

# Igor V Meglinski

## List of Publications by Year in descending order

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295  
papers

5,228  
citations

71102

41  
h-index

123424

61  
g-index

306  
all docs

306  
docs citations

306  
times ranked

3395  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantitative assessment of skin layers absorption and skin reflectance spectra simulation in the visible and near-infrared spectral regions. <i>Physiological Measurement</i> , 2002, 23, 741-753.	2.1	325
2	Application of circularly polarized light for non-invasive diagnosis of cancerous tissues and turbid tissue-like scattering media. <i>Journal of Biophotonics</i> , 2015, 8, 317-323.	2.3	197
3	Modelling the sampling volume for skin blood oxygenation measurements. <i>Medical and Biological Engineering and Computing</i> , 2001, 39, 44-50.	2.8	143
4	Computer simulation of the skin reflectance spectra. <i>Computer Methods and Programs in Biomedicine</i> , 2003, 70, 179-186.	4.7	143
5	Online object oriented Monte Carlo computational tool for the needs of biomedical optics. <i>Biomedical Optics Express</i> , 2011, 2, 2461.	2.9	135
6	Laser light scattering in turbid media Part I: Experimental and simulated results for the spatial intensity distribution. <i>Optics Express</i> , 2007, 15, 10649.	3.4	129
7	Simulation of optical coherence tomography images by Monte Carlo modeling based on polarization vector approach. <i>Optics Express</i> , 2010, 18, 21714.	3.4	92
8	Optical coherence tomography imaging depth enhancement by superficial skin optical clearing. <i>Laser Physics Letters</i> , 2007, 4, 824-826.	1.4	84
9	Optical Tweezers in Studies of Red Blood Cells. <i>Cells</i> , 2020, 9, 545.	4.1	82
10	Plant photonics: application of optical coherence tomography to monitor defects and rots in onion. <i>Laser Physics Letters</i> , 2010, 7, 307-310.	1.4	81
11	Terahertz time-domain spectroscopy for non-invasive assessment of water content in biological samples. <i>Biomedical Optics Express</i> , 2018, 9, 2266.	2.9	74
12	Optical tweezers study of red blood cell aggregation and disaggregation in plasma and protein solutions. <i>Journal of Biomedical Optics</i> , 2016, 21, 035001.	2.6	71
13	Monte Carlo simulation of reflection spectra of random multilayer media strongly scattering and absorbing light. <i>Quantum Electronics</i> , 2001, 31, 1101-1107.	1.0	68
14	Hyperspectral imaging of human skin aided by artificial neural networks. <i>Biomedical Optics Express</i> , 2019, 10, 3545.	2.9	68
15	Imaging of subcutaneous blood vessels and flow velocity profiles by optical coherence tomography. <i>Laser Physics</i> , 2010, 20, 891-899.	1.2	60
16	Skin Complications of Diabetes Mellitus Revealed by Polarized Hyperspectral Imaging and Machine Learning. <i>IEEE Transactions on Medical Imaging</i> , 2021, 40, 1207-1216.	8.9	60
17	Analysis of the spatial distribution of detector sensitivity in a multilayer randomly inhomogeneous medium with strong light scattering and absorption by the Monte Carlo method. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2001, 91, 654-659.	0.6	58
18	Transcutaneous immunization using microneedles and cubosomes: Mechanistic investigations using Optical Coherence Tomography and Two-Photon Microscopy. <i>Journal of Controlled Release</i> , 2013, 172, 894-903.	9.9	57

