YongKeun Park

List of Publications by Year in Descending Order

214 papers	8,397 citations	52 h-index	84 g-index
313 ext. papers	11,105 ext. citations	6 avg, IF	6.49 L-index

#	Paper	IF	Citations
214	Inverse problem solver for multiple light scattering using modified Born series. *Optica*, **2022**, 9, 177	8.6	2
213	Single-shot wide-field topography measurement using spectrally multiplexed reflection intensity holography via space-domain Kramers-Kronig relations.. *Optics Letters*, **2022**, 47, 1025-1028	3	2
212	Roadmap on chaos-inspired imaging technologies (CI2-Tech). *Applied Physics B: Lasers and Optics*, **2022**, 128, 1	1.9	3
211	Tomographic measurement of dielectric tensors at optical frequency.. *Nature Materials*, **2022**, 21, 317-324	27	1
210	Quantitative phase and refractive index imaging of 3D objects via optical transfer function reshaping.. *Optics Express*, **2022**, 30, 13802-13809	3.3	2
209	Single-Shot Reference-Free Holographic Imaging using a Liquid Crystal Geometric Phase Diffuser. *Laser and Photonics Reviews*, **2022**, 16, 2100559	8.3	3
208	Roadmap on Digital Holography-Based Quantitative Phase Imaging.. *Journal of Imaging*, **2021**, 7,	3.1	7
207	Correlation of dynamic membrane fluctuations in red blood cells with diabetes mellitus and cardiovascular risks. *Scientific Reports*, **2021**, 11, 7007	4.9	2
206	Chemotherapy confers a conserved secondary tolerance to EGFR inhibition via AXL-mediated signaling bypass. *Scientific Reports*, **2021**, 11, 8016	4.9	2
205	Multiscale label-free volumetric holographic histopathology of thick-tissue slides with subcellular resolution. *Advanced Photonics*, **2021**, 3,	8.1	12
204	DeepRegularizer: Rapid Resolution Enhancement of Tomographic Imaging Using Deep Learning. *IEEE Transactions on Medical Imaging*, **2021**, 40, 1508-1518	11.7	6
203	Detection of intracellular monosodium urate crystals in gout synovial fluid using optical diffraction tomography. *Scientific Reports*, **2021**, 11, 10019	4.9	2
202	Isotropically resolved label-free tomographic imaging based on tomographic moulds for optical trapping. *Light: Science and Applications*, **2021**, 10, 102	16.7	4
201	Pupil-aberration calibration with controlled illumination for quantitative phase imaging. *Optics Express*, **2021**, 29, 22127-22135	3.3	0
200	Label-Free Quantitative Analysis of Coacervates via 3D Phase Imaging. *Advanced Optical Materials*, **2021**, 9, 2100697	8.1	3
199	Three-dimensional label-free visualization and quantification of polyhydroxyalkanoates in individual bacterial cell in its native state. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
198	Label-Free White Blood Cell Classification Using Refractive Index Tomography and Deep Learning. *BME Frontiers*, **2021**, 2021, 1-9	4.4	3

197	Enhancing sensitivity in absorption spectroscopy using a scattering cavity. *Scientific Reports*, **2021**, 11, 14916	4.9	2
196	Missing Cone Artifact Removal in ODT Using Unsupervised Deep Learning in the Projection Domain. *IEEE Transactions on Computational Imaging*, **2021**, 7, 747-758	4.5	0
195	Label-free three-dimensional observations and quantitative characterisation of on-chip vasculogenesis using optical diffraction tomography. *Lab on A Chip*, **2021**, 21, 494-501	7.2	6
194	Optimizing illumination in three-dimensional deconvolution microscopy for accurate refractive index tomography. *Optics Express*, **2021**, 29, 6293-6301	3.3	7
193	Intensity-based holographic imaging via space-domain KramersKronig relations. *Nature Photonics*, **2021**, 15, 354-360	33.9	18
192	Label-free monitoring of 3D cortical neuronal growth using optical diffraction tomography. *Biomedical Optics Express*, **2021**, 12, 6928-6939	3.5	1
191	Roadmap on digital holography [Invited]. *Optics Express*, **2021**, 29, 35078-35118	3.3	27
190	Reagent- and actuator-free analysis of individual erythrocytes using three-dimensional quantitative phase imaging and capillary microfluidics. *Sensors and Actuators B: Chemical*, **2021**, 348, 130689	8.5	0
