Aydogan Ozcan

List of Publications by Year in Descending Order

328 papers	17,344 citations	71 h-index	123 g-index
507 ext. papers	22,332 ext. citations	8 avg, IF	7.31 L-index

#	Paper	IF	Citations
328	Computational imaging without a computer: seeing through random diffusers at the speed of light. *ELight*, **2022**, 2,		12
327	Mobility of polypropylene microplastics in stormwater biofilters under freeze-thaw cycles. *Journal of Hazardous Materials Letters*, **2022**, 3, 100048	3.3	0
326	Smartphone Enabled Point-of-Care Detection of Serum Biomarkers. *Methods in Molecular Biology*, **2022**, 2393, 343-365	1.4	
325	Characterization of exhaled e-cigarette aerosols in a vape shop using a field-portable holographic on-chip microscope.. *Scientific Reports*, **2022**, 12, 3175	4.9	0
324	Sub-picomolar lateral flow antigen detection with two-wavelength imaging of composite nanoparticles.. *Biosensors and Bioelectronics*, **2022**, 207, 114133	11.8	0
323	Smartphone-enabled rapid quantification of microplastics. *Journal of Hazardous Materials Letters*, **2022**, 3, 100052	3.3	0
322	Cascadable all-optical NAND gates using diffractive networks.. *Scientific Reports*, **2022**, 12, 7121	4.9	2
321	Classification and reconstruction of spatially overlapping phase images using diffractive optical networks.. *Scientific Reports*, **2022**, 12, 8446	4.9	1
320	Biopsy-free in vivo virtual histology of skin using deep learning. *Light: Science and Applications*, **2021** , 10, 233	16.7	4
319	Microplastics retained in stormwater control measures: Where do they come from and where do they go?. *Water Research*, **2021**, 210, 118008	12.5	2
318	Calcium pyrophosphate crystal size and characteristics. *Osteoarthritis and Cartilage Open*, **2021**, 3,	1.5	2
317	Phenotypic Analysis of Microalgae Populations Using Label-Free Imaging Flow Cytometry and Deep Learning. *ACS Photonics*, **2021**, 8, 1232-1242	6.3	3
316	Spectrally encoded single-pixel machine vision using diffractive networks. *Science Advances*, **2021**, 7,	14.3	25
315	Smartphone-based sensors and imaging devices for global health. *Advanced Optical Technologies*, **2021**, 10, 87-88	0.9	1
314	Holographic Image Reconstruction with Phase Recovery and Autofocusing Using Recurrent Neural Networks. *ACS Photonics*, **2021**, 8, 1763-1774	6.3	5
313	Machine learning and computation-enabled intelligent sensor design. *Nature Machine Intelligence*, **2021**, 3, 556-565	22.5	23
312	Dynamic Imaging and Characterization of Volatile Aerosols in E-Cigarette Emissions Using Deep Learning-Based Holographic Microscopy. *ACS Sensors*, **2021**, 6, 2403-2410	9.2	5

311	Deep-Learning-Based Virtual Refocusing of Images Using an Engineered Point-Spread Function. *ACS Photonics*, **2021**, 8, 2174-2182	6.3	5
310	Introduction to Special Biomedical Optical Imaging Issue. *Lasers in Surgery and Medicine*, **2021**, 53, 747	3.6	
309	Scale-, Shift-, and Rotation-Invariant Diffractive Optical Networks. *ACS Photonics*, **2021**, 8, 324-334	6.3	15
308	Terahertz pulse shaping using diffractive surfaces. *Nature Communications*, **2021**, 12, 37	17.4	32
307	Misalignment Tolerant Diffractive Optical Networks **2021**,		1
306	Neural Network-Based On-Chip Spectroscopy Using a Scalable Plasmonic Encoder. *ACS Nano*, **2021**, 15, 6305-6315	16.7	8
305	Addressable nanoantennas with cleared hotspots for single-molecule detection on a portable smartphone microscope. *Nature Communications*, **2021**, 12, 950	17.4	25