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19	Human tissue color as viewed in high dynamic range optical spectral transmission measurements. <i>Biomedical Optics Express</i> , 2012, 3, 2154.	2.9	56
20	Peer-to-peer Monte Carlo simulation of photon migration in topical applications of biomedical optics. <i>Journal of Biomedical Optics</i> , 2012, 17, 0905041.	2.6	54
21	Monitoring of blood proteins glycation by refractive index and spectral measurements. <i>Laser Physics Letters</i> , 2008, 5, 460-464.	1.4	53
22	Propagation of coherent polarized light in turbid highly scattering medium. <i>Journal of Biomedical Optics</i> , 2014, 19, 025005.	2.6	53
23	Study of the possibility of increasing the probing depth by the method of reflection confocal microscopy upon immersion clearing of near-surface human skin layers. <i>Quantum Electronics</i> , 2002, 32, 875-882.	1.0	52
24	Label free in vivo laser speckle imaging of blood and lymph vessels. <i>Journal of Biomedical Optics</i> , 2012, 17, 050502.	2.6	52
25	3D Mueller matrix mapping of layered distributions of depolarisation degree for analysis of prostate adenoma and carcinoma diffuse tissues. <i>Scientific Reports</i> , 2021, 11, 5162.	3.3	52
26	Analysis of skin tissues spatial fluorescence distribution by the Monte Carlo simulation. <i>Journal Physics D: Applied Physics</i> , 2003, 36, 1722-1728.	2.8	51
27	Is mean blood saturation a useful marker of tissue oxygenation?. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009, 296, H1289-H1295.	3.2	51
28	3D Mueller-Matrix Diffusive Tomography of Polycrystalline Blood Films for Cancer Diagnosis. <i>Photonics</i> , 2018, 5, 54.	2.0	51
29	Towards enhanced optical sensor performance: SEIRA and SERS with plasmonic nanostars. <i>Analyst</i> , 2017, 142, 951-958.	3.5	49
30	Mueller-matrix-based polarization imaging and quantitative assessment of optically anisotropic polycrystalline networks. <i>PLoS ONE</i> , 2019, 14, e0214494.	2.5	49
31	Amending of fluorescence sensor signal localization in human skin by matching of the refractive index. <i>Journal of Biomedical Optics</i> , 2004, 9, 339.	2.6	46
32	Spatial evolution of depolarization in homogeneous turbid media within the differential Mueller matrix formalism. <i>Optics Letters</i> , 2015, 40, 5634.	3.3	45
33	Surface enhanced infrared absorption spectroscopy based on gold nanostars and spherical nanoparticles. <i>Analytica Chimica Acta</i> , 2017, 990, 141-149.	5.4	45
34	Complementary analysis of Mueller-matrix images of optically anisotropic highly scattering biological tissues. <i>Journal of the European Optical Society-Rapid Publications</i> , 2018, 14, .	1.9	45
35	Coherent effects of multiple scattering for scalar and electromagnetic fields: Monte Carlo simulation and Milne-like solutions. <i>Optics Communications</i> , 2007, 273, 307-310.	2.1	44
36	Laser light scattering in turbid media Part II: Spatial and temporal analysis of individual scattering orders via Monte Carlo simulation. <i>Optics Express</i> , 2009, 17, 13792.	3.4	43

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37	Evaluating $I^2$ -amyloidosis progression in Alzheimer's disease with Mueller polarimetry. Biomedical Optics Express, 2020, 11, 4509.	2.9	43
38	Simulation of polarization-sensitive optical coherence tomography images by a Monte Carlo method. Optics Letters, 2008, 33, 1581.	3.3	42
39	Bare laser-synthesized Au-based nanoparticles as nondisturbing surface-enhanced Raman scattering probes for bacteria identification. Journal of Biophotonics, 2018, 11, e201700225.	2.3	42
40	New model for light propagation in highly inhomogeneous polydisperse turbid media with applications in spray diagnostics. Optics Express, 2005, 13, 9181.	3.4	41
41	Doppler optical coherence tomography in cardiovascular applications. Laser Physics, 2010, 20, 1491-1499.	1.2	41
42	Two electric field Monte Carlo models of coherent backscattering of polarized light. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2394.	1.5	41
43	Imaging of subchondral bone by optical coherence tomography upon optical clearing of articular cartilage. Journal of Biophotonics, 2016, 9, 270-275.	2.3	41
44	Colon cancer detection by using Poincaré sphere and $2D$ polarimetric mapping of ex vivo colon samples. Journal of Biophotonics, 2020, 13, e202000082.	2.3	41
45	The advancement of blood cell research by optical tweezers. Reviews in Physics, 2020, 5, 100043.	8.9	41
46	Influence of blood pulsation on diagnostic volume in pulse oximetry and photoplethysmography measurements. Applied Optics, 2019, 58, 9398.	1.8	40
47	Turbulence monitoring with Doppler Optical Coherence Tomography. Laser Physics Letters, 2007, 4, 304-307.	1.4	39
48	Stokes-Correlometry Analysis of Biological Tissues With Polycrystalline Structure. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-12.	2.9	38
49	Embossed topographic depolarisation maps of biological tissues with different morphological structures. Scientific Reports, 2021, 11, 3871.	3.3	36
50	Special Section Guest Editorial: Polarized Light for Biomedical Applications. Journal of Biomedical Optics, 2016, 21, 071001.	2.6	35
51	Mutual interaction of red blood cells influenced by nanoparticles. Scientific Reports, 2019, 9, 5147.	3.3	35
52	Backscattering of circular polarized light from a disperse random medium influenced by optical clearing. Laser Physics Letters, 2011, 8, 324-328.	1.4	34
53	Assessment of the dynamics of human lymphatic system by near-infrared spectroscopy. Journal of Biophotonics, 2018, 11, e201700123.	2.3	34
54	Effect of photons of different scattering orders on the formation of a signal in optical low-coherence tomography of highly scattering media. Quantum Electronics, 2006, 36, 247-252.	1.0	33