189	Holotomography: Refractive Index as an Intrinsic Imaging Contrast for 3-D Label-Free Live Cell Imaging. *Advances in Experimental Medicine and Biology*, **2021**, 1310, 211-238	3.6	4
188	Non-resonant power-efficient directional Nd:YAG ceramic laser using a scattering cavity. *Nature Communications*, **2021**, 12, 8	17.4	20
187	Label-free multiplexed microtomography of endogenous subcellular dynamics using generalizable deep learning. *Nature Cell Biology*, **2021**,	23.4	5
186	Effects of osmolality and solutes on the morphology of red blood cells according to three-dimensional refractive index tomography.. *PLoS ONE*, **2021**, 16, e0262106	3.7	1
185	3D morphological and biophysical changes in a single tachyzoite and its infected cells using three-dimensional quantitative phase imaging. *Journal of Biophotonics*, **2020**, 13, e202000055	3.1	2
184	Speckle-Correlation Scattering Matrix Approaches for Imaging and Sensing through Turbidity. *Sensors*, **2020**, 20,	3.8	5
183	Fluid-Matrix Interface Triggers a Heterogeneous Activation of Macrophages.. *ACS Applied Bio Materials*, **2020**, 3, 4294-4301	4.1	
182	Computational approach to dark-field optical diffraction tomography. *APL Photonics*, **2020**, 5, 040804	5.2	3
181	Three-dimensional label-free observation of individual bacteria upon antibiotic treatment using optical diffraction tomography. *Biomedical Optics Express*, **2020**, 11, 1257-1267	3.5	15
180	Three-dimensional label-free imaging and quantification of migrating cells during wound healing. *Biomedical Optics Express*, **2020**, 11, 6812-6824	3.5	2

179	Low-coherence optical diffraction tomography using a ferroelectric liquid crystal spatial light modulator. *Optics Express*, **2020**, 28, 39649-39659	3.3	7
178	Calibration-free quantitative phase imaging using data-driven aberration modeling. *Optics Express*, **2020**, 28, 34835-34847	3.3	4
177	Deep-learning-based three-dimensional label-free tracking and analysis of immunological synapses of CAR-T cells. *ELife*, **2020**, 9,	8.9	12
176	Single-molecule functional anatomy of endogenous HER2-HER3 heterodimers. *ELife*, **2020**, 9,	8.9	5
175	Disordered Optics: Exploiting Multiple Light Scattering and Wavefront Shaping for Nonconventional Optical Elements. *Advanced Materials*, **2020**, 32, e1903457	24	17
174	Label-Free Tomographic Imaging of Lipid Droplets in Foam Cells for Machine-Learning-Assisted Therapeutic Evaluation of Targeted Nanodrugs. *ACS Nano*, **2020**, 14, 1856-1865	16.7	25
173	Significantly different expression levels of microRNAs associated with vascular invasion in hepatocellular carcinoma and their prognostic significance after surgical resection. *PLoS ONE*, **2019**, 14, e0216847	3.7	8
172	Imaging through scattering media using digital holography. *Optics Communications*, **2019**, 439, 218-223	2	9
171	Optical Measurements of Three-Dimensional Microscopic Temperature Distributions Around Gold Nanorods Excited by Localized Surface Plasmon Resonance. *Physical Review Applied*, **2019**, 11,	4.3	6
170	Ultrathin wide-angle large-area digital 3D holographic display using a non-periodic photon sieve. *Nature Communications*, **2019**, 10, 1304	17.4	52
169	Quantitative Phase Imaging and Artificial Intelligence: A Review. *IEEE Journal of Selected Topics in Quantum Electronics*, **2019**, 25, 1-14	3.8	78
168	Interpreting Intensity Speckle as the Coherency Matrix of Classical Light. *Physical Review Applied*, **2019**, 12,	4.3	6
167	. *IEEE Access*, **2019**, 7, 83449-83460	3.5	17
166	Deep learning-based optical field screening for robust optical diffraction tomography. *Scientific Reports*, **2019**, 9, 15239	4.9	8
165	Three-Dimensional Shapes and Cell Deformability of Rat Red Blood Cells during and after Asphyxial Cardiac Arrest. *Emergency Medicine International*, **2019**, 2019, 6027236	1.4	2
164	Mitotic Chromosomes in Live Cells Characterized Using High-Speed and Label-Free Optical Diffraction Tomography. *Cells*, **2019**, 8,	7.9	12
