## Nikolay Kazanskiy

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

2,601 26 203 35 h-index g-index citations papers 4,281 6.3 1.9 220 L-index ext. citations avg, IF ext. papers

#	Paper	IF	Citations
203	Recent Advances in Wearable Optical Sensor Automation Powered by Battery versus Skin-like Battery-Free Devices for Personal Healthcare-A Review <i>Nanomaterials</i> , <b>2022</b> , 12,	5.4	4
202	Hybrid metasurface perfect absorbers for temperature and biosensing applications. <i>Optical Materials</i> , <b>2022</b> , 123, 111906	3.3	3
201	A Miniaturized FSS-Based Eight-Element MIMO Antenna Array for Off/On-Body WBAN Telemetry Applications. <i>Electronics (Switzerland)</i> , <b>2022</b> , 11, 522	2.6	2
200	Fabrication and Investigation of Spectral Properties of a Dielectric Slab Waveguide Photonic Crystal Based Fano-Filter. <i>Crystals</i> , <b>2022</b> , 12, 226	2.3	3
199	A compact design of a modified Bragg grating filter based on a metal-insulator-metal waveguide for filtering and temperature sensing applications. <i>Optik</i> , <b>2022</b> , 251, 168466	2.5	4
198	Tailoring of Inverse Energy Flow Profiles with Vector Lissajous Beams. <i>Photonics</i> , <b>2022</b> , 9, 121	2.2	1
197	Revolution in Flexible Wearable Electronics for Temperature and Pressure Monitoring A Review. <i>Electronics (Switzerland)</i> , <b>2022</b> , 11, 716	2.6	5
196	Supporting Quadric Method for Designing Freeform Mirrors That Generate Prescribed Near-Field Irradiance Distributions. <i>Photonics</i> , <b>2022</b> , 9, 118	2.2	1
195	Numerical simulation of the performance of a spaceborne Offner imaging hyperspectrometer in the wave optics approximation. <i>Computer Optics</i> , <b>2022</b> , 46, 56-64	1.4	O
194	Performance Comparison of Silicon- and Gallium-Nitride-Based MOSFETs for a Power-Efficient, DC-to-DC Flyback Converter. <i>Electronics (Switzerland)</i> , <b>2022</b> , 11, 1222	2.6	O
193	Advancement in Silicon Integrated Photonics Technologies for Sensing Applications in Near-Infrared and Mid-Infrared Region: A Review. <i>Photonics</i> , <b>2022</b> , 9, 331	2.2	3
192	First Earth-Imaging CubeSat with Harmonic Diffractive Lens. <i>Remote Sensing</i> , <b>2022</b> , 14, 2230	5	1
191	Ultraviolet Nanosecond Laser Treatment to Reduce the Friction Coefficient of Silicon Carbide Ceramics. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 11906	2.6	O
190	Modern Types of Axicons: New Functions and Applications. <i>Sensors</i> , <b>2021</b> , 21,	3.8	4
189	Near-Field Vortex Beams Diffraction on Surface Micro-Defects and Diffractive Axicons for Polarization State Recognition. <i>Sensors</i> , <b>2021</b> , 21,	3.8	4
188	Numerical investigation of metasurface narrowband perfect absorber and a plasmonic sensor for a near-infrared wavelength range. <i>Journal of Optics (United Kingdom)</i> , <b>2021</b> , 23, 065102	1.7	5
187	State-of-the-Art Optical Devices for Biomedical Sensing Applications Review. <i>Electronics</i> (Switzerland), <b>2021</b> , 10, 973	2.6	10