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55	A simple approach for noninvasive transcranial optical vascular imaging (nTOVI). Journal of Biophotonics, 2015, 8, 897-901.	2.3	33
56	Study of flow dynamics in complex vessels using Doppler optical coherence tomography. Measurement Science and Technology, 2007, 18, 3279-3286.	2.6	32
57	Monte Carlo simulation of coherent effects in multiple scattering. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2005, 461, 43-53.	2.1	31
58	Biomedical applications of Jones-matrix tomography to polycrystalline films of biological fluids. Journal of Innovative Optical Health Sciences, 2019, 12, .	1.0	31
59	Combined application of dynamic light scattering imaging and fluorescence intravital microscopy in vascular biology. Laser Physics Letters, 0, 7, 603-606.	1.4	30
60	Probing the Red Blood Cells Aggregating Force With Optical Tweezers. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 365-370.	2.9	30
61	Application of wavelet analysis in optical coherence tomography for obscured pattern recognition. Laser Physics Letters, 2009, 6, 892-895.	1.4	29
62	Polarization and depolarization metrics as optical markers in support to histopathology of ex vivo colon tissue. Biomedical Optics Express, 2021, 12, 4560.	2.9	27
63	<i>In vivo</i> characterization of tumor and tumor vascular network using multimodal imaging approach. Journal of Biophotonics, 2011, 4, 645-649.	2.3	26
64	Quantitative assessment of submicron scale anisotropy in tissue multifractality by scattering Mueller matrix in the framework of Born approximation. Optics Communications, 2018, 413, 172-178.	2.1	26
65	Differential Mueller matrix imaging of partially depolarizing optically anisotropic biological tissues. Lasers in Medical Science, 2020, 35, 877-891.	2.1	26
66	Biodegradable Nanocarriers Resembling Extracellular Vesicles Deliver Genetic Material with the Highest Efficiency to Various Cell Types. Small, 2020, 16, e1904880.	10.0	25
67	Dyes Assay for Measuring Physicochemical Parameters. Analytical Chemistry, 2009, 81, 2311-2316.	6.5	24
68	Surface-enhanced Raman spectroscopy for identification and discrimination of beverage spoilage yeasts using patterned substrates and gold nanoparticles. Journal of Food Engineering, 2017, 212, 47-54.	5.2	24
69	Plasmon-Resonant Gold Nanostars With Variable Size as Contrast Agents for Imaging Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 13-20.	2.9	23
70	Detection of <i>Listeria innocua</i> on roll-to-roll produced SERS substrates with gold nanoparticles. RSC Advances, 2016, 6, 62981-62989.	3.6	23
71	Combined use of laser Doppler flowmetry and skin thermometry for functional diagnostics of intradermal finger vessels. Journal of Biomedical Optics, 2017, 22, 040502.	2.6	23
72	A highly efficient and safe gene delivery platform based on polyelectrolyte core-shell nanoparticles for hard-to-transfect clinically relevant cell types. Journal of Materials Chemistry B, 2020, 8, 9576-9588.	5.8	23