163	Cycle-consistent deep learning approach to coherent noise reduction in optical diffraction tomography. *Optics Express*, **2019**, 27, 4927-4943	3.3	29
162	KramersKronig holographic imaging for high-space-bandwidth product. *Optica*, **2019**, 6, 45	8.6	25

161	Study of Optical Configurations for Multiple Enhancement of Microalgal Biomass Production. *Scientific Reports*, **2019**, 9, 1723	4.9	7
160	Unique Red Blood Cell Morphology Detected in a Patient with Myelodysplastic Syndrome by Three-dimensional Refractive Index Tomography. *Laboratory Medicine Online*, **2019**, 9, 185	0.2	0
159	Reconstructed Three-Dimensional Images and Parameters of Individual Erythrocytes Using Optical Diffraction Tomography Microscopy. *Annals of Laboratory Medicine*, **2019**, 39, 223-226	3.1	5
158	Low-coherent optical diffraction tomography by angle-scanning illumination. *Journal of Biophotonics*, **2019**, 12, e201800289	3.1	10
157	Learning-based screening of hematologic disorders using quantitative phase imaging of individual red blood cells. *Biosensors and Bioelectronics*, **2019**, 123, 69-76	11.8	32
156	Measurements of complex refractive index change of photoactive yellow protein over a wide wavelength range using hyperspectral quantitative phase imaging. *Scientific Reports*, **2018**, 8, 3064	4.9	8
155	Three-dimensional label-free imaging and analysis of Pinus pollen grains using optical diffraction tomography. *Scientific Reports*, **2018**, 8, 1782	4.9	19
154	Reference-Free Single-Point Holographic Imaging and Realization of an Optical Bidirectional Transducer. *Physical Review Applied*, **2018**, 9,	4.3	16
153	Label-free non-invasive quantitative measurement of lipid contents in individual microalgal cells using refractive index tomography. *Scientific Reports*, **2018**, 8, 6524	4.9	36
152	Label-free high-resolution 3-D imaging of gold nanoparticles inside live cells using optical diffraction tomography. *Methods*, **2018**, 136, 160-167	4.6	23
151	Measurements of polarization-dependent angle-resolved light scattering from individual microscopic samples using Fourier transform light scattering. *Optics Express*, **2018**, 26, 7701-7711	3.3	7
150	Perspective: Wavefront shaping techniques for controlling multiple light scattering in biological tissues: Toward in vivo applications. *APL Photonics*, **2018**, 3, 100901	5.2	32
149	Super-resolution three-dimensional fluorescence and optical diffraction tomography of live cells using structured illumination generated by a digital micromirror device. *Scientific Reports*, **2018**, 8, 9183	4.9	44
148	Generalized quantification of three-dimensional resolution in optical diffraction tomography using the projection of maximal spatial bandwidths. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2018**, 35, 1891-1898	1.8	26
147	Reference-free polarization-sensitive quantitative phase imaging using single-point optical phase conjugation. *Optics Express*, **2018**, 26, 26858-26865	3.3	18
146	Combining Three-Dimensional Quantitative Phase Imaging and Fluorescence Microscopy for the Study of Cell Pathophysiology. *Yale Journal of Biology and Medicine*, **2018**, 91, 267-277	2.4	12
145	Enhancement of optical resolution in three-dimensional refractive-index tomograms of biological samples by employing micromirror-embedded coverslips. *Lab on A Chip*, **2018**, 18, 3484-3491	7.2	1
144	Automated Identification of Bacteria using Three-Dimensional Holographic Imaging and Convolutional Neural Network **2018**,		2

143	Label-Free Identification of Lymphocyte Subtypes Using Three-Dimensional Quantitative Phase Imaging and Machine Learning. *Journal of Visualized Experiments*, **2018**,	1.6	6
142	Quantitative phase imaging in biomedicine. *Nature Photonics*, **2018**, 12, 578-589	33.9	455
141	High-Resolution Holographic Microscopy Exploiting Speckle-Correlation Scattering Matrix. *Physical Review Applied*, **2018**, 10,	4.3	14