304	Recurrent neural network-based volumetric fluorescence microscopy. *Light: Science and Applications*, **2021**, 10, 62	16.7	9
303	Neural network-based image reconstruction in swept-source optical coherence tomography using undersampled spectral data. *Light: Science and Applications*, **2021**, 10, 155	16.7	4
302	Recent Progress in Lyme Disease and Remaining Challenges. *Frontiers in Medicine*, **2021**, 8, 666554	4.9	7
301	Deep learning-based transformation of H&E stained tissues into special stains. *Nature Communications*, **2021**, 12, 4884	17.4	12
300	Roadmap on digital holography [Invited]. *Optics Express*, **2021**, 29, 35078-35118	3.3	27
299	Methylation-Sensitive Loop-Mediated Isothermal Amplification (LAMP): Nucleic Acid Methylation Detection through LAMP with Mobile Fluorescence Readout. *ACS Sensors*, **2021**, 6, 3242-3252	9.2	7
298	All-optical synthesis of an arbitrary linear transformation using diffractive surfaces. *Light: Science and Applications*, **2021**, 10, 196	16.7	8
297	Quantitative particle agglutination assay for point-of-care testing using mobile holographic imaging and deep learning. *Lab on A Chip*, **2021**, 21, 3550-3558	7.2	5
296	Single-Shot Autofocusing of Microscopy Images Using Deep Learning. *ACS Photonics*, **2021**, 8, 625-638	6.3	17
295	Ensemble learning of diffractive optical networks. *Light: Science and Applications*, **2021**, 10, 14	16.7	18
294	All-optical information-processing capacity of diffractive surfaces. *Light: Science and Applications*, **2021**, 10, 25	16.7	21

293	Terahertz Pulse Shaping Using Diffractive Optical Networks **2021**,		3
292	Digital synthesis of histological stains using micro-structured and multiplexed virtual staining of label-free tissue. *Light: Science and Applications*, **2020**, 9, 78	16.7	24
291	Deep learning-enabled point-of-care sensing using multiplexed paper-based sensors. *Npj Digital Medicine*, **2020**, 3, 66	15.7	38
290	Automated screening of sickle cells using a smartphone-based microscope and deep learning. *Npj Digital Medicine*, **2020**, 3, 76	15.7	20
289	Contact lens-based lysozyme detection in tear using a mobile sensor. *Lab on A Chip*, **2020**, 20, 1493-1502	7.2	15
288	Early detection and classification of live bacteria using time-lapse coherent imaging and deep learning. *Light: Science and Applications*, **2020**, 9, 118	16.7	33
287	Holographic detection of nanoparticles using acoustically actuated nanolenses. *Nature Communications*, **2020**, 11, 171	17.4	14
286	Optical Technologies for Improving Healthcare in Low-Resource Settings: introduction to the feature issue. *Biomedical Optics Express*, **2020**, 11, 3091-3094	3.5	3
285	Integration of Diffractive Optical Neural Networks with Electronic Neural Networks **2020**,		2
284	Misalignment resilient diffractive optical networks. *Nanophotonics*, **2020**, 9, 4207-4219	6.3	22
283	Photonics for computing and computing for photonics. *Nanophotonics*, **2020**, 9, 4053-4054	6.3	3
282	Color Holographic Microscopy Using a Deep Neural Network **2020**,		1
281	Emerging Advances to Transform Histopathology Using Virtual Staining. *BME Frontiers*, **2020**, 2020, 1-11	4.4	18
280	Deep Learning to Refocus 3D Images. *Optics and Photonics News*, **2020**, 31, 57	1.9	
279	Pathological crystal imaging with single-shot computational polarized light microscopy. *Journal of Biophotonics*, **2020**, 13, e201960036	3.1	10