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73	3D Mueller-matrix-based azimuthal invariant tomography of polycrystalline structure within benign and malignant soft-tissue tumours. <i>Laser Physics Letters</i> , 2020, 17, 115606.	1.4	23
74	Influence of probe pressure on diffuse reflectance spectra of human skin measured in vivo. <i>Journal of Biomedical Optics</i> , 2017, 22, 1.	2.6	23
75	Crossed source detector geometry for a novel spray diagnostic: Monte Carlo simulation and analytical results. <i>Applied Optics</i> , 2005, 44, 2519.	2.1	22
76	Image transfer through the complex scattering turbid media. <i>Laser Physics Letters</i> , 2006, 3, 464-467.	1.4	22
77	Two-point Stokes vector diagnostic approach for characterization of optically anisotropic biological tissues. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 395401.	2.8	22
78	Speckle dynamics under ergodicity breaking. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 155401.	2.8	21
79	Mapping of polycrystalline films of biological fluids utilizing the Jones-matrix formalism. <i>Laser Physics</i> , 2018, 28, 025602.	1.2	21
80	A Robust Method for Adjustment of Laser Speckle Contrast Imaging during Transcranial Mouse Brain Visualization. <i>Photonics</i> , 2019, 6, 80.	2.0	21
81	Combined laser speckle imaging and fluorescent intravital microscopy for monitoring acute vascular permeability reaction. <i>Journal of Biomedical Optics</i> , 2019, 24, 1.	2.6	21
82	Role of scattering and birefringence in phase retardation revealed by locus of Stokes vector on Poincaré sphere. <i>Journal of Biomedical Optics</i> , 2020, 25, 1.	2.6	21
83	Polarization-Based Histopathology Classification of Ex Vivo Colon Samples Supported by Machine Learning. <i>Frontiers in Physics</i> , 2022, 9, .	2.1	21
84	Towards the nature of biological zero in the dynamic light scattering diagnostic modalities. <i>Doklady Physics</i> , 2013, 58, 323-326.	0.7	20
85	Imaging of subcutaneous microcirculation vascular network by double correlation Optical Coherence Tomography. <i>Laser and Photonics Reviews</i> , 2013, 7, 797-800.	8.7	20
86	Analysis of skin blood microflow oscillations in patients with rheumatic diseases. <i>Journal of Biomedical Optics</i> , 2017, 22, 070501.	2.6	20
87	In vivo nano-biosensing element of red blood cell-mediated delivery. <i>Biosensors and Bioelectronics</i> , 2021, 175, 112845.	10.1	20
88	Numerical simulation of coherent backscattering and temporal intensity correlations in random media. <i>Quantum Electronics</i> , 2006, 36, 990-1002.	1.0	19
89	Optical coherence tomography: A potential tool for unsupervised prediction of treatment response for Port-Wine Stains. <i>Photodiagnosis and Photodynamic Therapy</i> , 2008, 5, 191-197.	2.6	19
90	Assessment of the calibration curve for transmittance pulse-oximetry. <i>Laser Physics</i> , 2011, 21, 1972-1977.	1.2	19