#### (2021-2021)

186	2D-Photonic crystal heterostructures for the realization of compact photonic devices. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , <b>2021</b> , 44, 100903	2.6	10
185	Plasmonic sensor based on metal-insulator-metal waveguide square ring cavity filled with functional material for the detection of CO gas. <i>Optics Express</i> , <b>2021</b> , 29, 16584-16594	3.3	13
184	Analysis of the Advantages of Laser Processing of Aerospace Materials Using Diffractive Optics. <i>Metals</i> , <b>2021</b> , 11, 963	2.3	4
183	Silicon photonic devices realized on refractive index engineered subwavelength grating waveguides-A review. <i>Optics and Laser Technology</i> , <b>2021</b> , 138, 106863	4.2	16
182	Metal-Insulator-Metal Waveguide-Based Racetrack Integrated Circular Cavity for Refractive Index Sensing Application. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 1419	2.6	7
181	Recent Advances in Generation and Detection of Orbital Angular Momentum Optical Beams-A Review. <i>Sensors</i> , <b>2021</b> , 21,	3.8	7
180	Metal-insulator-metal nano square ring resonator for gas sensing applications. <i>Waves in Random and Complex Media</i> , <b>2021</b> , 31, 146-156	1.9	23
179	Using a Binary Diffractive Optical Element to Increase the Imaging System Depth of Field in UAV Remote Sensing Tasks. <i>Lecture Notes in Computer Science</i> , <b>2021</b> , 566-577	0.9	
178	Carbon Dioxide Gas Sensor Based on Polyhexamethylene Biguanide Polymer Deposited on Silicon Nano-Cylinders Metasurface. <i>Sensors</i> , <b>2021</b> , 21,	3.8	22
177	Academician Evgeny Pavlovich Velikhov and computer optics. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 1745, 012032	0.3	Ο
176	Modelling of temperature fields in DP1000 steel during laser treatment using diffractive optical elements. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 1745, 012016	0.3	0
175	Spectral characteristics of broad band-rejection filter based on Bragg grating, one-dimensional photonic crystal, and subwavelength grating waveguide. <i>Physica Scripta</i> , <b>2021</b> , 96, 055505	2.6	5
174	Supporting quadric method for designing refractive optical elements generating prescribed irradiance distributions and wavefronts. <i>Optics Express</i> , <b>2021</b> , 29, 26304-26318	3.3	2
173	2D-Heterostructure Photonic Crystal Formation for On-Chip Polarization Division Multiplexing. <i>Photonics</i> , <b>2021</b> , 8, 313	2.2	1
172	Influence of Two-Frequency Radiation Intensity Fluctuations on the Output Signal of a Vortex Optical Fiber Forming OAM Address in Polyharmonic Sensor Technology. <i>Photonics</i> , <b>2021</b> , 8, 351	2.2	0
171	A Numerical Investigation of a Plasmonic Sensor Based on a Metal-Insulator-Metal Waveguide for Simultaneous Detection of Biological Analytes and Ambient Temperature. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	9
170	Hybrid design of diffractive optical elements for optical beam shaping. <i>Optics Express</i> , <b>2021</b> , 29, 31875-	31.890	1
169	Recent advances in photonic crystal optical devices: A review. <i>Optics and Laser Technology</i> , <b>2021</b> , 142, 107265	4.2	15