140	Finite-difference time-domain analysis of increased penetration depth in optical coherence tomography by wavefront shaping. *Biomedical Optics Express*, **2018**, 9, 3883-3897	3.5	5
139	Measurements of three-dimensional refractive index tomography and membrane deformability of live erythrocytes from Pelophylax nigromaculatus. *Scientific Reports*, **2018**, 8, 9192	4.9	21
138	Ultrahigh-definition dynamic 3D holographic display by active control of volume speckle fields. *Nature Photonics*, **2017**, 11, 186-192	33.9	82
137	Time-reversing a monochromatic subwavelength optical focus by optical phase conjugation of multiply-scattered light. *Scientific Reports*, **2017**, 7, 41384	4.9	6
136	Antibacterial Activities of Graphene Oxide-Molybdenum Disulfide Nanocomposite Films. *ACS Applied Materials & Interfaces*, **2017**, 9, 7908-7917	9.5	115
135	Measurements of morphological and biophysical alterations in individual neuron cells associated with early neurotoxic effects in Parkinson's disease. *Cytometry Part A: the Journal of the International Society for Analytical Cytology*, **2017**, 91, 510-518	4.6	43
134	Tomographic active optical trapping of arbitrarily shaped objects by exploiting 3D refractive index maps. *Nature Communications*, **2017**, 8, 15340	17.4	34
133	Visualization and label-free quantification of microfluidic mixing using quantitative phase imaging. *Applied Optics*, **2017**, 56, 6341-6347	1.7	5
132	[Invited Paper] Review: 3D Holographic Imaging and Display Exploiting Complex Optics. *ITE Transactions on Media Technology and Applications*, **2017**, 5, 78-87	0.7	2
131	Time-multiplexed structured illumination using a DMD for optical diffraction tomography. *Optics Letters*, **2017**, 42, 999-1002	3	77
130	Holographic deep learning for rapid optical screening of anthrax spores. *Science Advances*, **2017**, 3, e1700606	11.5	104
129	Melittin-induced alterations in morphology and deformability of human red blood cells using quantitative phase imaging techniques. *Scientific Reports*, **2017**, 7, 9306	4.9	28
128	Generalized image deconvolution by exploiting the transmission matrix of an optical imaging system. *Scientific Reports*, **2017**, 7, 8961	4.9	4
127	Universal sensitivity of speckle intensity correlations to wavefront change in light diffusers. *Scientific Reports*, **2017**, 7, 44435	4.9	6
126	Identification of non-activated lymphocytes using three-dimensional refractive index tomography and machine learning. *Scientific Reports*, **2017**, 7, 6654	4.9	70

125	Refractive index tomograms and dynamic membrane fluctuations of red blood cells from patients with diabetes mellitus. *Scientific Reports*, **2017**, 7, 1039	4.9	55
124	A Bacteria-Based Remotely Tunable Photonic Device. *Advanced Optical Materials*, **2017**, 5, 1600617	8.1	23
123	Holographic imaging through a scattering layer using speckle interferometry. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2017**, 34, 1392-1399	1.8	20
122	Ultrahigh enhancement of light focusing through disordered media controlled by mega-pixel modes. *Optics Express*, **2017**, 25, 8036-8047	3.3	28
121	Effects of spatiotemporal coherence on interferometric microscopy. *Optics Express*, **2017**, 25, 8085-8097	3.3	26
120	Beyond Born-Rytov limit for super-resolution optical diffraction tomography. *Optics Express*, **2017**, 25, 30445-30458	3.3	18
119	Correlative three-dimensional fluorescence and refractive index tomography: bridging the gap between molecular specificity and quantitative bioimaging. *Biomedical Optics Express*, **2017**, 8, 5688-5697	3.5	50
118	Reconstructions of refractive index tomograms via a discrete algebraic reconstruction technique. *Optics Express*, **2017**, 25, 27415-27430	3.3	11
117	Compensation of aberration in quantitative phase imaging using lateral shifting and spiral phase integration. *Optics Express*, **2017**, 25, 30771-30779	3.3	18
116	White-light quantitative phase imaging unit. *Optics Express*, **2016**, 24, 9308-15	3.3	33