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91	Propagation of Cylindrical Vector Laser Beams in Turbid Tissue-Like Scattering Media. Photonics, 2019, 6, 56.	2.0	19
92	Biophotonics methods for functional monitoring of complications of diabetes mellitus. Journal of Biophotonics, 2020, 13, e202000203.	2.3	19
93	<title>Diffusion of temporal field correlation with selected applications</title>. , 1996, 2732, 34.		18
94	Assessment of transcutaneous vaccine delivery by optical coherence tomography. Laser Physics Letters, 2012, 9, 607-610.	1.4	18
95	Parallel <i>in vivo</i> monitoring of pH in gill capillaries and muscles of fishes using microencapsulated biomarkers. Biology Open, 2017, 6, 673-677.	1.2	18
96	Mutual interaction of red blood cells assessed by optical tweezers and scanning electron microscopy imaging. Optics Letters, 2018, 43, 3921.	3.3	18
97	Low and high order light scattering in particulate media. Laser Physics Letters, 2004, 1, 387-390.	1.4	17
98	Visualisation of blood and lymphatic vessels with increasing exposure time of the detector. Quantum Electronics, 2013, 43, 679-682.	1.0	17
99	Assisted Medication Management in Elderly Care Using Miniaturised Near-Infrared Spectroscopy. , 2018, 2, 1-24.		17
100	Meat freshness revealed by visible to near-infrared spectroscopy and principal component analysis. Journal of Physics Communications, 2020, 4, 095011.	1.2	17
101	Characterization at the individual cell level and in whole blood samples of shear stress preventing red blood cells aggregation. Journal of Biomechanics, 2016, 49, 1021-1026.	2.1	16
102	Influence of Pulsed He-Ne Laser Irradiation on the Red Blood Cell Interaction Studied by Optical Tweezers. Micromachines, 2019, 10, 853.	2.9	16
103	Impairments of cerebral blood flow microcirculation in rats brought on by cardiac cessation and respiratory arrest. Journal of Biophotonics, 2021, 14, e202100216.	2.3	16
104	Photoacoustic Imaging in Biomedicine and Life Sciences. Life, 2022, 12, 588.	2.4	16
105	Microencapsulated bio-markers for assessment of stress conditions in aquatic organisms <i>in vivo</i> . Laser Physics Letters, 2012, 9, 542-546.	1.4	15
106	Remote <i>in vivo</i> stress assessment of aquatic animals with microencapsulated biomarkers for environmental monitoring. Scientific Reports, 2016, 6, 36427.	3.3	15
107	Backscattering of linearly and circularly polarized light in randomly inhomogeneous media. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 257-267.	0.6	14
108	Ear swelling test by using laser speckle imaging with a long exposure time. Journal of Biomedical Optics, 2014, 19, 060502.	2.6	14

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109	Impact of Nanocapsules on Red Blood Cells Interplay Jointly Assessed by Optical Tweezers and Microscopy. <i>Micromachines</i> , 2020, 11, 19.	2.9	14
110	Polarization and Orbital Angular Momentum of Light in Biomedical Applications: feature issue introduction. <i>Biomedical Optics Express</i> , 2021, 12, 6255.	2.9	14
111	Application of the vector Monte-Carlo method in polarisation optical coherence tomography. <i>Quantum Electronics</i> , 2006, 36, 1009-1015.	1.0	13
112	Characterization of shear stress preventing red blood cells aggregation at the individual cell level: The temperature dependence. <i>Clinical Hemorheology and Microcirculation</i> , 2017, 64, 853-857.	1.7	12
113	Evolution of raw meat polarization-based properties by means of Mueller matrix imaging. <i>Journal of Biophotonics</i> , 2021, 14, e202000376.	2.3	12
114	Shedding the Polarized Light on Biological Tissues. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2021, , .	0.4	12
115	Investigation of Blood Flow Microcirculation by Diffusing Wave Spectroscopy. <i>Critical Reviews in Biomedical Engineering</i> , 2001, 29, 535-548.	0.9	11
116	APPLICATION OF DOPPLER OPTICAL COHERENCE TOMOGRAPHY IN RHEOLOGICAL STUDIES: BLOOD FLOW AND VESSELS MECHANICAL PROPERTIES EVALUATION. <i>Journal of Innovative Optical Health Sciences</i> , 2009, 02, 431-440.	1.0	11
117	Helicity flip of the backscattered circular polarized light. <i>Proceedings of SPIE</i> , 2010, , .	0.8	11
118	3D Mueller Matrix Reconstruction of the Optical Anisotropy Parameters of Myocardial Histopathology Tissue Samples. <i>Frontiers in Physics</i> , 2021, 9, .	2.1	11
119	Multimodal imaging of vascular network and blood microcirculation by optical diagnostic techniques. <i>Quantum Electronics</i> , 2011, 41, 308-313.	1.0	10
120	Backscattering of linearly polarized light from turbid tissue-like scattering medium with rough surface. <i>Journal of Biomedical Optics</i> , 2016, 21, 071117.	2.6	10
121	Application of PEG-Covered Non-Biodegradable Polyelectrolyte Microcapsules in the Crustacean Circulatory System on the Example of the Amphipod <i>Eulimnogammarus verrucosus</i> . <i>Polymers</i> , 2019, 11, 1246.	4.5	10
122	Monitoring of temperature-mediated phase transitions of adipose tissue by combined optical coherence tomography and Abbe refractometry. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	2.6	10
123	Development of oral cancer tissue-mimicking phantom based on polyvinyl chloride plastisol and graphite for terahertz frequencies. <i>Journal of Biomedical Optics</i> , 2020, 25, .	2.6	10
124	Screening of Alzheimer's Disease With Multiwavelength Stokes Polarimetry in a Mouse Model. <i>IEEE Transactions on Medical Imaging</i> , 2022, 41, 977-982.	8.9	10
125	Dependence of the circular polarization of backscattered light in random media on anisotropy of scatterers. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2010, 108, 99-106.	0.6	9
126	Optical Assay for Biotechnology and Clinical Diagnosis. <i>IEEE Transactions on Biomedical Engineering</i> , 2011, 58, 2154-2160.	4.2	9