278	Measurement of serum phosphate levels using a mobile sensor. *Analyst, The*, **2020**, 145, 1841-1848	5	8
277	Fractal LAMP: Label-Free Analysis of Fractal Precipitate for Digital Loop-Mediated Isothermal Nucleic Acid Amplification. *ACS Sensors*, **2020**, 5, 385-394	9.2	17
276	Point-of-Care Serodiagnostic Test for Early-Stage Lyme Disease Using a Multiplexed Paper-Based Immunoassay and Machine Learning. *ACS Nano*, **2020**, 14, 229-240	16.7	29

275	Deep-Learning-Based Image Reconstruction and Enhancement in Optical Microscopy. *Proceedings of the IEEE*, **2020**, 108, 30-50	14.3	48
274	Deep Learning-Based Holographic Polarization Microscopy. *ACS Photonics*, **2020**, 7, 3023-3034	6.3	17
273	Automated, Cost-Effective Optical System for Accelerated Antimicrobial Susceptibility Testing (AST) Using Deep Learning. *ACS Photonics*, **2020**, 7, 2527-2538	6.3	4
272	Inference in artificial intelligence with deep optics and photonics. *Nature*, **2020**, 588, 39-47	50.4	114
271	Label-free detection of cysts using a deep learning-enabled portable imaging flow cytometer. *Lab on A Chip*, **2020**, 20, 4404-4412	7.2	6
270	Sensing of electrolytes in urine using a miniaturized paper-based device. *Scientific Reports*, **2020**, 10, 13620	4.9	23
269	Analysis of Diffractive Optical Neural Networks and Their Integration with Electronic Neural Networks. *IEEE Journal of Selected Topics in Quantum Electronics*, **2020**, 26,	3.8	48
268	Computational Image Analysis of Guided Acoustic Waves Enables Rheological Assessment of Sub-nanoliter Volumes. *ACS Nano*, **2019**, 13, 11062-11069	16.7	2
267	Deep learning in holography and coherent imaging. *Light: Science and Applications*, **2019**, 8, 85	16.7	89
266	Computational cytometer based on magnetically modulated coherent imaging and deep learning. *Light: Science and Applications*, **2019**, 8, 91	16.7	13
265	Rapid imaging, detection, and quantification of Nosema ceranae spores in honey bees using mobile phone-based fluorescence microscopy. *Lab on A Chip*, **2019**, 19, 789-797	7.2	25
264	Paper-based multiplexed vertical flow assay for point-of-care testing. *Lab on A Chip*, **2019**, 19, 1027-1034	7.2	33
263	Nanoscience and Nanotechnology at UCLA. *ACS Nano*, **2019**, 13, 6127-6129	16.7	1
262	Smartphone-imaged microfluidic biochip for measuring CD64 expression from whole blood. *Analyst, The*, **2019**, 144, 3925-3935	5	13
261	Bright-field holography: cross-modality deep learning enables snapshot 3D imaging with bright-field contrast using a single hologram. *Light: Science and Applications*, **2019**, 8, 25	16.7	62
260	Virtual histological staining of unlabelled tissue-autofluorescence images via deep learning. *Nature Biomedical Engineering*, **2019**, 3, 466-477	19	174
259	Deep learning-based super-resolution in coherent imaging systems. *Scientific Reports*, **2019**, 9, 3926	4.9	45
258	PhaseStain: the digital staining of label-free quantitative phase microscopy images using deep learning. *Light: Science and Applications*, **2019**, 8, 23	16.7	121

257	Smartphone-based clinical diagnostics: towards democratization of evidence-based health care. *Journal of Internal Medicine*, **2019**, 285, 19-39	10.8	97
256	Generative Adversarial Networks Enable Cross-Modality Super-Resolution in Fluorescence Microscopy. *Microscopy and Microanalysis*, **2019**, 25, 1228-1229	0.5	
255	Resolution enhancement in scanning electron microscopy using deep learning. *Scientific Reports*, **2019**, 9, 12050	4.9	40