168	Plasmonics: A Necessity in the Field of Sensing-A Review (Invited). <i>Fiber and Integrated Optics</i> , <b>2021</b> , 40, 14-47	0.8	22
167	Two-dimensional photonic crystal heterostructure for light steering and TM-polarization maintaining applications. <i>Laser Physics</i> , <b>2021</b> , 31, 036201	1.2	7
166	Evanescent Field Ratio Enhancement of a Modified Ridge Waveguide Structure for Methane Gas Sensing Application. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 8469-8476	4	21
165	Modal Characteristics of Refractive Index Engineered Hybrid Plasmonic Waveguide. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 9779-9786	4	10
164	Highly Sensitive Refractive Index Sensor Based on Plasmonic Bow Tie Configuration. <i>Photonic Sensors</i> , <b>2020</b> , 10, 223-232	2.3	28
163	A highly sensitive design of subwavelength grating double-slot waveguide microring resonator. Laser Physics Letters, <b>2020</b> , 17, 076201	1.5	15
162	Nanodots decorated asymmetric metalihsulatorihetal waveguide resonator structure based on Fano resonances for refractive index sensing application. <i>Laser Physics</i> , <b>2020</b> , 30, 076204	1.2	24
161	Variable transformation of singular cylindrical vector beams using anisotropic crystals. <i>Scientific Reports</i> , <b>2020</b> , 10, 5590	4.9	10
160	Subwavelength Grating Double Slot Waveguide Racetrack Ring Resonator for Refractive Index Sensing Application. <i>Sensors</i> , <b>2020</b> , 20,	3.8	21
159	Device performance of standard strip, slot and hybrid plasmonic Fing resonator: a comparative study. Waves in Random and Complex Media, 2020, 1-10	1.9	6
158	Design and fabrication of freeform mirrors generating prescribed far-field irradiance distributions. <i>Applied Optics</i> , <b>2020</b> , 59, 5006-5012	1.7	4
157	Ultrashort inverted tapered silicon ridge-to-slot waveguide coupler at 1.55 $\bar{\mu}$ m and 3.392 $\bar{\mu}$ m wavelength. <i>Applied Optics</i> , <b>2020</b> , 59, 7821-7828	1.7	11
156	Caustics of the vortex beams generated by vortex lenses and vortex axicons. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2020</b> , 37, 476-482	1.8	8
155	Design of diffractive lenses operating at several wavelengths. <i>Optics Express</i> , <b>2020</b> , 28, 11705-11720	3.3	8
154	Modeling of image formation with a space-borne Offner hyperspectrometer. <i>Computer Optics</i> , <b>2020</b> , 44, 12-21	1.4	2
153	Achievements in the development of plasmonic waveguide sensors for measuring the refractive index. <i>Computer Optics</i> , <b>2020</b> , 44, 295-318	1.4	12
152	Structural and Polarization Transformations of Laser Beams in Anisotropic Crystals. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2020</b> , 56, 170-175	0.6	
151	Enhancing the sensitivity of a standard plasmonic MIM square ring resonator by incorporating the Nano-dots in the cavity. <i>Photonics Letters of Poland</i> , <b>2020</b> , 12, 1	2.1	13

### (2019-2020)

150	Sensitivity Enhancement of Silicon Strip Waveguide Ring Resonator by Incorporating a Thin Metal Film. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 1355-1362	4	14
149	Plasmonic sensors based on Metal-insulator-metal waveguides for refractive index sensing applications: A brief review. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2020</b> , 117, 113798	3	68
148	A plasmonic colour filter and refractive index sensor applications based on metalihsulatorihetal square []-ring cavities. <i>Laser Physics</i> , <b>2020</b> , 30, 016205	1.2	20
147	Hybrid plasmonic waveguide race-track $\overline{\mu}$ -ring resonator: Analysis of dielectric and hybrid mode for refractive index sensing applications. <i>Laser Physics</i> , <b>2020</b> , 30, 016202	1.2	7
146	Ultra-short lossless plasmonic power splitter design based on metal[hsulator[hetal waveguide. Laser Physics, <b>2020</b> , 30, 016201	1.2	13
145	Highly integrated plasmonic sensor design for the simultaneous detection of multiple analytes. <i>Current Applied Physics</i> , <b>2020</b> , 20, 1274-1280	2.6	22
144	Diffractive optical elements for multiplexing structured laser beams. <i>Quantum Electronics</i> , <b>2020</b> , 50, 629-635	1.8	10
143	Bessel Beam: Significance and Applications-A Progressive Review. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	19
142	Compact Imaging Systems Based on Annular Harmonic Lenses. Sensors, 2020, 20,	3.8	6
141	Arrays Formation of Zinc Oxide Nano-Objects with Varying Morphology for Sensor Applications. <i>Sensors</i> , <b>2020</b> , 20,	3.8	3
140	Nanodots decorated MIM semi-ring resonator cavity for biochemical sensing applications. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , <b>2020</b> , 42, 100836	2.6	23
139	Polarization-Insensitive Hybrid Plasmonic Waveguide Design for Evanescent Field Absorption Gas Sensor. <i>Photonic Sensors</i> , <b>2020</b> , 11, 279	2.3	7
138	Highly sensitive refractive index sensor based on hybrid plasmonic waveguide microring resonator. Waves in Random and Complex Media, <b>2020</b> , 30, 292-299	1.9	26
137	An array of nano-dots loaded MIM square ring resonator with enhanced sensitivity at NIR wavelength range. <i>Optik</i> , <b>2020</b> , 202, 163655	2.5	29
136	Enhancement of evanescent field ratio in a silicon strip waveguide by incorporating a thin metal film. <i>Laser Physics</i> , <b>2019</b> , 29, 076202	1.2	4
135	Numerical analysis of a miniaturized design of a FabryPerot resonator based on silicon strip and slot waveguides for bio-sensing applications. <i>Journal of Modern Optics</i> , <b>2019</b> , 66, 1172-1178	1.1	17
134	Plasmonic refractive index sensor based on metal <b>i</b> hsulator-metal waveguides with high sensitivity. Journal of Modern Optics, <b>2019</b> , 66, 1038-1043	1.1	49
133	A T-shaped 1 🛮 8 balanced optical power splitter based on 90 🖺 bend asymmetric vertical slot waveguides. <i>Laser Physics</i> , <b>2019</b> , 29, 046207	1.2	11

