Y. Zhang, H. Günaydin, D. Teng, A. Ozcan, "Non-Iterative Holographic Image Reconstruction and Phase Retrieval Using a Deep Convolutional Neural Network," OSA Conference on Lasers and Electro-optics (CLEO), May 13-18, 2018, San Jose, CA USA
- 414. A. Ray, S. Li, T. Segura, and A. Ozcan, "High-throughput holographic monitoring of nanoparticle degradation for drug delivery applications," OSA Conference on Lasers and Electrooptics (CLEO), May 13-18, 2018, San Jose, CA USA
- 415. Q. Wei, G. Acuna, S. Kim, C. Vietz, D. Tseng, J. Chae, D. Shir, W. Luo, P. Tinnefeld, and A. Ozcan, "Plasmonics Improves the Sensitivity of Smartphone Fluorescence Microscopy," OSA Conference on Lasers and Electro-optics (CLEO), May 13-18, 2018, San Jose, CA USA
- 416. M. Daloglu, W. Luo, F. Shabbir, F. Lin, K. Kim, I. Lee, J. Jiang, W. Cai, V. Ramesh, and M. Yu, and A. Ozcan, "High-throughput 3D Tracking of Sperm Locomotion Reveals Head Spin and Flagellar Beating Patterns," OSA Conference on Lasers and Electro-optics (CLEO), May 13-18, 2018, San Jose, CA USA
- 417. A. Ozcan, "Deep Learning Enabled Computational Imaging and Sensing," IEEE International Conference on Nano/Micro Engineered and Molecular Systems, April 22-26, 2018, Singapore (*Keynote Talk*)
- 418. A. Ozcan, "Machine Learning Enabled Computational Imaging and Sensing," OSA Biophotonics Congress Biomedical Optics, April 3-6, 2018, Florida, USA (*Invited Talk*)
- 419. Y. Rivenson, Y. Zhang, H. Günaydın, D. Teng, and A. Ozcan, "Phase Retrieval and Hologram Reconstruction Using a Neural Network," American Physical Society, APS March Meeting, March 5-9, 2018, Los Angeles, CA, USA
- 420. Y. Zhang, Y. Shin, K. Sung, S. Yang, H. Chen, H. Wang, D. Teng, Y. Rivenson, R.P. Kulkarni, and A. Ozcan, "On-chip 3D Microscopy of Optically Cleared Tissue," American Physical Society, APS March Meeting, March 5-9, 2018, Los Angeles, CA, USA
- 421. Y. Rivenson, Z. Gorocs, H. Gunaydin, Y. Zhang, H. Wang, and A. Ozcan, "Enhancing Microscopy through Deep Learning," American Physical Society, APS March Meeting, March 5-9, 2018, Los Angeles, CA, USA
- 422. A. Ozcan, "Mobile Microscopy, Sensing and Diagnostics through Computational Photonics," Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Pittcon Conference, February 26-March 1, 2018, Orlando, FL, USA (*Invited Talk*)
- 423. S. Feng, D. Tseng, C. Brown, D. DiCarlo, O. Garner and A. Ozcan, "Smartphone-Based Microplate Reader for Automated Antimicrobial Susceptibility Testing," The Emerging

- Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, February 22-24, 2018, Washington DC, USA
- 424. M. Tamamitsu, Y. Zhang, H. Wang, Y. Wu, and A. Ozcan, "Robust Holographic Autofocusing Using Edge Sparsity of the Complex Optical Wavefront," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, February 22-24, 2018, Washington DC, USA
- 425. M.U. Daloglu, W. Luo, F. Shabbir, F. Lin, K. Kim, I. Lee, J. Jiang, W. Cai, V. Ramesh, M. Yu, and A. Ozcan, "High-throughput 3D Tracking of Sperm Cells Reveals Flagellar Beating Patterns and Head Spin," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, February 22-24, 2018, Washington, DC, USA
- 426. Z.S. Ballard, M. Fordham, M. Lei, and A. Ozcan, "Optimization of spectral sensor performance using machine learning," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, February 22-24, 2018, Washington, DC, USA
- 427. A. Ozcan, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," Molecular Medicine Tri-Conference, Molecular Diagnostics for Infectious Diseases, February 11-16, 2018, San Francisco, CA, USA (*Invited Talk*)
- 428. Y. Wu, A. Shiledar, Y. Li, J. Wong, S. Feng, X. Chen, C. Chen, K. Jin, S. Janamian, Z. Yang, Z.S. Ballard, Z. Göröcs, A. Feizi, and A. Ozcan, "Air quality monitoring using lens-less holographic on-chip microscopy," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27- February 1, 2018, San Francisco, CA, Paper # 10485-29
- 429. Y. Zhang, Y. Shin, K. Sung, S. Yang, H. Chen, H. Wang, D. Teng, Y. Rivenson, R. P. Kulkarni, and A. Ozcan, "3D on-chip microscopy of optically cleared tissue," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27- February 1, 2018, San Francisco, CA, Paper # 10485-35
- 430. A. Ozcan, "Lost in image data," SPIE Photonics West, Optical Data Science: Trends Shaping the Future of Photonics, January 27-February 1, 2018, San Francisco, CA, Paper # 10551-13 (*Invited Talk*)
- 431. M.U. Daloglu, A. Ray, Z. Gorocs, M. Xiong, R. Malik, G. Bitan, E. McLeod and A. Ozcan, "On-chip ultraviolet holography for high-throughput nanoparticle and biomolecule detection," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27 February 1, 2018, San Francisco, CA, Paper # 10485-36
- 432. Y. Zhang, H. Wang, Y. Wu, M. Tamamitsu, and A. Ozcan, "A robust holographic autofocusing criterion based on edge sparsity," SPIE Photonics West, Quantitative Phase Imaging IV, January 27- February 1, 2018, San Francisco, CA, Paper # 10503-19
- 433. A. Ray, S. Li, T. Segura, and A. Ozcan, "Monitoring of nanoparticle degradation using holographic on-chip microscopy for drug delivery applications," SPIE Photonics West, Colloidal Nanoparticles for Biomedical Applications XIII, January 27-February 1, 2018, San Francisco, CA, Paper # 10507-22
- 434. Y. Zhang, M. Alexander, S. Yang, R. Krishnan, Y. Bian, E. Botvinick, J. Lakey, and A. Ozcan, "High-throughput screening of encapsulated islets using wide-field lens-free on-chip imaging," SPIE Photonics West, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues XVI, January 27- February 1, 2018, San Francisco, CA, Paper # 10497-28
- 435. Z. Ballard, D. Shir, A. Bhardwaj, S. Bazargan, S. Sathianathan, A. Ozcan, "Machine learning enabled flexible and low-cost plasmonic sensors for point-of-care sensing," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27 February 1, 2018, San Francisco, CA, Paper # 10485-8

- 436. Y. Rivenson, Z. Göröcs, H. Günaydın, Y. Zhang, H. Wang and A. Ozcan, "Deep learning enhances microscopic imaging," SPIE Photonics West, Optical Data Science: Trends Shaping the Future of Photonics, January 27-February 1, 2018, San Francisco, CA, Paper # 10551-11 (*Invited Talk*)
- 437. Q. Wei, G. Acuna, S. Kim, C. Vietz, D. Tseng, J. Chae, D. Shir, W. Luo, P. Tinnefeld, and A. Ozcan, "Surface-enhanced fluorescence microscopy on a smartphone," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27- February 1, 2018, San Francisco, CA, USA Paper # 10485-20
- 438. Z. Göröcs, Y. Rivenson, H.C. Koydemir, D. Tseng, T.L. Troy, V. Demas and A. Ozcan, "Compact imaging system for quantitative fluorescence sensing through autofluorescent, scattering and absorbing media," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27- February 1, 2018, San Francisco, CA, USA Paper # 10485-23
- 439. Y. Rivenson, Y. Zhang, H. Gunaydin, D. Teng, and A. Ozcan, "Deep learning based holographic image reconstruction and phase recovery," SPIE Photonics West, Quantitative Phase Imaging IV, January 27- February 1, 2018, San Francisco, CA, USA Paper # 10503-18
- 440. M. Kühnemund, Q. Wei, E. Darai, Y. Wang, I. Hernandez-Neuta, Z. Yang, D. Tseng, A, Ahlford, L. Mathot, T. Sjöblom, A. Ozcan, and M. Nilsson, "*In situ* detection of point mutations and targeted DNA sequencing using mobile phone microscopy," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings IV, January 27- February 1, 2018, San Francisco, CA, USA Paper # 10485-26
- 441. S. Feng, D. Tseng, C. Brown, D. DiCarlo, O. Garner and A. Ozcan, "Automated Diagnosis of Antimicrobial Resistance using a Mobile Phone Based Well-Plate Reader," Keystone Symposia on Antimicrobials and Resistance: Opportunities and Challenges, October 29 November 1, 2017, Santa Fe, NM, USA
- 442. J. Kong, Q. Wei, D. Tseng, J. Zhang, E. Pan, M. Lewinski, O. Garner, A. Ozcan, and D. Di Carlo, "Highly Stable and Sensitive Nucleic Acid Detection using Unique Dye Interactions and a Fluorescence Multi-well Plate Reader on a Mobile Phone," BMES (Biomedical Engineering Society) Annual Meeting, October 11–14, 2017, Phoenix, AZ, USA
- 443. J. Gupta, A. Cheng, D. Joh, T. Dailey-Chwalibog, A. Hucknall, Q. Wei, A. Ozcan, B. Guesdon, M. Freemark, and A. Chilkoti, "A Point-of-Care Screening Platform for Serotargets of Severe Acute Malnutrition," BMES (Biomedical Engineering Society) Annual Meeting, October 11–14, 2017, Phoenix, AZ, USA
- 444. S. Feng, D. Tseng, C. Brown, D. DiCarlo, O. Garner and A. Ozcan, "Automated and Cost-Effective Antimicrobial Susceptibility Testing on a Mobile Phone," BMES (Biomedical Engineering Society) Annual Meeting, October 11–14, 2017, Phoenix, AZ, USA
- 445. A. Ozcan, "Mobile Imaging, Sensing and Diagnostics Using Computational Photonics," Biodetection and Biosensors Conference, Select Biosciences Meeting, Murray Edwards College, October 10-11, 2017, Cambridge, UK (*Keynote Talk*)
- 446. Y. Zhang, Y. Shin, K. Sung, S. Yang, H. Chen, H. Wang, D. Teng, Y. Rivenson, R. Kulkarni, and A. Ozcan, "Holographic 3D microscopy of optically cleared tissue," OSA Frontiers in Optics (FiO) Conference, September 17-21, 2017, Washington, DC, USA
- 447. A. Ozcan, "Mobile microscopy, sensing and diagnostics through computational photonics," Light Conference, July 17-18, 2017, Changchun, China (*Invited Talk*)
- 448. A. Ozcan, "Mobile microscopy, sensing and diagnostics through computational photonics," VII International Congress on Analytical Nanoscience and Nanotechnology, July 3-5, 2017, Barcelona, Spain (*Plenary Talk*)
- 449. Y. Wu, A. Shiledar, Y. Li, J. Wong, S. Feng, X. Chen, C. Chen, K. Jin, S. Janamian, Z. Yang, Z. Ballard, Z. Göröcs, A. Feizi, and A. Ozcan, "Computational Mobile Microscopy and Machine

- Learning Enable High-throughput Air Quality Monitoring," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 450. Z. Ballard, D. Shir, A. Bhardwaj, S. Bazargan, S. Santhianathan and A. Ozcan, "Low-cost plasmonic readers designed by machine learning," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 451. Z. Göröcs, Y. Rivenson, H.C. Koydemir, D. Tseng, T.L. Troy, V. Demas and A. Ozcan, "Quantitative fluorescence sensing through an autofluorescent skin tissue phantom using a portable microscope," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 452. J. E. Kong, Q. Wei, D. Tseng, J. Zhang, E. Pan, M. Lewinski, O.B. Garner, A. Ozcan, D. Di Carlo, "Enhanced nucleic acid readout with intercalator sequestration and cell-phone based fluorescence multiwell plate reader," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 453. H.E. Muñoz, C.T. Riche, J.E. Kong, O.B. Garner, A. Ozcan, and D. Di Carlo, "Bright Field Analysis of Digital LAMP Assay," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 454. Y. Zhang, M. Alexander, S. Yang, R. Krishnan, Y. Bian, E. Botvinick, J. Lakey, and A. Ozcan, "High-throughput Analysis of Islet Encapsulation Quality with Lens-free On-chip Imaging," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 455. H. Ceylan Koydemir, I. I. Bogoch, D. Tseng, R.K.D. Ephraim, E. Duah, J. Tee, J. R. Andrews, and A. Ozcan, "Field Testing of a Mobile Phone Microscope for Screening of Schistosomiasis in Sub-Saharan Africa," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 456. M. U. Daloglu, A. Ray, Z. Gorocs, M. Xiong, R. Malik, G. Bitan, E. McLeod and A. Ozcan, "Wide-field and High-contrast Biomolecule Imaging With On-chip Holography Using Ultraviolet Light," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 457. H. Wang, Z. Göröcs, W. Luo, Y. Zhang, Y. Rivenson, and A. Ozcan, "Pixel Super-Resolution in Lens-Based Coherent Microscopy Using Out-of-focus Imaging," 18th Annual UC Systemwide Bioengineering Symposium, June 28-30, 2017, University of California, Los Angeles, CA, USA
- 458. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," European Conferences on Biomedical Optics (ECBO) OSA and SPIE, June 25-29, 2017, Munich, Germany (*Plenary Talk*)
- 459. A. Ozcan, "Applications of holographic on-chip microscopy," SPIE Optical Metrology Conference, Optical Methods for Inspection, Characterization, and Imaging of Biomaterials, June 25-29, 2017, Munich, Germany (*Keynote Talk*)
- 460. A. Ozcan, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," Pathology Informatics Summit, May 22-25, 2017, Pittsburgh, PA, USA (*Invited Talk*)
- 461. Y. Wu, A. Shiledar, Y. Li, J. Wong, S. Feng, X. Chen, C. Chen, K. Jin, S. Janamian, Z. Yang, Z.S. Ballard, Z. Göröcs, A. Feizi, and A. Ozcan, "Mobile Microscopy and Machine Learning Provide Accurate and High-throughput Monitoring of Air Quality," OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA USA (*Postdeadline Paper*)
- 462. Z.S. Ballard, D. Shir, A. Bhardwaj, S. Bazargan, S. Sathianathan, and A. Ozcan, "Computational Sensing in Plasmonics: Design of Low-cost and Mobile Plasmonic Readers Using Machine Learning," OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA USA
- 463. A. Feizi, Y. Zhang, A. Greenbaum, A. Guziak, M. Luong, R. Chan, B. Berg, H. Ozkan, W. Luo, M. Wu, Y. Wu, and A. Ozcan, "Lensfree On-chip Microscopy Achieves Accurate

- Measurement of Yeast Cell Viability and Concentration Using Machine Learning," OSA Conference on Lasers and Electro-optics (CLEO '17), May 16-18, 2016, San Jose, CA USA
- 464. H. Ceylan Koydemir, S. Feng, K. Liang, D. Tseng, R. Nadkarni, P. Benien, and A. Ozcan, "Automated Detection and Enumeration of Waterborne Pathogens Using Mobile Phone Microscopy and Machine Learning," OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA, USA
- 465. M. Daloglu, A. Ray, Z. Göröcs, M. Xiong, R. Malik, G. Bitan, E. McLeod, and A. Ozcan, "Onchip Microscopy and Nano-particle Detection Using Ultraviolet Light," OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA USA
- 466. Z. Göröcs, Y. Rivenson, H. C. Koydemir, D. Tseng, T. Troy, V. Demas, and A. Ozcan "Mobile Microscope for Quantitative Fluorescence Sensing Through Highly Autofluorescent and Scattering Media" OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA USA
- 467. H. Wang, Z. Gorocs, W. Luo, Y. Zhang, Y. Rivenson, A. Ozcan, "Pixel Super-Resolution in Coherent Microscopy Systems Through Out-of-Focus Imaging," OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA, USA
- 468. Y. Rivenson, Y. Wu, H. Wang, Y. Zhang, A. Feizi, and A. Ozcan, "Sparsity-based On-chip Holographic Microscopy," OSA Conference on Lasers and Electro-optics (CLEO '17), May 14-19, 2017, San Jose, CA USA
- 469. A. Ozcan, "Mobile Microscopy, Sensing and Diagnostics through Computational Photonics," IEEE NEMS Conference: Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems, April 9-12, 2017, Los Angeles, CA, USA (*Invited Talk*)
- 470. A. Ozcan, "Computational Imaging, Sensing and Diagnostics," Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Pittcon Conference, March 5-9, 2017, Chicago, IL, USA (*Invited Talk*)
- 471. Z.S. Ballard, D. Shir, A. Bhardwaj, S. Bazargan, S. Sathianathan, and A. Ozcan, "Design of Low-cost and Field-portable Plasmonic Readers Using Machine Learning," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, March 2-4, 2017, Washington, DC, USA
- 472. H.C. Koydemir, S. Feng, K. Liang, R. Nadkarni, D. Tseng, P. Benien and A. Ozcan, "Rapid Detection and Quantification of Waterborne Pathogens Using Smartphone Based Fluorescence Microscopy and Machine Learning," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, March 2-4, 2017, Washington, DC, USA
- 473. A. Ozcan, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," SPIE Photonics West, Biophotonics Executive Forum, 31 January, 2017, San Francisco, CA (*Invited Talk*)
- 474. Y. Wu, Y. Zhang, W. Luo, and A. Ozcan, "Demosaiced pixel super-resolution in digital holography for multiplexed computational color imaging on a chip," SPIE Photonics West, Spectroscopy and Multi-Color Imaging and Sensing Techniques, 28 January 2 February 2017, San Francisco, CA, Paper # 10055-5
- 475. A. Feizi, Y. Zhang, A. Greenbaum, A. Guziak, M. Luong, R. Chan, B. Berg, W. Luo, M. Wu, Y. Wu, and A. Ozcan, "Yeast viability and concentration measurement using lens-free on-chip microscopy and machine learning," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, January 28-February 2, 2017, San Francisco, CA, Paper #10055-7
- 476. H.C. Koydemir, S.W. Feng, K. Liang, R. Nadkarni, D. Tseng, P. Benien, and A. Ozcan, "A survey of supervised machine learning models for mobile-phone based pathogen identification and classification", SPIE Photonics West 2017, Optics and Biophotonics in Low Resource Settings III, 28 January 2 February, 2017, San Francisco, CA, Paper # 10055-9

- 477. S.W. Feng, D. Tseng, D. Di Carlo, O.B. Garner and A. Ozcan, "A cost-effective smartphone-based antimicrobial susceptibility test reader for drug resistance testing", SPIE Photonics West 2017, Optics and Biophotonics in Low Resource Settings III, 28 January 2 February, 2017, San Francisco, CA, Paper # 10055-10
- 478. A. Ray, H. Ho, M. Daloglu, A. Torres, E. McLeod, and A. Ozcan, "Cost-effective and label-free holographic biosensor for detection of Herpes Simplex Virus," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings III, January 28-February 2, 2017, San Francisco, CA, Paper # 10055-13
- 479. Y. Rivenson, Y. Wu, H. Wang, Y. Zhang, and A. Ozcan, "High resolution computational onchip imaging of biological samples using sparsity constraint," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings III, January 28-Feb 2, 2017, San Francisco, CA, Paper # 10055-22
- 480. W. Luo, H. Wang, Z. Gorocs, L. Bentolila, and A. Ozcan, "Super-resolution through out-of-focus imaging in lens-based microscopy," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings III, January 28 February 2, 2017, San Francisco, CA, Paper # 10055-24
- 481. Y. Zhang, Y. Wu, Y. Zhang, and A. Ozcan, "Fusion of lens-free microscopy and mobile-phone microscopy images for high-color-accuracy and high-resolution pathology imaging," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings III, January 28 February 2, 2017, San Francisco, CA, Paper # 10055-27
- 482. A. Ozcan, "Applications of holographic on-chip microscopy," SPIE Photonics West, Quantitative Phase Imaging III, 28 January 2 February 2017, San Francisco, CA (*Invited Talk*)
- 483. H.C. Koydemir, and A. Ozcan, "Waterborne pathogen detection using a smartphone based fluorescence microscope and machine learning", Biological and Chemical Sensors Summit, December 5-7, 2016, La Jolla, CA, USA
- 484. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, S. Feng, Q. Wei, R. Y. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O. B. Garner, and A. Ozcan, "Colorimetric Microplate Reader for Point-of-Care ELISA Quantification", Biological and Chemical Sensors Summit, December 5-7, 2016, La Jolla, CA, USA
- 485. Y. Zhang and A. Ozcan, "Lensfree On-Chip Biomedical Imaging Using Cost-Effective Image Sensors," Biological and Chemical Sensors Summit, December 5-7, 2016, La Jolla, CA, USA
- 486. S.Y. Celine Lee, Y. Zhang, D. Furst, A. Rosenthal, R. Schumacher, J. FitzGerald, A. Ozcan, "Computational Polarizing Microscopy: A Novel Method to Detect Birefringent Crystals Using Lens-Free on-Chip Microscopy," American College of Rheumatology (ACR/ARHP) Annual Meeting, November 11-16, 2016, Washington DC, USA
- 487. S.Y. Celine Lee, Y. Zhang, D. Furst, A. Rosenthal, R. Schumacher, J. FitzGerald, A. Ozcan, "Computational Polarizing Microscopy: A Novel Method to Image Birefringent Crystals in Patient Samples," Gout, Hyperuricemia and Crystal-Associated Disease Network (G-CAN) Annual Meeting, November 11, 2016, Washington DC, USA
- 488. H.C. Koydemir, and A. Ozcan, "Waterborne pathogen detection using a smartphone based fluorescence microscope and machine learning", Clean Air and Water Solutions Conference, American Filtration and Separations Society, October 25-26, 2016, San Diego, CA, USA
- 489. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, S. Feng, Q. Wei, R. Y. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O. B. Garner, and A. Ozcan, "A Smartphone-Based 96-Well Plate Reader for Cost-effective Point-of-Care ELISA Test Quantification", IEEE Global Humanitarian Technology Conference (GHTC), October 13-16, 2016, Seattle, Washington, USA
- 490. Y. Zhang, S. Y. C. Lee, Y. Zhang, D. Furst, J. Fitzgerald, and A. Ozcan, "Wide-field Synovial Fluid Analysis Using Lens-free Polarized Microscopy for Gout Diagnosis," BMES (Biomedical Engineering Society) Annual Meeting, October 5-8, 2016, Minneapollis, Minnesota, USA

- 491. H.C. Koydemir, I.I. Bogoch, D. Tseng, R.K.D. Ephraim, E. Duah, J. Tee, J. R. Andrews, and A. Ozcan, "Label-free Field Screening of Schistosoma haematobium Eggs in Urine Samples Using a Cost Effective Smartphone Based Microscope", BMES (Biomedical Engineering Society) Annual Meeting, Micro/Nano Tools in Medicine, October 5-8, 2016, Minneapolis, Minnesota, USA
- 492. A. Ray, H. Ho, M. Daloglu, E. Mcleod and A. Ozcan, "Field-Portable Holographic Microscope for Label-free Detection of Herpes Simplex Virus", BMES (Biomedical Engineering Society) Annual Meeting, October 5-8, 2016, Minneapolis, Minnesota, USA
- 493. A. Ozcan, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," The Annual Meeting of The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) SciX Conference, September 18-23, 2016, Minneapolis, Minnesota (*Keynote Talk*)
- 494. A. Ozcan, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," National Meeting of Electromagnetism, University of Parma, September 12-14, 2016, Parma, Italy (*Plenary Talk*)
- 495. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics" Gordon Research Conference (GRC), The Use of Big Data in Health Related Research, The Chinese University of Hong Kong, July 17-22, 2016, Hong Kong, China (*Invited Talk*)
- 496. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, S. Feng, Q. Wei, R. Y. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O. B. Garner, and A. Ozcan, "A Smartphone Colorimetric Microplate Reader for Point-of-Care ELISA Quantification", Biodefense World Summit 2016 (June 28-29, 2016), Baltimore, MD, USA
- 497. A. Ozcan, "High-throughput analysis of horse sperm 3D swimming patterns using computational on-chip imaging" Association for Applied Animal Andrology (AAAA) Biennial Conference, June 24-26, 2016, Tours, France (*Plenary Talk*)
- 498. H.C. Koydemir, E. Van Dyne, D. Tseng, S. Feng, D. Karinca, K. Liang, R. Nadkarni, R. Varma, and A. Ozcan, "Sickle Cell Detection Using a Smartphone Based Transmission Microscope", 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 499. S. Feng, M.J. Woo, H. Kim, E.S. Shin, and A. Ozcan, "An online global-health related technology training platform for middle and high-school students," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 500. Y. Zhang, S. Y. C. Lee, Y. Zhang, D. Furst, J. Fitzgerald, and A. Ozcan, "Wide-Field Lens-Free Polarized Imaging of Birefringent Crystals in Synovial Fluid for Gout Diagnosis," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 501. A. Ozcan, "Mobile Imaging, Sensing and Diagnostics," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA (*Invited Talk*)
- 502. K. Yanny, P. Wolf, H. Patel, Z. Gorocs and A. Ozcan, "High-Throughput Imaging Cytometer for Real-Time Waterborne Pathogen Monitoring," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 503. Z. Gorocs, W. Luo, Y. Zhang, A. Feizi and A. Ozcan, "Wavelength scanning enables pixel super-resolution in holographic microscopy," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 504. B. Berg, B. Cortazar, D. Tseng, Q. Wei, D. Di Carlo, O. B. Garner, and A. Ozcan, "A Smartphone-Based 96-Well Plate Reader for Point-of-Care Quantification of Colorimetric

- ELISA Tests," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 505. Y. Wu, Y. Zhang, W. Luo, and A. Ozcan, "Multiplexed Holographic Color Imaging on a Chip Using Demosaiced Pixel Super-Resolution," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 506. Y. Zhang, Y. Wu, Y. Zhang, and A. Ozcan, "Color Calibrated Fusion of Lens-free and Mobile-Phone Microscopy Images for High-Resolution and High-Color-Fidelity Imaging," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 507. A. Ray, H. Ho, M. Daloglu, E. Mcleod, A. Ozcan, "Label-free Detection of Herpes Simplex Virus using a Cost-effective and Portable Holographic Microscope", 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Franscisco, CA, USA
- 508. Y. Rivenson, H. Wang, Y. Wu, Y. Zhang, and A. Ozcan, "Computational holographic imaging of biological samples using sparsity constraint," 17th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2016, University of California, San Francisco, CA, USA
- 509. Y. Wu, Y. Zhang, W. Luo and A. Ozcan, "Multiplexed Color Imaging Using Demosaiced Pixel Super-Resolution," OSA Conference on Lasers and Electro-optics (CLEO '16), June 5-10, 2016, San Jose, CA USA, Paper # AM4O.6
- 510. W. Luo, Y. Zhang, Z. Gorocs, and A. Ozcan, "Wavelength Scanning based Pixel Super-Resolution," OSA Conference on Lasers and Electro-optics (CLEO '16), June 6-10, 2016, San Jose, CA USA, Paper # STh3G.5
- 511. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, S. Feng, Q. Wei, R. Y. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O. B. Garner, and A. Ozcan, "A Smartphone-based Microplate Reader for Point-of-Care ELISA Quantification," OSA Conference on Lasers and Electro-optics (CLEO '16), June 5-10, 2016, San Jose, CA USA, Paper # ATu1O.4
- 512. Y. Zhang, Y. Wu, Y. Zhang, and A. Ozcan, "Fusion of Lens-free and Lens-based Microscope Images for Accurate Color Imaging," OSA Conference on Lasers and Electro-optics (CLEO '16), June 5-10, 2016, San Jose, CA USA, Paper # STh3G.3
- 513. A. Ozcan, "Mobile Imaging, Sensing and Diagnostics" 26th Anniversary World Congress on Biosensors (Biosensors Congress, Elsevier), May 25-27, 2016, Gothenburg, Sweden (*Plenary Talk*)
- 514. A. Ozcan, "Mobile-phone based imaging, sensing and diagnostics technologies" Summer School on Mobile Diagnostics, Biosensors Congress, Elsevier, May 24, 2016, Gothenburg, Sweden (*Invited Talk*)
- 515. A. Ozcan, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics" *Ernst Abbe Lecture*, International Conference on Applied Optics and Photonics (organized by ICO and DGaO), May 19, 2016, Hannover, Germany
- 516. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," IEEE International Conference on Computational Photography (ICCP), Northwestern University, May 13-15, 2016, Evanston, IL (*Keynote Talk*)
- 517. K. Yanny, P. Wolf, Z. Gorocs, A. Ozcan, "Real-Time Waterborne-Pathogen and Algae Monitoring System Using Digital Holographic Imaging" Council on Undergraduate Research 20th Annual Posters on the Hill, April 19-20, 2016, Capitol Hill, Washington, DC
- 518. S. Feng, MJ Woo, H. Kim, E. Shin, and A. Ozcan, "Game-based educational training of youths to diagnose malaria," 41st West Coast Biological Sciences Undergraduate Research Conference, Point Loma Nazarene University, April 9, 2016, San Diego, CA
- 519. A. Feizi, Y. Zhang, A. Greenbaum, R.Y. Chan, B. Berg, P. Chung, M. Wu, H. Ozkan, J. Guziak, M.C. Luong and A. Ozcan, "Portable and cost-effective yeast viability analysis using lens-free

- on-chip microscopy and machine learning," SPIE Photonics Europe, April 4-7, 2016, Brussels, Belgium, Paper # 9896-12
- 520. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools," Lab-on-a-Chip & Microfluidics Conference, Select Biosciences Meeting, March 16, 2016, Madrid, Spain (*Keynote Talk*)
- 521. A. Ozcan, "On-chip microscopy, sensing and diagnostics," SPIE Photonics West, Quantum Sensing, Nano Electronics and Photonics XIII, February 13-18, 2016, San Francisco, CA, Paper # 9755-27 (*Invited Talk*)
- 522. H. Ceylan Koydemir, I. I. Bogoch, D. Tseng, R.K.D. Ephraim, E. Duah, J. Tee, J.R. Andrews, and A. Ozcan, "Field-testing of a cost-effective mobile-phone based microscope for screening of Schistosoma haematobium", SPIE Photonics West 2016, Optics and Biophotonics in Low Resource Settings II, February 13-18, 2016, San Francisco, CA, Paper # 9699-23
- 523. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, D. Tseng, R. Y. Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, S. Feng, and A. Ozcan, "Single DNA imaging and length quantification through a mobile-phone microscope," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 13-18, 2016, San Francisco, CA, Paper # 9699-2
- 524. Y. Zhang, S. Y. C. Lee, Y. Zhang, D. Furst, J. Fitzgerald and A. Ozcan, "Wide-field synovial fluid imaging using polarized lens-free on-chip microscopy for point-of-care diagnostics of gout and pseugodout", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 13-18, 2016, San Francisco, CA, Paper # 9699-14
- 525. H. Ceylan Koydemir, Z. Gorocs, D. Tseng, B. Cortazar, S. Feng, R. Y. L. Chan, J. Burbano, E. McLeod, and A. Ozcan, "Rapid and sensitive detection of waterborne pathogens using machine learning on a smartphone based fluorescence microscope", SPIE Photonics West 2016, Optics and Biophotonics in Low Resource Settings II, Fluorescence and Polarization Methods, February 13-18, 2016, San Francisco, CA, Paper # 9699-11
- 526. B. Berg, B. Cortazar, D. Tseng, H. Ozkan, S. Feng, Q. Wei, R. Y. Chan, J. Burbano, Q. Farooqui, M. Lewinski, D. Di Carlo, O. B. Garner, and A. Ozcan, "Cellphone-based colorimetric microplate reader for point-of-care testing," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 13-18, 2016, San Francisco, CA, Paper # 9699-4
- 527. S. Feng, MJ Woo, H. Kim, E. Kim, S. J. Ki, L. Shao, and A. Ozcan, "A game-based crowd-sourcing platform for rapidly training middle and high school students to perform biomedical image analysis," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings II, February 13-18, 2016, San Francisco, CA, Paper # 9699-28
- 528. W. Luo, Y. Zhang, A. Feizi, Z. Göröcs, A. Greenbaum, and A. Ozcan, "Wavelength scanning achieves pixel super-resolution in holographic on-chip microscopy," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings II, February 13-18, 2016, San Francisco, CA, Paper # 9699-9
- 529. K. Yanny, P. Wolf, H. Patel, Z. Gorocs, and A. Ozcan, "High-throughput Volumetric Detection of Giardia lamblia in Water Samples Using Real-time Holographic Microscopy," The 23rd Annual Southern California Conference for Undergraduate Research (SCCUR), Harvey Mudd College (November 21, 2015), California, USA
- 530. S. Kim, Q. Wei and A. Ozcan, "Fluorescence Imaging and Sizing of Single DNA Molecules with a Smartphone," The 23rd Annual Southern California Conference for Undergraduate Research (SCCUR), Harvey Mudd College (November 21, 2015), California, USA
- 531. A. Ozcan, "A computational look at nano-scale toward giga-pixel nanoscopy," IEEE International Conference on Nano/Molecular Medicine and Engineering IEEE NanoMed Conference (November 15-18, 2015), Hawaii, USA (*Invited Talk*)
- 532. H.C. Koydemir and A. Ozcan, "Mobile-Phone Based Optical Imaging Platform for Rapid and Accurate Detection and Quantification of Waterborne Pathogens in Low Resource Settings", The