254	Deep learning-based color holographic microscopy. *Journal of Biophotonics*, **2019**, 12, e201900107	3.1	24
253	Early detection of E. coli and total coliform using an automated, colorimetric and fluorometric fiber optics-based device. *Lab on A Chip*, **2019**, 19, 2925-2935	7.2	11
252	Three-dimensional virtual refocusing of fluorescence microscopy images using deep learning. *Nature Methods*, **2019**, 16, 1323-1331	21.6	85
251	Class-specific differential detection in diffractive optical neural networks improves inference accuracy. *Advanced Photonics*, **2019**, 1, 1	8.1	35
250	Holographic Reconstruction with Bright-field Microscopy Contrast using Cross-Modality Deep Learning **2019**,		1
249	Cross-Modality Deep Learning Achieves Super-Resolution in Fluorescence Microscopy **2019**,		2
248	PhaseStain: Deep Learning-based Histological Staining of Quantitative Phase Images **2019**,		1
247	DNA origami nanotools for single-molecule biosensing and superresolution microscopy **2019**,		1
246	Auto-focusing and extended depth-of-field holographic reconstruction using deep learning (Conference Presentation) **2019**,		2
245	Low-cost and portable UV holographic microscope for high-contrast protein crystal imaging. *APL Photonics*, **2019**, 4, 030804	5.2	6
244	On the use of deep learning for computational imaging. *Optica*, **2019**, 6, 921	8.6	261
243	Smartphone-based turbidity reader. *Scientific Reports*, **2019**, 9, 19901	4.9	5
242	Design of task-specific optical systems using broadband diffractive neural networks. *Light: Science and Applications*, **2019**, 8, 112	16.7	60
241	Deep learning enables cross-modality super-resolution in fluorescence microscopy. *Nature Methods* , **2019**, 16, 103-110	21.6	291
240	Deep Learning Enables High-Throughput Analysis of Particle-Aggregation-Based Biosensors Imaged Using Holography. *ACS Photonics*, **2019**, 6, 294-301	6.3	32

239	Benchmarking Smartphone Fluorescence-Based Microscopy with DNA Origami Nanobeads: Reducing the Gap toward Single-Molecule Sensitivity. *ACS Omega*, **2019**, 4, 637-642	3.9	33
238	Accurate color imaging of pathology slides using holography and absorbance spectrum estimation of histochemical stains. *Journal of Biophotonics*, **2019**, 12, e201800335	3.1	5
237	Design and validation of a wide-field mobile phone microscope for the diagnosis of schistosomiasis. *Travel Medicine and Infectious Disease*, **2019**, 30, 128-129	8.4	3
236	Phase recovery and holographic image reconstruction using deep learning in neural networks. *Light: Science and Applications*, **2018**, 7, 17141	16.7	406
235	Wearable and Implantable Sensors for Biomedical Applications. *Annual Review of Analytical Chemistry*, **2018**, 11, 127-146	12.5	136
234	Computational Sensing of Staphylococcus aureus on Contact Lenses Using 3D Imaging of Curved Surfaces and Machine Learning. *ACS Nano*, **2018**, 12, 2554-2559	16.7	18
233	Label-free 3D computational imaging of spermatozoon locomotion, head spin and flagellum beating over a large volume. *Light: Science and Applications*, **2018**, 7, 17121	16.7	34
232	Smartphones Democratize Advanced Biomedical Instruments and Foster Innovation. *Clinical Pharmacology and Therapeutics*, **2018**, 104, 38-41	6.1	6
231	Deep Learning Enhanced Mobile-Phone Microscopy. *ACS Photonics*, **2018**, 5, 2354-2364	6.3	101
230	Mobile Technologies for the Discovery, Analysis, and Engineering of the Global Microbiome. *ACS Nano*, **2018**, 12, 3065-3082	16.7	14