132	Label-free detection of ambient refractive index based on plasmonic Bragg gratings embedded resonator cavity sensor. <i>Journal of Modern Optics</i> , <b>2019</b> , 66, 1920-1925	1.1	11
131	Technological line for creation and research of diffractive optical elements 2019,		13
130	Metasurfaces with continuous ridges for inverse energy flux generation. <i>Optics Express</i> , <b>2019</b> , 27, 151	29-31.51:	3522
129	Optical elements based on silicon photonics. <i>Computer Optics</i> , <b>2019</b> , 43, 1079-1083	1.4	11
128	Calculation of a diffractive lens having a fixed focal position at several prescribed wavelengths. <i>Computer Optics</i> , <b>2019</b> , 43, 946-955	1.4	10
127	A fair comparison of spectral properties of Slot and Hybrid plasmonic micro-ring resonators. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1410, 012119	0.3	O
126	Testing of diffractive optical element as part of specific CO2 laser equipment for metallic materials modification. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1368, 022025	0.3	0
125	A multichannel metallic dual nano-wall square split-ring resonator: design analysis and applications. <i>Laser Physics Letters</i> , <b>2019</b> , 16, 126201	1.5	19
124	Softening of Low-alloyed Titanium Billets with Laser Annealing. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2018</b> , 302, 012070	0.4	4
123	Hybrid plasmonic waveguide-assisted Metal <b>I</b> hsulator <b>M</b> etal ring resonator for refractive index sensing. <i>Journal of Modern Optics</i> , <b>2018</b> , 65, 1135-1140	1.1	54
122	Modelling of Rib channel waveguides based on silicon-on-sapphire at 4.67 th wavelength for evanescent field gas absorption sensor. <i>Optik</i> , <b>2018</b> , 168, 692-697	2.5	23
121	Silicon on silicon dioxide slot waveguide evanescent field gas absorption sensor. <i>Journal of Modern Optics</i> , <b>2018</b> , 65, 174-178	1.1	43
120	Toward Ultralightweight Remote Sensing With Harmonic Lenses and Convolutional Neural Networks. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , <b>2018</b> , 11, 3338-3348	4.7	22
119	Experimental study of optical characteristics of a satellite-based Offner hyperspectrometer 2018,		6
118	Design of an axisymmetrical refractive optical element generating required illuminance distribution and wavefront. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , <b>2018</b> , 35, 1949-1953	1.8	8
117	Linear assignment problem in the design of freeform refractive optical elements generating prescribed irradiance distributions. <i>Optics Express</i> , <b>2018</b> , 26, 27812-27825	3.3	23
116	Multifocal spectral diffractive lens. <i>Computer Optics</i> , <b>2018</b> , 42, 219-226	1.4	8
115	Vegetation type recognition in hyperspectral images using a conjugacy indicator. <i>Computer Optics</i> , <b>2018</b> , 42, 846-854	1.4	16