- Knowledge Foundation Sensor Global Summit 2015, Sensor R&D Advanced Materials, Design, Modeling & Fusion for Sensor Applications, (November 10 11, 2015), La Jolla, California, USA.
- 533. K. Yanny, H. Patel, P. Wolf, Z. Gorocs, and A. Ozcan, "Real-Time Lens-free Digital Holographic Microscopy", 2015 SACNAS (Society for Advancement of Chicanos and Native Americans in Science) National Conference (October 29-30, 2015), Gaylord National Convention Center, Washington, DC, USA
- 534. D. Kim, O. Garner, A. Ozcan, and D. Di Carlo, "Homogenous Amplified Digital Immunoassay," MicroTAS 2015 The 19th International Conference on Miniaturized Systems for Chemistry and Life Sciences (October 25-29, 2015), Gyeongju, South Korea
- 535. S. Feng, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan, "Google Glass-based Rapid Analysis of Immuno-chromatographic Diagnostic Tests," OSA Frontiers in Optics (FiO) Conference (October 18-22, 2015), San Jose, California, USA
- 536. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," OSA Frontiers in Optics (FiO) Conference (October 18-22, 2015), San Jose, California, USA (*Invited Talk*)
- 537. H.C. Koydemir, Z. Gorocs, D. Tseng, B. Cortazar, S. Feng, R. Yan Lok Chan, J. Burbano, E. McLeod, and A. Ozcan, "Mobile-phone Based Optical Microscopy and Machine Learning Platform for Rapid Detection and Quantification of Waterborne Pathogens in Low resource Settings", IEEE Global Humanitarian Technology Conference (GHTC), (October 8-11, 2015), Seattle, Washington, USA
- 538. Y. Zhang, A. Greenbaum, A. Feizi, P-L. Chung, W. Luo, S. Kandukuri, and A. Ozcan, "Computational Imaging of Pathology Slides Using Wide-Field On-Chip Microscopy," BMES (Biomedical Engineering Society) Annual Meeting, (October 7-10, 2015), Tampa, Florida, USA
- 539. D. Kim, A. Ozcan, O. Garner, and D. Di Carlo, "Homogenous Amplified Digital Immunoassay," BMES (Biomedical Engineering Society) Annual Meeting, (October 7-10, 2015), Tampa, Florida, USA
- 540. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, D. Tseng, R. Yan Lok Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, S. Feng, and A. Ozcan, "Mobile-Phone Based Microscopy for Imaging and Sizing of Single DNA Molecules," BMES (Biomedical Engineering Society) Annual Meeting, (October 7-10, 2015), Tampa, Florida, USA
- 541. B. Cortazar, H. Ceylan Koydemir, D. Tseng, S. Feng, and A. Ozcan, "Non-destructive and Rapid Plant Chlorophyll Quantification Using Google Glass," BMES (Biomedical Engineering Society) Annual Meeting, (October 7-10, 2015), Tampa, Florida, USA
- 542. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," 11th International Conference on Micro- to Nano-Photonics IV ROMOPTO 2015, September 1-4, 2015, Bucharest, Romania (*Invited Talk*)
- 543. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing, Diagnostics Tools through Computational Photonics," SPIE Optics & Photonics Conference, August 11, 2015, San Diego, CA, USA (*Plenary Talk*)
- 544. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," American Association for Clinical Chemistry (AACC) Annual Meeting, July 26-30, 2015, Atlanta, Georgia, USA (*Invited Talk*)
- 545. A. Ozcan, "Lens-free On-chip Microscopy for Biomedical Imaging, Sensing and Diagnostics," Conference on Lasers and Electro-optics (CLEO-Europe, organized by OSA, IEEE and EPS), June 21-25, 2015, Munich, Germany (*Keynote Talk*)
- 546. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools through Computational Photonics," 3rd European Optical Society (EOS) Conference on Optofluidics, June 22-23, 2015, Munich, Germany (*Invited Talk*)

- 547. A.F. Coskun, A. Cetin, D. Etezadi, B. Galarreta, D.A. Alvarez, H. Altug, and A. Ozcan, "Optofluidic-Plasmonic Handheld Biosensor for High-Throughput and Label-Free Monitoring of Molecular Interactions," Conference on Lasers and Electro-optics (CLEO-Europe, organized by OSA, IEEE and EPS), June 21-25, 2015, Munich, Germany
- 548. H. Ceylan Koydemir, B. Cortazar, D. Tseng, S. Feng, and A. Ozcan, "Non-invasive and Field-based Quantification of Plant Chlorophyll Content Using Google Glass", 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA
- 549. W. Luo, A. Greenbaum, Y. Zhang, and A. Ozcan, "High-resolution On-chip Imaging using Synthetic Aperture," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 550. S. Feng, M. Woo, S. Ki, L. Shao, K. Huang, Z. Wen, J. Wu, and A. Ozcan, "Game-based crowdsourcing platform for malaria diagnostics and training of diagnosticians," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 551. Z. Gorocs, E. McLeod and A. Ozcan, "Fluorescence signal enhancement using vapor-condensed micro-reflectors", 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 552. C. Nguyen, Y. Mi, E. McLeod, T.U. Dincer, M. Veli, W. Luo, and A. Ozcan, "Nanoparticle and virus sizing through time-resolved lensfree holographic on-chip microscopy," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 553. K. Yanny, H. Patel, P. Wold, Z. Gorocs, and A. Ozcan, "Real-Time Waterborne-Pathogen and Algae Monitoring Using Digital Holographic Imaging on a Chip", 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 554. A. Feizi, A. Greenbaum, Y. Chan, B. Berg, Y. Zhang, H. Ozkan, P. Chung, M. Wu, and A. Ozcan, "Portable and Cost-effective Cell Viability Analysis Using Lensfree On-Chip Imaging," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 555. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, N. Nguyen, D. Tseng, R. Y. L. Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, S. Feng, and A. Ozcan, "3D Printed Microscopy on a Mobile-phone for Imaging and Sizing of Single DNA Molecules," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 556. Y. Zhang, A. Greenbaum, A. Feizi, P.L. Chung, W. Luo, S.R. Kandukuri, and A. Ozcan, "High-throughput Pathology Slide Imaging Using Lens-free On-chip Microscopy," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 557. T-W. Su, I. Choi, J. Feng, K. Huang, W. Luo, F. Shabbir, and A. Ozcan, "High-throughput 3D analysis of animal sperm trajectories using holographic lensfree on-chip imaging," 16th Annual UC Systemwide Bioengineering Symposium, June 22-24, 2015, University of California, Santa Cruz, CA, USA
- 558. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, D. Tseng, R. Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, S. Feng, and A. Ozcan, "Field-Portable Smartphone Microscopy Platform for Widefield Imaging and Sizing of Single DNA molecules," OSA Conference on Lasers and Electrooptics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # ATh4J.6
- 559. E. McLeod, T.U. Dincer, M. Veli, Y.N. Ertas, C. Nguyen, W. Luo, A. Greenbaum, A. Feizi, and A. Ozcan, "Field-Portable Nanoparticle and Virus Sizing Enabled by On-Chip Microscopy and Vapor-Condensed Nanolenses," OSA Conference on Lasers and Electro-optics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # STu2K.6

- 560. A.F. Coskun, A. Cetin, B. Galarreta, D.A. Alvarez, H. Altug, and A. Ozcan, "Field-portable optofluidic plasmonic biosensor for wide-field and label-free monitoring of molecular interactions," OSA Conference on Lasers and Electro-optics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # STu1K.1
- 561. W. Luo, F. Shabbir, C. Gong, C. Gulec, J. Pigeon, J. Shaw, A. Greenbaum, T-W. Su, A.F. Coskun, S. Tochitsky, C. Joshi, and A. Ozcan, "High-throughput Lensfree Ion-Track Analysis for Laser-Driven Accelerators," OSA Conference on Lasers and Electro-optics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # STu2N.5
- 562. Y. Zhang, A. Greenbaum, A. Feizi, P-L. Chung, W. Luo, S. Kandukuri, and A. Ozcan, "Widefield Imaging of Pathology Slides using Lensfree On-chip Microscopy," OSA Conference on Lasers and Electro-optics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # AW4J.6
- 563. Z. Göröcs, E. McLeod, S. Acharya and A. Ozcan, "Self-assembled Micro-reflectors for Signal Enhancement in Fluorescence Microscopy," OSA Conference on Lasers and Electro-optics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # STh4G.2
- 564. W. Luo, A. Greenbaum, Y. Zhang, and A. Ozcan, "High-resolution On-chip Imaging using Synthetic Aperture," OSA Conference on Lasers and Electro-optics (CLEO '15), May 10-15, 2015, San Jose, CA USA, Paper # STu2K.3
- 565. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics", International Semiconductor Science and Technology Conference (ISSTC), May 11-13, 2015, Izmir, Turkey (*Invited Talk*)
- 566. A. Ozcan, "A computational look at nano-scale toward giga-pixel nanoscopy," SPIE Defense, Security, and Sensing Conference, April 20-24, 2015, Baltimore, USA (*Invited Talk*)
- 567. H. Ceylan Koydemir, Z. Gorocs, D. Tseng, and A. Ozcan, "Rapid and sensitive detection and counting of Giardia lamblia cysts in water samples using a field portable and cost-effective fluorescence imaging platform on a mobile-phone", University of California, Global Health Day, April 18, 2015, University of California, Los Angeles, USA
- 568. Q. Wei, W. Luo, S. Chiang, and A. Ozcan, "Mobile-Phone Based Microscopy for Imaging and Sizing of Single DNA Molecules," University of California, Global Health Day, April 18, 2015, University of California, Los Angeles, USA
- 569. Y. Zhang, A. Greenbaum, A. Feizi, and A. Ozcan, "Wide-field Pathology Slide Imaging using Lens-free On-chip Microscopy," University of California, Global Health Day, April 18, 2015, University of California, Los Angeles, USA
- 570. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics", IEEE International Symposium on Biomedical Imaging (IEEE ISBI), Tutorial on Point-of-care Imaging Systems, April 16-19, 2015, New York, NY, USA (*Invited Talk Tutorial*)
- 571. S. Feng and A. Ozcan, "Online Training and Educational Games for Malaria Diagnosis and Expert Scoring," 2015 Consortium of Universities for Global Health (CUGH) Global Health Conference, March 26-28, 2015, Boston, MA, USA *The Lancet Global Health*: Meeting Abstract
- 572. Q. Wei, W. Luo, S. Chiang, T. Kappel, C. Mejia, D. Tseng, R. Y. L. Chan, E. Yan, H. Qi, F. Shabbir, H. Ozkan, S. Feng, and A. Ozcan, "Mobile Phone based Microscopy for Imaging and Sizing of Single DNA Molecules," ACS National Meeting, March 22-16, 2015, Denver, Colorado, USA
- 573. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," 2nd International Conference on Label-Free Technologies, March 12-14, 2015, Cambridge, MA, USA (*Invited Talk*)

- 574. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing and Measurement Tools Through Computational Photonics," Society for Brain Mapping and Therapeutics (SBMT), Annual Congress, March 6-8, 2015, Los Angeles, CA, USA (*Invited Talk*)
- 575. M.U. Daloglu, W. Luo, J. Feng, G. Ren and A. Ozcan, "Lensfree 3D Imaging of Sperms," The Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM), Organized by AAAS and NSF, February 19-21, 2015, Washington, DC, USA
- 576. A. Ozcan, "Democratization of Diagnostics Tools Through Computational Imaging and Sensing," AAAS Annual Meeting, Symposium on Affordable Diagnostics for All: High-Resolution Medical Imaging for Saving Lives, February 12-16, 2015, San Jose, CA, USA (*Invited Talk*)
- 577. W. Luo, F. Shabbir, C. Gong, C. Gulec, J. Pigeon, J. Shaw, A. Greenbaum, T-W. Su, A.F. Coskun, S.Y. Tochitsky, C.J. Joshi, and A. Ozcan, "High-throughput on-chip analysis of single ion tracks created by laser-driven plasma accelerators," SPIE Photonics West, Frontiers in Ultrafast Optics: Biomedical, Scientific, and Industrial Applications XV, February 7-12, 2015, San Francisco, CA, Paper # 9355-20
- 578. S.W. Feng, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan, "Google glass based immunochromatographic diagnostic test analysis," SPIE Photonics West, Optical Diagnostics and Sensing XV: Toward Point-of-Care Diagnostics, February 7-12, 2015, San Francisco, CA, Paper # 9332-21
- 579. E. McLeod, C. Nguyen, P. Huang, W. Luo, M. Veli, and A. Ozcan, "Tunable vapor-condensed nanolenses for label-free nanoscale imaging and sensing," SPIE Photonics West, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications XII, February 7-12, 2015, San Francisco, CA, Paper # 9337-16 (*Invited Talk*)
- 580. Z. Göröcs, E. McLeod, S. Acharya, and A. Ozcan, "Fluorescent signal enhancement using vapor-condensed micro-reflectors," SPIE Photonics West, Advanced Fabrication Technologies for Micro/Nano Optics and Photonics VIII, February 7-12, 2015, San Francisco, CA, Paper #9374-38
- 581. Y. Zhang, A. Greenbaum, A. Feizi and A. Ozcan, "Pathology slide imaging using wide-field lensfree microscopy," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 7-12, 2015, San Francisco, CA, Paper # 9314-20
- 582. H.C. Koydemir, Z. Gorocs, E. Mcleod, D. Tseng and A. Ozcan, "Field Portable Fluorescence Microscopy for Detection of Giardia lamblia Cyst in Water Samples," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 7-12, 2015, San Francisco, CA, Paper # 9314-28
- 583. S.W. Feng, M. Woo, K. Chandramouli, and A. Ozcan, "A game-based platform for crowd-sourcing biomedical image diagnosis and standardized remote training and education of diagnosticians," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 7-12, 2015, San Francisco, CA, Paper # 9314-19
- 584. E. McLeod, T. U. Dincer, M. Veli, Y. N. Ertas, C. Nguyen, W. Luo, and A. Ozcan, "Field-portable and cost-effective holographic device for label-free nanoparticle and virus imaging and sizing," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 7-12, 2015, San Francisco, CA, Paper # 9314-5
- 585. Q. Wei, R. Nagi, K. Sadeghi, S. Feng, E. Yan, S. J. Ki, R. Caire, D. Tseng, A. Ozcan, "Smartphone Based Spatiotemporal Mapping of Mercury(II) Ions Using a Colorimetric Gold Nanoparticle Assay", SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 7-12, 2015, San Francisco, CA, Paper # 9314-18

- 586. B. Cortazar, H.C. Koydemir, D. Tseng, S. W. Feng, and A. Ozcan, "Field quantification of plant chlorophyll content using Google Glass," SPIE Photonics West, Optics and Biophotonics in Low-Resource Settings, February 7-12, 2015, San Francisco, CA, Paper # 9314-4
- 587. W. Luo, A. Greenbaum, Y. Zhang, and A. Ozcan, "Lensfree on-chip imaging using synthetic aperture," SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXII, February 7-12, 2015, San Francisco, CA, Paper # 9330-2
- 588. T-W. Su, I. Choi, J. Feng, K. Huang, W. Luo, and A. Ozcan, "High-throughput on-chip analysis of 3D swimming patterns of animal sperms using holographic lensfree imaging", SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXII, February 7-12, 2015, San Francisco, CA, Paper # 9330-24
- 589. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," Biophysical Society Annual Meeting, Workshop on Microfluidics Tools for Studying Molecules and Cells, February 7-11, 2015, Baltimore, MD, USA (*Invited Talk*)
- 590. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," Gordon Research Conference (GRC), Physical Virology, January 25-30, 2015, Ventura, CA, USA (*Invited Talk*)
- 591. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", IEEE EMBS Micro and Nanotechnology in Medicine (MNM) Conference, December 8-12, 2014, Oahu, Hawaii, USA (*Invited Talk*)
- 592. E. McLeod, C. Nguyen, P. Huang, W. Luo, M. Veli, and A. Ozcan, "Vapor-Condensed Nanolenses for Label-Free Nanoparticle and Virus Imaging Using Lensfree Holographic On-Chip Microscopy," Materials Research Society, MRS Fall Meeting, Boston, MA (November 30 December 5, 2014)
- 593. C. Nguyen, E. McLeod, P. Huang, W. Luo, M. Veli, and A. Ozcan, "Vapor-Condensation of Tunable Nanolenses for Cost-Effective and Portable Lens-free Microscopes," Southern California Conference for Undergraduate Research (SCCUR), November 22, 2014, California State University, Fullerton, USA
- 594. A.E. Cetin, A.F. Coskun, B.C. Galarreta, M. Huang, D. Herman, A. Ozcan and H. Altug, "Hand-Held and High-Throughput Biosensor with Plasmonics and Lens-Free Imaging", OSA Latin America Optics and Photonics Conference, November 16-21, 2014, Cancun, Mexico, Paper # LTh1D.3
- 595. I. Pushkarsky, Y. Lyb, W. Weaver, T-W. Su, O. Mudanyali, A. Ozcan, and D. Di Carlo, "On-chip Cell Motility Analysis using Lensfree Holograhic Microscopy," MicroTAS 2014 The 18th International Conference on Miniaturized Systems for Chemistry and Life Sciences, San Antonio, Texas, USA (October 26-30, 2014)
- 596. H.C. Koydemir, Z. Gorocs, E. McLeod, D. Tseng, A. Ozcan, "Waterborne pathogen detection using a smart phone based fluorescent microscope," MicroTAS 2014 The 18th International Conference on Miniaturized Systems for Chemistry and Life Sciences, San Antonio, Texas, USA (October 26-30, 2014)
- 597. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," Workshop on Diagnostics Technologies for Point of Care and Resource Limited Settings, MicroTAS 2014 The 18th International Conference on Miniaturized Systems for Chemistry and Life Sciences, San Antonio, Texas, USA (October 26, 2014)
- 598. Z. Göröcs, Y. Ling, M. Yu, D. Karahalios, K. Mogharabi, K. Lu, Q. Wei, and A. Ozcan, "Ultra-Wide Field-Of-View Gigapixel Fluorescent Imaging System Using A Modified Flatbed Scanner," BMES (Biomedical Engineering Society) Annual Meeting, (October 22-25, 2014), San Antonio, Texas, USA

- 599. A.P. Gifford, H.C. Koydemir, and A. Ozcan, "Automated Detection of Giardia lamblia Cysts and Cryptosporidium parvum Oocysts in Microscopy Images Using Digital Image Processing," BMES (Biomedical Engineering Society) Annual Meeting, (October 22-25, 2014), San Antonio, Texas, USA
- 600. Q. Wei, R. Nagi, K. Sadeghi, S. Feng, D. Tseng, and A. Ozcan, "Quantitative Mercury Sensing and Spatiotemporal Mapping Using a Smartphone," BMES (Biomedical Engineering Society) Annual Meeting, (October 22-25, 2014), San Antonio, Texas, USA
- 601. A. Ozcan, "Next Generation Micro-analysis and Diagnosis Using Computational Imaging, Crowd-sourcing and Gaming", 5th International Eurasian Hematology Congress, October 15, 2014, Antalya, Turkey (*Keynote Talk*)
- 602. Q. Wei and A. Ozcan, "Smartphone-Based Imaging Devices for Nano-Object and Small Molecule Detection in Resource-Limited Settings", IEEE Global Humanitarian Technology Conference (GHTC), (October 10-13, 2014), San Jose, CA, USA
- 603. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools", Strategies in Biophotonics Conference, September 11, 2014, Boston, MA USA (*Keynote Talk*)
- 604. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," SPIE Optics and Photonics Conference, August 18, 2014, San Diego, CA USA, Paper # 9166-18 (*Invited Talk*)
- 605. S. Feng, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan, "Google Glass based immunochromatographic diagnostic test analysis," ACS National Meeting, August 10-14, 2014, San Francisco, CA
- 606. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," Gordon Research Conference (GRC), Lasers in Medicine & Biology, July 13-18, 2014, Holderness, NH (*Invited Talk*)
- 607. A. Ozcan, "Democratization of Diagnostics and Measurement Tools through Computational Imaging and Sensing", OSA Optics & Photonics Congress, Imaging and Applied Optics, July 13-17, 2014, Seattle, WA USA (*Invited Talk*)
- 608. Q. Wei, H. Qi, W. Luo, D. Tseng, L.A. Bentolila, T. Wu, R. Sun, and A. Ozcan, "Smartphone-based Microscopy for Imaging of Single Fluorescent Nanoparticles and Viruses", 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA
- 609. S. Feng, M.J. Woo, K. Chandramouli, and A. Ozcan, "BioGames: A Game-based Framework for Crowdsourcing Biomedical Image Analysis and Training of Diagnosticians," 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, CA, USA
- 610. S. Feng, R. Caire, B. Cortazar, M. Turan, A. Wong, and A. Ozcan, "Google Glass Based Immunochromatographic Diagnostic Test Analysis," 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, CA, USA
- 611. I. Pushkarsky, Y. Lyb, W. Weaver, T-W. Su, O. Mudanyali, A. Ozcan, and D. Di Carlo "Automated single-cell motility analysis on a chip using lensfree microscopy" 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA
- 612. Z. Göröcs, Y. Ling, M. D. Yu, D. Karahalios, K. Mogharabi, K. Lu, Q. Wei and A. Ozcan, "Fluorescent Flatbed Scanner: An Ultra-Large Field-of-View Gigapixel Fluorescent Imaging System" 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA
- 613. W. Luo, A. Greenbaum, S.O. Isikman, A.F. Coskun, and A. Ozcan, "Billion-Voxel Optical Tomography using Lensfree Holographic On-Chip Imaging", 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA

- 614. H.C. Koydemir, Z. Gorocs, E.R. McLeod, D. Tseng and A. Ozcan, "Smartphone enabled waterborne pathogen detection using fluorescence microscopy", 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA
- 615. Q. Wei, R. Nagi, K. Sadeghi, S. Feng, D. Tseng, and A. Ozcan, "Spatio-temporal Mapping of Mercury Contamination using a Smartphone", 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA
- 616. E. McLeod, C. Nguyen, P. Huang, W. Luo, M. Veli, and A. Ozcan, "Self-assembled Liquid Nanolenses for Wide-field Nanoparticle and Virus Imaging," 15th Annual UC Systemwide Bioengineering Symposium, June 18-20, 2014, University of California, Irvine, USA
- 617. Q. Wei, H. Qi, W. Luo, D. Tseng, L. A. Bentolila, T.-T. Wu, R. Sun, and A. Ozcan, "Single Nanoparticle and Virus Detection Using a Smart Phone Based Fluorescence Microscope", OSA Conference on Lasers and Electro-optics (CLEO '14), June 8-13, 2014, San Jose, CA USA, Paper # AW3L.1
- 618. A. Ozcan, "Computational Imaging and Sensing for Biophotonics Applications", OSA Conference on Lasers and Electro-optics (CLEO '14), June 8-13, 2014, San Jose, CA USA (*Invited Talk*)
- 619. A.E. Cetin, A.F. Coskun, B.C. Galarreta, M. Huang, D. Herman, A. Ozcan and H. Altug, "Hand-Held Plasmonic Biosensor for High-Throughput Sensing for Point-of-Care Applications", OSA Conference on Lasers and Electro-optics (CLEO '14), June 8-13, 2014, San Jose, CA USA, Paper # FM3K.2.
- 620. A. Ozcan, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools using Mobile Phones," SPIE Translational Biophotonics Conference, Rice University, May 20, 2014, Houston, TX (*Invited Talk*)
- 621. A. Ozcan, "Computational Imaging, Sensing and Diagnostics for Telemedicine and Global Health" American Society of Microbiology (ASM) General Meeting, May 19, 2014, Boston, MA (*Invited Talk*)
- 622. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," MicroNano System Workshop, Uppsala, Sweden (May 15, 2014) (*Plenary Talk*)
- 623. A. Ozcan, "BioGames: A Platform for Crowd-sourced Biomedical Image Analysis and Telediagnosis," Southern California Academy of Sciences Annual Meeting, May 2-3, 2014, Camarillo, CA USA
- 624. A. Greenbaum, A. Feizi, N. Akbari, and A. Ozcan, "Field-portable and cost-effective color microscopy for telemedicine," University of California, Global Health Day, April 26, 2014, University of California, Davis, USA
- 625. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," XII Conference on Optical Chemical Sensors and Biosensors (EUROPT(R)ODE), Athens, Greece, April 15, 2014 (*Plenary Talk*)
- 626. S. Feng, S. Mavandadi, F. Yu, R. Caire, V. Phillipe, R. Yu, A. Ozcan, "BigFoot: A Foot Monitoring Platform Using Flatbed Scanners," Diabetic Foot Global Conference (DFCon), March 20-22, 2014, Los Angeles, CA, USA
- 627. A.F. Coskun, R. Nagi, K. Sadeghi, S. Phillips and A. Ozcan, "Smart-phone based albumin testing in urine," SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems: Novel Imaging Technologies, February 2014, San Francisco, CA, paper #8933-21
- 628. E.R. McLeod, P. Huang, M. Veli, S. Acharya, W. Luo and A. Ozcan, "Self-assembly via condensation of polymer liquid nanolenses for wide-field nanoparticle and virus imaging," SPIE Photonics West, Advanced Fabrication Technologies for Micro/Nano Optics and Photonics VII, February 2014, San Francisco, CA, paper # 8974-9

- 629. Q. Wei, E. McLeod, H. Qi, Z. Wan, R. Sun, and A. Ozcan, "Plasmonic Nanoparticle-Enhanced Lensfree Holographic Cytometry," SPIE Photonics West, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications X, February 2014, San Francisco, CA, paper #8954-10
- 630. W. Luo, A. Greenbaum, S. O. Isikman, A. F. Coskun, and A. Ozcan, "Giga-pixel On-chip Microscopy and Tomography using Lensfree Holography with Color Image Sensors," SPIE Photonics West, Design and Quality for Biomedical Technologies VI: Biomedical Imaging Technologies II, February 2014, San Francisco, CA, paper #8936-32
- 631. A. Greenbaum, A. Feizi, N. Akbari and A. Ozcan, "Computational lensfree color microscopy for wide field-of-view imaging," SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XXI, February 2014, San Francisco, CA, paper #8949-15
- 632. Z. Göröcs, Y. Ling, M. Dai Yu, D. Karahalios, K. Mogharabi, K. Lu and A. Ozcan, "Fluorescent imaging over an ultralarge field-of-view of 532 cm² using a flatbed scanner" SPIE Photonics West, Optical Diagnostics and Sensing XIV: Toward Point-of-Care Diagnostics, February 2014, San Francisco, CA, paper #8591-12
- 633. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," International Conference on Electronics Computer and Computation (ICECCO), Ankara, Turkey (November 7-9, 2013) (*Plenary Talk*)
- 634. A. Ozcan, "Computational Imaging, Sensing and Diagnostics," MicroTAS 2013 The 17th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Freiburg, Germany (October 27-31, 2013) (*Plenary Talk*)
- 635. A. Ozcan, "Smartphone based microscopy, biomedical sensing and diagnostics," MicroTAS 2013 The 17th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Workshop on Point-of-Care Platforms for Clinical Diagnostics, Freiburg, Germany (October 27, 2013) (*Invited Talk*)
- 636. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," IEEE Global Humanitarian Technology Conference (GHTC), San Jose, CA (October 21, 2013) (*Plenary Talk*)
- 637. A. Greenbaum, N. Akbari, A. Feizi and A. Ozcan, "Field-Portable Lensfree Holographic Color Microscope for Telemedicine Applications," IEEE Global Humanitarian Technology Conference (GHTC), San Jose, CA (October 22, 2013)
- 638. A. Ozcan, "Computational Imaging On a Chip," OSA Frontiers in Optics (FiO), Orlando, Florida October 7, 2013 (*Invited Talk*)
- 639. W. Luo, C. Gong, F. Shabbir, C. Gulec, J. Pigeon, J. Shaw, A. Greenbaum, T. Su, A. F. Coskun, S. Tochitsky, C. Joshi, and A. Ozcan, "High-throughput Analysis of CR39 Detectors using Lensfree Holographic On-Chip Microscopy," North American Particle Accelerator Conference (NA-PAC'13) (September 29 October 4, 2013), Pasadena, CA USA, Contribution ID# 2345
- 640. E. McLeod and A. Ozcan, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," The Annual Meeting of The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) SciX Conference, October 3, 2013, Milwaukee, WI (*Invited Talk*)
- 641. J. Weidling, S. Isikman, A. Greenbaum, A. Ozcan, and E. Botvinick, "Can Capillaries Grown in 3D Culture be Imaged without the Use of an Optical Lens System?" BMES (Biomedical Engineering Society) Annual Meeting, (September 25-28, 2013), Seattle, WA, USA
- 642. H. Zhu, I. Sencan, J. Wong, S. Dimitrov, D. Tseng and A. Ozcan, "Blood Analysis on a Cellphone," BMES (Biomedical Engineering Society) Annual Meeting, (September 25-28, 2013), Seattle, WA, USA

- 643. T-W. Su, L. Xue, and A. Ozcan, "Computational Imaging and High-throughput 3D Tracking of Human Sperms," BMES (Biomedical Engineering Society) Annual Meeting, (September 25-28, 2013), Seattle, WA, USA
- 644. A. Greenbaum, N. Akbari, and A. Ozcan, "Computational Field-Portable Microscope for On-Chip Imaging of Confluent Samples," BMES (Biomedical Engineering Society) Annual Meeting, (September 25-28, 2013), Seattle, WA, USA
- 645. S. Mavandadi, S. Feng, F. Yu, S. Dimitrov, R. Yu, and A. Ozcan, "BioGames A crowd-sourced gaming platform for distributed tele-pathology and training of experts," BMES (Biomedical Engineering Society) Annual Meeting, (September 25-28, 2013), Seattle, WA, USA
- 646. W. Luo, A. Greenbaum, B. Khademhosseinieh, T-W. Su, A.F. Coskun and A. Ozcan, "Enhanced Space-Bandwidth Product In Lensfree On-Chip Microscopy," IEEE Photonics Conference 2013, (September 8-12, 2013), Seattle, WA, USA
- 647. T-W. Su, I. Choi, J. Feng, K. Huang, E. McLeod, and A. Ozcan, "Lensfree Holographic Imaging Discovers Chiral Ribbon Trajectories of Sperms," IEEE Photonics Conference (September 8-12, 2013) Seattle, WA, US
- 648. E. McLeod, W. Luo, O. Mudanyali, A. Greenbaum, and A. Ozcan, "Giga-pixel nanoimaging using computational on-chip microscopy," IEEE Photonics Conference (September 8-12, 2013) Seattle, WA, USA
- 649. Q. Wei, E. McLeod, H. Qi, Z. Wan, R. Sun, and A. Ozcan. "Lensfree Holographic Cytometry Using Plasmonic Nanoparticles," IEEE Photonics Conference 2013, (September 8-12, 2013), Seattle, WA, USA
- 650. A. Ozcan, "Lensfree Computational Microscopy," SPIE Optics and Photonics Conference, August 28, 2013, San Diego, CA USA, Paper # 8858-42 (*Invited Talk*)
- 651. A. Ozcan, "Computational On-chip Imaging," OSA Computational Optical Sensing and Imaging (COSI), June 23-27 2013, Arlington, Virgina, USA (*Invited Talk*)
- 652. A. F. Coskun, J. Wong, D. Khodadadi, R. Nagi, A. Tey, and A. Ozcan, "Food Allergen Testing on a Smart Phone", 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 653. I. Sencan, A. F. Coskun, U. Sikora, A. Ozcan, "Spectral Demultiplexing in Computational Onchip Microscopy", 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 654. A. Greenbaum, A. Feizi, N. Akbari and A. Ozcan, "Computational Super-resolved Color Microscopy on a Chip", 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 655. H. Zhu, I. Sencan, J. Wong, S. Dimitrov, D. Tseng, A. Ozcan, "Blood Analysis on a Smart Phone", 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 656. S. Mavandadi, S. Feng, F. Yu, S. Dimitrov, R. Yu, U. Sikora, O. Yaglidere, S. Padmanabhan, A. Ozcan, "BioGames for Crowd-sourced Tele-Pathology, Diagnosis and Medical Expert Training," 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 657. E. McLeod, W. Luo, O. Mudanyali, A. Greenbaum, A. Ozcan, "Giga-pixel lensfree computational imaging of nano-objects on a chip", 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 658. Q. Wei, E. McLeod, H. Qi, Z. Wan, R. Sun, A. Ozcan, "Lensfree Holographic Cytometry Using Plasmonic Nanoparticles", 14th Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 659. A. Greenbaum, W. Luo, B. Khademhosseinieh, T. Su, A.F. Coskun, and A. Ozcan, "Increasing Space-Bandwidth Product In Pixel Super-Resolved Computational On-Chip Microscopy", 14th

- Annual UC Systemwide Bioengineering Symposium, June 19-21, 2013, University of California, San Diego, USA
- 660. O. Mudanyali, E. McLeod, W. Luo, A. Greenbaum, A. F. Coskun, Y. Hennequin, C. Allier, and A. Ozcan, "High-throughput Imaging of Single Viruses using Self-assembled Nano-lenses and On-Chip Holography," OSA Conference on Lasers and Electro-optics (CLEO '13) (June 9-14, 2013), San Jose, CA USA, Paper # AW1I.6
- 661. S. A. Arpali, C. Arpali, A. F. Coskun, H. H. Chiang and A. Ozcan, "High-throughput screening of blood samples based on structured illumination on-chip imaging," OSA Conference on Lasers and Electro-optics (CLEO '13) (June 9-14, 2013), San Jose, CA USA, Paper # CTh3I.1
- 662. A. F. Coskun, J. Wong, D. Khodadadi, R. Nagi, A. Tey and A. Ozcan, "Cell-Phone Based Food Allergen Testing," OSA Conference on Lasers and Electro-optics (CLEO '13) (June 9-14, 2013), San Jose, CA USA, Paper # CTu2M.7
- 663. E. McLeod, O. Mudanyali, W. Luo, A. Greenbaum, A. F. Coskun, Y. Hennequin, C. Allier, and A. Ozcan, "Self-Assembled Nanolens Formation for Widefield Computational Imaging of Nanoparticles on a Chip," OSA Conference on Lasers and Electro-optics (CLEO '13) (June 9-14, 2013), San Jose, CA USA, Paper # CTh3I.6
- 664. A. Ozcan, "Computational On-Chip Imaging Toward Telemedicine Applications," OSA Conference on Lasers and Electro-optics (CLEO '13) (June 9-14, 2013), San Jose, CA USA, Paper # AM3M.1 (*Invited Talk*)
- 665. A. Ozcan, "Lensfree Computational Imaging," SPIE Optical Metrology Conference, May 16, 2013, Munich, Germany (*Invited Talk*)
- 666. A. Ozcan, "Cell phone-based imaging and sensing architectures," SPIE Defense, Security, and Sensing Conference, April 29 2013, Baltimore, USA (*Invited Talk*)
- 667. W. Luo, A. Greenbaum and A. Ozcan, "Giga-Pixel Imaging on a Chip: High Numerical Aperture Lensfree Microscopy Over a Wide Field-of-View", IEEE International Symposium on Biomedical Imaging (IEEE ISBI), April 7-11, 2013, San Francisco, CA, Paper# TuBT3.2
- 668. A. Ozcan, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications" IEEE 8th International Conference on Intelligent Sensors, Sensor Networks and Information Processing (IEEE ISSNIP), April 5 2013, Melbourne, Australia (*Plenary Talk*)
- 669. A. Ozcan, "Photonics-based Telemedicine Technologies toward Smart Global Health Systems," AAAS Annual Meeting, February 16, 2013, Boston, Massachusetts, USA (*Invited Talk*)
- 670. A. Ozcan, "Computational microscopy, sensing, and diagnostics on a cellphone," IS&T SPIE Electronic Imaging Conference, San Francisco, California (February 5, 2013) (*Invited Talk*)
- 671. S. Mavandadi, S. Dimitrov, S. Feng, F. Yu, R. Yu, U. Sikora, and A. Ozcan, "Crowd-sourced BioGames Toward Distributed Microscopic Image Analysis and Tele-Diagnosis," *SPIE Photonics West*, Optical Diagnostics and Sensing XIII: Toward Point-of-Care Diagnostics, February 2013, San Francisco, CA, paper # 8591-20
- 672. O. Mudanyali, S. Dimitrov, U. Sikora, S. Padmanabhan, I. Navruz and A. Ozcan, "Universal rapid diagnostic test (RDT) reader on a cell-phone for real-time spatio-temporal mapping of infectious diseases," SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic Systems XI, February 2013, San Francisco, CA, Paper # 8572-48
- 673. W. Luo, A. Greenbaum, A. F. Coskun, U. Sikora and A. Ozcan, "High Numerical Aperture (NA=0.9) and Wide-field On-Chip Microscopy," SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XX, February 2013, San Francisco, CA, paper # 8589-9
- 674. I. Sencan, U. Sikora, and A. Ozcan, "Lensfree multispectral holographic microscopy using sunlight," SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XX, February 2013, San Francisco, CA, paper # 8589-28