229	Lensless digital holographic microscopy and its applications in biomedicine and environmental monitoring. *Methods*, **2018**, 136, 4-16	4.6	71
228	Extended depth-of-field in holographic imaging using deep-learning-based autofocusing and phase recovery. *Optica*, **2018**, 5, 704	8.6	157
227	All-optical machine learning using diffractive deep neural networks. *Science*, **2018**, 361, 1004-1008	33.3	467
226	Ferrodrop Dose-Optimized Digital Quantification of Biomolecules in Low-Volume Samples. *Analytical Chemistry*, **2018**, 90, 8881-8888	7.8	6
225	High-Throughput Screening of Encapsulated Islets Using Wide-Field Lens-Free On-Chip Imaging. *ACS Photonics*, **2018**, 5, 2081-2086	6.3	5
224	Parasite motility is critical for virulence of African trypanosomes. *Scientific Reports*, **2018**, 8, 9122	4.9	27
223	A robust holographic autofocusing criterion based on edge sparsity: Comparison of Gini index and Tamura coefficient for holographic autofocusing based on the edge sparsity of the complex optical wavefront **2018**,		4
222	Optical refractometry using lensless holography and autofocusing. *Optics Express*, **2018**, 26, 29614-29628	3.3	7

221	Investigation of haptoglobin, serum amyloid A, and some biochemical parameters in calves with omphalitis. *Veterinary World*, **2018**, 11, 1055-1058	1.7	3
220	Imaging Without Lenses. *American Scientist*, **2018**, 106, 28	2.7	2
219	3D on-chip microscopy of optically cleared tissue **2018**,		1
218	On-chip ultraviolet holography for high-throughput nanoparticle and biomolecule detection **2018**,		1
217	Enzyme-Free Nucleic Acid Amplification Assay Using a Cellphone-Based Well Plate Fluorescence Reader. *Analytical Chemistry*, **2018**, 90, 690-695	7.8	20
216	Identification of pathogenic bacteria in complex samples using a smartphone based fluorescence microscope.. *RSC Advances*, **2018**, 8, 36493-36502	3.7	31
215	3D imaging of sex-sorted bovine spermatozoon locomotion, head spin and flagellum beating. *Scientific Reports*, **2018**, 8, 15650	4.9	12
214	Motility-based label-free detection of parasites in bodily fluids using holographic speckle analysis and deep learning. *Light: Science and Applications*, **2018**, 7, 108	16.7	34
213	Label-Free Bioaerosol Sensing Using Mobile Microscopy and Deep Learning. *ACS Photonics*, **2018**, 5, 4617-4627	6.5	42
212	Deep Learning Microscopy: Enhancing Resolution, Field-of-View and Depth-of-Field of Optical Microscopy Images Using Neural Networks **2018**,		5
211	Non-Iterative Holographic Image Reconstruction and Phase Retrieval Using a Deep Convolutional Neural Network **2018**,		1
210	A deep learning-enabled portable imaging flow cytometer for cost-effective, high-throughput, and label-free analysis of natural water samples. *Light: Science and Applications*, **2018**, 7, 66	16.7	75
209	Nucleic acid quantification in the field. *Nature Biomedical Engineering*, **2018**, 2, 629-630	19	4
208	Targeted DNA sequencing and in situ mutation analysis using mobile phone microscopy. *Nature Communications*, **2017**, 8, 13913	17.4	97
207	Computational Sensing Using Low-Cost and Mobile Plasmonic Readers Designed by Machine Learning. *ACS Nano*, **2017**, 11, 2266-2274	16.7	47
206	Highly Stable and Sensitive Nucleic Acid Amplification and Cell-Phone-Based Readout. *ACS Nano*, **2017**, 11, 2934-2943	16.7	75