114	Laser beam shaping with purposefully changing of spatial power distribution 2018,		1
113	Plasmonic refractive index sensor based on M-I-M square ring resonator <b>2018</b> ,		8
112	Analysis of structural features of a LED searchlight. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1096, 012073	0.3	0
111	Compact design of a polarization beam splitter based on silicon-on-insulator platform. <i>Laser Physics</i> , <b>2018</b> , 28, 116202	1.2	10
110	An evanescent field absorption gas sensor at mid-IR 3.39 th wavelength. <i>Journal of Modern Optics</i> , <b>2017</b> , 64, 1892-1897	1.1	36
109	Simulations of dynamic resistive evaporation in a vacuum. <i>Technical Physics</i> , <b>2017</b> , 62, 1490-1495	0.5	3
108	Support subspaces method for recognition of the synthetic aperture radar images using fractal compression. <i>International Journal of Advanced Robotic Systems</i> , <b>2017</b> , 14, 172988141773395	1.4	2
107	Laser beam shaping for modification of materials with ferritic-martensitic structure. <i>Procedia Engineering</i> , <b>2017</b> , 201, 164-168		7
106	Performance analysis of real-time face detection system based on stream data mining frameworks. <i>Procedia Engineering</i> , <b>2017</b> , 201, 806-816		9
105	Efficiency of deep integration between a research university and an academic institute. <i>Procedia Engineering</i> , <b>2017</b> , 201, 817-831		9
104	Nonparaxial effects in lensacon optical systems. <i>Optoelectronics, Instrumentation and Data Processing</i> , <b>2017</b> , 53, 484-493	0.6	7
103	IMAGE RESTORATION IN DIFFRACTIVE OPTICAL SYSTEMS USING DEEP LEARNING AND DECONVOLUTION. <i>Computer Optics</i> , <b>2017</b> , 41, 875-887	1.4	34
102	RECONSTRUCTION OF ANATOMICAL STRUCTURES USING STATISTICAL SHAPE MODELING. <i>Computer Optics</i> , <b>2017</b> , 41, 897-904	1.4	18
101	Determination the allowable error to adjustment of a diffractive optical element and the accuracy demanded to set the parameters of the focused beam <b>2017</b> ,		1
100	Microprofile formation by thermal oxidation of molybdenum films. <i>Technical Physics Letters</i> , <b>2016</b> , 42, 164-166	0.7	26
99	Ultraviolet-LIGA-based fabrication and characterization of a nonresonant drive-mode vibratory gyro/accelerometer. <i>Journal of Micro/Nanolithography, MEMS, and MOEMS</i> , <b>2016</b> , 15, 035001	0.7	5
98	On a silicon-based photonic-crystal cavity for the near-IR region: Numerical simulation and formation technology. <i>Semiconductors</i> , <b>2016</b> , 50, 1112-1116	0.7	4
97	Specific features of the laser irradiation of thin molybdenum films. <i>Technical Physics</i> , <b>2016</b> , 61, 579-583	0.5	5

96	Performance analysis of sliding window filtering of two dimensional signals based on stream data processing systems <b>2016</b> ,		4
95	Layered lens with a linear dependence of the refractive index change 2016,		3
94	Optical modulator based on coupled photonic crystal cavities. Journal of Modern Optics, 2016, 1-6	1.1	3
93	Design of mirrors for generating prescribed continuous illuminance distributions on the basis of the supporting quadric method. <i>Applied Optics</i> , <b>2016</b> , 55, 687-95	0.2	15
92	Modeling the reflection of the electromagnetic waves at a diffraction grating generated on a curved surface. <i>Computer Optics</i> , <b>2016</b> , 40, 194-202	1.4	4
91	Injectional multilens molding parameters optimization. <i>Computer Optics</i> , <b>2016</b> , 40, 203-214	1.4	38
90	Solving the inverse problem of focusing laser radiation in a plane region using geometrical optics. <i>Computer Optics</i> , <b>2016</b> , 40, 439-450	1.4	9
89	Support subspaces method for synthetic aperture radar automatic target recognition. <i>International Journal of Advanced Robotic Systems</i> , <b>2016</b> , 13, 172988141666484	1.4	11
88	Numerical simulation of the ablation of thin molybdenum films under laser irradiation. <i>Technical Physics</i> , <b>2016</b> , 61, 1279-1285	0.5	6
87	E-beam lithography exposure conditions for the fabrication of RGB filter based on metal/dielectric subwavelength grating. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 741, 012150	0.3	
86	Reactive ion etching of indium-tin oxide films by CCl4-based Inductivity Coupled Plasma. <i>Journal of Physics: Conference Series</i> , <b>2016</b> , 741, 012105	0.3	1
85	Converter of laser beams with circular polarization to cylindrical vector beams based on anisotropic crystals <b>2016</b> ,		1
84	Calculating x-ray diffraction on crystals by means of the differential method <b>2016</b> ,		2
83	Analytical source-target mapping method for the design of freeform mirrors generating prescribed 2D intensity distributions. <i>Optics Express</i> , <b>2016</b> , 24, 10962-71	3.3	21
82	Nanocrystalline silicon thin films and grating structures for solar cells <b>2016</b> ,		3
81	Application of photonic-crystal coupled cavities for increase in sensitivity of optical sensor. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2016</b> , 25, 25-31	0.7	
80	Thermal oxidative degradation of molybdenum films under laser ablation. <i>Technical Physics</i> , <b>2015</b> , 60, 265-269	0.5	10
79	Simulation of spectral filters used in hyperspectrometer by decomposition on vector Bessel modes <b>2015</b> ,		9