- 675. A. Ozcan, "Lensfree on-chip microscopy and tomography toward telemedicine applications," *SPIE Photonics West*, Microfluidics, BioMEMS, and Medical Microsystems XI, February 2013, San Francisco, CA, paper # 8615-25 (*Invited Talk*)
- 676. O. Mudanyali, E. McLeod, W. Luo, A. Greenbaum, A. F. Coskun, J. Dinten, Y. Hennequin, C. P. Allier, and A. Ozcan, "Single nanoparticle and virus imaging using computational on-chip microscopy," SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems, February 2013, San Francisco, CA, Paper # 8570-22
- 677. A. Ozcan, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," The Society for Laboratory Automation and Screening (SLAS) Annual Conference, Orlando, Florida (January 16, 2013) (*Invited Talk*)
- 678. A. Ozcan, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," SPIE 1st International Biophotonics Meeting in Israel, Tel Aviv, Israel (December 9-11, 2012) (*Plenary Talk*)
- 679. S. Mavandadi, S. Feng, F. Yu, S. Dimitrov, R. Yu, and A. Ozcan, "BioGames: A Crowd-sourced Tele-diagnosis Platform," *mHealth Summit*, (December 3-5, 2012), Washington DC
- 680. H. Zhu, U. Sikora, and A. Ozcan, "Sensitive and specific detection of *Escherichia coli* on a cell-phone," *mHealth Summit*, (December 3-5, 2012), Washington DC
- 681. K-W. Huang, T-W. Su, A. Ozcan, and P-Y. Chiou, "Optoelectronic Tweezers Integrated with Lensfree Holographic Microscopy for Large-area Cell Detection and Manipulation," IEEE NanoMedicine (NanoMed) Conference, Bangkok, Thailand (November 4-7, 2012) (*Best Paper Award*)
- 682. O. Mudanyali, S. Dimitrov, U. Sikora, S. Padmanabhan, I. Navruz and A. Ozcan, "Smart Rapid Diagnostics Test Reader running on a Cell-Phone for Real-time Mapping of Epidemics," mHealthSys Workshop Association for Computing Machinery (ACM) SenSys, Toronto, Canada, (November, 6 2012) (*Invited Contribution*)
- 683. P. A. Sandoz, A. F. Coskun, A. J. Chung, W. M. Weaver, O. Adeyiga, D. Khodadadi, A. Ozcan, D. Di Carlo, "Digital readout platform for water-in-oil droplet immunoassays running on a cell-phone for point of care viral load sensing," MicroTAS 2012 The 16th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Okinawa, Japan (October 28 November 1, 2012)
- 684. H. Zhu, U. Sikora, and A. Ozcan, "Quantum dot based sandwich immunoassay for sensitive detection of Escherichia coli on a cell-phone," BMES (Biomedical Engineering Society) Annual Meeting, (October 24-27, 2012), Atlanta, Georgia, USA
- 685. T-W. Su, L. Xue, and A. Ozcan, "Lensfree 3D Tracking of Sperms at High-throughput," OSA Frontiers in Optics (FiO), Rochester, NY (October 14-18, 2012) (*Postdeadline Paper*)
- 686. A. Ozcan, "Computational Imaging Tools for Point-of-care Diagnostics," IEEE Engineering in Medicine and Biology Society (EMBC'12), San Diego, CA, USA (August 28 September 1, 2012) (*Invited Presentation*)
- 687. A. Ozcan, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," OSA Imaging Systems and Applications (IS) & Applied Industrial Optics: Spectroscopy, Imaging and Metrology (AIO) (June 24-28, 2012), Monterey, CA USA (*Invited Presentation*)
- 688. S. Mavandadi, S. Dimitrov, S. Feng, F. Yu, U. Sikora, O. Yaglidere, S. Padmanabhan, K. Nielsen, A. Ozcan, "Crowd-sourced Games Toward Distributed Medical Image Analysis and Tele-Diagnosis", 13th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 689. A.F. Coskun, D.R. Gossett, A.J. Mach, D. Herman, Y. Suh, D. Di Carlo, and A. Ozcan, "Integration of Lensfree On-Chip Fluorescent Imaging with Lens-based Microscopy toward

- High-throughput Rare-cell Analysis", 13th Annual Systemwide Bioengineering Symposium, June 21- 23, 2012, University of California, Berkeley, USA
- 690. O. Mudanyali, S. Dimitrov, U. Sikora, S. Padmanabhan, I. Navruz, and A. Ozcan, "Cell-phone based Rapid-Diagnostic-Test Reader Platform for Spatio-temporal Mapping of Diseases", 13th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 691. A. Greenbaum, U. Sikora and A. Ozcan , "Giga-Pixel Lensfree Computational Microscopy on a Chip", 13th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 692. P.A. Sandoz, A.F. Coskun, A.J. Chung, W.M. Weaver, O. Adeyiga, D. Khodadadi, A. Ozcan, and D. Di Carlo, "Digital readout platform for water-in-oil droplet immunoassays running on a cell-phone for point of care viral load sensing", 13th Annual Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 693. S.O. Isikman, W. Bishara, H. Zhu, A. Ozcan, "Optofluidic Microscopy and Tomography on a Chip", 13th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 694. H. Zhu, U. Sikora, and A. Ozcan, "Quantum-dot based sandwich immunoassay for sensitive detection of Escherichia coli on a cell-phone," 13th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 695. I. Sencan, A. F. Coskun, T. Su, D. G. Herman, Y. Suh, A. Ozcan, "High-throughput Color Imaging on a Chip Using Sparse Signal Recovery", 13th Annual UC Systemwide Bioengineering Symposium, June 21-23, 2012, University of California, Berkeley, USA
- 696. A. Greenbaum and A. Ozcan, "Lensfree Imaging of Dense Samples using Holograms Recorded at Multiple Heights," OSA Conference on Lasers and Electro-optics (*CLEO '12*) (May 6-11, 2012), San Jose, CA USA, Paper # CF1I.1
- 697. H. Zhu, S. Mavandadi, A.F. Coskun, O.Yaglidere and A. Ozcan, "Fluorescent flow-cytometry on a cell-phone," OSA Conference on Lasers and Electro-optics (*CLEO '12*) (May 6-11, 2012), San Jose, CA USA, Paper # CF1I.2
- 698. A. Ozcan, "Lensfree On-Chip Microscopy and Cytometry Tools for Telemedicine Applications," OSA Conference on Lasers and Electro-optics (*CLEO '12*), Technology Transfer Showcase (May 6-11, 2012), San Jose, CA USA
- 699. A. Greenbaum, U. Sikora and A. Ozcan, "Field-Portable Pixel Super-Resolution Microscopy of Dense Samples using Lensfree Holograms Recorded at Multiple Heights", OSA Digital Holography and Three Dimensional Imaging, (April 28 May 2, 2012) Miami, USA
- 700. A. Ozcan, "Lensfree on-chip microscopy and tomography" SPIE Defense, Security, and Sensing Conference, April 25 2012, Baltimore, USA, Paper # 8373-50 (*Invited Talk*)
- 701. A. Ozcan, "New imaging and sensing architectures for telemedicine and global healthcare" SPIE Defense, Security, and Sensing Conference, April 23 2012, Baltimore, USA, Paper # 8371A-1 (*Invited Talk*)
- 702. A. Greenbaum, U. Sikora, and A. Ozcan, "On-chip imaging of dense samples using pixel super resolution based multi-height lensfree microscopy," SPIE Defense, Security, and Sensing Conference, (April 23-27 2012) Baltimore, USA, Paper # 8366-26
- 703. O. Mudanyali, D. Tseng, C. Oztoprak, S. O. Isikman, I. Sencan, O. Yaglidere, and A. Ozcan, "Lab-on-a-cellphone: emerging platform for telemedicine global health," SPIE Defense, Security, and Sensing Conference, (April 23-27 2012) Baltimore, USA, Paper # 8371A-2
- 704. S. O. Isikman, W. Bishara, O. Mudanyali, U. Sikora, O. Yaglidere, A. Ozcan, "On-chip Blood Analysis using Lensless Microscopy", SPIE Defense, Security and Sensing Conference, (April 23-27, 2012) Baltimore, USA, paper # 8371A-3

- 705. T.-W. Su, A. Erlinger, D. Tseng, and A. Ozcan, "Field-portable Fertility Test using Lensless Microscopy on a Chip," SPIE Defense, Security, and Sensing Conference, (April 23-27 2012) Baltimore, USA, Paper # 8371A-4
- 706. B. Khademhosseinieh, G. Biener, I. Sencan, and A. Ozcan, "Lens-free, Near-infrared (NIR) Imaging Using Structured Substrates and Compressive Sensing," SPIE Defense, Security, and Sensing Conference, (April 23-27 2012) Baltimore, USA, Paper #8373-95
- 707. H. Zhu, S. Mavandadi, A.F. Coskun, O.Yaglidere, and A. Ozcan, "Fluorescent Microscopy and Imaging Cytometry on a Cell-phone," University of California, Global Health Day, February 4, 2012, University of California, Berkeley, USA
- 708. A. Greenbaum, U. Sikora, O. Mudanyali and A. Ozcan, "Field-portable wide-field microscopy for imaging Papanicolaou smears," University of California, Global Health Day, February 4, 2012, University of California, Berkeley, USA
- 709. O. Mudanyali, W. Bishara, C. Oztoprak, D. Tseng, A. Erlinger, and A. Ozcan, "High-Throughput Screening Of Water Quality Using Field-Portable Lensfree Computational Microscopes", University of California, Global Health Day, February 4, 2012, University of California, Berkeley, USA
- 710. S. O. Isikman, W. Bishara, O. Mudanyali, U. Sikora, O. Yaglidere, and A. Ozcan, "Field-portable and Cost-effective Lensfree Microscopy for On-chip Blood Analysis and Wide-field Imaging of Malaria Slides", University of California, Global Health Day, February 4, 2012, University of California, Berkeley, USA
- 711. S.M. Nadipuram, O. Mudanyali, A. Ozcan and K. Nielsen, "Novel Lensfree Microscope Technology Based On Shadow Imaging For The Detection Of Giardia Lamblia Oocysts In Stool," American Federation for Medical Research, Western Regional Meeting, Carmel, CA, USA (January 25-28, 2012)
- 712. O. Mudanyali, W. Bishara, S. Nadipuram, U. Sikora, T. Su, O. Yaglidere, R. Ramasawmy, K. Nielsen and A. Ozcan, "Imaging Of Malaria Parasites Using Portable Lensfree Microscopes," American Federation for Medical Research, Western Regional Meeting, Carmel, CA, USA (January 25-28, 2012)
- 713. A. Ozcan, "Lensless Microscopy and Sensing on a Chip," SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems, January 2012, San Francisco, CA, paper # 8212-19 (*Invited Talk*)
- 714. M. Lee and A. Ozcan, "Field-portable reflection and transmission microscopy based on lensless digital holography," SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic Systems X, January 2012, San Francisco, CA, paper # 8214-11
- 715. S. O. Isikman, W. Bishara, U. Sikora, O. Yaglidere, J. Yeah and A. Ozcan, "Lensfree Optical Tomographic Microscopy: From bench-top to field use", SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XIX, January 2012, San Francisco, CA, paper # 8227-31
- 716. T-W. Su and A. Ozcan, "Resolving 3-D trajectories of sperms on a chip using multi-angle lensfree digital holography," SPIE Photonics West, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XIX, January 2012, San Francisco, CA, paper # 8227-30
- 717. S. O. Isikman, W. Bishara, H. Zhu and A. Ozcan, "Optofluidic tomographic microscopy: a new tool for optofluidics", SPIE Photonics West, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues X, January 2012, San Francisco, CA, paper # 8225-26
- 718. I. Sencan, A. F. Coskun, T. Su, D. G. Herman, Y. Suh, and A. Ozcan, "Lensfree incoherent color imaging using compressive decoding," SPIE Photonics West, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues X, January 2012, San Francisco, CA, paper # 8225-34

- 719. O. Mudanyali, W. Bishara, and A. Ozcan, "Lensfree pixel superresolution microscopy using thin wetting films on a chip", SPIE Photonics West, Optical Diagnostics and Sensing XII: Toward Point-of-Care Diagnostics, January 2012, San Francisco, CA, paper # 8229A-17
- 720. O. Mudanyali, D. Tseng, S. O. Isikman, C. Oztoprak, I. Sencan, W. Bishara, O. Yaglidere and A. Ozcan, "Compact and Cost-effective Lensless Telemedicine Microscopy for Global Health Applications," IEEE Global Humanitarian Technology Conference (GHTC), Seattle, Washington (October 30 November 1, 2011)
- 721. S.O. Isikman, W. Bishara, H. Zhu, and A. Ozcan, "Optofluidic Tomography," OSA Frontiers in Optics (FiO), San Jose, CA (October 16-20, 2011)
- 722. A. Ozcan, "Lensless Microscopy and Sensing on a Chip," OSA Frontiers in Optics (FiO), San Jose, CA (October 16-20, 2011) (*Invited Talk*)
- 723. M. Lee, O. Yaglidere, and A. Ozcan, "Compact and Cost-effective Lensfree Reflection and Transmission Microscopy on Chip," OSA Frontiers in Optics (FiO), San Jose, CA (October 16-20, 2011)
- 724. U. Sikora, S. Isikman, W. Bishara, O. Yaglidere, J. Yeah, and A. Ozcan, "Portable Lens-free Tomographic Microscope," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011) *Undergraduate Research Paper*
- 725. O. Yaglidere, M. Lee, and A. Ozcan, "Field Portable Reflection and Transmission Microscopy," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011) *Undergraduate Research Paper*
- 726. D. Herman, Y. Suh, A.F. Coskun, I. Sencan, T. Su, and A. Ozcan, "Waveguide-based Lensless Fluorescence Microscopy for Wide-field On-Chip Imaging," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011) *Undergraduate Research Paper*
- 727. W. Bishara, U. Sikora, O. Mudanyali, T. Su, O. Yaglidere, S. Luckhart, and A. Ozcan, "Portable Lensless Pixel Super-Resolution Microscope for Telemedicine Applications," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 728. A.F. Coskun, T. Su, I. Sencan, and A. Ozcan, "Wide-field Lensless Fluorescent Microscopy," BMES - Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 729. S.O. Isikman, W. Bishara, S. Mavandadi, F.W. Yu, S. Feng, R. Lau and A. Ozcan, "Lensless Optical Tomography On a Chip," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 730. H. Zhu, O. Yaglidere, T. Su, D. Tseng, and A. Ozcan, "Wide-field fluorescent microscopy on a cell-phone," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 731. O. Mudanyali, W. Bishara, and A. Ozcan, "Lensfree Pixel-Super Resolution Microscopy using Wetting-films On a Chip," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 732. G. Biener, A. Greenbaum, S. Isikman, K. Lee, D. Tseng and A. Ozcan, "Field-Portable Reflection and Transmission Microscope," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 733. M. Lee and A. Ozcan, "Compact and Cost-effective Lensfree Reflection Microscopy On a Chip," BMES Biomedical Engineering Society Annual Meeting, Hartford, Connecticut (October 12-15, 2011)
- 734. W. Bishara, S.O. Isikman, H. Zhu, A. Ozcan, "Opto-fluidic Tomography," MicroTAS 2011 The 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Seattle, USA (October 2-6, 2011)

- 735. S.O. Isikman, W. Bishara, U. Sikora, O. Yaglidere, J. Yeah, and A. Ozcan, "Compact and Costeffective Lensless Tomographic On-Chip Microscope," MicroTAS 2011 The 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Seattle, USA (October 2-6, 2011)
- 736. O. Mudanyali, W. Bishara, and A. Ozcan, "Lensfree Super-resolution Microscopy using Wetting Films," MicroTAS 2011 The 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Seattle, USA (October 2-6, 2011)
- 737. G. Biener, A. Greenbaum, S.O. Isikman, K. Lee, D. Tseng and A. Ozcan, "Field-Portable Reflection and Transmission Microscope for Telemedicine Applications," MicroTAS 2011 The 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Seattle, USA (October 2-6, 2011)
- 738. A. Ozcan, "Lensfree On-Chip Microscopy and Tomography," European Optical Society (EOS) Topical Meeting on Optical Microsystems, September 26-28, 2011, Capri, Italy (*Invited Talk*)
- 739. A.F. Coskun, I. Sencan, T. Su, and A. Ozcan, "Lensless Fluorescent On-Chip Microscopy using a Fiber-Optic Taper," IEEE Engineering in Medicine and Biology Society (EMBC'11), Boston, MA, USA (August 30 -September 3, 2011)
- 740. H. Zhu, O. Yaglidere, T. Su, D. Tseng, and A. Ozcan, "Wide-field Fluorescent Microscopy on a Cell-phone," IEEE Engineering in Medicine and Biology Society (EMBC'11), Boston, MA, USA (August 30 -September 3, 2011)
- 741. W. Bishara, U. Sikora, O. Mudanyali, T. Su, O. Yaglidere, S. Luckhart, and A. Ozcan, "Portable and Cost-effective Pixel Super-Resolution On-Chip Microscope for Telemedicine Applications," IEEE Engineering in Medicine and Biology Society (EMBC'11), Boston, MA, USA (August 30 -September 3, 2011)
- 742. S.O. Isikman, W. Bishara, H. Zhu and A. Ozcan, "Optofluidic On-Chip Tomography," IEEE Engineering in Medicine and Biology Society (EMBC'11), Boston, MA, USA (August 30 September 3, 2011)
- 743. B. Khademhosseini, I. Sencan, G. Biener, and A. Ozcan, "Use of Nano-structured Surfaces to Enable Higher Resolution Detector Arrays for Lensfree Imaging and Sensing on a Chip," Nanoelectronic Devices for Defense and Security Conference (Nano DDS), Brooklyn, New York, (August 29 September 1, 2011) (*Invited Talk*)
- 744. W. Bishara, T. Su, A.F. Coskun, H. Zhu, A. Ozcan, "High-resolution lens-free on-chip microscopy using holographic multiframe pixel super-resolution," SPIE Optics and Photonics, Unconventional Imaging and Wavefront Sensing VII (August 21-25 2011) San Diego, CA, USA, Paper # 8165A-7
- 745. A.F. Coskun, I. Sencan, T. Su, and A. Ozcan, "Lensless fluorescent microscopy on a chip using a tapered fiber optic faceplate and compressive decoding," SPIE Optics and Photonics, Unconventional Imaging and Wavefront Sensing VII (August 21-25 2011) San Diego, CA, USA, Paper # 8165A-9
- 746. S.O. Isikman, W. Bishara, S. Mavandadi, F.W. Yu, S. Feng, R. Lau and A. Ozcan, "Lensless Tomographic Microscopy on a Chip," OSA Imaging and Applied Optics Congress Meeting Computational Optical Sensing and Imaging (COSI), July 10-14 2011, Toronto, Ontario, Canada (*Postdeadline Paper*)
- 747. W. Bishara, U. Sikora, O. Mudanyali, T.W. Su, O. Yaglidere, S. Luckhart, and A. Ozcan, "Field-Portable Lensless Holographic Microscope using Pixel Super-Resolution," OSA Imaging and Applied Optics Congress Meeting Computational Optical Sensing and Imaging (COSI), July 10-14 2011, Toronto, Ontario, Canada
- 748. H. Zhu, O. Yaglidere, T-W, Su, D. Tseng, and A. Ozcan, "Cost-effective and Field-portable Fluorescent Microscopy on a Cell-phone," 12th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, San Barbara, USA

- 749. G. Biener, A. Greenbaum, S.O. Isikman, K. Lee, D. Tseng, and A. Ozcan, "Dual-mode Telemedicine Microscope," 12th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, USA
- 750. T.-W. Su, A. Erlinger, D. Tseng, and A. Ozcan, "Lensless On-chip Microscope as a Portable Semen Analysis Device," 12th Annual Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, USA
- 751. A.F. Coskun, T. Su, I. Sencan, and A. Ozcan, "Lensfree Fluorescent Microscopy", 12th Annual Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, USA
- 752. W. Bishara, U. Sikora, O. Mudanyali, T.W. Su, O. Yaglidere, S. Luckhart, and A. Ozcan., "Portable and Cost-effective Pixel Super-Resolution Microscope for Telemedicine Applications," 12th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, USA
- 753. M. Lee and A. Ozcan, "Field-portable Lensfree Reflection Holographic Microscopy," 11th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, US
- 754. O. Mudanyali, W. Bishara and A. Ozcan, "Lensfree On-chip Super Resolution Microscopy using Wetting-films", 12th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, USA
- 755. S. O. Isikman, W. Bishara, S. Mavandadi, F. Yu, S. Feng, R. Lau, and A. Ozcan, "Lensfree Optical Tomographic Microscopy on a Chip," 12th Annual UC Systemwide Bioengineering Symposium, June 13-15, 2011, University of California, Santa Barbara, USA
- 756. A. Ozcan, "Lensfree Microscopy On a Chip," Microscopical Society of Canada, 38th Annual Meeting (June 7-10, 2011) Ottawa, Canada (*Plenary Talk*)
- 757. A. Ozcan, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," ECI Advances in Optics for Biotechnology, Medicine & Surgery XII, (June 5-8, 2011) Naples, Florida (*Invited Talk*)
- 758. A. Ozcan, "Lensfree Holographic Microscopy for Global Health Applications," OSA Digital Holography and Three Dimensional Imaging, (May 9-11, 2011) Tokyo, Japan (*Invited Talk*)
- 759. W. Bishara, U. Sikora, O. Mudanyali, T. Su, O. Yaglidere, S. Luckhart, and A. Ozcan, "Field-Portable Lensless Holographic Microscope using Pixel Super-Resolution," OSA Topical Meeting on Computational Optical Sensing and Imaging, (July 10-14 2011) Toronto, Canada, Paper # CMA2
- 760. A. Ozcan, "Lensfree Microscopy On a Chip," OSA Topical Meeting, Novel Techniques in Microscopy, (April 4-6, 2011) Monterey, CA (*Invited Talk*)
- 761. B. Khademhosseini, G. Biener, I. Sencan, T. Su, A.F. Coskun and A. Ozcan, "Plasmonic Nano-Apertures for Lensfree On-chip Sensing," OSA Conference on Lasers and Electro-optics (*CLEO '11*) (May 1-6, 2011), Baltimore, Maryland USA, Paper # CTuZ4
- 762. B. Khademhosseini, G. Biener, I. Sencan, and A. Ozcan, "Lensless On-Chip Color Imaging using Nano-structured Surfaces and Compressive Decoding," OSA Conference on Lasers and Electro-optics (*CLEO '11*) (May 1-6, 2011), Baltimore, Maryland USA, Paper # CTuM1
- 763. A.F. Coskun, I. Sencan, T. Su, and A. Ozcan, "Wide-field Lensless Fluorescent Imaging of Transgenic *Caenorhabditis Elegans* On a Chip," OSA Conference on Lasers and Electro-optics (*CLEO '11*) (May 1-6, 2011), Baltimore, Maryland USA, Paper # AMF4
- 764. W.Bishara, H. Zhu, and A. Ozcan, "High-resolution Holographic Opto-fluidic Microscope On a Chip," OSA Conference on Lasers and Electro-optics (*CLEO '11*) (May 1-6, 2011), Baltimore, Maryland USA, Paper # CTuM4
- 765. S.O. Isikman, S. Seo, I. Sencan, O. Mudanyali, T. Su, W. Bishara, A. Erlinger, and A. Ozcan, "On-chip Blood Analysis Using Lensless Microscopy," SPIE Defense, Security, and Sensing

- Conference, (April 25-29 2011) Orlando, USA, Paper # 8029A-10
- 766. O. Mudanyali, D. Tseng, C. Oztoprak, S. O. Isikman, I. Sencan, O. Yaglidere, and A. Ozcan, "Lab on a Cell-phone as an emerging Telemedicine Platform", SPIE Defense, Security, and Sensing Conference, (April 25-29 2011) Orlando, USA, paper # 8029A-9
- 767. A.F. Coskun, I. Sencan, T. Su, and A. Ozcan, "Compressive Decoding Enabled Lensless Fluorescent Imaging On a Chip," SPIE Defense, Security, and Sensing Conference, (April 25-29 2011) Orlando, USA, Paper # 8036-35
- 768. T. Su, A. Erlinger, D. Tseng, and A. Ozcan, "Field-Portable Semen Analysis Using Lensless Microscopy On a Chip," SPIE Defense, Security, and Sensing Conference, (April 25-29 2011) Orlando, USA, Paper # 8029A-46
- 769. B. Khademhosseini, G. Biener, I. Sencan, T. Su, A.F. Coskun and A. Ozcan, "Lensfree sensing on a chip using plasmonic nano-apertures," SPIE Defense, Security, and Sensing Conference, (April 25-29 2011) Orlando, USA, Paper # 8024-8
- 770. O. Mudanyali, D. Tseng, S. O. Isikman, C. Oztoprak, I. Sencan, W. Bishara, O. Yaglidere and A. Ozcan, "Light-weight and Cost-effective Lensfree Microscopy for Wireless Health Applications", MMVR18, NextMed 2011, Medicine Meets Virtual Reality, February 2011, Newport Beach, CA, USA
- 771. W. Bishara, T. Su, A.F. Coskun, A. Ozcan, "High-resolution lensfree on-chip imaging over a wide field-of-view using source-shifted pixel superresolution," SPIE *Photonics West*, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XVIII, January 2011, San Francisco, CA, paper # 7904-42
- 772. S.O. Isikman, C. Oh, D.K. Tseng, O. Mudanyali, A. Ozcan, "A compact and light-weight differential interference contrast (DIC) microscope for telemedicine applications," SPIE *Photonics West*, Advanced Biomedical and Clinical Diagnostic Systems IX, January 2011, San Francisco, CA, paper # 7890-5
- 773. I. Sencan, A. F. Coskun, B. Khademhosseinieh, T. Su, G. Biener, and A. Ozcan, "Compressive decoding for incoherent lensfree on-chip imaging," SPIE *Photonics West*, Three-Dimensional and Multidimensional Microscopy: Image Acquisition and Processing XVIII, January 2011, San Francisco, CA, paper # 7904-45
- 774. T. Su, A. Erlinger, D. Tseng, and A. Ozcan, "Automated On-Chip Semen Analysis using a Handheld Lensfree Holographic Microscope", SPIE Photonics West, Optical Diagnostics and Sensing XI: Toward Point-of-Care Diagnostics, January 2011, San Francisco, CA, paper # 7906A-5
- 775. O. Mudanyali, D. Tseng, S. O. Isikman, C. Oztoprak, I. Sencan, W. Bishara, O. Yaglidere, and A. Ozcan, "Lensfree Telemedicine Microscopy for Global Health Challenges", SPIE Photonics West, Design and Quality for Biomedical Technologies IV, January 2011, San Francisco, CA, paper # 7891-18
- 776. O. Mudanyali, C. Oztoprak, D. Tseng, A. Erlinger, and A. Ozcan, "Field-Portable Lensfree On-Chip Microscopy for Detection of Waterborne Parasites", SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems, January 2011, San Francisco, CA, paper # 7888-13
- 777. B. Khademhosseinieh, I. Sencan, G. Biener, T. Su, A.F. Coskun, D. Tseng, and A. Ozcan, "Incoherent lensfree imaging on a chip using compressive decoding of nanostructured surfaces," SPIE *Photonics West*, Nanoscale Imaging, Sensing, and Actuation for Biomedical Applications VII, January 2011, San Francisco, CA, paper # 7908-21
- 778. A.F. Coskun, I. Sencan, T. Su, and A. Ozcan, "Ultra-wide-field lensfree fluorescent imaging of caenorhabditis elegans on a chip," SPIE *Photonics West*, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues IX, January 2011, San Francisco, CA, paper # 7902-42

- 779. S.O. Isikman, S. Seo, I. Sencan, O. Mudanyali, T. Su, W. Bishara, A. Erlinger, **A. Ozcan**, "High-throughput Blood Analysis On a Chip using Lensless Digital Holography," MicroTAS 2010 The 14th International Conference on Miniaturized Systems for Chemistry and Life Sciences, October 3-7, 2010, Groningen, The Netherlands
- 780. O. Mudanyali, C. Oztoprak, D. Tseng, A. Erlinger, **A. Ozcan**, "Water Quality Management using a Cost-effective and Field-portable Lensfree On-Chip Microscope," MicroTAS 2010 The 14th International Conference on Miniaturized Systems for Chemistry and Life Sciences, October 3-7, 2010, Groningen, The Netherlands
- 781. D. Tseng, O. Mudanyali, C. Oztoprak, S.O. Isikman, I. Sencan, O. Yaglidere and A. Ozcan, "Lensfree Telemedicine Microscope on a Wireless Phone," MicroTAS 2010 The 14th International Conference on Miniaturized Systems for Chemistry and Life Sciences, October 3-7, 2010, Groningen, The Netherlands
- 782. T. Su, S.O Isikman, W. Bishara, D. Tseng, A. Erlinger, and **A. Ozcan**, "Multi-angle lensfree holographic imaging for 3D cytometry on a chip," ASME 5th Frontiers in Biomedical Devices Conference, September 20-21, 2010, Newport Beach, CA
- 783. A.F. Coskun, T. Su, and **A. Ozcan**, "Lensless on-chip fluorescent imaging over an ultra wide field-of-view," ASME 5th Frontiers in Biomedical Devices Conference, September 20-21, 2010, Newport Beach, CA
- 784. S.O. Isikman, I. Sencan, O. Mudanyali, W. Bishara, C. Oztoprak and A. Ozcan, "Lensfree Color and Monochrome On-chip Imaging of Caenorhabditis Elegans Over a Wide Field-of-View," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 785. T-W. Su, D. Tseng and **A. Ozcan**, "Lensless on-chip microscope as a portable semen analysis device," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 786. B. Khademhosseini, I. Sencan, G. Biener, T. Su, A.F. Coskun, D. Tseng, **A. Ozcan**, "Lensfree Incoherent Microscopy on Nano-Structured Chips," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 787. W. Bishara, T-W Su, A.F. Coskun, and A. Ozcan, "High-resolution lensfree on-chip microscopy for wide-field imaging," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 788. O. Mudanyali, D. Tseng, S.O. Isikman, I. Sencan, W. Bishara, C. Oztoprak, S. Seo, B. Khademhosseini, and **A. Ozcan**, "Compact and Light-weight Telemedicine Microscope based on Lensfree On-Chip Imaging," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 789. C. Oh, S.O. Isikman, M. Lee and **A. Ozcan**, "Lensfree differential interference contrast (DIC) microscopy on a chip," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 790. A.F. Coskun, I. Sencan, T. Su, and **A. Ozcan**, "Ultra high-throughput lensfree fluorescent imaging using compressive sampling," BMES Annual Meeting, October 6-9 2010, Austin Texas USA
- 791. S.O. Isikman, I. Sencan, O. Mudanyali, W. Bishara, C. Oztoprak and A. Ozcan, "Lensfree Color and Monochrome On-chip Imaging of Caenorhabditis Elegans Over a Wide Field-of-View" Bionano Systems Symposium UKC, August 11-15, 2010, Seattle, WA USA
- 792. S. Seo, T. Su, A. Erlinger, and **A. Ozcan**, "Red blood cell analysis using holographic LUCAS technique" Bionano Systems Symposium UKC, August 11-15, 2010, Seattle, WA USA
- 793. W. Bishara, T. Su, A.F. Coskun, and **A. Ozcan**, "Wide-field Lensfree On-Chip Microscopy using Pixel Super-Resolution," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 794. B. Khademhosseini, I. Sencan, G. Biener, T. Su, A.F. Coskun, D. Tseng, **A. Ozcan,** "Nanostructured surfaces for lensless incoherent microscopy on a chip" 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA

- 795. O. Mudanyali, D. Tseng, S.O. Isikman, I. Sencan, W. Bishara, C. Oztoprak, S. Seo, B. Khademhosseini, and **A. Ozcan**, "Light-weight, Field-portable and Cost-effective Lensfree Microscopy for Telemedicine Applications," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 796. S.O. Isikman, I. Sencan, O. Mudanyali, W. Bishara, C. Oztoprak and **A. Ozcan**, "High-throughput Lensless Imaging of Caenorhabditis Elegans on a Chip," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 797. A.F. Coskun, T. Su, and **A. Ozcan,** "Lensfree Fluorescent Imaging and Cytometry on a Chip," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 798. T. Su, S.O. Isikman, W. Bishara, D. Tseng, A. Erlinger and **A. Ozcan**, "Three-Dimensional On-Chip Cytometry by Multi-angle Lensless Holographic Imaging," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 799. I. Sencan, T.Su, A.F. Coskun and **A. Ozcan,** "Compressive sampling for ultra high-throughput lensfree on-chip fluorescent imaging," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 800. G. Stybayeva, O. Mudanyali, S. Seo, J. Silangcruz, M. Macal, E. Ramanculov, S. Dandekar, A. Erlinger, **A. Ozcan**, and A. Revzin, "Lensfree Holographic Imaging of Antibody Microarrays for High-Throughput Detection of Leukocyte Numbers and Function," 11th Annual UC Systemwide Bioengineering Symposium, June 17-19, 2010, University of California, Davis, USA
- 801. C. Oh, S.O. Isikman and **A. Ozcan**, "Lensfree Polarization Microscopy On a Chip Using Incoherent Digital Holography," OSA Conference on Lasers and Electro-optics (*CLEO '10*) (May 16-21, 2010), San Francisco USA
- 802. S.O. Isikman, I. Sencan, O. Mudanyali, W. Bishara, C. Oztoprak and **A. Ozcan**, "Wide Field-of-View Lensless Imaging of Caenorhabditis Elegans On a Chip," OSA Conference on Lasers and Electro-optics (*CLEO '10*) (May 16-21, 2010), San Francisco USA
- 803. **A. Ozcan**, "Incoherent Lensfree Cell Holography for Global Health Applications" 7th International Conference on Optics-Photonics Design and Fabrication, (April 19-21 2010) Yokohoma, Japan (*Invited Talk*)
- 804. **A. Ozcan**, "Lensless digital holography for telemedicine" SPIE Defense, Security, and Sensing Conference, Photonic Microdevices/Microstructures for Sensing, (April 5-9 2010) Orlando, USA (*Invited Talk*)
- 805. T. Su, S. O. Isikman, W. Bishara, D. Tseng, A. Erlinger, and **A. Ozcan**, "Multi-angle Lensless Holography for Depth Resolved High-throughput Imaging of Cells On a Chip," IEEE Photonics Society, Winter Topical Meeting on Advanced Imaging in Bio-Photonics, (January 11-13 2010) Majorca, Spain
- 806. S. Isikman, S. Seo, I. Sencan, D. Tseng, O. Mudanyali, T. Su, A. Erlinger, and **A. Ozcan**, "Incoherent On-chip Cell Holography for Sub-cellular Imaging and Point-of-Care Diagnostics," SPIE *Photonics West Conference*, Imaging, Manipulation, & Analysis of Biomolecules, Cells, and Tissues VIII, January 2010, San Francisco, CA, paper # 7568-86
- 807. S. Isikman, S. Seo, Ikbal Sencan, A. Erlinger, and **A. Ozcan**, "Lensfree Cell Holography On a Chip: From Holographic Cell Signatures to Microscopic Reconstruction," IEEE Photonics Society Annual Fall Meeting (October 4-8, 2009) Antalya, Turkey
- 808. A. Ozcan, "Lensfree On-Chip Imaging for Telemedicine Applications" IEEE Photonics Society, 2009 Optical MEMS and NanoPhotonics Conference, (August 17-20, 2009) Florida (*Invited Talk*)
- 809. A. Ozcan, "Lensfree On-Chip Imaging for Telemedicine Applications" 2009 CMOS Emerging Technologies Workshop, Vancouver, Canada (*Invited Talk*)