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127	Evaluation of path-history-based fluorescence Monte Carlo method for photon migration in heterogeneous media. Optics Express, 2014, 22, 31948.	3.4	9
128	Monitoring of interaction of low-frequency electric field with biological tissues upon optical clearing with optical coherence tomography. Journal of Biomedical Optics, 2014, 19, 086002.	2.6	9
129	Submicron scale tissue multifractal anisotropy in polarized laser light scattering. Laser Physics Letters, 2018, 15, 035601.	1.4	9
130	Imaging of the interaction of low-frequency electric fields with biological tissues by optical coherence tomography. Optics Letters, 2013, 38, 2629.	3.3	8
131	Dermal Componentâ€“Based Optical Modeling of Skin Translucency: Impact on Skin Color. , 2014, , 25-61.		8
132	Microencapsulated fluorescent pH probe as implantable sensor for monitoring the physiological state of fish embryos. PLoS ONE, 2017, 12, e0186548.	2.5	8
133	Distribution of PEG-coated hollow polyelectrolyte microcapsules after introduction into the circulatory system and muscles of zebrafish. Biology Open, 2018, 7, .	1.2	8
134	Time-space Fourier filter for motion artifacts compensation during transcranial fluorescence brain imaging. Physics in Medicine and Biology, 2020, 65, 075007.	3.0	8
135	Delivery and reveal of localization of upconversion luminescent microparticles and quantum dots in the skin in vivo by fractional laser microablation, multimodal imaging, and optical clearing. Journal of Biomedical Optics, 2018, 23, 1.	2.6	8
136	<title>Modeling of skin reflectance spectra</title>. , 2001, , .		7
137	Spatial Localization of Biosensor Fluorescence Signals in Human Skin under the Effect of Equalization of the Refractive Index of the Surrounding Medium. Optics and Spectroscopy (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.6	7
138	Low-order light scattering in multiple scattering disperse media. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.6	7
139	Coherent Effects in Multiple Scattering of Linearly Polarized Light. Optics and Spectroscopy (English) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.6	7
140	COHERENT BACKSCATTERING OF CIRCULARLY POLARIZED LIGHT FROM A DISPERSE RANDOM MEDIUM. Progress in Electromagnetics Research M, 2011, 16, 47-61.	0.9	7
141	Optical diagnostics of vascular reactions triggered by weak allergens using laser speckle-contrast imaging technique. Quantum Electronics, 2014, 44, 713-718.	1.0	7
142	Imitation of optical coherence tomography images by wave Monte Carlo-based approach implemented with the Leontovichâ€“Fock equation. Optical Engineering, 2020, 59, 1.	1.0	7
143	Numerical simulation of coherent effects under conditions of multiple scattering. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2004, 97, 100-106.	0.6	6
144	Allocation of rhodamine-loaded nanocapsules from blood circulatory system to adjacent tissues assessed in vivo by fluorescence spectroscopy. Laser Physics Letters, 2018, 15, 105601.	1.4	6