115	Hyperspectral optical diffraction tomography. *Optics Express*, **2016**, 24, 2006-12	3.3	46
114	Energy leakage in partially measured scattering matrices of disordered media. *Physical Review B*, **2016**, 93,	3.3	3
113	Measuring cell surface area and deformability of individual human red blood cells over blood storage using quantitative phase imaging. *Scientific Reports*, **2016**, 6, 34257	4.9	59
112	Collaborative effects of wavefront shaping and optical clearing agent in optical coherence tomography. *Journal of Biomedical Optics*, **2016**, 21, 121510	3.5	5
111	Optical characterization of red blood cells from individuals with sickle cell trait and disease in Tanzania using quantitative phase imaging. *Scientific Reports*, **2016**, 6, 31698	4.9	22
110	Exploiting the speckle-correlation scattering matrix for a compact reference-free holographic image sensor. *Nature Communications*, **2016**, 7, 13359	17.4	59
109	Scattering Optical Elements: Stand-Alone Optical Elements Exploiting Multiple Light Scattering. *ACS Nano*, **2016**, 10, 6871-6	16.7	9
108	Optical diffraction tomography using a digital micromirror device for stable measurements of 4D refractive index tomography of cells **2016**,		27

107	In vivo deep tissue imaging using wavefront shaping optical coherence tomography. *Journal of Biomedical Optics*, **2016**, 21, 101406	3.5	19
106	Large-scale optical diffraction tomography for inspection of optical plastic lenses. *Optics Letters*, **2016**, 41, 934-7	3	16
105	Quantitative phase imaging of fluid mixing in microfluid chips **2016**,		2
104	Three-dimensional label-free imaging and quantification of lipid droplets in live hepatocytes. *Scientific Reports*, **2016**, 6, 36815	4.9	72
103	Holographic intravital microscopy for 2-D and 3-D imaging intact circulating blood cells in microcapillaries of live mice. *Scientific Reports*, **2016**, 6, 33084	4.9	26
102	Label-free optical quantification of structural alterations in Alzheimer's disease. *Scientific Reports*, **2016**, 6, 31034	4.9	48
101	Cellular normoxic biophysical markers of hydroxyurea treatment in sickle cell disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 9527-32	11.5	30
100	Remote sensing of pressure inside deformable microchannels using light scattering in Scotch tape. *Optics Letters*, **2016**, 41, 1837-40	3	8
99	A facile route to efficient, low-cost flexible organic light-emitting diodes: utilizing the high refractive index and built-in scattering properties of industrial-grade PEN substrates. *Advanced Materials*, **2015**, 27, 1624-31	24	84
98	Measuring large optical reflection matrices of turbid media. *Optics Communications*, **2015**, 352, 33-38	2	17
97	Recent advances in wavefront shaping techniques for biomedical applications. *Current Applied Physics*, **2015**, 15, 632-641	2.6	134
96	Simultaneous 3D visualization and position tracking of optically trapped particles using optical diffraction tomography. *Optica*, **2015**, 2, 343	8.6	53
95	Focusing through turbid media by polarization modulation. *Optics Letters*, **2015**, 40, 1667-70	3	25
94	Measuring optical transmission matrices by wavefront shaping. *Optics Express*, **2015**, 23, 10158-67	3.3	80
93	Comparative study of iterative reconstruction algorithms for missing cone problems in optical diffraction tomography. *Optics Express*, **2015**, 23, 16933-48	3.3	141
92	Label-free identification of individual bacteria using Fourier transform light scattering. *Optics Express*, **2015**, 23, 15792-805	3.3	52
91	Measurements of morphology and refractive indexes on human downy hairs using three-dimensional quantitative phase imaging. *Journal of Biomedical Optics*, **2015**, 20, 111207	3.5	10
90	Experimental observations of spectral changes produced by individual microscopic spheres. *Optics Letters*, **2015**, 40, 1093-6	3	2

89	Three-dimensional refractive index tomograms and deformability of individual human red blood cells from cord blood of newborn infants and maternal blood. *Journal of Biomedical Optics*, **2015**, 20, 111208	3.5	31