- 810. A. Ozcan, "Lensfree On-Chip Imaging for Telemedicine Applications" Engineering Conferences International, Advances in Optics for Biotechnology, Medicine and Surgery XI, Clinical Challenges and Research Solutions, Burlington, Vermont, 2009 (*Invited Talk*)
- 811. S. Seo, T. Su, D.K. Tseng, A. Erlinger, and **A. Ozcan**, "On-chip Cytometry using Lensless Digital Holography," OSA Conference on Lasers and Electro-optics (*CLEO '09*) (May 31- June 4, 2009)
- 812. S. Seo, T. Su, A. Erlinger, and **A. Ozcan**, "Lensfree on-chip detection of bacteria at low concentrations using LUCAS," SPIE *Photonics West*, Imaging, Manipulation, and Analysis of Biomolecules, Cells, and Tissues VII, January 2009, San Jose, CA, paper # 7182-23
- 813. T. Su, S. Seo, A. Erlinger, and **A. Ozcan**, "Multi-Angle LUCAS for High-throughput On-chip Cytometry," 30th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC-LEOS Joint Symposium, August 21-22, 2008, Vancouver, Canada
- 814. S. Seo, T. Su, A. Erlinger, and **A. Ozcan**, "Improved High-throughput On-chip Characterization of Cells Using Tunable Wavelength Illumination," Biomedical Engineering Society (BMES) Fall Meeting, October 2-4, 2008, St. Louis, MO *Outstanding Paper Award*
- 815. S. Seo, T. Su, A. Erlinger, and **A. Ozcan**, "Digital Noise Reduction for High-throughput On Chip Cell Characterization," University of California Systemwide Bioengineering Symposium, June 20-22, 2008, Riverside, CA
- 816. S. Seo, T. Su, A. Erlinger, and **A. Ozcan**, "High index optical materials for high-throughput lensfree imaging, counting and sorting of cells on a chip," ASME 3rd Frontiers in Biomedical Devices Conference, June 18-20, 2008, Irvine, CA
- 817. T. Su, S. Seo, A. Erlinger, and **A. Ozcan**, "High-throughput cell imaging, counting and characterization on a chip," ASME Summer Bioengineering Conference, June 2008, Florida
- 818. T. Su, S. Seo, A. Erlinger, and **A. Ozcan**, "Large Depth-of-Field Lensfree Imaging and Characterization of Cells over an Ultra-wide Field-of-View," OSA Biomedical Optics Topical Meeting, March 2008, Florida (*Postdeadline paper*)
- 819. **A. Ozcan**, E. Cubukcu, A. Bilenca, B.E. Bouma, F. Capasso, G. J. Tearney, "Differential near-field scanning optical microscopy based on sensor arrays,", SPIE *Photonics West*, 19-24 January 2008, San Jose, CA, paper # 6865-7 (*Invited Talk*)
- 820. A. Bilenca, T. Lasser, **A. Ozcan**, R.A. Leitgeb, B.E. Bouma, and G.J. Tearney, "On scattering effects in fluorescence coherence tomography," SPIE *Photonics West*, 19-24 January 2008, San Jose, CA, paper # 6861-25
- 821. **A. Ozcan**, E. Cubukcu, A. Bilenca, K. Crozier, B. E. Bouma, F. Capasso, and G. J. Tearney, "Differential near-field scanning optical microscopy," OSA Conference on Lasers and Electrooptics (*CLEO'07*) (May 6-11, 2007)
- 822. A. Bilenca, C. Joo, **A. Ozcan**, J. F. de Boer, B.E. Bouma and G. J. Tearney, "The Role of Amplitude and Phase in Fluorescence Coherence Imaging: From Wide Field to Nanometer Depth Profiling," OSA Conference on Lasers and Electro-optics (*CLEO'07*)
- 823. **A. Ozcan**, A. Bilenca, B. E. Bouma, and G. J. Tearney, "Lensless differential microscopy for high resolution imaging", SPIE *Photonics West*, 20-25 January 2007, San Jose, CA, paper # 6443-16
- 824. **A. Ozcan**, A. Bilenca, B. E. Bouma, and G. J. Tearney, "Mirror tunnel microscopy for wide-field imaging", SPIE *Photonics West*, 20-25 January 2007, San Jose, CA, paper # 6443-07
- 825. **A. Ozcan**, A. Bilenca, A. E. Desjardins, B. E. Bouma, and G. J. Tearney, "Digital speckle reduction in optical coherence tomography", SPIE *Photonics West*, 20-25 January 2007, San Jose, CA, paper # 6429-67
- 826. A. Bilenca, **A. Ozcan**, B. E. Bouma, G. J. Tearney, "Fluorescence coherence tomography", SPIE *Photonics West*, 20-25 January 2007, San Jose, CA, paper # 6443-02

- 827. A. Bilenca, **A. Ozcan**, B. E. Bouma, G. J. Tearney, "On the information capacity of coherence-gated imaging through turbid media", SPIE *Photonics West*, 20-25 January 2007, San Jose, CA, paper # 6436-03
- 828. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Transmission properties of tapered air-core photonic bandgap fibers," SPIE *Optics East*, 1-4 October 2006, Boston, MA, paper # 6389-32
- 829. **A. Ozcan**, "Second-order nonlinear thin film characterization using logarithmic Hilbert transform," SPIE *Optics East*, 1-4 October 2006, Boston, MA, paper # 6389-35
- 830. **A. Ozcan**, A. Bilenca, B. E. Bouma, G. J. Tearney, "Wide Field Imaging Using a Mirror Tunnel Microscope," *Gordon Research Conference*, Lasers In Medicine & Biology (July 2-7, 2006) Outstanding poster award winner
- 831. A. Bilenca, **A. Ozcan**, B. E. Bouma, G. J. Tearney, "Spectral domain fluorescence coherence tomography," *Gordon Research Conference*, Lasers In Medicine & Biology (July 2-7, 2006) *Outstanding poster award winner*
- 832. **A. Ozcan**, O. T. Inan, N. I. Maluf, G. T. A. Kovacs, M. J. F. Digonnet, and G. S. Kino, "Alternative data processing for frequency-domain optical coherence tomography," OSA Conference on Lasers and Electro-optics (*CLEO'06*) (May 21-26, 2006)
- 833. U. Demirci, and **A. Ozcan**, "Femtosecond laser micromachined multiple-orifice two-dimensional ejector arrays for picoliter droplet ejection," OSA Conference on Lasers and Electro-optics (*CLEO'06*) (May 21-26, 2006)
- 834. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Frequency-domain optical coherence tomography using minimum-phase functions," SPIE *Photonics West*, 21-26 January 2006, San Jose, CA, paper # 6079-31
- 835. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Measurement of the nonlinear coefficient profile of quasi-phase-matched gratings using iterative error-reduction algorithms," SPIE *Photonics West*, 21-26 January 2006, San Jose, CA, paper # 6103-21
- 836. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Characterization of fiber Bragg gratings using spectral interferometry based on minimum-phase functions," SPIE *Photonics West*, 21-26 January 2006, San Jose, CA, paper # 6116-6
- 837. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, "SIMBA: A new technique for ultrashort pulse characterization, "IEEE LEOS Summer Topicals, 25-27 July 2005, San Diego, CA
- 838. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, F. Ay, and A. Aydinli, "Thermally poled germanosilicate films with high second-order nonlinearity" Conference on Lasers and Electrooptics (*CLEO'05*), 23-27 May 2005, Baltimore, MD
- 839. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, "Iterative characterization of the group delay properties of fiber Bragg gratings" Conference on Lasers and Electro-optics (*CLEO'05*), 23-27 May 2005, Baltimore, MD
- 840. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, "Dependence of the induced second-order optical nonlinearity profile of poled silica samples on poling conditions" *SPIE Photonics West*, 24-29 January 2005, San Jose, CA, paper # 5723-28
- 841. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, "Ultra-short laser pulse characterization using a reference laser pulse" *SPIE Photonics West*, 24-29 January 2005, San Jose, CA, paper # 5708-12
- 842. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "A simple post-processing technique to improve the retrieval accuracy of second-order nonlinearity profiles" in Proceedings of Conference on Lasers and Electro-optics (*CLEO'04*), OSA Technical Digest (Optical Society of America, Washington DC, 2004), paper CThJ6.
- 843. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Comparison of three inverse Fourier transform techniques to determine the second-order optical nonlinearity profile of thin films" Proceedings of the *SPIE* The International Society for Optical Engineering; vol.5451, pp.304-310 (2004)

- 844. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Simplified inverse Fourier transform technique to determine second-order optical nonlinearity profiles using a reference sample" in Proceedings of Optical Fiber Communication Conference (*OFC'04*), OSA Technical Digest (Optical Society of America, Washington DC, 2004), paper FC3.
- 845. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Cylinder-assisted Maker-fringe technique to probe second-order nonlinearity profiles" Proceedings of the *SPIE* The International Society for Optical Engineering; vol.5350, pp.109-114 (2004)
- 846. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Improved Fourier transform technique to determine second-order optical nonlinearity profiles" in Proceedings of Bragg Gratings, Photosensitivity and Poling in Glass Waveguides (*BGPP'03*), OSA Technical Digest (Optical Society of America, Washington DC, 2003), paper WB3.
- 847. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "A novel technique to determine second-order optical nonlinearity profiles" in Proceedings of Optical Fiber Communication Conference (*OFC'03*), OSA Technical Digest (Optical Society of America, Washington DC, 2003), paper ThM4.
- 848. U. L. Block, **A. Ozcan**, M. J. F. Digonnet, and M. M. Fejer, "Polarization-independent mechanically induced long-period fiber gratings" Proceedings of the *SPIE* The International Society for Optical Engineering; vol.4638, pp.72-76 (2002)

BOOKS

• **A. Ozcan**, *Non-destructive Optical Characterization Tools*, Verlag DM Publishing House, ISBN: 978-3-639-10449-3

• W. Cao, **A. Ozcan**, H. Xie, B. Guan, *Computing and Data Science*, Springer, eBook ISBN: 978-981-16-8885-0, Print ISBN: 978-981-16-8884-3

BOOK CHAPTERS

- 1. S. Seo, T. Su, A. Erlinger, and **A. Ozcan**, *Lensfree Imaging Cytometry and Diagnostics for Point-of-care and Telemedicine Applications*, Editor: Kris Iniewski, CMOS Biomicrosystems, Wiley (published in 2011).
- S. O. Isikman, W. Bishara, O. Mudanyali, T. Su, D. Tseng and A. Ozcan, Lensfree Computational Microscopy Tools for On-Chip Imaging of Bio-Chips, Editors: Robert M Westervelt & David Issadore; Point of Care Diagnostics on a Chip, Springer, ISBN: 978-3-642-29267-5 (Print) 978-3-642-29268-2 (Online) (published in 2013)
- 3. T. Su and **A. Ozcan**, *Partially-coherent Lensless Holographic Microscopy for Automated Semen Analysis on a Chip*, Editors: Natan T. Shaked, Zeev Zalevsky, Lisa L. Satterwhite; Biomedical Optical Phase Microscopy and Nanoscopy, Elsevier, ISBN-13: 978-0124158719 (published in 2013)
- 4. S. O. Isikman, A. Greenbaum, M. Lee, W. Bishara, O. Mudanyali, T. Su, and **A. Ozcan**, *Lensfree Computational Microscopy Tools for Cell and Tissue Imaging at the Point-of-Care and in Low-Resource Settings*, Editor: Stanley Cohen; New Approaches to Cell and Tissue Imaging in Pathology, IOS Press, ISBN-13: 978-1614992332 (published in 2013)
- 5. A.F. Coskun, S.A. Arpali, C. Arpali, T. Su, I. Sencan, D. Herman, Y. Suh and **A. Ozcan**, *Lensfree On-Chip Fluorescence Microscopy for High-throughput Imaging of Bio-Chips*, Editor: Dr. Francesco Baldini; Proceedings of the Italian National Conference on Sensors, Springer (published in 2013)
- 6. E. McLeod and **A. Ozcan**, *Wide-field Nano-scale Imaging on a Chip*, Editor: Dr. Michael R. Hamblin & Dr. Pinar Avci; Applications of Nanoscience to Photomedicine, Elsevier (2014)

- 7. A.F. Coskun, H. Zhu, O. Mudanyali and **A. Ozcan**, *Lab on a Cellphone*, Editors: Dr. Walter Karlen and Dr. Kris Iniewski, Mobile Point-of-Care Monitors and Diagnostic Device Design, CRC Press (2014)
- 8. H. Zhu and **A. Ozcan**, *Opto-fluidics based Microscopy and Flow Cytometry on a Cellphone for Blood Analysis*, Editors: K.E. Herold & A. Rasooly, Mobile Health Technologies, Springer, ISBN 978-1-4939-2171-3 DOI: 10.1007/978-1-4939-2172-0_12 (2015)
- 9. I. Sencan and **A. Ozcan**, Compressive Sampling based Decoding Methods for Lens-Free On-Chip Microscopy and Sensing, Editor: Adrian Stern, Optical Compressive Imaging, ISBN 9781498708067, CRC Press (2016)
- 10. A.F. Coskun, T. Su, I. Sencan, and **A. Ozcan**, Lensless Fluorescent Imaging On a Chip: A new Method Toward High-throughput Screening of Rare Cells, Editors: Keith E. Herold & Avi Rasooly; Biosensors and Biodetection Technologies, CRC Press, ISBN 9781138198531 (published in 2016)
- 11. Z. Ballard and **A. Ozcan**, *Wearable Optical Sensors*, Editors: Jim Rehg, Susan Murphy, and Santosh Kumar; *Mobile Health*, DOI 10.1007/978-3-319-51394-2_16, Springer (2017)
- 12. J.T. Heggestad, D.S. Kinnamon, J. Liu, D.Y. Joh, C.M. Fontes, Q. Wei, A. Ozcan, A.M. Hucknall, A. Chilkoti, "Smartphone Enabled Point-of-Care Detection of Serum Biomarkers" In: Ossandon M.R., Baker H., Rasooly A. (eds) Biomedical Engineering Technologies. Methods in Molecular Biology, vol 2393. Humana, New York, NY. DOI: 10.1007/978-1-0716-1803-5_19 (2022)

OTHER PUBLICATIONS & EDITORIAL ARTICLES

- 1. N. Pillar, B. Bai, and **A. Ozcan**, "Virtual Histology: Democratizing Diagnostic Anatomic Pathology," *BioPhotonics Magazine* (2023)
- 2. Y. Li, T. Liu, H.C. Koydemir, Y. Zhang, E. Yang, M. Eryilmaz, H. Wang, J. Li, B. Bai, G. Ma and A. Ozcan, "Rapid, Stain-Free Quantification of Viral Plaques," Special Issue of "Optics in 2023" Optica (OSA), Optics & Photonics News (OPN) (2023)
- 3. J. Li, D. Mengu, N.T. Yardimci, Y. Luo, X. Li, M. Veli, Y. Rivenson, M. Jarrahi and A. Ozcan, "Single-Pixel Diffractive Network for Image Classification," Special Issue of "Optics in 2021" Optical Society of America (OSA), Optics & Photonics News (OPN) (2021)
- 4. A. Merkoçi, C. Li, L.M. Lechuga, and **A. Ozcan**, "COVID-19 Biosensing Technologies," *Biosensors and Bioelectronics* DOI: 10.1016/j.bios.2021.113046 (2021)
- 5. D. Brunner, A. Marandi , W. Bogaerts, and **A. Ozcan**, "Photonics for computing and computing for photonics," *Nanophotonics* DOI: 10.1515/nanoph-2020-0470 (2020)
- 6. **A. Ozcan**, Y. Rivenson, K. de Haan, H. Wang "From cutting-edge research to commercialization: transforming histopathology with deep learning-based virtual staining," Nature Research Bioengineering Community, <u>After the Paper</u> (2020)
- 7. Y. Wu, Y. Rivenson, H. Wang, Y. Luo, E. Ben-David, L.A. Bentolila, C. Pritz, and A. Ozcan, "Deep Learning to Refocus 3D Images," Special Issue of "Optics in 2020" Optical Society of America (OSA), Optics & Photonics News (OPN) (2020)
- 8. **A. Ozcan** and Y. Rivenson, "Deep learning-based virtual histology staining of unlabelled tissue," Nature Research Bioengineering Community, <u>Behind the Paper</u> (2019)
- 9. M. Batalin, A. Ozcan, Y. Wu, "Particulate Monitoring," Firehouse, <u>January Issue</u> (2018)
- 10. Y. Rivenson and **A. Ozcan**, "Toward a Thinking Microscope," Optical Society of America (OSA) *OPN (Optics & Photonics News)* DOI: 10.1364/OPN.29.7.000034 *arXiv:1805.08970* (2018)
- 11. Y. Wu, A. Shiledar, Y. Luo, J. Wong, C. Chen, B. Bai, Y. Zhang, M. Tamamitsu, and **A. Ozcan**, "Spatial mapping and analysis of aerosols during a forest fire using computational mobile microscopy," *arXiv:1802.02888* (2018)
- 12. D. Stork, A. Ozcan, P.R. Gill, "Imaging without lenses," American Scientist, DOI:

10.1511/2018.106.1.28 (2018)

- 13. M. Tamamitsu, Y. Zhang, H. Wang, Y. Wu, and A. Ozcan, "Comparison of Gini index and Tamura coefficient for holographic autofocusing based on the edge sparsity of the complex optical wavefront," *arXiv:1708.08055* (2017)
- 14. Q. Wei and **A. Ozcan**, "Smartphone Fluorescence Microscopy Allows Cost-Effective Molecular Diagnostics," *Biophotonics* <u>August Issue</u> (2017)
- 15. W.C.W Chan, A. Khademhosseini, H. Mohwald, W.J. Parak, J.F. Miller, A. Ozcan, P.S. Weiss, "Accelerating Advances in Science, Engineering, and Medicine through Nanoscience and Nanotechnology," *ACS Nano*, DOI: 10.1021/acsnano.7b02616 (2017)
- 16. **A. Ozcan**, "Research the Key to a Rich, Meaningful Undergraduate Photonics Education," *Biophotonics* March Issue (2017)
- 17. W. Luo, A. Greenbaum, Y. Zhang, and **A. Ozcan**, "High-numerical-aperture lens-free on-chip imaging using synthetic aperture," *SPIE Newsroom* DOI: 10.1117/2.1201503.005874 (2015)
- 18. D. Kim, Q. Wei, J.E. Kong, **A. Ozcan** and D. Di Carlo, "Research highlights: digital assays on chip," *Lab on a Chip*, DOI: 10.1039/c4lc90119c (2014)
- 19. A. Ozcan, "A Vision of Our Mobile Future," *The Analytical Scientist*, Issue 18, (2014)
- 20. **A. Ozcan**, "Algorithms and cell phone add-on enable powerful, inexpensive microscopy," *BioOptics World*, Volume 6, No. 3, pp. 29-31 (2013)
- 21. T. Su, L. Xue, D. Tseng, and **A. Ozcan**, "High-throughput 3D imaging of sperms," *Molecular Reproduction and Development* DOI: 10.1002/mrd.22159 (2013)
- 22. S. Mavandadi, S. Feng, F. Yu, R. Yu, and **A. Ozcan**, "BigFoot: Analysis, monitoring, tracking and sharing of bio-medical features of human appendages using consumer-grade home and office based imaging devices," *arXiv*:1212.0992 (2012)
- 23. A. Greenbaum, U. Sikora, and **A. Ozcan**, "Computational Imaging: Lens-free on-chip microscope is field-portable," *Laser Focus World*, Volume 48, Issue 7, <u>Pages 59 61</u> (2012)
- 24. S.O. Isikman, W. Bishara, U. Sikora, O. Yaglidere, and **A. Ozcan**, "Multi-angle illumination with pixel super-resolution enables lensfree on-chip tomography," *SPIE Newsroom* DOI: 10.1117/2.1201111.003979 (2011)
- 25. S.O. Isikman and A. Ozcan, "Lensfree Optical Tomography," G.I.T. Imaging & Microscopy (2011)
- 26. W. Bishara, U. Sikora, O. Mudanyali, T.W. Su, O. Yaglidere, S. Luckhart, and A. Ozcan, "Handheld and lensless microscope identifies malaria parasites," *SPIE Newsroom* DOI: 10.1117/2.1201107.003812 (2011)
- 27. **A. Ozcan**, S.O. Isikman, O. Mudanyali, D. Tseng, I. Sencan, "Lensfree on-chip holography facilitates novel microscopy applications" *SPIE Newsroom*, DOI: 10.1117/2.1201005.002947 (2010)
- 28. A. Ozcan, "Smart Technology for Global Access to healthcare" SPIE Newsroom, DOI:10.1117/2.1201002.002568 (2010)
- 29. **A. Ozcan**, S. Seo, T.W. Su, A. Erlinger, and D. Tseng, "Lensfree on-chip cytometry towards wireless health," *IEEE LEOS Newsletter*, October 2008 *Cover Article*

PATENTS (>70 issued/granted patents, >20 pending patent applications)

- 1. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Method of measuring a physical function using a composite function which includes the physical function (U.S. Patent No. *6*,856,393, issued 2/15/2005)
- 2. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Method of measuring a physical function using a symmetric composite function (U.S. Patent No. **7,133,134**; issued 11/7/06)
- 3. **A. Ozcan,** M. J. F. Digonnet, G. S. Kino, inventors; Method of measuring a physical function using a composite function which includes the physical function and an arbitrary reference function (*4 US Patents* were issued under the same Docket: U.S. Patent No. 7,050,169,

- **7,236,246**, **7,236,247** and **7,365,851** issued 5/23/06, 6/26/07, 6/26/07 and 4/29/2008, respectively)
- 4. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Method For Determining The Optical Nonlinearity Profile Of A Material (<u>2 U.S. Patents</u> were issued: US Patent No. 7,259,868, and 7,417,742 issued 8/21/07 and 8/26/06, respectively; U.K. Patent No. 2424069)
- 5. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Method of Characterizing Fiber Bragg Gratings Using Iterative Processing (U.S. Patent No. **7,385,683**, issued 6/10/08)
- 6. A. Ozcan, M. J. F. Digonnet, G. S. Kino, inventors; Method of retrieving phase and magnitude of weak ultrashort optical pulses using a stronger unknown pulse (<u>2 U.S. Patents</u> were issued: U.S. Patent No. 7,313,493 and 8,150,644 issued 12/25/07 and 4/3/2012, respectively; Europe Patent # 1859242)
- 7. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Optical image processing and femtosecond spectroscopy using minimum phase functions (2 *U.S. Patents* were issued: U.S. Patent No. 7,369,953 and 8,082,117 issued 5/6/08 and 12/20/2011, respectively)
- 8. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Apparatus for characterizing fiber Bragg gratings (<u>2 U.S. Patents</u> were issued: U.S. Patent No. 7,480,034 and 7,746,480, issued 1/20/09 and 6/29/10, respectively)
- 9. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; A new optical coherence tomography set-up and data processing to achieve better resolution (2 *U.S. Patents* were issued: U.S. Patent No. 7,493,227, and 8,032,322, issued 2/17/09 and 10/4/2011, respectively)
- 10. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Apparatus for measuring a frequency-domain optical coherence tomography power spectrum from a sample (U.S. Patent No. *8,219,350 B2*, issued 7/10/2012)
- 11. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Apparatus and method for processing optical coherence tomography imaging data (U.S. Patent No. *8*,*874*,*403*, issued 10/28/2014)
- 12. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Simple technique to fully characterize fiber Bragg gratings (pending, U.S. Patent Application No. 60/662,684, filed 3/17/05)
- 13. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Femtosecond spectroscopy using minimum or maximum phase functions (U.S. Patent No. *8,150,644*, issued 4/3/2012)
- 14. **A. Ozcan**, M. J. F. Digonnet, G. S. Kino, inventors; Optical image processing and femtosecond spectroscopy using minimum-phase functions (U.S. Patent No. **7,643,952**, issued 1/5/2010; European Patent Application No. **1866615 B1**)
- 15. **A. Ozcan**, and M. J. F. Digonnet, inventors; Optical Filtering Using Photonic-Bandgap Fiber Tapers, (U.S. Patent No. *8,009,948*, issued 8/30/2011)
- 16. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, inventors; Apparatus and Methods using Hollow-core Fiber Tapers (2 *U.S. Patents* were issued: U.S. Patent No. 7,742,665 and 8,244,086 issued 6/22/10 and 8/14/2012, respectively; EPO Application # 07813361.8; Canada Application # 2658526; Israel Application # 2658526; Japan Application # 521995/2009)
- 17. D. Di Carlo, S. Hur, B. Jalali, A. Ozcan, and T. K. Henry, inventors. "Inertial particle focusing flow cytometer" (U.S. Patent No. *8,693,762 B2*, issued 4/8/2014)
- 18. **A. Ozcan**, T. Su, A.F. Erlinger, inventors; "Compact Automated Semen Analysis Platform using Lens-Free On-Chip Microscopy" (U.S. Patent No. *8,842,901*, issued 9/23/2014)
- 19. **A. Ozcan**, O. Mudanyali, S. Dimitrov, S. Padmanabhan, I. Navruz, U. Sikora, inventors; "Portable Rapid Diagnostic Test Reader" (U.S. Patent No. *8,916,390*, issued 12/23/2014, European Patent Publication # *2812675*, issued 12/17/2014, Japanese Patent No. *6139565*, issued 5/31/2017, Korean Patent No. *10-2005597*, issued 7/24/2019)
- 20. **A. Ozcan**, O. Mudanyali, S. Dimitrov, S. Padmanabhan, I. Navruz, U. Sikora, inventors; "Portable Rapid Diagnostic Test Reader and Methods of Using the Same" (U.S. Patent No. 10,663,466, issued 5/26/2020)

- 21. **A. Ozcan**, H. Zhu, inventors; "Compact wide-field fluorescent imaging on a mobile device" (U.S. Patent No. *9,057,702 B2*, issued 6/16/2015)
- 22. **A. Ozcan**, A. Bilenca, B. E. Bouma, and G. J. Tearney, inventors; Mirror tunnel microscopy (pending, U.S. Patent Application No. 11/624,601, filed 1/18/07)
- 23. **A. Ozcan,** A. Bilenca, B. E. Bouma, and G. J. Tearney, inventors; Differential Microscopy for Wide-field, Lensless, High-resolution Imaging On Chip (disclosure submitted to Massachusetts General Hospital's CSRL MGH-3256)
- 24. **A. Ozcan,** S. Isikman, C. Oztoprak, inventors; Incoherent Lensfree Cell Holography and Microscopy on a Chip (Japan Patent No. *5639654* and *5999783* issued 10/31/14 and 9/9/16, respectively; U.S. Patent No. *9,007,433*, issued 4/14/15; European Patent No. *EP 2491366*, issued 12/28/2016)
- 25. **A. Ozcan,** inventor; Microscopy Method and System Incorporating Nano-features (U.S. Patent No. *9,202,835*, issued 12/1/2015)
- 26. **A. Ozcan**, S. Feng, D. Tseng, B. Cortazar, H.C. Koydemir, "Method and device for quantification of plant cholorophyll content" (U.S. Patent No. *10*,*175*,*215*, issued 1/8/2019)
- 27. **A. Ozcan,** inventor; Wide-field on-chip imaging and rapid counting of cells (pending, U.S. Patent Application No. 61/394,278, filed 10/18/2010)
- 28. **A. Ozcan,** T.W. Su inventors; Multi-angle Lensless Digital Holography for Depth Resolved High-throughput Imaging (pending, U.S. Patent Application No. 61/263,276, filed 11/20/2009)
- 29. **A.Ozcan,** C. Oh inventors; Lensfree Differential Interference Contrast Microscopy using Incoherent Digital Holography (pending, U.S. Patent Application No. 61/318,753, filed 3/29/2010)
- 30. **A. Ozcan,** inventor; Lensfree on-chip imaging using nano-structured surfaces (pending, U.S. Patent Application No. 61/324,915, filed 4/16/2010)
- 31. **A. Ozcan,** T.W. Su, I. Sencan, A.F. Coskun, inventors; "Lensfree wide-field imaging on a chip using compressive decoding" (pending, U.S. Patent Application No. 61/330799, filed 5/3/2010; PCT/US11/33819 filed 4/25/2011)
- 32. **A. Ozcan**, C. Oztoprak, inventors; "Lensfree Microscopy on a Cellphone" (pending, U.S. Patent Application No. 61/331,500, filed 5/5/2010)
- 33. **A. Ozcan**, W. Bishara, inventors; "Lensfree wide-field super-resolution imaging device" (U.S. Patent No. *8,866,063*, issued 10/21/2014)
- 34. **A. Ozcan**, W. Bishara, inventors; "Method and Device for Holographic Opto-fluidic Microscopy" (U.S. Patent No. *9*,767,341 B2, issued 9/19/2017)
- 35. **A. Ozcan**, T. Su, I. Sencan, A.F. Coskun, inventors; "Wide-field lensless fluorescent imaging on a chip" (U.S. Patent No. *9,331,113 B2*, issued 5/3/2016)
- 36. **A. Ozcan**, G.Biener, A. Greenbaum, S.O. Isikman, inventors; "Combined Reflection And Transmission Microscope For Telemedicine Applications" (pending, U.S. Patent Application No. 61/496,890, filed 6/14/2011)
- 37. **A. Ozcan**, S.O. Isikman, W. Bishara, inventors; "Portable Lensfree Tomographic Imaging" (pending, U.S. Patent Application No. 61/486,685, filed 6/15/2011)
- 38. **A. Ozcan**, S.O. Isikman, W. Bishara, inventors; "Lensfree Tomographic Imaging Devices and Methods" (U.S. Patent No. *9,605,941*, issued 3/28/2017)
- 39. **A. Ozcan**, H. Zhu, S. Mavandadi, inventors; "Optofluidic Fluorescent Imaging Cytometry On A Cell-Phone" (pending, U.S. Patent Application No. 61/509,985, filed 7/20/2011; International Patent Application Serial No. PCT/US11/66647, filed 12/21/2011)
- 40. **A. Ozcan**, A. Greenbaum, inventors; "Maskless Imaging of Dense-Samples Using Multi-Height Lensfree Microscope" (U.S. Patent No. *9,715,099*, issued 7/25/17)
- 41. **A. Ozcan**, H. Zhu, I. Sencan, inventors; "Cost-Effective and Rapid Blood Analysis On A Cell-Phone" (pending, U.S. Patent Application No. 61/745,370, filed on 12/21/2012)

- 42. **A. Ozcan**, A. Coskun, J. C. Wong, inventors; "Allergen testing platform for use with mobile electronic devices" (pending, U.S. Patent Application US 14/053,475, filed on 10/14/2013)
- 43. **A. Ozcan**, S. Mavandadi, S. Feng, F. Yu, R. Yu, inventors; "BIG FOOT: Analysis, Monitoring, Tracking and Sharing of Biomedical Features of Human Appendages" (pending, U.S. Patent Application 61/697,725 filed 9/06/2012)
- 44. **A. Ozcan**, T. Su, inventors; "High throughput lens-free three-dimensional tracking of sperm" (U.S. Patent No. *9,588,037 B2*, issued 3/7/2017)
- 45. **A. Ozcan**, O. Mudanyali, W. Bishara, inventors; "Lensfree holographic microscopy using wetting films" (pending, U.S. Patent Application PCT/US2012/048601, WO2013019640 A1, filed 07/29/2011)
- 46. **A. Ozcan**, O. Mudanyali, E. McLeod, inventors; "Wide-field microscopy using self-assembled liquid lenses" (pending, U.S. Patent Application PCT/US2013/044366, WO2013184835 A1, filed 06/05/2013)
- 47. **A. Ozcan**, S. O. Isikman, A. Greenbaum, W. Luo, inventors; "Giga-Pixel Lensfree Imaging Using Color Sensor-Arrays" (pending, U.S. Patent Application 61/646,816, filed 05/14/2012)
- 48. **A. Ozcan**, M. Lee, inventors; "Field-portable reflection and transmission microscopy based on lensless holography" (pending, U.S. Patent Application 61/523,655, filed 08/15/2011)
- 49. **A. Ozcan**, H. Zhu, inventors; "Quantum Dot Enabled Detection Of Escherichia Coli Using a Cell-Phone" (pending, U.S. Patent Application 61/600,534, filed 02/17/2012)
- 50. **A. Ozcan**, T. Su, I. Sencan, A.F. Coskun, inventors; "Wide-field Lensless Fluorescent Microscopy Using a Tapered Fiber-optic Faceplate On a Chip" (pending, U.S. Patent Application No. 61/430,449, filed 01/06/2011)
- 51. **A. Ozcan**, Q. Wei, inventors; "Method and device for detection and spatial mapping of mercury concentration in water samples" (U.S. Patent No. *10,365,214*, issued 7/30/2019)
- 52. **A. Ozcan** and S. Mavandadi, "System and method for crowd-sourced telepathology" (pending, U.S. Patent Application No. PCT/US2013/031109, WO2013142219 A1, filed 3/14/2013)
- 53. **A. Ozcan**, Z. Gorocs, Y. Ling, M.D. Yu, "Fluorescent Imaging Using a Flatbed Scanner" (U.S. Patent No. *9*,683,938 *B2*, issued 6/20/2017)
- 54. **A. Ozcan**, Q. Wei, W. Luo inventors; "Methods and device for single molecule imaging" (U.S. Patent No. *10*,248,838, issued 4/2/2019)
- 55. **A. Ozcan** and W. Luo, "Systems and Methods for Image Reconstruction" (pending, U.S. Patent Application No. 62/267,186, filed 12/14/2015)
- 56. **A. Ozcan**, D. Di Carlo, S. Feng, D. Tseng, B. Cortazar, B. Berg, H. Ozkan, O. Garner, "Microplate reader for ELISA testing" (U.S. Patent No. *11,347,000*, issued 5/31/2022; European Patent No. EP *3311163*, issued 8/5/2020)
- 57. **A. Ozcan**, E. McLeod, "Device and method for tunable vapor condensed nanolenses" (U.S. Patent No. *10*,088,663, issued 10/2/2018)
- 58. **A. Ozcan**, A. Grinbaum, Y. Zhang, A. Feizi, W. Luo, "Device and method for iterative phase recovery based on pixel super-resolved on-chip holography" (2 *U.S. Patents* were issued: U.S. Patent No. 10,871,745 and 11,422,503 issued 12/22/2020 and 8/23/2022, respectively; European Patent No. EP 3175302, issued 12/29/2021)
- 59. **A. Ozcan**, Y. Wu, Y. Zhang and W. Luo, "Method and System for Pixel Super-Resolution of Multiplexed Holographic Color Images" (U.S. Patent No. *10*,795,315, issued 10/6/2020)
- 60. **A. Ozcan**, Y. Zhang, Y. Wu, "Method and device for high-resolution color imaging using merged images from holographic and lens-based devices" (U.S. Patent No. *10,838,192*, issued 11/17/2020)
- 61. **A. Ozcan**, Y. Wu, S. Feng, "Mobile microscopy system for air quality monitoring" (U.S. Patent No. *11,054,357*, issued 7/6/2021; Great Britain (GB) Patent No. *GB2574357*, granted/issued 7/20/2022)