205	Computational On-Chip Imaging of Nanoparticles and Biomolecules using Ultraviolet Light. *Scientific Reports*, **2017**, 7, 44157	4.9	11
204	Nanoscience and Nanotechnology Cross Borders. *ACS Nano*, **2017**, 11, 1123-1126	16.7	3

203	Accelerating Advances in Science, Engineering, and Medicine through Nanoscience and Nanotechnology. *ACS Nano*, **2017**, 11, 3423-3424	16.7	6
202	High-Throughput Quantification of Nanoparticle Degradation Using Computational Microscopy and Its Application to Drug Delivery Nanocapsules. *ACS Photonics*, **2017**, 4, 1216-1224	6.3	13
201	Plasmonics Enhanced Smartphone Fluorescence Microscopy. *Scientific Reports*, **2017**, 7, 2124	4.9	43
200	Off-axis holography and micro-optics improve lab-on-a-chip imaging. *Light: Science and Applications*, **2017**, 6, e17105	16.7	8
199	Evaluation of a Mobile Phone-Based Microscope for Screening of Infection in Rural Ghana. *American Journal of Tropical Medicine and Hygiene*, **2017**, 96, 1468-1471	3.2	29
198	Roadmap for optofluidics. *Journal of Optics (United Kingdom)*, **2017**, 19, 093003	1.7	55
197	3D imaging of optically cleared tissue using a simplified CLARITY method and on-chip microscopy. *Science Advances*, **2017**, 3, e1700553	14.3	18
196	Microscopy without lenses. *Physics Today*, **2017**, 70, 50-56	0.9	26
195	Comparison of supervised machine learning algorithms for waterborne pathogen detection using mobile phone fluorescence microscopy. *Nanophotonics*, **2017**, 6, 731-741	6.3	7
194	Wearable Optical Sensors **2017**, 313-342		4
193	Computational imaging of sperm locomotion. *Biology of Reproduction*, **2017**, 97, 182-188	3.9	23
192	Inkjet-printed point-of-care immunoassay on a nanoscale polymer brush enables subpicomolar detection of analytes in blood. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E7054-E7062	11.5	53
191	Computational sensing of herpes simplex virus using a cost-effective on-chip microscope. *Scientific Reports*, **2017**, 7, 4856	4.9	13
190	Introduction to the special issue of optical biosensors. *Nanophotonics*, **2017**, 6, 623-625	6.3	4
189	Air quality monitoring using mobile microscopy and machine learning. *Light: Science and Applications*, **2017**, 6, e17046	16.7	72
188	Edge sparsity criterion for robust holographic autofocusing. *Optics Letters*, **2017**, 42, 3824-3827	3	76
187	Deep learning microscopy. *Optica*, **2017**, 4, 1437	8.6	337
186	Lab on a Cellphone **2017**, 43-61		

185	Mobile Microscopy and Machine Learning Provide Accurate and High-throughput Monitoring of Air Quality **2017**,		1
184	Quantitative Fluorescence Sensing Through Highly Autofluorescent, Scattering, and Absorbing Media Using Mobile Microscopy. *ACS Nano*, **2016**, 10, 8989-99	16.7	8
183	Color calibration and fusion of lens-free and mobile-phone microscopy images for high-resolution and accurate color reproduction. *Scientific Reports*, **2016**, 6, 27811	4.9	30
182	Demosaiced pixel super-resolution for multiplexed holographic color imaging. *Scientific Reports*, **2016**, 6, 28601	4.9	23
181	Ti and NiPt/Ti liner silicide contacts for advanced technologies **2016**,		13
180	Flexible Plasmonic Sensors. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22,	3.8	10
179	A game-based crowdsourcing platform for rapidly training middle and high school students to perform biomedical image analysis **2016**,		3
178	Lensless Imaging and Sensing. *Annual Review of Biomedical Engineering*, **2016**, 18, 77-102	12	161