88	Label-free characterization of white blood cells by measuring 3D refractive index maps. *Biomedical Optics Express*, **2015**, 6, 3865-75	3.5	94
87	One-Wave Optical Phase Conjugation Mirror by Actively Coupling Arbitrary Light Fields into a Single-Mode Reflector. *Physical Review Letters*, **2015**, 115, 153902	7.4	24
86	Optogenetic control of cell signaling pathway through scattering skull using wavefront shaping. *Scientific Reports*, **2015**, 5, 13289	4.9	30
85	Superresolution imaging with optical fluctuation using speckle patterns illumination. *Scientific Reports*, **2015**, 5, 16525	4.9	24
84	Characterizations of individual mouse red blood cells parasitized by Babesia microti using 3-D holographic microscopy. *Scientific Reports*, **2015**, 5, 10827	4.9	57
83	The Effects of Ethanol on the Morphological and Biochemical Properties of Individual Human Red Blood Cells. *PLoS ONE*, **2015**, 10, e0145327	3.7	35
82	Common-path diffraction optical tomography with a low-coherence illumination for reducing speckle noise **2015**,		6
81	Active illumination using a digital micromirror device for quantitative phase imaging. *Optics Letters*, **2015**, 40, 5407-10	3	108
80	Hybrid application of complex wavefront shaping optical coherence tomography and optical clearing agents for the penetration depth enhancement **2015**,		1
79	Angle-resolved light scattering of individual rod-shaped bacteria based on Fourier transform light scattering. *Scientific Reports*, **2014**, 4, 5090	4.9	34
78	Profiling individual human red blood cells using common-path diffraction optical tomography. *Scientific Reports*, **2014**, 4, 6659	4.9	97
77	T cells sense biophysical cues using lamellipodia and filopodia to optimize intraluminal path finding. *Integrative Biology (United Kingdom)*, **2014**, 6, 450-9	3.7	21
76	Full-field subwavelength imaging using a scattering superlens. *Physical Review Letters*, **2014**, 113, 113901	7.4	58
75	High-resolution three-dimensional imaging of red blood cells parasitized by Plasmodium falciparum and in situ hemozoin crystals using optical diffraction tomography. *Journal of Biomedical Optics*, **2014**, 19, 011005	3.5	169
74	Diffraction optical tomography using a quantitative phase imaging unit. *Optics Letters*, **2014**, 39, 6935-8	3	55
73	Quantitative phase imaging unit. *Optics Letters*, **2014**, 39, 3630-3	3	72
72	Biomedical applications of holographic microspectroscopy [invited]. *Applied Optics*, **2014**, 53, G111-22	1.7	35

71	Depth-enhanced 2-D optical coherence tomography using complex wavefront shaping. *Optics Express*, **2014**, 22, 7514-23	3.3	38
70	Spectro-angular light scattering measurements of individual microscopic objects. *Optics Express*, **2014**, 22, 4108-14	3.3	18
69	Common-path diffraction optical tomography for investigation of three-dimensional structures and dynamics of biological cells. *Optics Express*, **2014**, 22, 10398-407	3.3	75
68	LCD panel characterization by measuring full Jones matrix of individual pixels using polarization-sensitive digital holographic microscopy. *Optics Express*, **2014**, 22, 24304-11	3.3	26
67	High-Resolution 3-D Refractive Index Tomography and 2-D Synthetic Aperture Imaging of Live Phytoplankton. *Journal of the Optical Society of Korea*, **2014**, 18, 691-697		32
66	Random and V-groove texturing for efficient light trapping in organic photovoltaic cells. *Solar Energy Materials and Solar Cells*, **2013**, 115, 36-41	6.4	56
65	Spectro-refractometry of individual microscopic objects using swept-source quantitative phase imaging. *Analytical Chemistry*, **2013**, 85, 10519-25	7.8	40
64	Complex wavefront shaping for optimal depth-selective focusing in optical coherence tomography. *Optics Express*, **2013**, 21, 2890-902	3.3	79
63	Real-time visualization of 3-D dynamic microscopic objects using optical diffraction tomography. *Optics Express*, **2013**, 21, 32269-78	3.3	107