- 62. **A. Ozcan**, Yair Rivenson, Hongda Wang, Harun Gunaydin and Kevin de Haan, inventors; "Systems and methods for deep learning microscopy" (U.S. Patent No. *11*,222,415, issued 1/11/2022)
- 63. **A. Ozcan**, A. Feizi and A. Greenbaum, "System and Method for determining yeast cell viability and concentration" (U.S. Patent No. *11,320,362*, issued 5/3/2022)
- 64. **A. Ozcan**, Y. Rivenson, X. Lin, D. Mengu, Y. Luo, "Devices and methods employing optical-based machine learning using diffractive deep neural networks" (2 *U.S. Patents* were issued: U.S. Patent No. 11,392,830, issued 7/19/2022 and U.S. Patent No. 11,694,082, issued 7/4/2023)
- 65. **A. Ozcan**, Z. Gorocs, "Deep learning-enabled portable imaging flow cytometer for label-free analysis of water samples" (U.S. Patent No. *11,501,544 B2*, issued 11/15/2022)
- 66. **A. Ozcan**, A. Ray, H. Joung, D. Tseng and I.B. Salusky, "System and method for measuring serum phosphate levels using portable reader device" (U.S. Patent No. *11,460,395*, issued 10/4/2022)
- 67. **A. Ozcan**, Y. Rivenson, Y. Wu, Y. Zhang and H. Gunaydin "Method and system for phase recovery and holographic image reconstruction using a neural network" (U.S. Patent No. *11,514,325*, issued 11/29/2022)
- 68. **A. Ozcan**, O. Garner, D. Di Carlo and S. Wei Feng "Antimicrobial susceptibility testing device and method for use with portable electronic device" (U.S. Patent No. *11,697,833*, issued 7/11/2023)
- 69. **A. Ozcan**, Y. Rivenson, H. Wang, Z. Wei, "Method and system for digital staining of label-free fluorescence images using deep learning," (U.S. Patent No. *11,893,739 B2*, issued 2/6/2024; Japanese Patent No. *7344568*, issued 9/6/2023)
- 70. **A. Ozcan**, Y. Zhang, H. Ceylan Koydemir, "Device and method for motility-based label-free detection of motile objects in a fluid sample," (U.S. Patent No. *11,893,779 B2*, issued 2/6/2024; Japanese Patent No. *7344568*, issued 9/6/2023
- 71. **A. Ozcan**, Y. Rivenson and L. Huang, "Volumetric microscopy methods and systems using recurrent neural networks," (U.S. Patent No. *11,915,360*, issued 2/27/2024)
- 72. **A. Ozcan**, H-A. Joung, Z. Ballard, O. Garner, D. Di Carlo "Serodiagnostic testing device and system for early-stage Lyme disease using a multiplexed immunoassay," (U.S. Patent No. *17/285,906*, filed 4/15/2021)

INVITED TECHNICAL PRESENTATIONS

- 1. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Diffractive Imaging," University of Arizona, Wyant College of Optical Sciences Colloquium, February 22, 2024, Tucson, Arizona, USA
- 2. **A. Ozcan**, "Virtual staining of label-free tissue using deep learning", SPIE Photonics West, Quantitative Phase Imaging, January 29, 2024, San Francisco, CA, USA
- 3. **A. Ozcan**, "Diffractive visual processors", SPIE Photonics West, Computational Optical Imaging and Artificial Intelligence in Biomedical Sciences, January 28, 2024, San Francisco, CA, USA (*Keynote Talk*)
- 4. **A. Ozcan**, "Computational Label-free Microscopy and Point-of-care Sensing," The 7th IEEE Internet of Things Summit, Intelligent Biomedical Applications, January 24, 2024, San Antonio, TX, USA
- 5. **A. Ozcan**, "Diffractive Information Processing and Computational Imaging," The 54th Winter Colloquium on the Physics of Quantum Electronics (PQE), January 8, 2024, Utah, USA
- 6. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Diffractive Imaging," Izmir Institute of Technology, Photonics Department Seminar, January 5, 2024, Izmir, Turkey
- 7. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," Izmir Biomedicine and Genome Center, Dokuz Eylül University, January 4, 2024, Izmir, Turkey

- 8. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Diffractive Imaging," Koç University, College of Engineering Distinguished Seminar Series, December 21, 2023, Istanbul, Turkey
- 9. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," 12th Annual Surgery, Intervention & Engineering Symposium, Vanderbilt Institute for Surgery and Engineering (VISE), Vanderbilt University, December 13, 2023, Nashville, TN (*Keynote Talk*)
- 10. **A. Ozcan**, "Diffractive Information Processing and Computational Imaging," Vanderbilt Biophotonics Center (VBC) Seminar Series, Vanderbilt University, December 12, 2023, Nashville, TN
- 11. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," Ankara University, 10th Biomaterials Day Seminar Series, December 8, 2023, (Virtual)
- 12. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," International Symposium on Imaging, Sensing, and Optical Memory (ISOM), November 20, 2023, Kagawa, Japan (*Keynote Talk*)
- 13. **A. Ozcan**, "All-Optical Transformations Performed Using Diffractive Materials," AFOSR Physics of Sensing Program Review, November 14, 2023, Arlington, VA
- 14. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," IEEE Asilomar Conference on Signals, Systems, and Computers, October 31, 2023, Asilomar, CA
- 15. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Diffractive Imaging," University of California Santa Cruz (UCSC), Electrical & Computer Engineering, Departmental Seminar Series, October 30, 2023, Santa Cruz, CA
- 16. **A. Ozcan**, "Deep Learning-designed Diffractive Materials for Optical Computing and Computational Imaging," IEEE Nanotechnology Materials and Devices Conference (IEEE NMDC), October 24, 2023, Paestum, Italy (*Keynote Talk*)
- 17. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," CEINGE-Biotecnologie Avanzate Seminar, October 23, 2023, Naples, Italy
- 18. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," The 9th Turkish Institutes of Health (TUSEB) Annual Meeting, October 21, 2023, Istanbul, Turkiye
- 19. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," The 3rd Innovation Forum on Intelligent Computing, Zhejiang Lab, *Science*, and *Science Robotics* (AAAS) October 20, 2023 (Virtual)
- 20. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," Nano-Balkan International Conference, October 19, 2023, Tirana, Albania (*Plenary Talk*)
- 21. **A. Ozcan**, "Diffusing Computation into Optical Microscopy Hardware," CZI (Chan Zuckerberg Initiative) Frontiers in Imaging Workshop, October 17, 2023, San Francisco, CA
- 22. **A. Ozcan**, "Diffractive Optical Processors," Optica Frontiers in Optics (FiO) Conference, October 11, 2023, Seattle, WA (*Visionary Talk*)
- 23. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," University of Washington, Optica Student Chapter, October 10, 2023, Seattle, WA
- 24. **A. Ozcan**, "Computational Label-free Microscopy and Point-of-care Sensing," Global Health Labs, Innovation & Impact Speaker Series, October 10, 2023, Seattle, WA
- 25. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," Zhejiang University, Intelligent Computing Webinar, October 9, 2023 (Online)
- 26. **A. Ozcan**, "Diffractive optical networks & computational imaging without a computer," 28th Microoptics Conference, September 27, 2023, Miyazaki, Japan
- 27. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," International Forum on Microscopy (IFM), September 9, 2023, Zhongshan, China (*Plenary Talk*)
- 28. A. Ozcan, "Diffractive optical networks," International Conference on Materials Science,

- Engineering & Technology, September 8, 2023, Singapore (Keynote Talk)
- 29. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," University of Tokyo, Chemistry Department, September 8, 2023, Tokyo, Japan
- 30. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," Royal Society of Chemistry (RSC), Tokyo International Conference, September 7, 2023, Chiba, Japan (*Plenary Lecture*)
- 31. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," RIKEN Metamaterials Seminar, September 6, 2023, Wako, Saitama, Japan
- 32. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," Tokyo University of Technology, Special Lecture, September 6, 2023, Tokyo, Japan
- 33. **A. Ozcan**, "Diffractive optical networks & computational imaging without a computer," SPIE Optics and Photonics, August 21, 2023, San Diego CA, USA
- 34. **A. Ozcan**, "Diffractive optical networks & computational imaging without a computer," Conference on Visible Light Communication and Optical Computing, Chinese Optical Society, August 19, 2023, Shenzhen, China (Virtual) (*Plenary Talk*)
- 35. **A. Ozcan**, "Diffractive optical networks & computational imaging without a computer," Forum on Photonic Integrated Circuits, Chinese Society of Optical Engineering, August 14, 2023, Xiamen, China (Virtual)
- 36. **A. Ozcan**, "Diffractive Visual Processors," Phase for Life: Quantitative Phase Microscopy for Life Sciences Conference, Harvard University, August 12, 2023, Cambridge, MA, USA
- 37. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy and Diffractive Imaging," Gordon Research Conference (GRC) Chemical Imaging, August 3, 2023, Boston, MA, USA
- 38. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," International Conference on Optical MEMS and Nanophotonics (OMN), August 1, 2023, Unicamp, Brazil (*Plenary Talk*)
- 39. **A. Ozcan**, "Deep Learning Enabled Virtual Staining," Interventional Biophotonics Symposium & Summer School, University of California, Davis, July 17, 2023, Davis, CA, USA (*Keynote Talk*)
- 40. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," International Conference on Quantum Engineered Sensing and Information Technology, June 28, 2023, Paris, France
- 41. **A. Ozcan**, "Deep-learning-enabled computational microscopy and diffractive imaging," Pasteur Institute, June 27, 2023, Paris, France
- 42. **A. Ozcan**, "Virtual Staining of Label-free Tissue using Deep Learning," SPIE Optical Metrology Conference, June 26, 2023, Munich, Germany
- 43. **A. Ozcan**, "Deep-learning-enabled computational microscopy and diffractive imaging," International School on Light Sciences and Technologies, Universidad Internacional Menéndez Pelayo (UIMP), June 19, 2023, Santander, Spain (*Plenary Talk*)
- 44. **A. Ozcan**, "Diffractive Optical Computing and Imaging," PhotoniX Forum, Chinese Society of Optical Engineering, May 27, 2023, Hangzhou, China (*Plenary Talk*)
- 45. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," Biomaterials Conference, Qatar University, May 7, 2023, Qatar (*Keynote Talk*)
- 46. **A. Ozcan**, "Deep-learning-enabled computational microscopy and diffractive imaging," Optics and Photonics International Congress (OPIC), Biomedical Imaging and Sensing Conference (SPIE), April 21, 2023, Pacifico Yokohama, Japan
- 47. **A. Ozcan**, "Deep-learning-enabled computational microscopy and diffractive imaging," SPIE Photonics West, Biophotonics Plenary Session, January 29, 2023, San Francisco, CA (*Plenary Talk*)
- 48. A. Ozcan, "Diffractive Optical Networks and Computational Imaging Without a Computer,"

- SPIE Photonics West, Practical Holography XXXVII: Displays, Materials, and Applications, January 31, 2023, San Francisco, CA
- 49. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Optica Student Chapter of the Izmir Institute of Technology (Turkey), Photonics Department Special Seminar, January 21, 2023 (Virtual)
- 50. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Electronic Imaging Conference, Society for Imaging Science and Technology, January 17, 2023, San Francisco, USA
- 51. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," The 53rd Winter Colloquium on the Physics of Quantum Electronics (PQE), January 13, 2023, Utah, USA
- 52. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Optica Student Chapter of the National Institute of Astrophysics, Optics and Electronics (INAOE Mexico), Winter Workshop in Optics, December 7, 2022 (Virtual)
- 53. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Boston University, Photonics Center Symposium, December 1, 2022
- 54. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," International Conference on Optical and Photonic Engineering (icOPEN), November 24, 2022, Virtual (*Plenary Talk*)
- 55. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," SPIE Conference on Advanced Photonics, November 23, 2022, Virtual
- 56. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," IEEE Photonics Conference, November 16, 2022, Vancouver, Canada
- 57. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Asia Communications and Photonics Conference (ACP) & International Conference on Information Photonics and Optical Communications (IPOC), November 5, 2022 (Virtual)
- 58. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," USC Ming Shieh Institute (MHI) Seminar Series, USC, November 1, 2022, Los Angeles, CA, USA
- 59. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Institute for Pure & Applied Mathematics (IPAM), Diffractive Imaging with Phase Retrieval Workshop, UCLA, October 14, 2022, Los Angeles, CA, USA
- 60. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Bilkent University, Electrical & Electronics Engineering Department, Distinguished Speaker Seminar Series, October 10, 2022, Ankara, Turkey
- 61. **A. Ozcan**, "Deep Learning-enabled computational microscopy for biophotonics" SPIE Translational Biophotonics & Additive Manufacturing, September 13, 2022, Los Angeles, CA, USA
- 62. **A. Ozcan**, "Diffractive Optical Computing," 25th Congress of the International Commission for Optics (ICO), September 9, 2022, Dresden, Germany
- 63. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," ACS Fall Meeting, August 22, 2022, Chicago, IL, USA
- 64. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," 13th International Conference on Optics-Photonics Design and Fabrication (ODF), August 5, 2022, Sapporo, Japan
- 65. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," IEEE International Conference on Computational Photography (ICCP), Caltech, August 1, 2022, Pasadena, CA, USA
- 66. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational

- Microscopy and Sensing," Terasaki Institute for Biomedical Innovation, Terasaki Talk Series, July 13, 2022, Virtual
- 67. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Optica Imaging and Applied Optics Congress, July 12, 2022, Vancouver, Canada
- 68. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Gordon Research Conference (GRC) Image Science, June 6, 2022, Newry, ME, USA
- 69. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," UCLA Department of Physics & Astronomy Colloquium, May 26, 2022, Los Angeles, CA
- 70. **A. Ozcan**, "Virtual Staining of Tissue Using AI," Research Innovation Spotlight on Tools & Diagnostics, the Alliance for SoCal Innovation and BioscienceLA, May 3, 2022, Virtual
- 71. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Microsystems Exploratory Council (MEC), Optical Computing Workshop, April 2, 2022, San Francisco, CA
- 72. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," 16th International Conference on Laser Applications in Life Sciences (LALS), April 1, 2022, Nancy, France (*Keynote Talk*)
- 73. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," IEEE International Symposium on Biomedical Imaging (IEEE ISBI), March 29, 2022. Virtual
- 74. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," ICFO The Institute of Photonic Sciences (Barcelona, Spain), Light for Health Seminars, March 29, 2022, Virtual
- 75. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," TUBITAK Research Institute for Fundamental Sciences (Turkey), Distinguished Lecture Series, March 24, 2022, Virtual
- 76. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," Caltech/UCLA NIH T32 Program Symposium, March 21, 2022, Pasadena, CA
- 77. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," Technische Universität Dresden, Germany, SPIE & Optica Student Chapter Seminar Series, March 21, 2022, Virtual
- 78. **A. Ozcan**, "AI-enabled Computational Imaging for Biomedical Applications," Ulsan National Institute of Science and Technology (UNIST, Korea), Department of Biomedical Engineering Distinguished Seminar Series, March 17, 2022, Virtual
- 79. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Ontario Tech University (Canada), Engineering Research Distinguished Lecture Series, March 15, 2022, Virtual
- 80. **A. Ozcan**, "Diffractive Optical Networks & Computational Imaging Without a Computer," UC Berkeley, Solid State Devices Seminar Series, March 4, 2022, Virtual
- 81. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," Koç University Research Center for Translational Medicine, Annual Graduate Research Conference, February 17, 2022, Virtual (*Keynote Talk*)
- 82. **A. Ozcan**, "Diffractive optical neural networks", SPIE Photonics West, AI and Optical Data Sciences III, January 25, 2022, San Francisco, CA (*Keynote Talk*)
- 83. **A. Ozcan**, "Deep Learning-enabled Optics", SPIE Photonics West, BiOS Hot Topics Plenary Session, January 22, 2022, San Francisco, CA (*Plenary Session*)
- 84. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Indian Institutes of Technology (IIT), Delhi, Optica (OSA) Student Chapter, December 28, 2021, Virtual
- 85. A. Ozcan, "Diffractive Optical Networks & Computational Imaging Without a Computer,"

- Max-Planck Institute For the Science of Light, Distinguished Lecturer Series, December 2, 2021, Virtual
- 86. **A. Ozcan**, "Diffractive Optical Computing," University of California, Riverside (UCR), Electrical & Computer Engineering Distinguished Colloquium, November 15, 2021, Virtual
- 87. **A. Ozcan**, "Toward a Thinking Microscope," Federation of Turkish Pathology Associations, November 10, 2021, Virtual Conference
- 88. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," OSA Frontiers in Optics (FiO) Conference, November 1, 2021, Virtual Conference
- 89. **A. Ozcan**, "Deep Learning Advances Optical Microscopy," Biophotonics Conference Photonics Media, October 26, 2021, Virtual
- 90. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," 16th National Physics Meeting (XVI Encuentro de Física), Quito, Ecuador, October 25, 2021 Virtual (*Keynote Talk*)
- 91. **A. Ozcan**, "Diffractive Optical Networks," IEEE Photonics Conference, Virtual, October 18, 2021
- 92. **A. Ozcan**, "Toward intelligent microscopes: deep learning's potential for biomedical imaging applications," Annual Conference of the Society of Biomolecular Imaging and Informatics (SBI²), Virtual, October 5, 2021 (*Keynote Talk*)
- 93. **A. Ozcan**, "Deep Learning-enabled Computational Water Sensors," IEEE International Workshop on Metrology for the Sea (MetroSea'21), Italy, October 5, 2021 (*Plenary Talk*)
- 94. **A. Ozcan**, "Diffractive Optical Neural Networks," Chinese Society of Optical Engineering (CSOE) International Computational Imaging Conference, Hangzhou, China, September 25, 2021 (*Plenary Talk*)
- 95. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," KAIST Biophotonics Lecture Series, September 13, 2021, Virtual
- 96. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Institute of Physics (IOP), Machine Learning in Biological Physics Meeting, September 6, 2021, Virtual
- 97. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," Laser Focus World Webinar, August 8, 2021, Virtual
- 98. **A. Ozcan**, "Terahertz applications of diffractive optical networks," SPIE Optics and Photonics, August 1-5, 2021, Virtual Conference
- 99. **A. Ozcan**, "Diffractive Optical Networks," OSA Imaging and Applied Optics Congress, July 19, 2021, Virtual Conference (*Keynote Talk*)
- 100. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy," Royal Microscopical Society (RMS) Microscience Microscopy Congress (MMC), July 6, 2021, (*Plenary Talk*)
- 101. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," IEEE UAE Distinguished Seminar Series, June 28, 2021, Virtual
- 102. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," SPIE & OSA Student Chapter Karlsruhe, Germany, June 18, 2021, Virtual
- 103. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Bogazici University, Physics Department, May 28, 2021, Virtual
- 104. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Ege University, School of Engineering, May 26, 2021, Virtual
- 105. **A. Ozcan**, "Diffractive Optical Networks Designed by Deep Learning," The 5th International Conference on Optoelectronic and Microelectronic Technology and Application (OMTA 2021), Chinese Society for Optical Engineering (CSOE), May 22, 2021, Virtual Conference (*Plenary Talk*)

- 106. **A. Ozcan**, "Deep learning-enabled computational microscopy and sensing," UCLA Cardiovascular Theme Distinguished Seminar Series, David Geffen School of Medicine, UCLA, May 17, 2021
- 107. **A. Ozcan**, "Virtual Staining of Tissue Using Deep Learning," Roche Tucson Symposium, Innovations in Cancer Science and Diagnostics, April 21, 2021, Virtual Conference
- 108. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," MIT <u>Internet of Things (IoT) Seminar Series</u>, April 6, 2021, Virtual
- 109. **A. Ozcan**, "Deep learning-enabled high-throughput cytometry and sensing," U.S. Army Combat Capabilities Development Command (DEVCOM) Soldier Center Water Sensor Symposium, March 24, 2021, Virtual Conference
- 110. **A. Ozcan**, "Next Generation Technologies to Power Telehealth and Remote Monitoring," Digital Health Conference, The Southern California Biomedical Council (SoCalBio), March 23, 2021, Virtual Conference (*Keynote Talk*)
- 111. **A. Ozcan**, "Deep learning-enabled computational microscopy," Endocrine Society Annual Meeting (ENDO 2021), Symposium on Thinking Microscopes Artificial Intelligence in Imaging Molecules, Cells and Tumors, March 21, 2021, Virtual Conference
- 112. **A. Ozcan**, "Diffractive optical neural networks," SPIE Photonics West, AI and Optical Data Sciences II, March 6-11, 2021, Virtual Conference
- 113. **A. Ozcan**, "Deep learning-enabled computational microscopy and sensing," SPIE Photonics West, Integrated Sensors for Biological and Neural Sensing, March 6-11, 2021, Virtual Conference
- 114. **A. Ozcan**, "Deep Learning-enabled Computational Imaging and Sensing," Biosensors for Pandemics Conference, February 3, 2021, Virtual Conference (*Plenary Talk*)
- 115. **A. Ozcan**, "Toward Intelligent Microscopes: Deep Learning's Potential for Biomedical Applications," *Photonics Spectra* Conference, January 22, 2021, Virtual Conference (*Keynote Talk*)
- 116. **A. Ozcan**, "Diffractive optical neural networks designed by deep learning," SPIE Advanced Photonics Colloquium, January 13, 2021, Virtual Conference
- 117. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy for Biomedical Applications," BME Frontiers International Symposium on Advanced Optical Imaging for Biomedicine (organized by AAAS and SPJ), December 14, 2020, Virtual Conference (*Keynote Talk*)
- 118. **A. Ozcan**, "Deep Learning-enabled Computational Imaging and Sensing," The 31st Frontier Scientists Workshop, The Korean Academy of Science and Technology (KAST), December 4, 2020, Virtual Conference
- 119. **A. Ozcan**, "Diffractive optical neural networks designed by deep learning," MRS Spring Meeting, November 29, 2020, Virtual Conference (*Keynote Talk*)
- 120. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," International Symposium on Imaging, Sensing and Optical Memory, organized by The Optical Society of Japan, November 29 December 2, 2020, Virtual Conference
- 121. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," 5th West Lake Photonics Symposium (WPS 2020), November 28, 2020, Virtual Conference (*Plenary Talk*)
- 122. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," University of California Santa Cruz (UCSC), Electrical & Computer Engineering, Departmental Seminar Series, November 23, 2020, Virtual
- 123. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," University of Wisconsin-Madison, SPIE/OSA Student Chapter Seminar, October 7, 2020, Virtual
- 124. A. Ozcan, "Toward a Thinking Microscope: Deep Learning-enabled Computational

- Microscopy and Sensing," Yonsei University, Korea, Department of Mechanical Engineering Graduate Seminar Series, September 25, 2020, Virtual
- 125. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," AIChE Bioengineering & Translational Medicine Conference, September 28, 2020, Virtual Conference (*Keynote Talk*)
- 126. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," IEEE Photonics Conference, September 28, 2020, Virtual Conference
- 127. **A. Ozcan**, "Diffractive optical neural networks designed by deep learning," IEEE Research and Applications of Photonics in Defense (RAPID) Conference, August 12, 2020, Virtual Conference
- 128. **A. Ozcan**, "Diffractive optical neural networks designed by deep learning," The International Conference on Computing and Data Science, August 2, 2020, Virtual Conference (*Keynote Talk*)
- 129. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," iCANX Talks, Peking University Global Open Talks, June 26, 2020
- 130. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," IEEE Photonics Society Boston Chapter Webinar, June 11, 2020
- 131. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," 22nd Photonics North Conference, May 28, 2020, Virtual Conference (*Keynote Talk*)
- 132. **A. Ozcan**, "Diffractive optical neural networks designed by deep learning," OSA Conference on Lasers and Electro-optics (CLEO), May 11-15, 2020, Virtual Conference
- 133. **A. Ozcan**, "Computational Microscopy and Sensing," Biosensors for Pandemics Conference, May 6, 2020, Virtual Conference (*Plenary Talk*)
- 134. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," IEEE Aerospace Conference, March 11, 2020, Big Sky, Montana, USA (*Plenary Talk*)
- 135. **A. Ozcan**, "Deep learning-enabled holography," SPIE Photonics West, Label-free Biomedical Imaging and Sensing, February 4, 2020, San Francisco, CA, USA (*Keynote Talk*)
- 136. **A. Ozcan**, "Deep learning-enabled computational microscopy and sensing," SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems, February 3, 2020, San Francisco, CA, USA
- 137. **A. Ozcan**, "A Tale of Three Companies: Commercialization of Computational Imaging and Sensing Technologies," SPIE Photonics West, Advanced Biomedical and Clinical Diagnostic and Surgical Guidance, February 3, 2020, San Francisco, CA, USA
- 138. **A. Ozcan**, "Deep Learning-Enabled Computational Microscopy," University of California, Berkeley, 17th Annual Advanced Imaging Methods Workshop, January 31, 2020, Berkeley, CA, USA
- 139. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-Enabled Computational Microscopy and Sensing," Grand Rounds in Artificial Intelligence, University of Texas, Southwestern Medical Center, December 6, 2019, Dallas, Texas, USA
- 140. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-Enabled Computational Microscopy and Sensing," Noble Talks, University of Jena, Abbe Center, November 7, 2019, Jena, Germany
- 141. **A. Ozcan**, "Diffractive Optical Neural Networks Designed by Deep Learning," Leibniz Institute of Photonic Technology, November 7, 2019, Jena, Germany
- 142. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-Enabled Computational Microscopy and Sensing," Purdue University, Department of Physics and Astronomy Colloquium, October 31, 2019, Lafayette, Indiana, USA

- 143. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," The Annual Meeting of The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) SciX Conference, October 17, 2019, Palm Springs, California, USA
- 144. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," International Forum on Microscopy (IFM'19), September 7, 2019, Beijing, China (*Plenary Talk*)
- 145. **A. Ozcan**, "Deep learning in optical microscopy and image reconstruction," Nature Conference on AI and Robotics, organized by Nature Machine Intelligence, Nature Biomedical Engineering and Tencent AI Lab, September 2, 2019, Shenzen, China
- 146. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-Enabled Computational Microscopy and Sensing," University of Houston, Biomedical Engineering Department, SPIE Student Chapter Distinguished Lecture, August 20, 2019, Houston, TX, USA
- 147. **A. Ozcan**, "Diffractive optical neural networks designed by deep learning," SPIE Optics and Photonics Conference, August 15, 2019, San Diego, CA, USA, Paper #11080-89
- 148. **A. Ozcan**, "Deep learning optics," SPIE Optics and Photonics Conference, August 14, 2019, San Diego, CA, USA, Paper #11081-55
- 149. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-Enabled Computational Microscopy and Sensing," Micro and Nano-technologies for Medicine Workshop: Emerging Frontiers and Applications, UCLA, July 9, 2019, Los Angeles, CA, USA
- 150. **A. Ozcan**, "Toward a thinking microscope: Deep learning-enabled computational microscopy," 21st International Vacuum Congress, July 2, 2019, Malmö, Sweden
- 151. **A. Ozcan**, "Toward a thinking microscope: Deep learning-enabled computational microscopy and sensing," Chalmers University of Technology, Department of Biology and Biological Engineering, June 27, 2019, Gothenburg, Sweden
- 152. **A. Ozcan**, "Toward a thinking microscope: Deep learning-enabled computational microscopy and sensing," Lund University, NanoLund Nanoscience Colloqium, June 26, 2019, Lund, Sweden
- 153. **A. Ozcan**, "Democratization of Microscopy and Sensing," The Bridge Talk, Medicon Village, June 25, 2019, Lund, Sweden
- 154. **A. Ozcan**, "Democratization of Microscopy and Sensing," Malmö University, Department of Biomedical Science, June 25, 2019, Malmö, Sweden
- 155. **A. Ozcan**, "Toward a thinking microscope: Deep learning-enabled computational microscopy and sensing," SPIE Optical Metrology and Digital Optical Technologies Symposia, June 24, 2019, Munich, Germany (*Keynote Talk*)
- 156. **A. Ozcan**, "Deep learning in Optical Microscopy and Image Reconstruction," OSA Imaging and Applied Optics Congress, June 24, 2019, Munich, Germany
- 157. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," International School on Light Sciences and Technologies, Universidad Internacional Menéndez Pelayo (UIMP), June 17, 2019, Santander, Spain
- 158. **A. Ozcan**, "Toward a thinking microscope: Deep learning-enabled computational microscopy and sensing," ECI Advances in Optics for Biotechnology, Medicine and Surgery XVI, June 5, 2019, Quebec, Canada
- 159. **A. Ozcan**, "Deep Learning-enabled Computational Imaging and Sensing", National Advisory Council on Biomedical Imaging and Bioengineering, National Institutes of Health (NIH) NIBIB, May 21, 2019, Maryland, USA
- 160. **A. Ozcan**, "Deep Learning in Optical Microscopy and Image Reconstruction", OSA Conference on Lasers and Electro-optics (CLEO), May 10, 2019, San Jose, CA USA
- 161. A. Ozcan, "Deep Learning-enabled Computational Microscopy and Sensing," OSA

- Biophotonics Congress: Optics in the Life Sciences, April 15, 2019, Tucson, Arizona, USA (*Plenary Talk*)
- 162. **A. Ozcan**, "Deep learning in optical microscopy and image reconstruction," SPIE Defense & Commercial Sensing (DCS) Conference, April 14, 2019, Baltimore, MD, USA
- 163. **A. Ozcan**, "Deep-learning-enabled computational microscopy and sensing," Nature Conference on In Vitro Diagnostics, organized by Nature Biomedical Engineering, Shanghai Jiao Tong University, the China Association of In-Vitro Diagnostics, March 22, 2019, Nanchang, China
- 164. **A. Ozcan**, "Toward a thinking microscope: Deep-learning-enabled computational microscopy and sensing," Tsinghua University, March 20, 2019, Beijing, China
- 165. **A. Ozcan**, "Deep Learning-Enabled Computational Microscopy and Sensing," Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Pittcon Conference, March 17, 2019, Philadelphia, PA, USA
- 166. **A. Ozcan,** "Deep learning-enabled computational imaging in pathology," Cambridge Healthtech Institute, International Molecular Medicine Tri-Conference, March 11, 2019, San Francisco, CA, USA
- 167. **A. Ozcan**, "Deep-learning-enabled computational imaging and sensing", NSF Workshop, Reconfigurable Sensor Systems Integrated with Artificial Intelligence and Data Harnessing to Enable Personalized Medicine, March 7, 2019, Washington DC, USA
- 168. **A. Ozcan**, "Deep Learning Optics", SPIE Photonics West, OPTO Plenary Session, February 4, 2019, San Francisco, CA, USA (*Plenary Talk*)
- 169. **A. Ozcan**, "Toward a thinking microscope: Deep-learning-enabled computational microscopy and sensing", SPIE Photonics West, Optical Data Science, February 6, 2019, San Francisco, CA, USA (*Keynote Talk*)
- 170. **A. Ozcan**, "Super-resolution microscopy using deep learning", SPIE Photonics West, Single Molecule Spectroscopy and Superresolution Imaging, February 3, 2019, San Francisco, CA, USA
- 171. **A. Ozcan**, "Deep learning in optical microscopy and image reconstruction", SPIE Photonics West, Quantitative Phase Imaging, February 3, 2019, San Francisco, CA, USA
- 172. **A. Ozcan**, "Deep-learning-enabled computational imaging", SPIE Photonics West, Quantum Sensing and Nano Electronics and Photonics, February 4, 2019, San Francisco, CA, USA
- 173. **A. Ozcan**, "Diffractive deep neural networks for all-optical machine learning", SPIE Photonics West, Complex Light and Optical Forces, February 6, 2019, San Francisco, CA, USA
- 174. **A. Ozcan**, "Innovations at the Interface of Photonics and Medicine to Support Digital Health," Keystone Symposium, Digital Health: From Science to Application, January 22, 2019, Colorado, USA
- 175. **A. Ozcan**, "Mobile Imaging and Sensing Technologies for Diagnostics," Annual CEND Symposium, Center for Emerging and Neglected Diseases (CEND), UC Berkeley, January 11, 2019, Berkeley, CA, USA
- 176. **A. Ozcan**, "Deep Learning Optics," IEEE EMBS Micro and Nanotechnology in Medicine Conference, December 12, 2018, Hawaii, USA
- 177. **A. Ozcan**, "Deep Learning Optics," Electrical & Computer Engineering Department Seminar Series, University of California, Davis, November 30, 2018, Davis, CA, USA
- 178. **A. Ozcan**, "Deep Learning Optics," OSA Latin America Optics & Photonics Conference, November 14, 2018, Lima, Peru (*Plenary Talk*)
- 179. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning in Optical Microscopy and Image Reconstruction," OSA Latin America Optics & Photonics Conference, November 14, 2018, Lima, Peru
- 180. A. Ozcan, "Deep Learning in Optical Microscopy and Image Reconstruction," OSA Latin