78 Design method for automotive high-beam LED optics 2015, 7 Vortex phase elements as detectors of polarization state. Optics Express, 2015, 23, 17845-59 77 3.3 37 Spectral-spatial classification of hyperspectral images with k-means++ partitional clustering 2015, 76 5 Compact multichannel spectrometer based on the array of two-component photonic crystal 75 cavities. Pattern Recognition and Image Analysis, 2015, 25, 526-531 Integrated design technology for computer vision systems in railway transportation. Pattern 1 74 19 Recognition and Image Analysis, 2015, 25, 215-219 Active photonic crystal cavities for optical signal integration. Optical Memory and Neural Networks 73 (Information Optics), 2015, 24, 260-271 Modeling the performance of a spaceborne hyperspectrometer based on the offner scheme. 30 72 1.4 Computer Optics, 2015, 39, 70-76 USING COUPLED PHOTONIC CRYSTAL CAVITIES FOR INCREASING OF SENSOR SENSITIVITY. 18 1.4 Computer Optics, 2015, 39, 158-162 A differential method for calculating X-ray diffraction on crystals: scalar theory. Computer Optics, 70 2 1.4 **2015**, 39, 469-479 69 Real-time analysis of parameters of multiple object detection systems. Computer Optics, 2015, 39, 582-5914 6 Gas discharge devices generating the directed fluxes of off-electrode plasma. Vacuum, 2014, 101, 291-29,77 68 Analytical design of refractive optical elements generating one-parameter intensity distributions. 1.8 67 10 Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2538-44 Coupled-resonator optical waveguides for temporal integration of optical signals. Optics Express, 66 3.3 30 2014, 22, 14004-13 Sandwich-typed resonator cavity based on a regular photonic crystal nanobeam. Journal of Physics: 65 0.3 Conference Series, 2014, 490, 012167 Low-scattering surface plasmon refraction with isotropic materials. Optics Express, 2014, 22, 13547-54 64 26 SIMULATION OF HYPERSPECTROMETER ON SPECTRAL LINEAR VARIABLE FILTERS. Computer 63 1.4 19 Optics, 2014, 38, 256-270 MODELING ACTION OF A HYPERSPECTROMETER BASED ON THE OFFNER SCHEME WITHIN 62 1.4 24 GEOMETRIC OPTICS. Computer Optics, 2014, 38, 271-280 SPECTRAL-SPATIAL CLASSIFICATION WITH K-MEANS++ PARTICIONAL CLUSTERING. Computer 61 28 Optics, **2014**, 38, 281-286