177	High-throughput analysis of horse spermsT3D swimming patterns using computational on-chip imaging. *Animal Reproduction Science*, **2016**, 169, 45-55	2.1	16
176	Tools for the Microbiome: Nano and Beyond. *ACS Nano*, **2016**, 10, 6-37	16.7	99
175	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2016**, 22, 1-14	3.8	104
174	Computational out-of-focus imaging increases the spaceBandwidth product in lens-based coherent microscopy. *Optica*, **2016**, 3, 1422	8.6	22
173	Sparsity-based multi-height phase recovery in holographic microscopy. *Scientific Reports*, **2016**, 6, 37862	4.9	53
172	Propagation phasor approach for holographic image reconstruction. *Scientific Reports*, **2016**, 6, 22738	4.9	40
171	Wide-field imaging of birefringent synovial fluid crystals using lens-free polarized microscopy for gout diagnosis. *Scientific Reports*, **2016**, 6, 28793	4.9	29
170	High-throughput and automated diagnosis of antimicrobial resistance using a cost-effective cellphone-based micro-plate reader. *Scientific Reports*, **2016**, 6, 39203	4.9	25
169	Unconventional methods of imaging: computational microscopy and compact implementations. *Reports on Progress in Physics*, **2016**, 79, 076001	14.4	62
168	Pixel super-resolution using wavelength scanning. *Light: Science and Applications*, **2016**, 5, e16060	16.7	103

167	Rapid, portable and cost-effective yeast cell viability and concentration analysis using lensfree on-chip microscopy and machine learning. *Lab on A Chip*, **2016**, 16, 4350-4358	7.2	47
166	Homogeneous Entropy-Driven Amplified Detection of Biomolecular Interactions. *ACS Nano*, **2016**, 10, 7467-75	16.7	40
165	Wide-field nano-scale imaging on a chip **2015**, 9-30		
164	Cellphone-Based Hand-Held Microplate Reader for Point-of-Care Testing of Enzyme-Linked Immunosorbent Assays. *ACS Nano*, **2015**, 9, 7857-66	16.7	254
163	Democratization of Nanoscale Imaging and Sensing Tools Using Photonics. *Analytical Chemistry*, **2015**, 87, 6434-45	7.8	33
162	Wide-field pathology imaging using on-chip microscopy. *Virchows Archiv Fur Pathologische Anatomie Und Physiologie Und Fur Klinische Medizin*, **2015**, 467, 3-7	5.1	18
161	MICROBIOME. A unified initiative to harness Earth's microbiomes. *Science*, **2015**, 350, 507-8	33.3	155
160	Cell-laden Polymeric Microspheres for Biomedical Applications. *Trends in Biotechnology*, **2015**, 33, 653-666	15.1	64
159	High throughput on-chip analysis of high-energy charged particle tracks using lensfree imaging. *Applied Physics Letters*, **2015**, 106, 151107	3.4	6
158	Emerging Technologies for Next-Generation Point-of-Care Testing. *Trends in Biotechnology*, **2015**, 33, 692-705	15.1	467
157	Rapid imaging, detection and quantification of Giardia lamblia cysts using mobile-phone based fluorescent microscopy and machine learning. *Lab on A Chip*, **2015**, 15, 1284-93	7.2	128
156	Research highlights: digital assays on chip. *Lab on A Chip*, **2015**, 15, 17-22	7.2	8
155	Enhanced light collection in fluorescence microscopy using self-assembled micro-reflectors. *Scientific Reports*, **2015**, 5, 10999	4.9	12
154	Synthetic aperture-based on-chip microscopy. *Light: Science and Applications*, **2015**, 4, e261-e261	16.7	137
153	Quantification of plant chlorophyll content using Google Glass. *Lab on A Chip*, **2015**, 15, 1708-16	7.2	46
152	High-throughput and label-free single nanoparticle sizing based on time-resolved on-chip microscopy. *ACS Nano*, **2015**, 9, 3265-73	16.7	54