- America Optics & Photonics Conference, November 12, 2018, Lima, Peru (*Tutorial*)
- 181. **A. Ozcan**, "Deep learning-based imaging of microbiological samples," The 38th International Turkish Microbiology Congress, November 5, 2018, Antalya, Turkey
- 182. **A. Ozcan**, "Mobile Microscopy and Sensing Using Computational Optics and Deep Learning," Istanbul Technical University, October 2, 2018, Istanbul, Turkey
- 183. **A. Ozcan**, "Toward a Thinking Microscope: Deep Learning-enabled Computational Microscopy and Sensing," Biomedical Engineering Department Seminar Series, Cornell University, September 28, 2018, Ithaca, NY, USA
- 184. **A. Ozcan**, "Deep Learning-enabled Computational Microscopy and Sensing," The Stillman Lecture, University of Illinois, Urbana-Champaign (UIUC), September 26, 2018, Urbana, IL, USA
- 185. **A. Ozcan**, "Deep Learning-enabled Computational Imaging and Sensing," ASME NanoEngineering for Medicine and Biology Conference, August 21-24, 2018, Los Angeles, CA, USA (*Plenary Talk*)
- 186. **A. Ozcan**, "Machine Learning Enabled Computational Imaging and Sensing for Point-of-Care Medicine and Global Health," Workshop on Artificial Intelligence in Photonics, OSA CLEO Pacific Rim, July 30, 2018, Hong Kong
- 187. A. Ozcan, "Deep Learning-enabled Computational Imaging and Sensing," Symposium on Micro and Nano-technologies for Medicine: Emerging Frontiers and Applications, UCLA, July 17, 2018, Los Angeles, CA, USA
- 188. **A. Ozcan**, "Deep Learning Enabled Computational Imaging and Sensing," 1st International Conference on Engineering Biomedical Breakthroughs (Helmholtz Pioneer Campus), Venice International University, Isola di San Servolo, Venice, Italy, July 5, 2018 (*Keynote Talk*)
- 189. **A. Ozcan**, "Machine Learning Enabled Computational Imaging and Sensing for Point-of-Care Medicine and Global Health," OSA Imaging and Applied Optics Congress, June 27, 2018, Orlando, Florida, USA (*Keynote Talk*)
- 190. **A. Ozcan**, "Deep Learning-enabled Computational Imaging," University of Chicago, Institute for Biophysical Dynamics, June 15, 2018, Chicago, IL, USA
- 191. **A. Ozcan**, "Deep Learning-enabled Computational Imaging and Sensing," 20th TechConnect World Innovation Conference, Chemical, Physical & Bio-Sensors Symposium, May 16, 2018, Anaheim, CA, USA
- 192. **A. Ozcan**, "Machine Learning and Computation Enabled Microscopy and Sensing for Point-of-Care Medicine and Global Health," OSA Conference on Lasers and Electro-optics (CLEO), May 15, 2018, San Jose, CA, USA
- 193. A. Ozcan, "Deep Learning Enabled Computational Imaging and Sensing," EnMed Biomedical Imaging Symposium, Houston Methodist Research Institute, April 26, 2018, Houston, Texas, USA (*Plenary Talk*)
- 194. **A. Ozcan**, "Deep Learning Enabled Computational Imaging and Sensing," IEEE International Conference on Nano/Micro Engineered and Molecular Systems, April 23, 2018, Singapore (*Keynote Talk*)
- 195. **A. Ozcan**, "Machine Learning Enabled Computational Imaging and Sensing," OSA Biophotonics Congress: Biomedical Optics, April 5, 2018, Florida, USA
- 196. **A. Ozcan**, "Computational Analysis of Particulate Matter," Firefighter Physiological Monitoring Technology Summit, March 29, 2018, Washington, DC, USA
- 197. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," North Carolina State University, Advanced Self-Powered Systems of Integrated Sensors & Technologies Research Center, March 2, 2018, Raleigh, NC, USA
- 198. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics through Computational Photonics," Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Pittcon Conference,

- March 1, 2018, Orlando, FL, USA
- 199. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," Molecular Medicine Tri-Conference, Molecular Diagnostics for Infectious Diseases, February 14, 2018, San Francisco, CA, USA
- 200. **A. Ozcan**, "Lost in image data," SPIE Photonics West, Optical Data Science: Trends Shaping the Future of Photonics, January 30, 2018, San Francisco, CA, USA
- 201. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," Optics and Photonics Winter School and Workshop, College of Optical Sciences, University of Arizona, January 7, 2018, Tuscon, Arizona, USA (*Keynote Talk*)
- 202. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," California Institute of Technology (Caltech), Electrical Engineering Department, December 1, 2017, Pasadena, CA, USA
- 203. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics," 1st International Duke Kunshan University Innovation Forum, Gigapixel Imaging and Spectroscopy, November 2, 2017, Kunshan, China
- 204. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics Using Computational Photonics," Biodetection and Biosensors Conference, Select Biosciences Meeting, Murray Edwards College, October 11, 2017, Cambridge, UK (*Keynote Talk*)
- 205. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," University College London, October 9, 2017, London, UK
- 206. **A. Ozcan**, "Mobile microscopy, sensing and diagnostics through computational photonics," IEEE Photonics Society Webinar, September 27, 2017
- 207. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," IEEE Photonics Society Distinguished Lecture The College of Optics & Photonics, CREOL, University of Central Florida, September 20, 2017, Florida, USA
- 208. **A. Ozcan**, "Mobile microscopy, sensing and diagnostics through computational photonics," Department of Physics Colloquium, University of South Florida, September 19, 2017, Florida, USA
- 209. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," Biomedical Engineering Department Seminars, Tufts University, September 18, 2017, Boston, MA, USA
- 210. **A. Ozcan**, "Mobile microscopy, sensing and diagnostics through computational photonics," Chemistry and Biochemistry Seminars, California State University, Los Angeles, August, 29 2017, Los Angeles, CA, USA
- 211. **A. Ozcan**, "Bio-Markers and Point-of-Care Technologies," UCLA-NIH mHealth Summer Training Institute, August 8, 2017, Los Angeles, CA, USA
- 212. **A. Ozcan**, "Rapid high-throughput detection and automated counting of coliform bacteria and *Escherichia coli* using an on-chip imaging system" Army Research Office (ARO) NASA Life Sciences Review Meeting, NASA Ames Research Center, July 31, 2017, Mountain View, CA, USA
- 213. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," Changehun Institute of Optics, Chinese Academy of Sciences, OSA Student Chapter, July 19, 2017, Changehun, China
- 214. **A. Ozcan**, "Mobile microscopy, sensing and diagnostics through computational photonics," Light Conference, July 18, 2017, Changchun, China
- 215. **A. Ozcan**, "Mobile microscopy, sensing and diagnostics through computational photonics," VII International Congress on Analytical Nanoscience and Nanotechnology, July 4, 2017, Barcelona, Spain (*Plenary Talk*)

- 216. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics through Computational Photonics," Summer School on Smartphone-based Food Analysis, Wageningen University, June 30, 2017, Wageningen, The Netherlands
- 217. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," European Conferences on Biomedical Optics (ECBO) OSA and SPIE, June 27, 2017, Munich, Germany (*Plenary Talk*)
- 218. **A. Ozcan**, "Applications of holographic on-chip microscopy," SPIE Optical Metrology Conference, Optical Methods for Inspection, Characterization, and Imaging of Biomaterials, June 27, 2017, Munich, Germany (*Keynote Talk*)
- 219. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostic through Computational Photonics," IEEE Photonics Society Distinguished Lecture Poland Chapter, AGH University of Science and Technology, June 23, 2017, Krakow, Poland
- 220. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," Pathology Informatics Summit, May 22, 2017, Pittsburgh, PA, USA
- 221. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics through Computational Photonics," ICFO The Institute of Photonic Sciences, Light for Health Seminars, May 5, 2017, Barcelona, Spain
- 222. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics through Computational Photonics," IEEE NEMS Conference: Annual IEEE International Conference on Nano/Micro Engineered and Molecular Systems, April 9-12, 2017, Los Angeles, CA, USA
- 223. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," IEEE Photonics Society Distinguished Lecture Series, University of California, Santa Barbara (UCSB), April 5, 2017, Santa Barbara, CA
- 224. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," Global Good, Intellectual Ventures Lab, March 13, 2017, Seattle, WA
- 225. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Pittcon Conference, March 6, 2017, Chicago, IL, USA
- 226. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," IEEE CLAS Computer Society Seminar, Loyola Marymount University, February 23, 2017, Los Angeles, CA, USA
- 227. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," SPIE Photonics West, Biophotonics Executive Forum, January 31, 2017, San Francisco, CA
- 228. **A. Ozcan**, "Applications of holographic on-chip microscopy," SPIE Photonics West, Quantitative Phase Imaging III, January 30, 2017, San Francisco, CA
- 229. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," Rahmi M. Koç Science Medal Lecture, Koç University, December 6, 2016, Istanbul, Turkey
- 230. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics Technologies," University of Texas, Southwestern Medical Center, November 17, 2016, Dallas, TX, USA
- 231. **A. Ozcan**, "High-throughput Imaging and Sensing through Computational Photonics," U.S. Army Research Laboratory, Adephi Laboratory Center, November 15, 2016, Adephi, MD, USA
- 232. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics Technologies for Telemedicine and Global Health Applications," KTH Royal Institute of Technology, Life Sciences Technology Day, November 11, 2016, Stockholm, Sweden
- 233. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," Stanford Optical Society Seminar, Stanford University, September 29, 2016, Stanford, CA, USA
- 234. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," Science & Technology Seminar Series, Illimuna Inc., September 29, 2016, San Francisco, CA,

USA

- 235. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics through Computational Photonics," MESA+ Meeting, MESA+ Institute for Nanotechnology, University of Twente, September 26, 2016, Enschede, The Netherlands (*Keynote Talk*)
- 236. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," Tech Forum, 3M Company, September 19, 2016, Minneapolis, Minnesota, USA
- 237. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," The Annual Meeting of The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) SciX Conference, September 18, 2016, Minneapolis, Minnesota, USA (*Keynote Talk*)
- 238. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics," National Meeting of Electromagnetism, University of Parma, September 13, 2016, Parma, Italy (*Plenary Talk*)
- 239. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools Through Computational Photonics," SPIE Lecture, Consiglio Nazionale delle Ricerche, CNR-Naples, September 12, 2016, Naples, Italy
- 240. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools Through Computational Photonics," Rice University, Electrical and Computer Engineering Department Seminar Series, September 1, 2016, Houston, TX, USA
- 241. **A. Ozcan**, "Point of Care Technologies for Limited Resource Settings," UCLA-NIH mHealth Summer Training Institute, August 9, 2016, Los Angeles, CA, USA
- 242. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics" Gordon Research Conference (GRC), The Use of Big Data in Health Related Research, The Chinese University of Hong Kong, July 21, 2016, Hong Kong, China
- 243. **A. Ozcan**, "High-throughput analysis of horse sperm 3D swimming patterns using computational on-chip imaging" Association for Applied Animal Andrology (AAAA) Biennial Conference, June 26, 2016, Tours, France (*Plenary Talk*)
- 244. **A. Ozcan**, "Lost in Image Data?" International School on Light Sciences and Technologies, Universidad Internacional Menéndez Pelayo (UIMP), June 22, 2016, Santander, Spain
- 245. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics" International School on Light Sciences and Technologies, Universidad Internacional Menéndez Pelayo (UIMP), June 20, 2016, Santander, Spain
- 246. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics," 17th Annual UC Systemwide Bioengineering Symposium, June 13, 2016, University of California, San Francisco, CA, USA
- 247. **A. Ozcan**, "c-AIR: Computational Microscopy and Big Data Analytics Platform for Measuring Indoor and Outdoor Pollutants, Bio-Aerosols and Toxins" Social Innovation Summit, June 8, 2016, Washington DC, USA
- 248. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics" 26th Anniversary World Congress on Biosensors (Biosensors Congress, Elsevier), May 25, 2016, Gothenburg, Sweden (*Plenary Talk*)
- 249. **A. Ozcan**, "Mobile-phone based imaging, sensing and diagnostics technologies" Summer School on Mobile Diagnostics, Biosensors Congress, Elsevier, May 24, 2016, Gothenburg, Sweden
- 250. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools through Computational Photonics" *Ernst Abbe Lecture*, International Conference on Applied Optics and Photonics (organized by ICO and DGaO), May 19, 2016, Hannover, Germany
- 251. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," IEEE International

- Conference on Computational Photography (ICCP), Northwestern University, May 14, 2016, Evanston, IL (*Keynote Talk*)
- 252. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics Using Computational Photonics," King Abdulaziz City for Science and Technology, Materials Science Research Institute, May 9, 2016, Riyadh, Saudi Arabia
- 253. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools Through Computational Photonics," University of Washington, Bioengineering Seminar Series, April 7, 2016, Seattle, WA, USA
- 254. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools," Lab-on-a-Chip & Microfluidics Conference, Select Biosciences Meeting, March 16, 2016, Madrid, Spain (*Keynote Talk*)
- 255. **A. Ozcan,** "Mobile-phone based imaging, sensing and diagnostics technologies," Cambridge Healthtech Institute, International Molecular Medicine Tri-Conference, March 8, 2016, San Francisco, CA, USA
- 256. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools Through Computational Photonics," University of California, Los Angeles, Department of Chemistry and Biochemistry, Physical Chemistry Seminar Series, February 22, 2016, Los Angeles, CA, USA
- 257. **A. Ozcan,** "On-chip microscopy, sensing and diagnostics," SPIE Photonics West, Quantum Sensing, Nano Electronics and Photonics XIII, February 15, 2016, San Francisco, CA, USA
- 258. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools Through Computational Photonics," University of California, Berkeley, 13th Annual Advanced Imaging Methods Workshop, February 12, 2016, Berkeley, CA, USA
- 259. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics," The International Year of Light Symposium, University of Arizona, College of Medicine, January 20, 2016, Phoenix, Arizona, USA (*Keynote Lecture*)
- 260. **A. Ozcan**, "Mobile Imaging, Sensing and Diagnostics," The 20th Annual UCLA Health Care Symposium, University of California, Los Angeles, January 9, 2016, Los Angeles, CA, USA
- 261. **A. Ozcan**, "Next-Generation Biomedical Imaging, Sensing and Diagnostics Technologies," U.S. National Academy of Sciences, Arab-American Frontiers of Science, Engineering, and Medicine Symposium, December 6, 2015, KAUST, Saudi Arabia
- 262. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," University of Houston, Physics Department Colloquium, November 24, 2015, Houston, Texas, USA
- 263. **A. Ozcan**, "A computational look at nano-scale toward giga-pixel nanoscopy," IEEE International Conference on Nano/Molecular Medicine and Engineering IEEE NanoMed Conference, November 15, 2015, Hawaii, USA
- 264. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," U.S. Defense Threat Reduction Agency (DTRA), November 2, 2015, Washington DC, USA
- 265. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," Massachusetts General Hospital, Wellman Center for Photomedicine 40th anniversary meeting, October 30, 2015, Boston, Massachusetts, USA
- 266. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," Florida International University, Wallace H. Coulter Biomedical Engineering Distinguished Lecture Series, Annual Research Day, October 23, 2015, Florida, USA (*Keynote Talk*)
- 267. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," Stanford University, The Stanford Center for Image

- Systems Engineering Colloquia, October 20, 2015, Palo Alto, California, USA
- 268. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics," OSA Frontiers in Optics (FiO) Conference, October 19, 2015, San Jose, California, USA
- 269. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools Through Computational Photonics," NASA Jet Propulsion Laboratory, JPL Medical Engineering Distinguished Lecturer Series, October 8, 2015, Pasadena, California, USA
- 270. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," Swiss Federal Institute of Technology in Lausanne (EPFL), Distinguished Lecture in Biological Engineering, October 5, 2015, Lausanne, Switzerland
- 271. **A. Ozcan**, "Mobile Imaging, Sensing and Medical Diagnostics," The New York Academy of Sciences, Mobile Health Conference, September 30, 2015, New York, USA
- 272. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," University of Arizona, College of Optical Sciences Colloquium, September 24, 2015, Tucson, Arizona, USA
- 273. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," 11th International Conference on Micro- to Nano-Photonics IV ROMOPTO 2015, September 1, 2015, Bucharest, Romania
- 274. **A. Ozcan**, "Developing Sensor Technologies for Low Resource Settings," UCLA-NIH mHealth Summer Training Institute, August 26, 2015, Los Angeles, CA, USA
- 275. **A. Ozcan**, "Biomedical Imaging, Sensing and Diagnostics: Now vs. the Future," Association for Computing Machinery (ACM) SIGGRAPH Conference, SIGGRAPH Next, August 12, 2015, Los Angeles, CA, USA
- 276. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing, Diagnostics Tools through Computational Photonics," SPIE Optics & Photonics Conference, August 11, 2015, San Diego, CA, USA (*Plenary Talk*)
- 277. **A. Ozcan**, "Mobile imaging, sensing and medical diagnostics," Blavatnik Science Symposium, The New York Academy of Sciences, August 6, 2015, New York, USA
- 278. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics," American Association for Clinical Chemistry (AACC) Annual Meeting, July 30, 2015, Atlanta, Georgia, USA
- 279. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Toward Connected Health," The President's Cancer Panel, The Connected Cancer Patient Workshop, July 9, 2015, Chicago, IL, USA
- 280. **A. Ozcan**, "Program for Translational Biophotonics and Telemedicine," HHMI Professors Annual Meeting, Howard Hughes Medical Institute (HHMI), July 8, 2015, Chevy Chase, MD, USA
- 281. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools through Computational Photonics," Seminar at Corporate Research and Technology Zeiss, Carl-Zeiss Promenade, June 25, 2015, Jena, Germany
- 282. **A. Ozcan**, "Lens-free On-chip Microscopy for Biomedical Imaging, Sensing and Diagnostics," Conference on Lasers and Electro-optics (CLEO-Europe, organized by OSA, IEEE and EPS), June 24, 2015, Munich, Germany (*Keynote Talk*)
- 283. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools through Computational Photonics," 3rd European Optical Society (EOS) Conference on Optofluidics, June 23, 2015, Munich, Germany
- 284. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostic Tools," Pathology Diagnostics Conference, GTCbio, June 12, 2015, San Diego, CA (*Keynote Talk*)
- 285. A. Ozcan, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools

- Through Computational Photonics", Biophotonic Imaging for Medicine: A Digital Conference, June 11, 2015 Webinar (*Keynote Talk*)
- 286. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostic Tools Through Computational Photonics," University of California, San Diego (UCSD), Center for Excellence in Nanomedicine and Engineering (CNME), Frontiers of Therapeutic and Diagnostic Delivery Seminar Series, May 27, 2015, San Diego, CA
- 287. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Measurement Tools Through Computational Photonics," KAUST University of Science and Technology, Sensor Innovation Workshop, May 24, 2015, Saudi Arabia
- 288. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools", Reengineering BioMed Engineering Symposium, Hong Kong Science Park, May 14, 2015, Hong Kong (*Keynote Lecture*)
- 289. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics", International Semiconductor Science and Technology Conference (ISSTC), May 11, 2015, Izmir, Turkey
- 290. **A. Ozcan**, "A computational look at nano-scale toward giga-pixel nanoscopy", SPIE Defense, Security, and Sensing Conference, April 21, 2015, Baltimore, MD, USA
- 291. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Diagnostics Tools Through Computational Photonics", IEEE International Symposium on Biomedical Imaging (IEEE ISBI), Tutorial on Point-of-care Imaging Systems, April 16, 2015, New York, NY, USA
- 292. **A. Ozcan**, "Democratization of Next-Generation Microscopy, Sensing and Diagnostics Tools," Karolinska Institutet, Mobile Microscopy Symposium, March 26, 2015, Stockholm, Sweden (*Keynote Talk*)
- 293. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," MIT Media Lab, March 13, 2015, Cambridge, MA, USA
- 294. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," 2nd International Conference on Label-Free Technologies, March 13, 2015, Cambridge, MA, USA
- 295. **A. Ozcan**, "How Technology is Transforming Diagnostics," ASME Webinar, American Society of Mechanical Engineers, March 11, 2015
- 296. **A. Ozcan**, "Democratization of Next-Generation Imaging, Sensing and Measurement Tools Through Computational Photonics," Society for Brain Mapping and Therapeutics (SBMT), Annual Congress, March 6, 2015, Los Angeles, CA, USA
- 297. **A. Ozcan**, "Democratization of Diagnostics Tools Through Computational Imaging and Sensing," AAAS Annual Meeting, Symposium on Affordable Diagnostics for All: High-Resolution Medical Imaging for Saving Lives, February 14, 2015, San Jose, CA, USA
- 298. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," Biophysical Society Annual Meeting, February 10, 2015, Baltimore, MD, USA
- 299. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," University of Michigan, Ann Arbor, Electrical Engineering and Computer Science Department Seminar, February 9, 2015, Ann Arbor, MI, USA
- 300. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," UCLA Department of Pediatrics, Grand Rounds, January 30, 2015, Los Angeles, CA, USA
- 301. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics," Gordon Research Conference (GRC), Physical Virology, January 28, 2015, Ventura, CA, USA

- 302. **A. Ozcan**, "Smartphone and Mobile Diagnostics", Prognostic, Predictive, and Point-of-care: Biomarkers from Research to Clinic, Select Biosciences Conference, January 16, 2015, San Diego, CA, USA (*Keynote Talk*)
- 303. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", Boston University, Photonics Center, December 15, 2014, Boston, MA, USA
- 304. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", IEEE EMBS Micro and Nanotechnology in Medicine (MNM) Conference December 8, 2014, Oahu, Hawaii, USA
- 305. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", International Conference for Micro & Nanotechnologies for the Bioscience, November 17, 2014, Montreux, Switzerland (*Keynote Talk*)
- 306. **A. Ozcan**, "Lensfree Microscopy", Label-free Particle Sorting (LAPASO) Meeting and Workshop, November 16, 2014, Montreux, Switzerland
- 307. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", Bioscience 2014 Meeting, Karolinska Institutet, November 4, 2014, Stockholm, Sweden (Teleconference)
- 308. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", University of California, San Diego (UCSD) Bioengineering Department, October 24, 2014, San Diego, CA, USA
- 309. **A. Ozcan**, "Next Generation Micro-analysis and Diagnosis Using Computational Imaging, Crowd-sourcing and Gaming", 5th International Eurasian Hematology Congress, October 15, 2014, Antalya, Turkey (*Keynote Talk*)
- 310. **A. Ozcan**, "A computational look at nano-scale toward giga-pixel nanoscopy", Graphene and Related Technologies Workshop, October 13, 2014, Istanbul, Turkey
- 311. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", Duke University, Fitzpatrick Institute for Photonics, Fitzpatrick Distinguished Lecture, October 8, 2014, Durham, NC, USA
- 312. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", University of Miami, The 7th Annual Nanoscience Technology Symposium (NanoFlorida), September 25, 2014, Miami, FL, USA (*Plenary Talk*)
- 313. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", University of Delaware, ECE Distinguished Lecturer Series, September 24, 2014, Newark, DE, USA
- 314. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools", Strategies in Biophotonics Conference, September 11, 2014, Boston, MA USA (*Keynote Talk*)
- 315. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools through Computational Photonics", Wyss Institute, Harvard University, September 10, 2014, Boston, MA USA
- 316. **A. Ozcan**, "Next-Generation Imaging and Diagnostics through Mobile Phones," Next Generation Diagnostics Summit, Washington, DC, USA (August 19, 2014)
- 317. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," SPIE Optics and Photonics Conference, San Diego, CA USA (August 18, 2014)
- 318. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," Gordon Research Conference (GRC), Lasers in Medicine & Biology, Holderness, NH (July 17, 2014)
- 319. **A. Ozcan**, "Democratization of Diagnostics and Measurement Tools through Computational Imaging and Sensing", Global Health Summer Institute, University of Washington, July 15,

- 2014, Seattle, WA USA
- 320. **A. Ozcan**, "Democratization of Diagnostics and Measurement Tools through Computational Imaging and Sensing", OSA Optics & Photonics Congress, Imaging and Applied Optics, July 14, 2014, Seattle, WA USA
- 321. **A. Ozcan**, "Novel Imaging Techniques Through Computational Photonics," Blavatnik Science Symposium, The New York Academy of Sciences, New York, USA (July 9, 2014)
- 322. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools using Mobile Phones," New Frontiers in Digital Technologies for Influenza: Big data and Mobile-Phone Connected Diagnostic Tests, The Institute of Materials, London, UK (June 26, 2014)
- 323. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics", IEEE EMBS International Summer School on Biomedical Imaging, June 19-20, 2014, Saint-Jacut de la Mer, Brittany, France
- 324. **A. Ozcan**, "Computational Imaging and Sensing for Biophotonics Applications", OSA Conference on Lasers and Electro-optics (CLEO '14), June 12, 2014, San Jose, CA USA
- 325. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools using Computational Photonics," University of Tokyo, Department of Chemistry, Tokyo, Japan (June 10, 2014)
- 326. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools using Computational Photonics," University of Southern California, Keck School of Medicine, Department of Preventive Medicine, Los Angeles, CA (June 6, 2014)
- 327. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," University of Illinois, Urbana-Champaign (UIUC), Biophotonics Summer School, Urbana-Champaign, IL (May 26, 2014)
- 328. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools using Mobile Phones," SPIE Translational Biophotonics Conference, Rice University, Houston, TX (May 20, 2014)
- 329. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics for Telemedicine and Global Health," American Society of Microbiology (ASM) General Meeting, Boston, MA (May 19, 2014)
- 330. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools using Mobile Phones," KTH Royal Institute of Technology, Sweden (May 16, 2014)
- 331. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," MicroNano System Workshop, Uppsala, Sweden (May 15, 2014) (*Plenary Talk*)
- 332. **A. Ozcan**, "BioGames: Crowd-sourced Games for Malaria Diagnosis and Tele pathology," World Malaria Day, Bay Area Symposium, Berkeley, CA (April 25, 2014)
- 333. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," Istanbul University, Cerrahpasa Medical School, Istanbul, Turkey (April 16, 2014)
- 334. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," XII Conference on Optical Chemical Sensors and Biosensors (EUROPT(R)ODE), Athens, Greece (April 15, 2014) (*Plenary Talk*)
- 335. **A. Ozcan**, "BioGames: Crowd-sourced Games for Tele pathology," University of Southern California, Global Health Awareness Week, Los Angeles, CA (March 31, 2014)
- 336. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," Yale University, School of Medicine, Bioimaging Sciences Seminar Series, New Haven, CT (March 25, 2014)
- 337. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," Vanderbilt University, SPIE Student Chapter, Nashville, TN (March 21, 2014)
- 338. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," Texas A&M University, Biomedical Engineering Department Seminar Series, College Station, TX (March 17, 2014)
- 339. A. Ozcan, "Computational Microscopy, Sensing and Diagnostics," Google, Mountain View,

- CA (February 27, 2014)
- 340. **A. Ozcan**, "Translational Research on Mobile Phone based Imaging, Sensing and Diagnostics Tools," KAUST University of Science and Technology, Saudi Arabia (February 10, 2014) (*Keynote Talk*)
- 341. **A. Ozcan**, "Cellphone based Imaging, Sensing and Diagnostics for Global Health," NCI-NIBIB Point of Care Technologies for Cancer Conference, National Institutes of Health (NIH), Bethesda, MD (January 8, 2014)
- 342. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics," University of California, Riverside, Department of Electrical Engineering, Riverside, CA (January 6, 2014)
- 343. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," Naval Health Research Center, San Diego, CA (December 11, 2013)
- 344. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," University of California, Davis, Department of Electrical and Computer Engineering, Davis, CA (December 6, 2013)
- 345. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," Turkish Innovation Week, Istanbul, Turkey (November 28, 2013)
- 346. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," MIT Lester Wolfe Workshop, Boston, MA (November 19, 2013)
- 347. **A. Ozcan**, "Giga-pixel Nanoscopy on a Chip: A Computational Wide-field Look at the Nanoscale Without the Use of Lenses," NIH Common Fund High-Risk High-Reward Research Symposium, National Institutes of Health (NIH), Bethesda, MD (November 18, 2013)
- 348. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," International Conference on Electronics Computer and Computation (ICECCO), Ankara, Turkey (November 8, 2013) (*Plenary Talk*)
- 349. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," ETH Zurich, Department of Biosystems Science and Engineering, Switzerland (November 1, 2013)
- 350. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," MicroTAS 2013 The 17th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Freiburg, Germany (October 29, 2013) (*Plenary Talk*)
- 351. **A. Ozcan**, "Smartphone based microscopy, biomedical sensing and diagnostics," MicroTAS 2013 The 17th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Workshop on Point-of-Care Platforms for Clinical Diagnostics, Freiburg, Germany (October 27, 2013)
- 352. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," Hewlett-Packard (HP) Laboratories R&D Engineering Seminar, Palo Alto, CA (October 23, 2013)
- 353. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," IEEE Global Humanitarian Technology Conference (GHTC), San Jose, CA (October 21, 2013) (*Plenary Talk*)
- 354. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," UC Berkeley EECS Department, Berkeley, CA (October 21, 2013)
- 355. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," University of Maryland, Qualcomm Microsystems Seminar Series, October 15, 2013, College Park, MD, USA
- 356. **A. Ozcan**, "Computational Imaging On a Chip," OSA Frontiers in Optics (FiO), October 7, 2013, Orlando, Florida, USA
- 357. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," Southern Illinois University, Department of Chemistry and Biochemistry, September 13, 2013, Carbondale, IL, USA
- 358. A. Ozcan, "Computational Imaging and Diagnosis for Telemedicine and Global Health," Ohio

- State University, Science Sundays, September 8, 2013, Columbus, OH, USA
- 359. **A. Ozcan**, "mHealth Technologies for Resource-Poor Settings," UCLA-NIH mHealth Summer Institute, August 27, 2013, Los Angeles, CA, USA
- 360. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," Bilkent University, International Workshop on Cleanroom Training for Critical and Sustainable Technologies, July 1, 2013, Ankara, Turkey (*Plenary Talk*)
- 361. **A. Ozcan**, "Computational On-chip Imaging," OSA Computational Optical Sensing and Imaging (COSI), June 27, 2013, Arlington, Virgina, USA
- 362. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," Sharp Laboratories of America, Technical and Innovation Colloquium, June 14, 2013, Camas, WA, USA
- 363. **A. Ozcan**, "Computational On-Chip Imaging Toward Telemedicine Applications," OSA Conference on Lasers and Electro-optics (CLEO '13), June 10, 2013, San Jose, CA USA
- 364. **A. Ozcan**, "Lensfree Computational Imaging," SPIE Optical Metrology Conference, May 16, 2013, Munich, Germany
- 365. **A. Ozcan**, Panelist on 'Bioscience Discoveries', Milken Institute Global Conference, May 1, 2013, Los Angeles, CA
- 366. **A. Ozcan**, "Cell phone-based imaging and sensing architectures," SPIE Defense, Security, and Sensing Conference, April 29 2013, Baltimore, USA
- 367. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics on a Cellphone," HIMSS Annual Health Care IT Conference, April 10, 2013, Los Angeles, CA
- 368. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," IEEE 8th International Conference on Intelligent Sensors, Sensor Networks and Information Processing (IEEE ISSNIP), April 5, 2013, Melbourne, Australia (*Plenary Talk*)
- 369. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," *Qualcomm Inc.*, March 27, 2013, San Diego, CA
- 370. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Faculty of Engineering and Natural Sciences, *Sabanci University*, March 22 2013, Istanbul, Turkey
- 371. **A. Ozcan**, "Computational Imaging Toward Digital Diagnosis and Telemedicine Applications," *Istanbul Technical University (ITU)*, March 21, 2013, Istanbul, Turkey
- 372. **A. Ozcan,** "Lensfree on-chip microscopy and tomography toward telemedicine applications," XXVI Image Analysis Course, University of La Laguna, Tenerife, Spain (March 5, 2013)
- 373. **A. Ozcan**, "Photonics-based Telemedicine Technologies toward Smart Global Health Systems," *AAAS Annual Meeting*, February 16, 2013, Boston, Massachusetts, USA
- 374. **A. Ozcan**, "Computational microscopy, sensing, and diagnostics on a cellphone," *IS&T SPIE Electronic Imaging Conference*, San Francisco, California (February 5, 2013)
- 375. **A. Ozcan,** "Lensfree on-chip microscopy and tomography toward telemedicine applications," *SPIE Photonics West*, Microfluidics, BioMEMS, and Medical Microsystems XI, San Francisco, California (February 4, 2013)
- 376. **A. Ozcan**, "Rapid and Cost-effective Blood Analysis on a Cellphone," Southern California Healthcare Technology Acceleration Program, University of California, San Diego (UCSD) von-Liebig Center, San Diego, California (January 29, 2013)
- 377. **A. Ozcan**, "Computational Imaging for Telemedicine and High-throughput Analysis," Cell Based Assays, Cell-Tech Conference, San Diego, California (January 22, 2013)
- 378. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," The Society for Laboratory Automation and Screening (SLAS) Annual Conference, Orlando, Florida (January 16, 2013)

- 379. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," ICFO The Institute of Photonic Sciences, SPIE Student Chapter Lecture, Barcelona, Spain (December 14, 2012)
- 380. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," Ben-Gurion University, SPIE Student Chapter Lecture, Israel (December 12, 2012)
- 381. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," SPIE 1st International Biophotonics Meeting in Israel, Tel Aviv, Israel (December 11, 2012) (*Plenary Talk*)
- 382. **A. Ozcan**, "Photonics based Telemedicine Technologies," National Informatics Congress, Ankara, Turkey (November 21, 2012)
- 383. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," University of California, Riverside, Bioengineering Department Colloquium, Riverside, CA (November 14, 2012)
- 384. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Nanjing University of Science and Technology, Advanced Laser Applications in Science and Engineering, Nanjing, China (November 2, 2012) (*Plenary Talk*)
- 385. **A. Ozcan**, "Computational Microscopy and Tomography Toward Telemedicine Applications," Cytometry Development Workshop, Monterey, CA (October 27, 2012)
- 386. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," University of Southern California (USC), Molecular and Computational Biology Seminar Series, Los Angeles, CA (October 19, 2012)
- 387. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," University of California, Irvine, College of Medicine, Medical Scientist Training Program, Lake Arrowhead, CA (October 6, 2012) (*Keynote Talk*)
- 388. **A. Ozcan**, "Optofluidic fluorescent imaging cytometry on a cellular phone," 2nd AMI-4-Europe Conference on Medical Imaging, Hannover, Germany (September 29, 2012) (*Keynote Talk*)
- 389. **A. Ozcan**, "Computational Microscopy and Tomography Tools for Telemedicine Applications," National Photonics Conference, Koc University, Istanbul, Turkey (September 14, 2012) (*Plenary Talk*)
- 390. **A. Ozcan**, "Computational Microscopy Toward Telemedicine Applications," Next Generation Medical Imaging Workshop, Carnegie Mellon University, Pittsburg, USA (September 5, 2012)
- 391. **A. Ozcan**, "Computational Imaging Tools for Point-of-care Diagnostics," IEEE Engineering in Medicine and Biology Society (EMBC'12), San Diego, CA, USA (August 30, 2012)
- 392. **A. Ozcan**, "Digital Diagnosis Using Cellphones," XIX International AIDS Conference, Washington, DC, USA (July 22 27, 2012)
- 393. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," OSA Imaging Systems and Applications (IS) & Applied Industrial Optics: Spectroscopy, Imaging and Metrology (AIO), June 27, 2012, Monterey, CA USA
- 394. **A. Ozcan**, "Digital Diagnosis Using Cellphones," USAID Frontiers in Development Forum, Georgetown University, June 12, 2012, Washington, DC
- 395. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," NSF CBET Conference, June 6, 2012, Baltimore, MD
- 396. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Stanford University, Optical Society, May 10, 2012, Stanford, CA
- 397. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," Electrical and Systems Engineering Department Seminar Series, University of Pennsylvania, April 26, 2012, Philadelphia, PA
- 398. **A. Ozcan**, "Lensfree on-chip microscopy and tomography" SPIE Defense, Security, and Sensing Conference, April 25 2012, Baltimore, USA