60	FORMATION OF IMAGES USING MULTILEVEL DIFFRACTIVE LENS. Computer Optics, 2014, 38, 425-434	1.4	23
59	OBJECT RECOGNITION BY THE RADAR SIGNATURES OF ELECTROMAGNETIC FIELD SCATTERING ON BASE OF SUPPORT SUBSPACES METHOD. <i>Computer Optics</i> , <b>2014</b> , 38, 503-510	1.4	8
58	Use of photonic crystal cavities for temporal differentiation of optical signals. <i>Optics Letters</i> , <b>2013</b> , 38, 1149-51	3	32
57	Design of an optical element forming an axial line segment for efficient LED lighting systems.  Optics Express, <b>2013</b> , 21, 28651-6	3.3	30
56	Two-component cavity based on a regular photonic crystal nanobeam. <i>Applied Optics</i> , <b>2013</b> , 52, 5830-4	1.7	4
55	Calculating the energy spectrum of complex low-dimensional heterostructures in the electric field. <i>Scientific World Journal, The</i> , <b>2013</b> , 2013, 807462	2.2	1
54	MATHEMATICAL MODEL OF COMPLETELY OPTICAL SYSTEM FOR DETECTION OF MODE PROPAGATION PARAMETERS IN AN OPTICAL FIBER WITH FEW-MODE OPERATION FOR ADAPTIVE COMPENSATION OF MODE COUPLING. <i>Computer Optics</i> , <b>2013</b> , 37, 352-359	1.4	15
53	Cloud Computing for Nanophotonic Simulations. Lecture Notes in Computer Science, 2013, 54-67	0.9	5
52	Binary beam splitter. Applied Optics, 2012, 51, 2672-7	1.7	28
51	Research and Education Center of Diffractive Optics 2012,		25
50	Cloud Computing for Rigorous Coupled-Wave Analysis. <i>Advances in Optical Technologies</i> , <b>2012</b> , 2012, 1-7		5
49	Distributed storage and parallel processing for large-size optical images 2012,		10
48	Design of LED optics with two aspherical surfaces and the highest efficiency 2012,		3
47	The lensacon: nonparaxial effects. <i>Journal of Optical Technology (A Translation of Opticheskii Zhurnal)</i> , <b>2011</b> , 78, 724	0.9	30
46	Design of high-efficient freeform LED lens for illumination of elongated rectangular regions. <i>Optics</i>		57
	Express, <b>2011</b> , 19 Suppl 3, A225-33	3.3	<i>31</i>
45		3.4	28
45	Express, 2011, 19 Suppl 3, A225-33  Scattering suppression in plasmonic optics using a simple two-layer dielectric structure. Applied		

42	Influence of vortex transmission phase function on intensity distribution in the focal area of high-aperture focusing system. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2011</b> , 20, 23-4	2.7	24
41	CUDA-enabled implementation of a neural network algorithm for handwritten digit recognition.  Optical Memory and Neural Networks (Information Optics), 2011, 20, 98-106	0.7	5
40	Insulator[hsulator[hetal plasmonic waveguide for parasitic scattering suppression in plasmonic optics. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2011</b> , 75, 1573-1575	0.4	О
39	Manufacture of diffractive optical elements by cutting on numerically controlled machine tools. <i>Russian Engineering Research</i> , <b>2011</b> , 31, 1268-1272	1	22
38	Vortex phase transmission function as a factor to reduce the focal spot of high-aperture focusing system. <i>Journal of Modern Optics</i> , <b>2011</b> , 58, 748-760	1.1	58
37	Evanescent-wave interferometric nanoscale photolithography using guided-mode resonant gratings. <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 170-174	2.5	32
36	Interference pattern generation in evanescent electromagnetic waves for nanoscale lithography using waveguide diffraction gratings. <i>Quantum Electronics</i> , <b>2011</b> , 41, 759-764	1.8	17
35	Design of diffractive lenses for focusing surface plasmons. <i>Journal of Optics (United Kingdom)</i> , <b>2010</b> , 12, 015001	1.7	30
34	Extraordinary magneto-optical effect of a change in the phase of diffraction orders in dielectric diffraction gratings. <i>Journal of Experimental and Theoretical Physics</i> , <b>2010</b> , 111, 967-974	1	9
33	Machine vision system for singularity detection in monitoring the long process. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2010</b> , 19, 23-30	0.7	24
32	Harnessing the guided-mode resonance to design nanooptical transmission spectral filters. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2010</b> , 19, 318-324	0.7	10
31	Mesh domain decomposition in the finite-difference solution of Maxwell equations. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2009</b> , 18, 203-211	0.7	8
30	Constructing An Adaptive Color Reproduction System With Color Space Reference Regions Recognition. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1754	-1759	О
29	Parameter optimization of a tribometric device for rapid assessment of substrate surface cleanliness. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2008</b> , 17, 167-172	0.7	2
28	Studying fabrication errors of the diffraction grating on the end face of a silver-halide fiber. <i>Optical Memory and Neural Networks (Information Optics)</i> , <b>2007</b> , 16, 263-268	0.7	7
27	Formation of diffractive microrelief on diamond film surface. Optics and Laser Technology, 2007, 39, 123	<b>41</b> 238	320
26	Fibre sensors based on transverse mode selection. <i>Journal of Modern Optics</i> , <b>2007</b> , 54, 833-844	1.1	24
25	Design and investigation of colour separation diffraction gratings. <i>Journal of Optics</i> , <b>2007</b> , 9, 123-127		О