62	Subwavelength light focusing using random nanoparticles. *Nature Photonics*, **2013**, 7, 454-458	33.9	125
61	Quantitative phase imaging techniques for the study of cell pathophysiology: from principles to applications. *Sensors*, **2013**, 13, 4170-91	3.8	291
60	Synthetic Fourier transform light scattering. *Optics Express*, **2013**, 21, 22453-63	3.3	37
59	Simple super-resolution live-cell imaging based on diffusion-assisted Förster resonance energy transfer. *Scientific Reports*, **2013**, 3, 1208	4.9	43
58	Measuring large optical transmission matrices of disordered media. *Physical Review Letters*, **2013**, 111, 153902	7.4	89
57	Digital optical phase conjugation for delivering two-dimensional images through turbid media. *Scientific Reports*, **2013**, 3, 1909	4.9	94
56	Optical imaging techniques for the study of malaria. *Trends in Biotechnology*, **2012**, 30, 71-9	15.1	51
55	Label-free imaging of membrane potential using membrane electromotility. *Biophysical Journal*, **2012**, 103, 11-8	2.9	44
54	Optical measurement of biomechanical properties of individual erythrocytes from a sickle cell patient. *Acta Biomaterialia*, **2012**, 8, 4130-8	10.8	87

53	Measurement Techniques for Red Blood Cell Deformability: Recent Advances **2012**,		22
52	Polarization holographic microscopy for extracting spatio-temporally resolved Jones matrix. *Optics Express*, **2012**, 20, 9948-55	3.3	66
51	Dynamic spectroscopic phase microscopy for quantifying hemoglobin concentration and dynamic membrane fluctuation in red blood cells. *Optics Express*, **2012**, 20, 9673-81	3.3	76
50	Dynamic active wave plate using random nanoparticles. *Optics Express*, **2012**, 20, 17010	3.3	58
49	Fourier transform light scattering angular spectroscopy using digital inline holography. *Optics Letters*, **2012**, 37, 4161-3	3	30
48	Active spectral filtering through turbid media. *Optics Letters*, **2012**, 37, 3261-3	3	56
47	Fourier-transform light scattering of individual colloidal clusters. *Optics Letters*, **2012**, 37, 2577-9	3	19
46	Anisotropic light scattering of individual sickle red blood cells. *Journal of Biomedical Optics*, **2012**, 17, 040501	3.5	29
45	Pf155/RESA protein influences the dynamic microcirculatory behavior of ring-stage Plasmodium falciparum infected red blood cells. *Scientific Reports*, **2012**, 2, 614	4.9	50
44	Effective temperature of red-blood-cell membrane fluctuations. *Physical Review Letters*, **2011**, 106, 238103	7.4	101
43	Measurement of the nonlinear elasticity of red blood cell membranes. *Physical Review E*, **2011**, 83, 051925	2.4	60
42	Optical Sensing of Red Blood Cell Dynamics **2011**, 279-309		6
41	Real-time quantitative phase imaging with a spatial phase-shifting algorithm. *Optics Letters*, **2011**, 36, 4677-9	3	143
40	Metabolic remodeling of the human red blood cell membrane measured by quantitative phase microscopy **2011**,		1
39	Light scattering of human red blood cells during metabolic remodeling of the membrane. *Journal of Biomedical Optics*, **2011**, 16, 011013	3.5	31
38	Biophysics of malarial parasite exit from infected erythrocytes. *PLoS ONE*, **2011**, 6, e20869	3.7	65
37	Measurement of red blood cell mechanics during morphological changes. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 6731-6	11.5	291
36	Crosstalk between PKA and Epac regulates the phenotypic maturation and function of human dendritic cells. *Journal of Immunology*, **2010**, 185, 3227-38	5.3	33

35	Static and dynamic light scattering of healthy and malaria-parasite invaded red blood cells. *Journal of Biomedical Optics*, **2010**, 15, 020506	3.5	64
34	Metabolic remodeling of the human red blood cell membrane. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 1289-94	11.5	280
33	Spectroscopic phase microscopy for quantifying hemoglobin concentrations in intact red blood cells. *Optics Letters*, **2009**, 34, 3668-70	3	136
32	Improved phase sensitivity in spectral domain phase microscopy using line-field illumination and self phase-referencing. *Optics Express*, **2009**, 17, 10681-7	3.3	31