- 399. **A. Ozcan**, "New imaging and sensing architectures for telemedicine and global healthcare" SPIE Defense, Security, and Sensing Conference, April 23 2012, Baltimore, USA
- 400. **A. Ozcan**, "BioPhotonics Technologies for Global Health," 9th Annual Unite for Sight Global Health & Innovation Conference, Yale University, April 21, 2012, New Haven CT
- 401. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," American Institute of Physics (AIP) Industrial Physics Forum, International Centre for Theoretical Physics (ICTP), April 18, 2012, Trieste Italy
- 402. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Future Diagnostics Conference, University of California, Irvine, April 16, 2012, Irvine, CA
- 403. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Annual Meeting of Texas Society for Microscopy, April 13, 2012, Fort Worth, Texas
- 404. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Stanford Symposium for Biomedical Imaging, Stanford University, April 5, 2012, Stanford, CA
- 405. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," BioNJ Innovation Summit, Princeton University, March 14, 2012, Princeton, NJ
- 406. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," Turkish American Scientists and Scholars Association (TASSA) Annual Conference, University of Maryland, March 3, 2012, College Park, MD
- 407. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," *Google*, February 23, 2012, Venice, Los Angeles, CA
- 408. **A. Ozcan**, "Microscopy on a Cell-phone as a Diagnostic Tool," AAAS Annual Meeting, February 19, 2012, Vancouver, Canada
- 409. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," Italian National Conference on Sensors, February 17, 2012, Rome, Italy (*Plenary Talk*)
- 410. **A. Ozcan**, "Ultra-high Throughput On-Chip Microscopy and Cytometry Using Lensfree Computational Imaging," The Society for Laboratory Automation and Screening (SLAS) Annual Conference, February 8, 2012, San Diego, CA
- 411. **A. Ozcan**, "Microscopy on a Cellphone: An Emerging Telemedicine Platform," TEDx BigApple, Disruptive Ideas, February 4, 2012, New York, NY
- 412. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," SPIE Photonics West, Fellows Luncheon, January 23, 2012, San Francisco, CA
- 413. **A. Ozcan**, "Lensless Microscopy and Sensing on a Chip," SPIE Photonics West, Frontiers in Biological Detection: From Nanosensors to Systems, January 22, 2012, San Francisco, CA
- 414. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," University of California, San Diego (UCSD) Entrepreneur Challenge, January 11, 2012, San Diego, CA (*Plenary Talk*)
- 415. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," IEEE Engineering in Medicine and Biology Society (EMBS), Buenaventura Chapter, December 7, 2011, Thousand Oaks, CA
- 416. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," University of California, San Diego (UCSD) Electrical Engineering Department and von-Liebig Center, December 7, 2011, San Diego, CA
- 417. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," University of Colorado, Boulder, Computational Optical Sensing and Imaging (COSI) Seminar Series, November, 14 2011, Boulder, Colorado

- 418. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," mHealthSys Workshop Association for Computing Machinery (ACM) SenSys 2011, November, 1 2011, Seattle, Washington (*Plenary Talk*)
- 419. **A. Ozcan**, "Lensless Microscopy and Sensing on a Chip," Optical Society of America (OSA), Frontiers in Optics (FiO) Conference, October 19, 2011, San Jose, CA
- 420. **A. Ozcan**, "Lensfree Inexpensive Microscopy," Pathology Informatics Meeting, October 5, 2011, Pittsburgh, PA (*Plenary Talk*)
- 421. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography," European Optical Society (EOS) Topical Meeting on Optical Microsystems, September 26, 2011, Capri, Italy
- 422. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," Boston University, Department of Electrical and Computer Engineering, September 1, 2011 Boston, MA USA
- 423. **A. Ozcan**, "Use of Nano-structured Surfaces to Enable Higher Resolution Detector Arrays for Lensfree Imaging and Sensing on a Chip," Nanoelectronic Devices for Defense and Security Conference (Nano DDS), August 30, 2011, Brooklyn, New York
- 424. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," National Academies Panel on Harnessing Light: Capitalizing on Optical Science Trends and Challenges for Future Research, National Academies' Beckman Center, August 24, 2011, Irvine, CA, USA
- 425. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," NIH, National Cancer Institute, Workshop on Cancer Detection and Diagnostics Technologies for Global Health, August 22, 2011, Rockville, Maryland, USA
- 426. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," SPIE Optics and Photonics Conference, Keynote Speech, Student Leadership Workshop, August 21, 2011, San Diego, CA, USA
- 427. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Bio-Rad Laboratories, iTalk Series*, July 19, 2011, Hercules, CA
- 428. **A. Ozcan**, "Microscopy on a Cell-phone as a Diagnostic Tool," *UC San Diego*, *Wireless Health Innovation Challenge*; *Von Liebig Center*, 28 June 2011, San Diego, CA
- 429. **A. Ozcan**, "Lensfree On-Chip Imaging for Telemedicine and Battlefield Diagnostics" Office of Naval Research, Biosciences and Biocentric Technology Annual Program Review, 21 June 2011, Arlington, VA
- 430. **A. Ozcan**, "Lensfree Microscopy On a Chip," Microscopical Society of Canada, 38th Annual Meeting, June 7, 2011, Ottawa, Canada
- 431. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," ECI Advances in Optics for Biotechnology, Medicine & Surgery XII, June 5, 2011, Naples, Florida
- 432. **A. Ozcan**, "Lensfree On-Chip Microscopy and Tomography Toward Telemedicine Applications," *Applied Physics Seminar Series*, *Caltech*, May 18, 2011, Pasadena, CA
- 433. **A. Ozcan**, "Cost-Effective and Compact Microscopic Analysis and Diagnosis on a Cell Phone," World Reconstruction Conference, Innovation Competition Awardee, May 11, 2011, Geneva, Switzerland
- 434. **A. Ozcan**, "Lensfree Holographic Microscopy for Global Health Applications," OSA Digital Holography and Three Dimensional Imaging, May 9, 2011, Tokyo, Japan
- 435. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Arizona Cytology Association*, *Spring Seminar Series*, April 30, 2011, Tempe, Arizona

- 436. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," 8th Annual Unite for Sight Conference Global Health & Innovation, Yale University, April 17, 2011, New Haven CT
- 437. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *University of Southern California, W.V.T. Rusch Engineering Honors Colloquium*, April 15, 2011, Los Angeles CA
- 438. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Rice University, Global Health Technologies Symposium*, April 9, 2011, Houston TX
- 439. **A. Ozcan**, "Lensfree Microscopy On a Chip," *OSA Topical Meeting, Novel Techniques in Microscopy*, April 6, 2011, Monterey, CA
- 440. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Stanford University BioEngineering Department*, April 4, 2011, Stanford CA
- 441. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Harvard Global Infectious Diseases Symposium*, Harvard Medical School, March 28, 2011, Boston MA
- 442. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *IBM T. J. Watson Research Center*, Physical Sciences Seminar, 11 March 2011, Yorktown Heights, New York
- 443. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," World Bank, Human Development Forum, 1 March 2011, Washington DC
- 444. **A. Ozcan**, "Telemedicine Devices for Surveillance of Infectious Diseases," *Framework Programs for Global Health and Signature Innovation Initiative Meeting*, NIH campus, 17 February 2011, Bethesda, MD
- 445. **A. Ozcan**, "Microscopy on a Cell-phone as a Diagnostic Tool," *UC San Diego*, *TATRC/Qualcomm Wireless Health Innovation Challenge*, 1 February 2011, San Diego, CA
- 446. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," Bogazici University, Biomedical Engineering Institute, 29 December 2010, Istanbul Turkey
- 447. **A. Ozcan**, "Lab-on-a-Cellphone as an Emerging Telemedicine Platform," *University of California, Global Health Day, UCI Campus* 30 November 2010, Irvine CA
- 448. **A. Ozcan**, "Lensfree Imaging for Microscopy and Diagnostics," *First Look LA Meeting, USC Campus* 16 November 2010, Los Angeles CA
- 449. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *UC Irvine Biomedical Engineering Department Seminar Series*, 12 November 2010, Irvine CA
- 450. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *mHealth Summit*, 9 November 2010, Washington DC
- 451. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Los Angeles IDEA Project*, 7 November 2010, Los Angeles
- 452. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *LAUNCH: Health Forum, NASA Kennedy Space Center*, 31 October 2010, Orlando
- 453. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Future Trends Conference*, 18 October 2010, Miami, Florida
- 454. **A. Ozcan**, "Lensfree On-Chip Imaging for Telemedicine and Battlefield Diagnostics" Office of Naval Research, 14 October 2010, Washington DC
- 455. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Body Computing Conference, University of Southern California*, 23 September 2010, Los Angeles, CA

- 456. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Google*, 10 September 2010, Mountain View, CA
- 457. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Cisco*, 2 August 2010, Milpitas, CA
- 458. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Google-Nature-O'Reilly Science Foo Camp'10, Google Headquarters*, 1 August 2010, Mountain View, CA
- 459. **A. Ozcan**, "Telemedicine Microscopy toward Smart Global Health Systems" National Geographic Explorers Symposium, 9 June 2010, Washington DC
- 460. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" Frontiers in Photonics Seminar Series, University of California, Irvine, 14 May 2010, Irvine CA
- 461. **A. Ozcan**, "Lensfree On-Chip Imaging for Telemedicine and Battlefield Diagnostics" Office of Naval Research, Biosciences and Biocentric Technology Annual Program Review, 7 May 2010, Arlington, VA
- 462. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" Photonics Seminar Series, University of Southern California (USC), 28 April 2010, Los Angeles CA
- 463. **A. Ozcan**, "Incoherent Lensfree Cell Holography for Global Health Applications" 7th International Conference on Optics-Photonics Design and Fabrication, (April 19-21 2010) Yokohoma, Japan
- 464. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" Optical Society of Southern California Monthly Meeting, 13 April 2010, Los Angeles CA
- 465. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" Stanford University Electrical Engineering Department, 12 April 2010, Stanford CA
- 466. **A. Ozcan**, "Lensless digital holography for telemedicine" SPIE Defense, Security, and Sensing Conference, Photonic Microdevices/Microstructures for Sensing, (April 5-9 2010) Orlando, USA
- 467. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" UC Berkeley EECS Department, 12 March 2010, Berkeley CA
- 468. **A. Ozcan**, "Incoherent Lensfree Imaging" AFOSR Electromagnetics Contractor's Meeting, 6 January 2010, San Antonio TX
- 469. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" Stanford University Electrical Engineering Department, 11 December 2009, Stanford CA
- 470. **A. Ozcan**, Panelist at Vodafone Americas Foundation's Wireless Innovations Project Workshop, University of California, San Francisco, 10 December 2009, San Francisco CA
- 471. **A. Ozcan**, "Imaging of Cell Shadows for Global Health and Telemedicine Applications," *The Council of Scientific Society Presidents, Annual Meeting*, 6 December 2009, Washington, DC
- 472. **A. Ozcan**, "Imaging of Cell Shadows for Global Health and Telemedicine Applications," *PopTech 2009 Conference*, 23 October 2009, Camden, ME
- 473. **A. Ozcan**, "Lensfree On-Chip Imaging for Telemedicine Applications" 2009 CMOS Emerging Technologies Workshop, Vancouver, Canada
- 474. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *MIT Media Labs*, 22 September 2009, Cambridge, MA
- 475. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *Vodafone Ventures Conference*, 10 September 2009, London, UK
- 476. **A. Ozcan**, "Lensfree On-Chip Imaging for Telemedicine Applications" IEEE Photonics Society, 2009 Optical MEMS and NanoPhotonics Conference, (August 17-20, 2009) Florida

- 477. **A. Ozcan**, "Lensfree On-Chip Imaging for Telemedicine Applications" Engineering Conferences International, Advances in Optics for Biotechnology, Medicine and Surgery XI, Clinical Challenges and Research Solutions, Burlington, Vermont, 2009
- 478. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *Lockheed Martin Fellows Conference*, 6 April 2009, Carlsbad, CA
- 479. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *UCLA Center for Embedded Networked Sensors*, 20 February 2009, Los Angeles, CA
- 480. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *Abbott Hematology Laboratories*, 6 February 2009, Santa Clara, CA
- 481. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *Google*, 27 January 2009, Mountain View, CA
- 482. **A. Ozcan**, "A new tool for TeleMedicine: High-throughput On Chip Cytometry and Diagnostics," *UCLA Global Health Workshop, Enhancing the Health of Women and Children Globally*, 23 October 2008, Los Angeles, CA
- 483. **A. Ozcan**, "A new tool for Wireless Health: High-throughput On Chip Cytometry and Diagnostics," *UCLA Bio-Engineering Department Seminar Series*, 16 October 2008, Los Angeles, CA
- 484. **A. Ozcan**, "High-throughput On Chip Cytometry and Diagnostics," *Lehigh University, Center for Optical Technologies Annual Open House*, 13-14 October 2008, Bethlehem, PA.
- 485. **A. Ozcan**, "High-throughput On Chip Cytometry and Diagnostics," *University of Tokyo*, *CNSI-CNBI Symposium on NanoBioTechnology*, 8-9 September 2008, Tokyo, Japan
- 486. **A. Ozcan**, "High-throughput On Chip Cytometry and Diagnostics," *Kyoto University, Joint Nano-Bio Workshop*, 10 September 2008, Tokyo, Japan
- 487. **A. Ozcan**, "High-throughput On Chip Cytometry and Diagnostics," *Kyushu University*, Global COE Joint Symposium, 11 September 2008, Fukuoka, Japan
- 488. **A. Ozcan**, "High-throughput Imaging and Characterization of a Heterogeneous Cell Solution On Chip," *California Institute of Technology, Electrical Engineering Department*, 16 May 2008, Pasadena, CA
- 489. **A. Ozcan**, "Differential near-field scanning optical microscopy based on sensor arrays,", SPIE *Photonics West*, 19-24 January 2008, San Jose, CA, paper # 6865-7
- 490. **A. Ozcan**, "Ultra wide-field Lensless Monitoring of Cells on Chip," *Iris International Inc.*, 20 November 2007, Los Angeles, CA
- 491. **A. Ozcan**, "New Concepts in Nano- and Bio-Imaging," *University of California, Los Angles, Electrical Engineering Department*, 23 April 2007, Los Angeles CA
- 492. **A. Ozcan**, "New Concepts in Nano- and Bio-Imaging" *Northeastern University, Physics Department*, 12 April 2007, Boston MA
- 493. **A. Ozcan**, "New Concepts in Nano- and Bio-Imaging" *Georgia Institute of Technology, The School of Electrical and Computer Engineering*, 05 March 2007, Atlanta GA
- 494. **A. Ozcan**, "Differential Near-Field Scanning Optical Microscopy" *Harvard Medical School*, Annual Wellman Retreat, 02 November 2006, Boston MA
- 495. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimum-phase functions" Berkeley Optoelectronics Seminar Series (BOSS), *University of California*, *Berkeley*, 18 November 2005, Berkeley, CA
- 496. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimum-phase functions" Lawrence Berkeley National Laboratory, *University of California*, *Berkeley*, 29 September 2005, Berkeley, CA

- 497. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimumphase functions" The Research Laboratory of Electronics, *Massachusetts Institute of Technology*, 23 September 2005, Boston, MA
- 498. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimumphase functions" Massachusetts General Hospital, *Harvard Medical School*, 20 September 2005, Boston, MA
- 499. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimumphase functions" BioEngineering Department, *California Institute of Technology*, 12 September 2005, Pasadena, CA
- 500. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimum-phase functions" BioEngineering Department, *University of California*, *Berkeley*, 6 September 2005, Berkeley, CA
- 501. **A. Ozcan**, "Non-destructive characterization tools using spectral interferometry and minimum-phase functions" The Research Laboratory of Electronics, *Massachusetts Institute of Technology*, 25 August 2005, Boston, MA
- 502. **A. Ozcan**, "Second-order nonlinearities in silica" Faculty of Engineering and Natural Sciences, *Sabanci University*, 3 January, 2005, Istanbul, Turkey

OTHER TECHNICAL PRESENTATIONS

- 1. **A. Ozcan**, "Virtual Staining of Label-free Tissue Using Deep Learning," UCLA Bioengineering Research Day, February 16, 2024, Los Angeles, CA, USA (*Plenary Talk*)
- 2. **A. Ozcan**, "Deep-Learning-Enabled Computational Microscopy & Diffractive Imaging," UCLA Biomedical Electronics Symposium, April 29, 2023, Los Angeles, CA
- 3. **A. Ozcan**, "Deep Learning-enabled Microscopy and Sensing," UCLA Bioengineering Research Day, February 11, 2022, Los Angeles, CA, USA (*Keynote Talk*)
- 4. **A. Ozcan**, "Mobile Microscopy, Telemedicine and Deep Learning," Science Embassadors Conference, Sabanci University, May 4, 2019, Istanbul, Turkey
- 5. **A. Ozcan**, "Deep Learning Optics," The Annual Symposium of the Peking University-UCLA Joint Research Institute in Science and Engineering (JRI), October 15, 2018, Los Angeles, CA, USA
- 6. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnostics for Point-of-Care Medicine and Global Health," Biotech Connection Los Angeles (BCLA), Biotech Networking Mixer, December 5, 2017, Los Angeles, CA, USA
- 7. **A. Ozcan**, "Sensing and Diagnotics Techologies for Mobile Health and Telemedicine," UCLA Chancellor's Society, Parents and Alumni Event, 5 December 2017, Newport Beach, CA
- 8. **A. Ozcan**, "Engineering and Medicine Panel: The Future of our Health," Bruin Engineers' Reunion, UCLA, 10 June 2017, Los Angeles CA
- 9. **A. Ozcan**, "Undergraduate Research and Training on Mobile Health and Telemedicine Technologies," Korean American Scientists and Engineers Association Southern California Major Fair, UCLA, 15 October 2016, Los Angeles CA (*Keynote Talk*)
- 10. **A. Ozcan**, "Undergraduate Research and Training on Mobile Health and Telemedicine Technologies," UCLA Undergraduate Open House, 8 October 2016, Los Angeles CA
- 11. **A. Ozcan**, "Mobile Microscopy, Sensing and Diagnotics Techologies," UCLA Microbiome Center Lecture Series, Los Angeles, CA (April 15, 2016)
- 12. **A. Ozcan**, "Sensing and Diagnotics Techologies for Mobile Health and Telemedicine," UCLA Chancellor's Society, Parents and Alumni Event, San Francisco, CA (February 28, 2016)
- 13. **A. Ozcan**, "Democratization of Next-Generation Imaging, Diagnostics and Measurement Tools Through Computational Photonics", Karabuk University, Turkey, May 6, 2015 (Webinar)
- 14. A. Ozcan, "Computation Microscopy, Sensing and Diagnostics," High School Summer Research

- Program, University of California, Los Angeles, CA (August 5, 2014)
- 15. **A. Ozcan**, "Frontier Medicine", The Next Billion A Forum Presented by Quartz, Seattle Art Museum, Seattle, WA (June 2, 2014)
- 16. **A. Ozcan**, "Computation Microscopy, Sensing and Diagnostics," Engineering Tech Forum, University of California, Los Angeles, CA (February 6, 2014)
- 17. **A. Ozcan**, "Next-Generation Imaging and Diagnostics through Mobile Phones," HIV Interest Meeting, University of California, Los Angeles, CA (February 1, 2014)
- 18. **A. Ozcan**, "Crowd-sourced Games for Telepathology," Citizen Science and Libraries Program, Natural History Museum of Los Angeles, CA (December 13, 2013)
- 19. **A. Ozcan**, "Computational Imaging, Sensing and Diagnostics," *California NanoSystems Institute* (*CNSI*), University of California, Los Angeles, December 4, 2013, Los Angeles, CA
- 20. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *David Geffen School of Medicine*, University of California Los Angeles, November 14, 2013, Los Angeles, CA
- 21. **A. Ozcan**, "Innovations in Photonics," *UCLA Foundation Governors' Salon*, University of California Los Angeles, September 10, 2013, Los Angeles, CA
- 22. **A. Ozcan**, "Computational Microscopy, Sensing and Diagnostics for Telemedicine and Global Health Applications," *School of Engineering Tech Forum*, University of California Los Angeles, May 8, 2013, Los Angeles, CA
- 23. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *School of Public Health, Center for Global and Immigrant Health*, University of California Los Angeles, February 15, 2012, Los Angeles, CA
- 24. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *CNSI- CEA/LETI/CLINATEC Joint Symposium*, University of California Los Angeles, February 3, 2012, Los Angeles, CA
- 25. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *CNSI- Swedish Medical NanoScience Center Joint Symposium*, University of California Los Angeles, January 30, 2012, Los Angeles, CA
- 26. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Department of Materials Science and Engineering*, University of California Los Angeles, December 2, 2011, Los Angeles, CA
- 27. **A. Ozcan**, "Cellphone Microscopy toward Smart Telemedicine Systems," *UCLA Parents' Weekend*, October 28, 2011, Los Angeles, CA
- 28. **A. Ozcan**, "Telemedicine Microscopy toward Smart Global Health Systems," *Science*, *Engineering*, & *Technology for Story Tellers*, Universal Studios, Burbank, July 14, 2011, Los Angeles, CA
- 29. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *Medical Innovation Interest Group, UCLA Medical School*, May 25, 2011, Los Angeles, CA
- 30. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems," *UCLA Alumni Meeting*, May 17, 2011, Santa Ana, CA
- 31. **A. Ozcan**, "Telemedicine Microscopy toward Smart Global Health Systems," *UCLA Electrical Engineering Open House*, 10 April 2011, Los Angeles CA
- 32. **A. Ozcan**, "Telemedicine Microscopy toward Smart Global Health Systems," *UCLA School of Engineering Advisory Board Meeting*, 7 April 2011, Los Angeles CA
- 33. **A. Ozcan**, "Use of Sub-wavelength Metallic Apertures to Enable Higher Resolution Sensor-Arrays," AFOSR Electromagnetics Contractor's Meeting, 5 January 2011, San Antonio TX
- 34. **A. Ozcan**, "Lab-on-a-Cellphone as an Emerging Telemedicine Platform," *Institute of Technology Advancement, UCLA School of Engineering* 2 December 2010, Los Angeles CA

- 35. **A. Ozcan**, "Photonics based Telemedicine Technologies toward Smart Global Health Systems" *University of California, Los Angeles* Early Bird Engineers Summer School, School of Engineering, 5 August 2010, Los Angeles CA
- 36. **A. Ozcan**, "Telemedicine Microscopy toward Smart Global Health Systems" *University of California, Los Angeles* CNSI SCI|ART NanoLab Summer School, 30 June 2010, Los Angeles CA
- 37. **A. Ozcan**, "High-throughput on-chip cytometry," CNSI and KINC/KAIST Joint Symposium, 19 August 2008, Los Angeles CA
- 38. **A. Ozcan**, "High-throughput lensfree cell characterization on a chip," *University of California*, *Los Angeles* CNSI Member Luncheon, 9 July 2008, Los Angeles CA
- 39. **A. Ozcan**, "High-throughput cell characterization on a chip," *University of California, Riverside, Center for NanoScience Innovation for Defense Annual Review*, 17 June, 2008, Riverside CA
- 40. **A. Ozcan**, "Ultra wide-field Lensless Monitoring of Cells on Chip," *University of California, Los Angles, Electrical Engineering Department Annual Research Review*, 28 January, 2008, Los Angeles CA
- 41. **A. Ozcan**, "Differential Near-field Scanning Optical Microscopy," *University of California, Los Angles, Center for NanoScience Innovation for Defense Annual Review*, 4 December, 2007, Los Angeles CA
- 42. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Feasibility study of air-core fiber tapers" *Northrop Grumman Corporation Litton Review*, 7 October, 2005, Stanford University, Stanford, CA
- 43. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Non-destructive characterization tools using spectral interferometry and minimum-phase functions" *Northrop Grumman Corporation Litton Review*, 7 October, 2005, Stanford University, CA
- 44. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Electro-optic poled silica devices" *Northrop Grumman Corporation Litton Review*, 25 February, 2005, Stanford University, Stanford, CA
- 45. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Spectral characterization using minimum phase functions" *Northrop Grumman Corporation Litton Review*, 25 February, 2005, Stanford University, Stanford, CA
- 46. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Application of the Fienup algorithm to characterize fiber Bragg gratings" *Northrop Grumman Corporation Litton Review*, 16 July, 2004, Stanford University, Stanford, CA
- 47. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Iterative processing technique to retrieve second-order optical nonlinearity profiles" *Northrop Grumman Corporation Litton Review*, 16 July, 2004, Stanford University, Stanford, CA
- 48. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Dependence of the induced nonlinearity profile on poling conditions" *Northrop Grumman Corporation Litton Review*, 16 July, 2004, Stanford University, Stanford, CA
- 49. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Electro-optic poled silica devices" *Northrop Grumman Corporation Litton Review*, 16 July, 2004, Stanford University, Stanford, CA
- 50. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Second-order nonlinear material characterization" *Northrop Grumman Corporation Litton Review*, 21 November, 2003, Stanford University, Stanford, CA
- 51. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Advances in thermal poling of glasses" *Northrop Grumman Corporation Litton Review*, 21 November, 2003, Stanford University, Stanford, CA
- 52. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Second-order nonlinear material characterization" *Northrop Grumman Corporation Litton Review*, 16 May, 2003, Stanford University, Stanford, CA

- 53. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Second-order nonlinear material characterization" *Stanford Photonics Research Center (SPRC) Mixer*, 28 February, 2003, Stanford University, Stanford, CA (poster presentation)
- 54. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Progress on Si₃N₄ and TiO₂ thermal poling" *Northrop Grumman Corporation Litton Review*, 26 September, 2002, Stanford University, Stanford, CA
- 55. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "A solution to optical phase problems" *Northrop Grumman Corporation Litton Review*, 26 September, 2002, Stanford University, Stanford, CA
- 56. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Measurement of optical $\chi^{(3)}$ of TiO₂ films" *Northrop Grumman Corporation Litton Review*, 26 September, 2002, Stanford University, Stanford, CA
- 57. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Nonlinearity profile in glasses" *Northrop Grumman Corporation Litton Review*, 1 February, 2002, Stanford University, Stanford, CA
- 58. **A. Ozcan**, U. L. Block, M. J. F. Digonnet, and G. S. Kino, "Reducing the polarization dependence of mechanically induced LPBGs " *Northrop Grumman Corporation Litton Review*, 19 June, 2001, Stanford University, Stanford, CA
- 59. **A. Ozcan**, M. J. F. Digonnet, and G. S. Kino, "Nonlinearity profile in glasses" *Northrop Grumman Corporation- Litton Review*, 19 June, 2001, Stanford University, Stanford, CA
- 60. **A. Ozcan**, U. L. Block, M. J. F. Digonnet, and G. S. Kino, "Mechanically-induced long-period fiber gratings: A simple, polarization-independent device" *Northrop Grumman Corporation Litton Review*, 10 November, 2000, Stanford University, Stanford, CA

IN THE NEWS – PRESS COVERAGE

- 1. IEEE Photonics Society Illuminated Podcast Series, "Pioneering Biomedical Imaging with Computational Tools," 2/2024
- 2. Phys.Org, "Image denoising using a diffractive material," 2/2024
- 3. Photonics Spectra, "<u>Deep Learning-Driven Terahertz System Captures Multispectral Images in</u> Real Time," 1/2024
- 4. SPIE Newsroom, "Optical computing boost with diffractive network advance," 1/2024
- 5. Phys.Org, "Performing complex-valued linear transformations using spatially incoherent diffractive optical networks," 1/2024
- 6. EurekAlert, "New method for addressing the reliability challenges of neural networks in inverse imaging problems," 1/2024
- 7. Laser Focus World, "<u>Terahertz focal-plane array enables real-time, super-resolution imaging</u>," 1/2024
- 8. Venture, "Most Influential Biotech Startups Shaping the Future in Los Angeles," 11/2023
- 9. Advanced Science News (Wiley), "How label-free, super-resolution imaging will push microscopy's limits," 11/2023
- 10. UCLA Newsroom, "Over three dozen UCLA faculty listed among world's most influential researchers," 11/2023
- 11. Phys.Org, "<u>Team develops new method for communicating around arbitrary opaque walls</u>," 11/2023
- 12. SPIE News, "Doctor in your pocket: Here come smartphone diagnostics," 11/2023
- 13. Phys.Org, "<u>Detecting hidden defects in materials using a single-pixel terahertz sensor</u>," 11/2023
- 14. Phys.Org, "High-throughput terahertz imaging: Progress and challenges," 10/2023
- 15. EurekAlert, "<u>Diffractive networks enable quantitative phase imaging (QPI) through random diffusers</u>," 9/2023

- 16. IEEE Photonics Society, "Making Holographic Imaging Faster, Higher Resolution and More Efficient," 9/2023
- 17. Tech Xplore, "<u>Diffractive optical network enables multispectral quantitative phase imaging in a snapshot</u>," 9/2023
- 18. Optics.Org, "<u>UCLA improves 'hi-fi' data transmission with novel electro-optical method</u>," 8/2023
- 19. Wiley Analytical Science, "New diffractive optical network to uncover the unknown," 8/2023
- 20. Phys.Org, "A new route for universal polarization transformations of spatially varying polarization fields," 8/2023
- 21. SPIE Newsroom, "<u>High-fidelity transmission of information via novel electronic-optical</u> system," 8/2023
- 22. Photonics Media, "Optical Processor Captures Scenes in Spatially Incoherent Light," 8/2023
- 23. EurekAlert, "<u>Universal linear processing of spatially incoherent light through diffractive</u> optical networks," 8/2023
- 24. Wiley Analytical Science, "Reconstructing microscopic images from holograms," 8/2023
- 25. Optica, Optics & Photonics News (OPN), "AI Model Swaps Datasets for Physics," 8/2023
- 26. Phys.Org, "<u>Universal linear processing of spatially incoherent light through diffractive optical networks</u>," 8/2015
- 27. EurekAlert, "Self-supervised AI learns physics to reconstruct microscopic images from holograms," 8/2023
- 28. Optics.Org, "Phase imaging catches sight of obscured objects," 7/2023
- 29. Phys.Org, "<u>Diffractive networks enable quantitative phase imaging (QPI) through random diffusers</u>," 7/2023
- 30. The Daily Science, "New technology could speed up viral plaque detection by days," 6/2023
- 31. EurekAlert, "New rapid viral plaque detection system, aided by deep learning and holographic imaging, can help accelerate vaccine and drug development," 6/2023
- 32. Photonics Media, "Paper-Based Test Scans for Multiple Biomarkers," 5/2023
- 33. Tech Xplore, "AI-designed unidirectional imagers," 5/2023
- 34. Medical Xpress, "A rapid and inexpensive paper-based test for multiplexed sensing of biomarkers," 5/2023
- 35. Tech Xplore, "Data class-specific image encryption using optical diffraction," 5/2023
- 36. Photonics Spectra, "<u>Diffractive Optical Network Enables Snapshot Multispectral Imaging</u>," 4/2023
- 37. Phys.Org, "Snapshot multispectral imaging using a diffractive optical network," 4/2023
- 38. Wiley Analytical Science, "Microscopy: the ones to watch," 3/2023
- 39. SPIE Newsroom, "Deep learning: A powerful tool for biophotonics in labs and clinics" 3/2023
- 40. Communications of the ACM, "Optical Computing for Object Classification Through Diffusive Random Media," 3/2023
- 41. Medical Xpress, "AI-based staining of biological samples," 3/2023
- 42. Tech Xplore, "Optical computing for object classification through diffusive random media," 3/2023
- 43. Tech Xplore, "Diffractive optical networks use object shifts for performance boost," 2/2023
- 44. IEEE Spectrum, "Optical AI Could Feed Voracious Data Needs," 1/2023
- 45. SPIE News, "Healthcare's wearable future," 1/2023
- 46. Tech Xplore, "Wavelength-multiplexed diffractive optical processor computes hundreds of linear transformations in parallel" 1/2023
- 47. Phys.Org, "<u>Deep learning-designed diffractive processor computes hundreds of transformations in parallel</u>," 1/2023
- 48. The Microscopists Interviews, https://www.youtube.com/watch?v=2Cgmh2pg-Yc 1/2023

- 49. The Economist, "Artificial intelligence and the rise of optical computing," 12/2022
- 50. Los Angeles Business Journal, "PictorLabs Launches with More Than \$18 Million in Funding," 12/2022
- 51. EurekAlert, "3D-printed decoder, AI-enabled image compression could enable higher-res displays," 12/2022
- 52. UCLA Newsroom, "Nearly 40 UCLA scholars are among the most highly cited researchers in their fields," 11/2022
- 53. Medical Xpress, "<u>Deep learning–based virtual staining of tissue facilitates rapid assessment of breast cancer biomarker,</u>" 10/2022
- 54. ScienMag, "Artificial intelligence methods may replace histochemical staining," 10/2022
- 55. EurekAlert, "<u>Deep learning-based virtual staining of tissue facilitates rapid assessment of breast cancer biomarker,</u>" 10/2022
- 56. Nature, "Five ways deep learning has transformed image analysis," 9/2022
- 57. KCBS Radio, "<u>UCLA's 'ultra secure' AI camera only records what it's programmed for</u>," 9/2022
- 58. EurekAlert, "Neural network speeds holographic image reconstruction for biological samples," 9/2022
- 59. Photonics Media, "Cascaded Neural Networks Help Virtually Re-Stain Tissue Samples," 9/2022
- 60. Wiley Analytical Science, "AI-designed camera only records objects of interest," 9/2022
- 61. Optica, Optics & Photonics News (OPN) "Deep Design for Optical Devices" 9/2022
- 62. Phys.Org, "Neural network speeds holographic image reconstruction for biological samples," 9/2022
- 63. New Scientist, "AI-created lenses let camera ignore some objects when taking pictures," 8/2022
- 64. Phys.Org, "Chemical-free re-staining of tissue using deep learning," 8/2022
- 65. Practical Patient Care, "AI's helping hand," 8/2022
- 66. Tech Xplore, "Superior phase recovery and hologram reconstruction using a deep neural network," 8/2022
- 67. Gizmodo, "Researchers Invent a Privacy-Preserving Camera That Only Captures What You Want," 8/2022
- 68. Inverse, "This high-tech camera may help protect our identities," 8/2022
- 69. PetaPixel, "This AI Camera Protects Your Privacy by Only Recording Specific Targets," 8/2022
- 70. Tech Xplore, "AI-designed camera only records objects of interest while being blind to others," 8/2022
- 71. Photonics Spectra, "Diffractive Optical Network Supports Quantitative Phase Imaging," 8/2022
- 72. Photonics Media, "Expanding the Range: Wearables Enable the Next Level of Mobile Health Data Monitoring," 7/2022
- 73. Tech Xplore, "<u>Deep learning accelerates the detection of live bacteria using thin-film transistor arrays</u>," 7/2022
- 74. Phys.Org, "<u>All-optical computation of a group of transformations using a polarization-encoded diffractive network</u>," 5/2022
- 75. Wiley Analytical Science, "Quantitative phase imaging without a computer," 5/2022
- 76. Photonics Media, "Diffractive Optical Network Supports Quantitative Phase Imaging," 5/2022
- 77. Phys.Org, "<u>All-optical phase recovery and quantitative phase imaging performed instantly without a computer</u>," 5/2022
- 78. BioTechniques, "Democratizing microscopy and diagnostics and developing digital holography: an interview with Aydogan Ozcan," 4/2022
- 79. Wiley Analytical Science, "A fresh take on microscopy," 3/2022
- 80. SPIE News, "Next-gen imaging takes pictures that speak a million pixels," 3/2022