24	Information technology of remotely sensed optical image analysis on the basis of multiscale conceptions integration <b>2007</b> ,		1
23	Selective excitation of step-index fiber modes 2007,		4
22	Design and investigation of color separation diffraction gratings. <i>Applied Optics</i> , <b>2007</b> , 46, 2825-30	1.7	17
21	Designing a mirror to form a line-shaped directivity diagram. <i>Journal of Modern Optics</i> , <b>2007</b> , 54, 589-59	97 <sub>1.1</sub>	23
20	Synthesis and investigation of diamond diffractive optical elements 2006,		3
19	Synthesis of diamond diffractive optical elements for IR laser beam focusing 2005,		2
18	Design of DOEs for wavelength division and focusing. <i>Journal of Modern Optics</i> , <b>2005</b> , 52, 917-926	1.1	23
17	Designing reflectors to generate a line-shaped directivity diagram. <i>Journal of Modern Optics</i> , <b>2005</b> , 52, 1529-1536	1.1	25
16	High-effective fiber sensors based on transversal mode selection <b>2005</b> , 5854, 163		3
15	Anisotropic Etching of SiO2 in High-Voltage Gas-Discharge Plasmas. <i>Russian Microelectronics</i> , <b>2004</b> , 33, 169-182	0.5	18
14	A DOE to form a line-shaped directivity diagram. <i>Journal of Modern Optics</i> , <b>2004</b> , 51, 1999-2005	1.1	27
13	Design of DOEs for multiwavelength demultiplexing and spatial focusing <b>2004</b> , 5485, 98		3
12	Fabricating and testing diffractive optical elements focusing into a ring and into a twin-spot <b>2000</b> , 4316, 193		26
11	Synthesis of a binary DOE focusing into an arbitrary curve, using the electromagnetic approximation. <i>Optics and Lasers in Engineering</i> , <b>1998</b> , 29, 237-247	4.6	10
10	A method for the diffractive microrelief formation using the layered photoresist growth. <i>Optics and Lasers in Engineering</i> , <b>1998</b> , 29, 281-288	4.6	23
9	Application of a pseudogeometrical optical approach for calculation of the field formed by a focusator. <i>Optics and Laser Technology</i> , <b>1996</b> , 28, 297-300	4.2	14
8	Comparative analysis of different focusators focusing into a segment. <i>Optics and Laser Technology</i> , <b>1995</b> , 27, 207-213	4.2	4
7	A method for estimating the DOE's energy efficiency. Optics and Laser Technology, 1995, 27, 219-221	4.2	5

#### LIST OF PUBLICATIONS

6	Multifocal and combined diffractive elements <b>1993</b> , 1992, 226		1
5	Computer Generated Diffractive Multi-focal Lens. <i>Journal of Modern Optics</i> , <b>1992</b> , 39, 1245-1251	1.1	43
4	Focusators at letters diffraction design 1991,		3
3	Focusators for laser-branding. <i>Optics and Lasers in Engineering</i> , <b>1991</b> , 15, 311-322	4.6	24
2	Wave Fronts Forming By Computer Generated Optical Elements 1990,		1
1	Simple and Improved Plasmonic Sensor Configuration Established on MIM Waveguide for Enhanced Sensing Performance. <i>Plasmonics</i> ,1	2.4	1