151	Calling Biomarkers in Milk Using a Protein Microarray on Your Smartphone. *PLoS ONE*, **2015**, 10, e0134360	3.7	49
150	Opto-fluidics based microscopy and flow cytometry on a cell phone for blood analysis. *Methods in Molecular Biology*, **2015**, 1256, 171-90	1.4	7

149	Wide-field Imaging of Pathology Slides using Lensfree On-chip Microscopy **2015**,		1
148	Lensfree optofluidic plasmonic sensor for real-time and label-free monitoring of molecular binding events over a wide field-of-view. *Scientific Reports*, **2014**, 4, 6789	4.9	107
147	Spectral demultiplexing in holographic and fluorescent on-chip microscopy. *Scientific Reports*, **2014**, 4, 3760	4.9	20
146	Immunochromatographic diagnostic test analysis using Google Glass. *ACS Nano*, **2014**, 8, 3069-79	16.7	144
145	Handheld high-throughput plasmonic biosensor using computational on-chip imaging. *Light: Science and Applications*, **2014**, 3, e122-e122	16.7	250
144	Detection and spatial mapping of mercury contamination in water samples using a smart-phone. *ACS Nano*, **2014**, 8, 1121-9	16.7	312
143	Cellphone-based devices for bioanalytical sciences. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 3263-77	4.4	226
142	Mobile phones democratize and cultivate next-generation imaging, diagnostics and measurement tools. *Lab on A Chip*, **2014**, 14, 3187-94	7.2	258
141	Tunable vapor-condensed nanolenses. *ACS Nano*, **2014**, 8, 7340-9	16.7	34
140	Cellphone-based detection platform for rbST biomarker analysis in milk extracts using a microsphere fluorescence immunoassay. *Analytical and Bioanalytical Chemistry*, **2014**, 406, 6857-66	4.4	61
139	Nano-imaging enabled via self-assembly. *Nano Today*, **2014**, 9, 560-573	17.9	17
138	Computational imaging, sensing and diagnostics for global health applications. *Current Opinion in Biotechnology*, **2014**, 25, 8-16	11.4	25
137	Automated single-cell motility analysis on a chip using lensfree microscopy. *Scientific Reports*, **2014**, 4, 4717	4.9	51
136	Biomedical imaging and sensing using flatbed scanners. *Lab on A Chip*, **2014**, 14, 3248-57	7.2	37
135	Imaging and sizing of single DNA molecules on a mobile phone. *ACS Nano*, **2014**, 8, 12725-33	16.7	135
134	Wide-field computational imaging of pathology slides using lens-free on-chip microscopy. *Science Translational Medicine*, **2014**, 6, 267ra175	17.5	161
133	Lensfree On-Chip Fluorescence Microscopy for High-Throughput Imaging of Bio-Chips. *Lecture Notes in Electrical Engineering*, **2014**, 9-15	0.2	1
132	Smart-phone based computational microscopy using multi-frame contact imaging on a fiber-optic array. *Lab on A Chip*, **2013**, 13, 4015-23	7.2	85

131	Optoelectronic tweezers integrated with lensfree holographic microscopy for wide-field interactive cell and particle manipulation on a chip. *Lab on A Chip*, **2013**, 13, 2278-84	7.2	30
130	Optical detection and sizing of single nanoparticles using continuous wetting films. *ACS Nano*, **2013**, 7, 7601-9	16.7	26
129	Albumin testing in urine using a smart-phone. *Lab on A Chip*, **2013**, 13, 4231-8	7.2	148
128	Fluorescent imaging of single nanoparticles and viruses on a smart phone. *ACS Nano*, **2013**, 7, 9147-55	16.7	359
127	Optical imaging techniques for point-of-care diagnostics. *Lab on A Chip*, **2013**, 13, 51-67	7.2	264
126	On-chip biomedical imaging. *IEEE Reviews in Biomedical Engineering*, **2013**, 6, 29-46	6.4	70
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