- 81. Optica, "Optica Names Aydogan Ozcan the 2022 Joseph Fraunhofer Award/Robert M. Burley Prize Recipient," 3/2022
- 82. SPIE News, "BiOS Hot Topics: Imaging techniques break new ground," 2/2022
- 83. EurekAlert (AAAS), "Seeing through random diffusers instantly without a computer," 1/2022
- 84. Dark Daily, "<u>UCLA's Virtual Histology Could Eliminate Need for Invasive Biopsies for Some Skin Conditions and Cancers,</u>" 1/2022
- 85. Daily Bruin, "*UCLA researchers streamline skin tissue analysis with virtual staining technique*," 1/2022
- 86. Physics World, IOP (Institute of Physics), "Virtual histology may reduce the need for skin biopsies," 1/2022
- 87. Photonics Media, "AI Imaging Method Provides Biopsy-free Skin Diagnosis," 1/2022
- 88. Finding Genius Podcast, "How AI Technology Is Helping Scientists Study Biopsies Smarter, Better, and Faster," 1/2022
- 89. Diagnostics World, "Virtual Histology Moving Closer To Clinical Adoption" 12/2021
- 90. MD+DI: Medical Device and Diagnostic Industry, "Can This New Tech Reduce the Need for Skin Biopsies?" 12/2021
- 91. Photonics Media, "Histology Process Bypasses Need for Biopsies, Enables Diagnoses," 11/2021
- 92. Oncology Tube, "New imaging technology developed by UCLA research team may reduce need for skin biopsies" 11/2021
- 93. Daily Bruin, "Researchers at UCLA develop computer-free technology for deciphering holograms," 11/2021
- 94. Wiley Analytical Science, "Virtual staining set to reduce need for skin biopsies," 11/2021
- 95. Optics.Org, "UCLA deep-learning reduces need for invasive biopsies," 11/2021
- 96. UCLA Health Newsroom, "New imaging technology developed by UCLA research team may reduce need for skin biopsies," 11/2021
- 97. Phys.Org, "<u>Diffractive optical networks reconstruct holograms instantaneously without a digital computer</u>," 11/2021
- 98. UCLA Newsroom, "43 UCLA scholars among most highly cited researchers for 2021" 11/2021
- 99. Physics World IOP (Institute of Physics), "All-optical processors could compute any linear transformation, machine learning reveals," 10/2021
- 100. Light: Science & Applications (Springer Nature), "Light People: Professor Aydogan Ozcan," 10/2021
- 101. Phys.Org, "Light computes any desired linear transform without a digital processor," 9/2021
- 102. Science Daily, "Artificial intelligence re-stained images of tissue biopsy expedite diagnoses," 8/2021
- 103. AI in Healthcare, "AI enables much faster pathology for life-or-death interventions," 8/2021
- 104. Photonics Media, "<u>Deep Learning-Trained Neural Network Reconstructs OCT Images</u>," 8/2021
- 105. Phys.Org, "Deep learning and holography create a better point-of-care sensor," 8/2021
- 106. The Analytical Scientist, "Empowering the Analytical Scientist in Everyone," 7/2021
- 107. Phys.Org, "<u>Deep learning improves image reconstruction in optical coherence tomography</u> using less data," 7/2021
- 108. Wiley Analytical Science, "Artificial intelligence delivers faster holographic imaging," 6/2021
- 109. Phys.Org, "Rapid measurement of aerosol volatility using a deep learning-based portable microscope," 6/2021
- 110. IEEE Spectrum, "Do You Believe in Science? Then Take This Pledge," 5/2021

- 111. Photonics Media, "Single-Pixel Detector Classifies Images Using Diffractive Optical Network," 4/2021
- 112. American Association for Clinical Chemistry (AACC), Clinical Laboratory News, "<u>Artificial Intelligence Is Poised to Transform Point-of-Care Testing</u>," 4/2021
- 113. Phys.Org, "Object classification through a single-pixel detector," 3/2021
- 114. EurekAlert, "Recurrent neural network advances 3D fluorescence imaging," 3/2021
- 115. Laser Focus World, "<u>Deep learning enables single-shot autofocus in microscopy applications</u>," 2/2021
- 116. OSA Optics & Photonics News (OPN), "Shaping Light Pulses with Deep Learning" 2/2021
- 117. Phys.Org, "Researchers create low-cost, AI-powered device to measure optical spectra" 2/2021
- 118. Nature Photonics, "Machine learning with light" 1/2021
- 119. Microscopy & Analysis, "'Deep-R' delivers single-shot autofocusing" 1/2021
- 120. Phys.Org, "Optical network shapes pulses of light" 1/2021
- 121. Photonics Media, "Deep Learning-Designed Network Shapes Light Pulse" 1/2021
- 122. EurekAlert, "Diffractive networks light the way for optical image classification" 1/2021
- 123. UCLA Newsroom, "37 UCLA scientists among world's most influential researchers" 11/2020
- 124. Nature Methods, "Smart solutions for automated imaging," 10/2020
- 125. Photonics Media, "Portable Microscopy Leverages Advancements in Electronics and Computing," 9/2020
- 126. SPIE News, "What's in your water?," 9/2020
- 127. Biophotonics World, "<u>Deep learning enables early detection and classification of live bacteria using holography</u>," 7/2020
- 128. Nature Photonics, "Machine intelligence lights up imaging," 4/2020
- 129. SPIE News, "Artificial Intelligence Set to Assist Doctors in Low-resource Settings," 3/2020
- 130. Communications of the ACM (Association for Computing Machinery), "Optical System Could Lead to Devices That Can Recognize Objects Instantly," 3/2020
- 131. Photonics Spectra, "Advancements in Holography Usher In Sci-Fi-Inspired Devices," 1/2020
- 132. Phys.Org, "Paper-based test could diagnose Lyme disease at early stages," 12/2019
- 133. Photonics Media, "Ozcan Labs, UCLA Publish Method on Machine Learning Using Continuum of Wavelengths," 12/2019
- 134. Microscopy and Analysis, "Artificial Intelligence converts 2D images into 3D," 11/2019
- 135. Phys.Org, "Researchers convert 2-D images into 3-D using deep learning," 11/2019
- 136. Daily Bruin, "<u>UCLA researchers develop prototype to more efficiently detect rare cells in blood,</u>" 10/2019
- 137. Phys.Org, "<u>AI-based cytometer detects rare cells in blood using magnetic modulation and deep learning</u>," 10/2019
- 138. Photonics Media, "Lens-Free Microscopy Focuses on Commercialization," 9/2019
- 139. Science Daily, "Optical neural network could lead to intelligent cameras," 8/2019
- 140. Laser Focus World, "With new differential detection scheme, all-optical diffractive neural networks get performance boost," 8/2019
- 141. Photonics Spectra, "Wearable Sensors Challenge Traditional Medical Technology," 8/2019
- 142. Nature Biomedical Engineering, "Computational staining of unlabelled tissue," 6/2019
- 143. Voice of America, "Sneezing a Lot? Handheld Allergen Detector Can Help," 5/2019
- 144. Photonics Media, "Computational Imaging Builds Better Pictures," 5/2019
- 145. SPIE News, "Mission Possible: Deep neural nets transform diagnostic imaging," 5/2019
- 146. The New York Academy of Sciences Magazine, "*The Cutting Edge: There's An App For That*," 5/2019
- 147. The Scientist, "Artificial Intelligence Sees More in Microscopy than Humans Do," 5/2019

- 148. NVIDIA Blog, "Springing into Deep Learning: How AI Could Track Allergens on Every Block," 5/2019
- 149. Phys.Org, "<u>Deep learning merges advantages of holography and bright-field microscopy for 3-D imaging</u>," 3/2019
- 150. Daily Bruin, "<u>UCLA researchers develop smartphone-based microscope to detect lethal bee</u> parasites," 2/2019
- 151. Phys.Org, "Mobile-phone microscope detects the 'silent killer' of honey bees," 1/2019
- 152. Phys.Org, "Artificial intelligence detects the presence of viruses," 1/2019
- 153. Microscopy & Analysis, "Artificial intelligence transforms resolution," 12/2018
- 154. Photonics Media, "Mobile Device Detects Parasitic Infections Quickly Using Holographic Analysis and Deep Learning," 12/2018
- 155. Phys.Org, "Deep learning democratizes nano-scale imaging," 12/2018
- 156. R&D Magazine, "<u>Detection Device Identifies Parasitic Infections Faster, with More Sensitivity</u>," 12/2018
- 157. Daily Bruin, "Innovation in microscopes lets UCLA lab make new findings about sperm movement," 11/2018
- 158. Photonics Spectra, "All-optical diffractive deep neural network is 3D-printed at UCLA," 10/2018
- 159. Lab Manager, "Improved Air-Quality Sensors and Collaborations Could Save Lives," 10/2018
- 160. New Atlas, "Portable device gets the drop on toxic algae," 10/2018
- 161. Daily Bruin, "<u>UCLA researchers developing improved device for detecting dangerous algal blooms</u>," 9/2018
- 162. Phys.Org, "Mobile device could make it easier to predict and control harmful algal blooms," 9/2018
- 163. Engineering.com, "3D Printing Aids Development of Mobile Phone-Based Medical Devices," 9/2018
- 164. The Scientist, "AI Object Recognition System Operates at Speed of Light," 7/2018
- 165. Discover Magazine, "This AI Calculates at the Speed of Light," 7/2018
- 166. TechCrunch, "This 3D-printed AI construct analyzes by bending light," 7/2018
- 167. CNBC, "NOW Diagnostics Acquires CELLMIC Reader Technology," 7/2018
- 168. ASME (The American Society of Mechanical Engineers), "Breathe Easy with a Better Portable Air Monitor," 6/2018
- 169. Microscopy & Analysis, "Deep learning accelerates holographic imaging," 6/2018
- 170. Firehouse Magazine, "Fire Technology: The Future of Wearable Technology," 6/2018
- 171. Phys.Org, "<u>Deep learning extends imaging depth and speeds up hologram reconstruction</u>," 5/2018
- 172. Photonics Media, "Cellmic Patent Aims to Grow Leti Portfolio," 5/2018
- 173. Science Daily, "<u>Deep learning transforms smartphone microscopes into laboratory-grade devices</u>," 4/2018
- 174. Laser Focus World, "<u>Microscopy: Deep learning improves microscopy images-without system adjustments</u>," 1/2018
- 175. Communications of the ACM (Association for Computing Machinery), "*Smartphone Science*," 1/2018
- 176. Engineering for Change, "A Better Portable Air Quality Monitor," 12/2017
- 177. Science Discoveries, "<u>Detecting waterborne pathogen using a smartphone-based microscope</u>," 12/2017
- 178. BioOptics World, "Deep learning method could improve optical microscopy," 12/2017
- 179. OSA Optics & Photonics News (OPN), "Imaging Dives Into Deep Learning," 11/2017

- 180. Photonics Media "Holographic Technique Uses Deep Learning to Increase Accuracy, Improve Microscopy," 11/2017
- 181. Association for Computing Machinery (ACM) TechNews, "<u>UCLA Engineers Use Deep Learning to Reconstruct Holograms and Improve Optical Microscopy</u>," 11/2017
- 182. IEEE GlobalSpec, Engineering 360, "Deep Learning for Diagnostic Medicine," 11/2017
- 183. Microscopy and Analysis, "Neural network boosts optical resolution," 11/2017
- 184. Phys.Org, "Deep learning reconstructs holograms," 10/2017
- 185. DarkDaily, "<u>UCLA's Ozcan Labs Develops Portable Smartphone DNA Detection System That Performs as well as Clinical Laboratory Testing</u>," 10/2017
- 186. BioOptics World, "Holographic microscope tracks sperm motion in 3D," 9/2017
- 187. The Pathologist, "No Lens, No Problem," 9/2017
- 188. UCLA Newsroom, "Consortium links experts in engineering, medicine to improve health in underserved communities," 9/2017
- 189. International Business Times, "*UCLA's holographic microscope enables scientists to study spinning head of sperm in 3D*," 9/2017
- 190. The Scientist, "Microscopy Tool Can "See" Through Dense Tissue: Study," 8/2017
- 191. Phys.Org, "<u>Hologram technology could lead to improved diagnoses of chronic diseases in remote areas</u>," 8/2017
- 192. Microscopy and Analysis, "Breakthrough for smartphone microscopy," 5/2017
- 193. Association for Computing Machinery (ACM) TechNews, "Mobile Device Can Accurately and Inexpensively Monitor Air Quality Using Machine Learning," 5/2017
- 194. Phys.Org, "<u>Holographic microscope provides a new tool for nanomedicine to rapidly measure degradation of drug loaded nanoparticles</u>," 5/2017
- 195. IEEE GlobalSpec, Engineering 360, "Mobile Device Measures Air Quality," 5/2017
- 196. Phys.Org, "Mobile device can accurately and inexpensively monitor air quality using machine learning," 5/2017
- 197. Nature, "Pocket Laboratories," 5/2017
- 198. Dark Daily, "<u>UCLA Device Enables Diagnosis of Antimicrobial Resistance in Any Setting</u>," 4/2017
- 199. The Pathologist, "Mobile Phone Microscopy," 3/2017
- 200. Clarivate Analytics, "<u>Aydogan Ozcan's research 'vision' helps put UC at the forefront of innovation,</u>" 3/2017
- 201. BioOptics World, "Smartphone method makes DNA biomarker detection portable and low-cost," 3/2017
- 202. BioOptics World, "Machine learning enhances smartphone attachment for disease detection," 3/2017
- 203. Phys.Org, "Smart mobile tool may be used to diagnose and treat serious diseases," 2/2017
- 204. OSA Optics & Photonics News (OPN), "Smartphone-Enabled Molecular Diagnostics," 2/2017
- 205. Newsweek, "Cell phone case detects cancer-related DNA mutations," 1/2017
- 206. BBC, "DNA-testing smartphone aims to tackle drugs resistance," 1/2017
- 207. The Scientist, "Next Generation: Mobile Microscope Detects DNA Sequences," 1/2017
- 208. Popular Science, "This machine lets your smartphone analyze DNA," 1/2027
- 209. PC Magazine, "Scientists Can Sequence DNA With a Smartphone," 1/2017
- 210. The Inquirer, "Smartphone-based microscope means DNA sequencing any time, any place, anywhere," 1/2017
- 211. Gizmodo, "Scientists Can Now Sequence DNA With a Smartphone," 1/2017
- 212. Photonics.com, "Smartphone Microscope Images and Detects Next-Generation DNA Sequencing Reactions," 1/2017

- 213. BioOptics World, "Biophotonics-driven smartphone attachment detects antimicrobial resistance," 12/2016
- 214. Phys.Org, "Researchers combat antimicrobial resistance using smartphones," 12/2016
- 215. Hurriyet Daily News, "*Turkish engineer, inventor at UCLA receives Koç University's Medal of Science*" 12/2016
- 216. United Press International (UPI), "Wearable monitors measure dyes through skin" 9/2016
- 217. BioOptics World, "Wearable microscope can measure fluorescent dyes through skin" 9/2016
- 218. United Press International (UPI), "<u>Technique may quickly detect diseases, cancer with portable device</u>," 8/2016
- 219. BioOptics World, "Lens-free microscopy platform shows promise for rapid gout diagnosis," 7/2016
- 220. Lab Manager, "Developments in Computational Imaging Techniques," 6/2016
- 221. BioOptics World, "Seminal biophotonics device developer Ozcan is named IEEE distinguished lecturer" 5/2016
- 222. Phys.Org, "New technique greatly enhances digital microscopy images," 1/2016
- 223. Gizmodo, "A New Sensor Turns Old Microscopes Into Super-Resolution Devices," 1/2016
- 224. BioOptics World, "Biophotonics innovator Ozcan wins International Commission for Optics Prize," 12/2015
- 225. Discover Magazine, "A DNA Analyzer That Fits in Your Pocket," 11/2015
- 226. Engineering 360, "The Lab-on-Chip Revolution: Finding the Right Niche," 10/2015
- 227. Optics.Org, "Optics+Photonics2015: Cell phone evolution 'democratizes' diagnostic tools," 8/2015
- 228. BioOptics World, "<u>UCLA mobile diagnostics spinoff Holomic is named World Economic Forum Tech Pioneer</u>," 8/2015
- 229. BioOptics World, "Smartphone-based ELISA reader performs medical diagnostics at the point of care," 8/2015
- 230. UCLA Newsroom, "<u>UCLA teams with Korean organization to teach middle school students about global health issues</u>," 8/2015
- 231. Phys.Org, "Researchers create smartphone-based device that reads medical diagnostic tests quickly and accurately," 7/2015
- 232. CCTV-America (Chinese Central Television), "Game-changing tech for the developing world," 6/2015
- 233. UCLA Newsroom, "UCLA undergraduates shine at engineering research event," 6/2015
- 234. TXNOLOGIST, "Light's Guide: Engineer Coaxes Photons & Smartphones to Reveal Hidden Worlds," 6/2015
- 235. Chemical and Engineering News (C&EN), "Smartphones Put Medical Diagnostics In Your Hands" 5/2015
- 236. Bioscience Technology, "New Technology Turns Smartphone into a DNA-Scanning Microscope" 5/2015
- 237. Gizmag, "3D-printed attachment turns any smartphone into a DNA-scanning microscope," 5/2015
- 238. Optical Society (OSA) Newsroom, "A Phone with the Ultimate Macro Feature," 4/2015
- 239. BioOptics World, "Noninvasive app captures chlorophyll content quickly, cheaply," 3/2105
- 240. Scientific American, "Google Glass Takes Sharp Look At Plant Health," 2/2015
- 241. Daily Bruin, "*UCLA lab develops Google Glass app for rapid diagnosis of plant health*," 2/2015
- 242. RSC Chemistry World, "Google Glass to monitor plant health," 2/2015
- 243. Optik & Photonik, "Lens-free Microscope Can Detect Cancer at the Cellular Level," 2/2015
- 244. Phys.Org, "Google Glass app noninvasively analyzes plant health in seconds," 2/2015

- 245. BioOptics World, "<u>SINGLE-MOLECULE MICROSCOPY/PORTABLE PATHOLOGY:</u> Compact devices compete with high-end instruments" 1/2015
- 246. BioTechniques, "Diagnosis by Hologram," 1/2015
- 247. Los Angeles Times, "<u>A lens-free microscope that borrows tech from your cellphone</u>," 12/2014
- 248. The Scientist, "Measuring DNA with a Smartphone," 12/2014
- 249. Laser Focus World, "From Ozcan's lab at UCLA: a smartphone fluorescence microscope and a lens-free cancer-detecting microscope," 12/2014
- 250. OSA Optics and Photonics News (OPN), "Viewing a Single DNA Strand with a Smartphone," 12/2014
- 251. Chemical and Engineering News (C&EN), "Smartphone Microscope Sizes Up Single DNA Molecules," 12/2014
- 252. IHS Engineering 360, "Your Smart Phone as Medical Lab Instrument" 12/2014
- 253. Photonics.com, "Lens-Free 3-D Microscope Sharp Enough for Pathology," 12/2014
- 254. Phys.Org, "Engineers detect and measure individual DNA molecules using smartphone microscope," 12/2014
- 255. The Huffington Post, "A Mobile Health Innovation That Could Help Stop Ebola," 11/2014
- 256. Nature Photonics Editorial, "Mobile Science," 10/2014
- 257. Robb Report, "Phoning in on Food Allergens," 10/2014
- 258. Cisco Blogs, "Mobile Phone Microscopes for the Developing World," 8/2014
- 259. Chemical and Engineering News (C&EN), "Nanolenses Help Researchers Pick Out Tiny Objects," 7/2014
- 260. BioOptics World, "Biophotonics trailblazers drive mobile health," 7/2014
- 261. BioOptics World, "<u>Biophotonics pioneer Ozcan named 2014 Howard Hughes Medical</u> Institute Professor" 7/2014
- 262. HHMI, Howard Hughes Medical Institute, "HHMI Puts Top Scientists in the Classroom," 6/2014
- 263. Fora TV, "Frontier Medicine," 6/2014
- 264. Smithsonian Magazine, "Inside the Technology That Can Turn Your Smartphone into a Personal Doctor," 4/2014
- 265. ACS, "Transforming Tech Toys," 4/2014
- 266. ACS Breakthrough Science, "*Using Google Glass to map the future of medical testing*," 4/2014
- 267. ABC 7 News, Google Glass based Diagnostics, 3/2014
- 268. Laser Focus World, *LED-based lab-on-a-chip device screens for 170,000 molecules in blood*, 3/2014
- 269. Nanowerk, A Google Glass app for instant medical diagnostics, 3/2014
- 270. Red Orbit, New Google Glass App Can Transmit Diagnostic Tests For Analysis, 2/2014
- 271. Chemistry World, Science at your fingertips, 2/2014
- 272. Medical News Today, Could Google Glass be used to predict disease outbreaks?, 2/2014
- 273. Fast Company, *Use Your Phone To Find Out If You're Getting Poisoned By Mercury*, 2/2014
- 274. CNET News, 'Lab on a phone' detects mercury in water, 2/2014
- 275. Phys.Org, <u>Research team develops rapid smartphone-based mercury testing and mapping</u>, 2/2014
- 276. Nature, *Phone device detects mercury*, 1/2014
- 277. Chemical and Engineering News (C&EN), <u>Smartphone Attachment Detects Ionic Mercury</u>, 1/2014
- 278. Renal & Urology News, New Albumin Self-Testing Platform, 12/2013

- 279. ACS Press Room, <u>Combating Disease: Improved smartphone microscope brings single-virus</u> detection to remote locations, 11/2013
- 280. Nature Nanotechnology, *Imaging on the Go*, 11/2013
- 281. Scientific American, Smartphone-Based Imaging System Spots Nanoscale Objects, 11/2013
- 282. ASME Podcast, *Turning Your Smartphone into a Microscope*, 10/2013
- 283. AAAS Science Update, *Smartphone Microscope*, 10/2013
- 284. NBC News, <u>Turn a smart-phone into a virus-detecting microscope?</u>, 10/2013
- 285. The Wall Street Journal, A Virus on the Camera Roll, 9/2013
- 286. Wired Magazine, *Nokia 808 PureView smartphone used to fluorescence image viruses*, 9/2103
- 287. Los Angeles Times, Smartphone attachment can photograph nano-scale objects, 9/2013
- 288. The Engineer, Smartphone attachment detects viruses and bacteria, 9/2013
- 289. BioScience Technology, Smartphone 'Microscope' Detects a Single Virus, 9/2103
- 290. Fast Company, Researchers turn a smartphone into a virus-detecting microscope, 9/2013
- 291. Chemical and Engineering News (C&EN), <u>Smart Phones Snap Pictures Of Individual Virus Particles</u>, 9/2013
- 292. Chemistry World, *Personal kidney disease monitoring on your phone*, 8/2013
- 293. The Engineer, Smartphone albumin detector to make life easier for diabetics, 8/2013
- 294. Laser Focus World, <u>UCLA researchers create small Android/iPhone fluorescence device for common kidney tests</u>, 8/2013
- 295. Photonics Media, *Photonics Firm a Finalist in Nokia Sensing Contest*, 8/2013
- 296. Lab on a Chip Blog (Royal Society of Chemistry), *A new function for your cell-phone:* analysing blood at point of care, 7/2013
- 297. Optical Society of America (OSA) Press Release, <u>New Single Virus Detection Techniques for</u> Faster Disease Diagnosis, 5/2013
- 298. The Wall Street Journal, Seeking Creative Solutions to Global Health Problems, 5/2013
- 299. TechNews World, Food Testing for Safe Tasting, 5/2013
- 300. Milken Institute, *Bioscience Discoveries That Will Blow Your Mind*, 5/2013
- 301. LiveScience, Stunning 3D sperm images reveal new motion, 4/2013
- 302. Phys.Org, Cell phone camera photographs microscopic cell samples, 4/2013
- 303. Photonics Spectra, *Food allergen worries? There's an app for that*, 3/2013
- 304. Optics.Org, UCLA brings malaria diagnosis to the masses, 3/2013
- 305. Wellcome Trust Blog, Crowdsourcing malaria diagnosis with games, 3/2013
- 306. Le Monde, Un imageur optique sans lentille, 2/2013
- 307. Photonics Spectra, Smartphones Move From Social Media to Social Medicine, 1/2013
- 308. IEEE Spectrum, Smartphones as Blood Analyzers and Allergen Testers, 1/2013
- 309. Phys.Org, Nano-lens microscopes can detect viruses, other objects at nanoscale, 1/2013
- 310. Photonics Media, *The Most Popular Stories of 2012*, 1/2013
- 311. AAAS Science Update, Smartphone Allergy Tester, 1/2013
- 312. The Scientist, *Sperm Shadows*, 1/2013
- 313. NBC News, *Peanut allergy? Check that food first with your smartphone 'lab'*, 12/2012
- 314. New York Daily News, Smart phone device can detect food allergens, 12/2012
- 315. Wired Magazine, The Best Scientific Figures of 2012, 12/2012
- 316. Chemistry World, Worried about food allergens? There's an app for that, 12/2012
- 317. Science Daily, *Got Food Allergies? You Can Now Test Your Meal On the Spot Using a Cell Phone*, 12/2012
- 318. United Nations Dispatch, When Making Diagnoses Becomes A Game, 12/2012
- 319. Gizmag, Revealed: World Technology Network's innovators of 2012, 10/2012
- 320. Nature News, Light-sensing chip captures sperm on the move, 9/2012

- 321. Science Magazine, As the sperm swims, 9/2012
- 322. National Geographic, Sperm Tracked in 3-D A First, 9/2012
- 323. National Science Foundation, News and Discoveries, <u>Precision Motion Tracking Thousands</u> of Cells at a Time, 9/2012
- 324. Popular Science, Sperm Can't Turn Left, Or Don't Want To, 9/2012
- 325. Los Angeles Times, <u>Human sperm seen propelling selves by four different swim strokes</u>, 9/2012
- 326. Discover Magazine, *House Calls for the 21st Century: Carrying a Doctor in Your Pocket*, 9/2012
- 327. Phys.Org, *High-resolution microscopy without a lens*, 9/2012
- 328. Business Insider, 30 Game Changing Innovations, 8/2012
- 329. Business Insider, <u>A Tiny Microscope That Attaches To A Cell Phone Could Save Lives</u>
 Around The World, 8/2012
- 330. Drive for Innovation, Impacts of Smart Phone Medicine, 8/2012
- 331. The Science Coalition, *Innovators Series*, 7/2012
- 332. University of California, Office of the President "<u>Cell phone-based sensor spots dangerous</u> bacteria," 7/2012
- 333. BioOptics World, "Average Joes challenge medical pros in telepathology game," 7/2012
- 334. BioTechniques, "Crowdsourcing Microscopic Analysis," 6/2012
- 335. UCLA Newsroom, "Game on! UCLA researchers use online crowd-sourcing to diagnose malaria," 5/2012
- 336. PC World, "Crowdsourcing Game Helps Diagnose Infectious Diseases," 5/2012
- 337. CNET, "Tracking diseases using Google Maps and cell phones," 5/2012
- 338. Science Daily, "Researchers Combat Global Disease With a Cell Phone, Google Maps and a Lot of Ingenuity" 4/2012
- 339. Popular Science (PopSci), "Scan Your Food For Bacteria With Your Cell Phone" 2/2012
- 340. Science Magazine Podcast, "Engineering Public Health," 2/2012
- 341. Physics Today, "Microtomography for microfluidics at Photonics West" 1/2012
- 342. NBC Los Angeles, "<u>UCLA Scientist's Cell Phone Microscope Named Top Innovation of 2011,</u>" 1/2012
- 343. The Scientist, "Top Ten Innovations of 2011," 1/2012
- 344. BBC News, "Portable microscope detects bacteria using holograms", 9/2011
- 345. Time Magazine, Techland Blog, "<u>A Laser Microscope that Detects E. Coli and Creates Holograms?</u>," 9/2011
- 346. SPIE Newsroom, "Low-cost cellphone microscope enabled by enhanced processing capabilities", 9/2011
- 347. Optics & Photonics News (OPN), "Microscopy without lenses," 9/2011
- 348. Popular Science, "Holographic Microscope Detects Bacteria on the Cheap," 9/2011
- 349. BioOptics World, "<u>Holograms replace lenses in low-cost, portable, dual-mode microscope</u>," 8/2011
- 350. Physics Today, "Harnessing consumer mobile devices for science," 8/2011
- 351. Chemical and Engineering News (C&EN), "A cell phone counts cells," 7/2011
- 352. Science Daily, "Got Flow Cytometry? All You Need Is Five Bucks and a Cell Phone," 7/2011
- 353. Telemedicine and E-Health Journal, "<u>Telemicroscopes and Point-of-Care Diagnostics Team Up with Smartphones</u>," 6/2011
- 354. Mashable.Com, "How Mobile Phones Are Saving Lives in the Developing World," 6/2011
- 355. Optics.Org, "UCLA team shows lens-free 3D optical tomography" 5/2011
- 356. Medical News Today, "High-Resolution 3-D Images On A Chip Produced By Optical Microscope Without Lenses," 4/2011

- 357. CNN, "The 'killer app' that could help save lives," 3/2011
- 358. The Independent (UK), "Smartphone doubles as microscope to test blood, water parasites," 2/2011
- 359. LiveScience (NSF), "Cell Phone Apps Test for Disease," 2/2011
- 360. BioPhotonics Magazine, "Not Your Father's Microscope," 2/2011
- 361. Popular Mechanics Magazine, "10 Tech Concepts You Need to Know for 2011," 12/2010
- 362. Photonics.com, "The Best of 2010: Lensless Microscope Made for Telemedicine" 12/2010
- 363. USA Today, "UCLA develops cell phone microscope," 12/2010
- 364. National Geographic Magazine, "New Life-Saving Medical Imaging Tool: The Mobile Phone," 12/2010
- 365. Popular Mechanics Magazine, "Cell-phone Enabled Healthcare," 10/2010
- 366. UCLA Newsroom, "*UCLA lens-free telemedicine microscope adds male fertility testing to its bag of tricks*," 10/2010
- 367. BBC News, "Smart vision for mobile phones in the developing world," 09/2010
- 368. Voice of America News, "14 Scientists and Activists Who Are Changing the World," 09/2010
- 369. Bio Photonics Magazine, "Lensless, phone-based imaging addresses global health care needs," 09/2010
- 370. The Scientist, "Cell+Phone," 9/2010
- 371. Nature Photonics Research Highlights, "Lens-free imaging," 7/2010
- 372. BioTechniques, "Outward bound: scientists design high-throughput HIV test for the field," 8/2010
- 373. Smart Planet, "New in telemedicine: The cell phone microscope", 7/2010
- 374. IEEE, The Institute Magazine, "*Pocket Microscopes*", 7/2010
- 375. Science Daily, "Cell Phone Microscope Poised to Begin Trials in Africa," 7/2010
- 376. Daily Tech, "New "Lab on a Chip" Device Revolutionizes HIV Testing" 7/2010
- 377. Scientific American, "Tech Team Puts Microscope on Cell Phone," 6/2010
- 378. MIT's Technology Review Magazine, "\$3 Microscope Plugs into Cell Phones", 5/2010
- 379. Science and Development Network (SciDevNet), "*Tiny microscope eyes the developing world*", 04/2010
- 380. Science Daily, "World's smallest and lightest telemedicine microscope", 4/2010
- 381. The New York Times, "Far From a Lab? Turn a Cellphone Into a Microscope", 11/2009
- 382. CNET News, "How your cell phone can diagnose disease", 11/2009
- 383. Popular Science (PopSci), "<u>A Software-Powered Cell Phone Microscope That Doesn't Need Special Lenses</u>", 11/2009
- 384. MIT's Technology Review Magazine, "Inexpensive chips and sophisticated software could make microscope lenses obsolete", 09/2009
- 385. UCLA Newsroom covers LUCAS with a video 09/2009 (*Watch*)
- 386. Earth & Sky Radio Series, Radio Interview on LUCAS, 04/2009 (*Listen*)
- 387. Vodafone Americas Foundation, *Press Release on LUCAS*, 04/2009
- 388. Science and Development Network (SciDevNet), "<u>Mobile phone diagnosis approaches field trials</u>", 04/2009
- 389. Los Angeles Business Journal, "Healthy Future Takes Shape", 04/2009
- 390. BBC Science in Action, Radio Interview on LUCAS, 01/2009 (*Listen*)
- 391. CNN, "Invention turns cell phone into mobile medical lab", 02/2009
- 392. CBS Science Channel, Brink Show, Video Interview on LUCAS, 02/2009 (Watch)
- 393. Science Daily, "Health Monitoring with Your Cell Phone", 12/2008
- 394. Wired Magazine, "Scientists Hack Cellphone to Analyze Blood, Detect Disease, Help <u>Developing Nations</u>", 12/2008
- 395. Voice of America Interview on LUCAS, 10/2008 (Watch)

- 396. BioOptics World Magazine, "Hologram technology enables monitoring of HIV, malaria, E. coli via cell phone", 12/2008
- 397. Medical Design Magazine, "Smart counter also identifies cells in sample", 11/2008
- 398. MIT's Technology Review Magazine, "Counting cells in seconds", 10/2008
- 399. Photonics.com, "Dial-in Diagnosis", 10/2008
- 400. Science Daily, "Better Health Through Your Cell Phone", 09/2008
- 401. Photonics Spectra, "Sharp corners and kaleidoscopes lead to novel microscopy approaches", 01/2007
- 402. Biophotonics International Magazine, "Seeing deep and wide with a microscope", 10/2006.