31	Speckle-field digital holographic microscopy. *Optics Express*, **2009**, 17, 12285-92	3.3	102
30	Ultraviolet refractometry using field-based light scattering spectroscopy. *Optics Express*, **2009**, 17, 18878-86	3.3	21
29	Imaging red blood cell dynamics by quantitative phase microscopy. *Blood Cells, Molecules, and Diseases*, **2008**, 41, 10-6	2.1	154
28	Refractive index maps and membrane dynamics of human red blood cells parasitized by Plasmodium falciparum. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 13730-5	11.5	464
27	Coherence properties of red blood cell membrane motions. *Physical Review E*, **2007**, 76, 031902	2.4	53
26	Element stacking method for topology optimization with material-dependent boundary and loading conditions. *Journal of Mechanics of Materials and Structures*, **2007**, 2, 883-895	1.2	9
25	Fresnel particle tracing in three dimensions using diffraction phase microscopy. *Optics Letters*, **2007** , 32, 811-3	3	54
24	Imaging voltage-dependent cell motions with heterodyne Mach-Zehnder phase microscopy. *Optics Letters*, **2007**, 32, 1572-4	3	48
23	Microrheology of red blood cell membranes using dynamic scattering microscopy. *Optics Express*, **2007**, 15, 17001-9	3.3	50
22	Diffraction phase and fluorescence microscopy. *Optics Express*, **2006**, 14, 8263-8	3.3	188
21	Scattering superlens. *SPIE Newsroom*,		2
20	Optical diffraction tomography techniques for the study of cell pathophysiology. *Journal of Biomedical Photonics and Engineering*,020201-1-020201-16	2.4	38
19	Real-time monitoring of bacterial growth and fast antimicrobial susceptibility tests exploiting multiple light scattering		1
18	Physicochemical Properties of Chromosomes in Live Cells Characterized by Label-Free Imaging and Fluorescence Correlation Spectroscopy		2

17	Rapid label-free identification of pathogenic bacteria species from a minute quantity exploiting three-dimensional quantitative phase imaging and artificial neural network	4
16	Measurements of morphological and biochemical alterations in individual neuron cells associated with early neurotoxic effects in Parkinson disease	4
15	Refractive index tomograms and dynamic membrane fluctuations of red blood cells from patients with diabetes mellitus	1
14	Melittin-induced alterations in morphology and deformability of human red blood cells using quantitative phase imaging techniques	2
13	Label-free high-resolution 3-D imaging of gold nanoparticles inside live cells using optical diffraction tomography	5
12	Holotomography: refractive index as an intrinsic imaging contrast for 3-D label-free live cell imaging	15
11	Label-free identification of non-activated lymphocytes using three-dimensional refractive index tomography and machine learning	2
10	Holographic deep learning for rapid optical screening of anthrax spores	2
9	Correlative three-dimensional fluorescence and refractive index tomography: bridging the gap between molecular specificity and quantitative bioimaging	2
8	Label-free three-dimensional observations and quantitative characterisation of on-chip vasculogenesis using optical diffraction tomography	2
7	Data-driven multiplexed microtomography of endogenous subcellular dynamics	4
6	Label-free non-invasive quantitative measurement of lipid contents in individual microalgal cells using refractive index tomography	1
5	Deep-learning-based label-free segmentation of cell nuclei in time-lapse refractive index tomograms	2
4	Deep-learning based three-dimensional label-free tracking and analysis of immunological synapses of chimeric antigen receptor T cells	3
3	Three-dimensional label-free observation of individual bacteria upon antibiotic treatment using optical diffraction tomography	1
2	Measuring three-dimensional dynamics of platelet activation using 3-D quantitative phase imaging	1
1	Rapid antimicrobial susceptibility test using spatiotemporal analysis of laser speckle dynamics of bacterial colonies	2