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145	Imaging of early stage breast cancer with circularly polarized light. , 2020, , .		6
146	Screening Cancer Aggressiveness by Using Circularly Polarized Light. , 2013, , .		6
147	Diagnosis of Skin Vascular Complications Revealed by Time-Frequency Analysis and Laser Doppler Spectrum Decomposition. IEEE Transactions on Biomedical Engineering, 2023, 70, 3-14.	4.2	6
148	Permittivity of a randomly inhomogeneous medium. Optics and Spectroscopy (English Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.5	5
149	Monte Carlo simulation of photon migration in turbid random media based on the object-oriented programming paradigm. Proceedings of SPIE, 2011, , .	0.8	5
150	Diffusing-wave polarimetry for tissue diagnostics. Proceedings of SPIE, 2014, , .	0.8	5
151	Simple and Effective Administration and Visualization of Microparticles in the Circulatory System of Small Fishes Using Kidney Injection. Journal of Visualized Experiments, 2018, , .	0.3	5
152	Polarization Correlometry of Scattering Biological Tissues and Fluids. SpringerBriefs in Physics, 2020, , .	0.7	5
153	Multiplexed spatially-focused localization of light in adipose biological tissues. Scientific Reports, 2022, 12, .	3.3	5
154	Determination of absorption coefficient of skin melanin in visible and NIR spectral region. , 2000, 3907, 143.		4
155	Monte Carlo Method in optical diagnostics of skin and skin tissues. , 2003, , .		4
156	Laser ice scaffolds modeling for tissue engineering. Laser Physics Letters, 2005, 2, 465-467.	1.4	4
157	Simulation of the propagation of a light pulse in a randomly inhomogeneous medium. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2006, 100, 767-775.	0.6	4
158	GPU-accelerated object-oriented Monte Carlo modeling of photon migration in turbid media. , 2010, , .		4
159	The use of optical coherence tomography for morphological study of scaffolds. Quantum Electronics, 2012, 42, 394-398.	1.0	4
160	Ecophotonics: assessment of temperature gradient in aquatic organisms using up-conversion luminescent particles. Quantum Electronics, 2017, 47, 153-157.	1.0	4
161	Evaluation of handwriting peculiarities utilizing laser speckle contrast imaging. Laser Physics Letters, 2019, 16, 115601.	1.4	4
162	Polyacrylamide-based phantoms of human skin for hyperspectral fluorescence imaging and spectroscopy. Quantum Electronics, 2021, 51, 118-123.	1.0	4

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163	Wireless data transfer through biological tissues using near-infrared light: testing skull and skin phantoms. , 2020, , .		4
164	Introduction to Light Scattering by Biological Objects. , 0, , .		4
165	Optical Wireless Data Transfer Through Biotissues: Practical Evidence and Initial Results. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2019, , 191-205.	0.3	4
166	Tissue-mimicking phantoms for biomedical applications. , 2020, , .		4
167	Hemorheological alterations of red blood cells induced by 450-nm and 520-nm laser radiation. Journal of Photochemistry and Photobiology B: Biology, 2022, 230, 112438.	3.8	4
168	Use of diffusion wave spectroscopy in diagnostics of blood. Journal of Applied Spectroscopy, 2000, 67, 709-716.	0.7	3
169	Monte Carlo modeling of polarized light propagation in a biological tissue. , 2002, , .		3
170	<title>Skin fluorescence model based on the Monte Carlo technique</title>. , 2003, , .		3
171	A novel Monte Carlo method for the optical diagnostics of skin. , 2003, 5141, 133.		3
172	<title>Investigation of glucose-hemoglobin interaction by optical coherence tomography</title>. , 2007, , .		3
173	Improving image quality in reflection confocal microscopy involving gold nanoparticles and osmotically active immersion liquids. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1 1 0.7843146BT /Overlock ID		3
174	Field of a point source in a semi-infinite elastic medium. Waves in Random and Complex Media, 2012, 22, 423-434.	2.7	3
175	Monte Carlo Modeling of Photon Migration for the Needs of Biomedical Optics and Biophotonics. Series in Optics and Optoelectronics, 2013, , 1-72.	0.0	3
176	In-Body Communications Exploiting Light: A Proof-of-Concept Study Using Ex Vivo Tissue Samples. IEEE Access, 2020, 8, 190378-190389.	4.2	3
177	Blood Flow Visualization by Means of Laser Speckle-Contrast Measurements under the Conditions of Nonergodicity. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2020, 128, 778-786.	0.6	3
178	Symmetric decomposition of Mueller matrices reveals a new parametric space for polarimetric assistance in colon cancer histopathology. , 2021, , .		3
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