Sergey S Stafeev

List of Publications by Year
in descending order

110 papers	983 citations	430754 18 h-index	526166 27 g-index
114 all docs	114 docs citations	114 times ranked	336 citing authors

#	Article	IF	Citations
1	Tightly focusing vector beams containing V-point polarization singularities. Optics and Laser Technology, 2022, 145, 107479.	2.2	14
2	Topological Charge of Multi-Color Optical Vortices. Photonics, 2022, 9, 145.	0.9	4
3	Circular Polarization near the Tight Focus of Linearly Polarized Light. Photonics, 2022, 9, 196.	0.9	13
4	Geometric Progression of Optical Vortices. Photonics, 2022, 9, 407.	0.9	3
5	Spin-Orbital Conversion with the Tight Focus of an Axial Superposition of a High-Order Cylindrical Vector Beam and a Beam with Linear Polarization. Micromachines, 2022, 13, 1112.	1.4	6
6	Invariance of the transverse spin angular momentum at the focus. Optics Communications, 2021, 479, 126453.	1.0	3
7	The formation of an array of photonic nanojets by steps with square profile. Journal of Physics: Conference Series, 2021, 1745, 012011.	0.3	0
8	A dual-functionality metalens to shape a circularly polarized optical vortex or a second-order cylindrical vector beam. Photonics and Nanostructures - Fundamentals and Applications, 2021, 43, 100898.	1.0	9
9	Tight focusing cylindrical vector beams with fractional order. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1090.	0.9	15
10	Sharp Focusing of a Hybrid Vector Beam with a Polarization Singularity. Photonics, 2021, 8, 227.	0.9	10
11	Toroidal Vortices of Energy in Tightly Focused Second-Order Cylindrical Vector Beams. Photonics, 2021, 8, 301.	0.9	1
12	Minimal Focal Spot Size Measured Based on Intensity and Power Flow. Sensors, 2021, 21, 5505.	2.1	0
13	Spin-Orbital Conversion of a Strongly Focused Light Wave with High-Order Cylindricalâ€“Circular Polarization. Sensors, 2021, 21, 6424.	2.1	9
14	Focusing a Vortex Laser Beam with Polarization Conversion. Photonics, 2021, 8, 480.	0.9	3
15	Focusing of cylindrical vector beams with an order from zero to one and with an order greater than one. , 2021, , .		0
16	Theoretical and experimental study of spiral zone plates in aluminum thin film. , 2021, , .		2
17	Energy flows in tight focus of optical vortices. Journal of Physics: Conference Series, 2021, 2103, 012162.	0.3	0
18	Tight Focusing of Beams with High-order Cylindrical-circular Polarization. , 2021, , .		0

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19	Tight focusing of circularly polarized light limited by semicircular aperture. Journal of Physics: Conference Series, 2021, 2103, 012164.	0.3	0
20	Laser Light Focusing by Aluminium Zone Plate. , 2020, , .		1
21	Poynting Vector Behavior of Cylindrical Vector Beam Focused by Gradient Index Lens. , 2020, , .		0
22	Orbital Energy and Spin Flows in a Strong Focus of Laser Light. IEEE Photonics Journal, 2020, 12, 1-13.	1.0	2
23	Spin-orbit and orbit-spin conversion in the sharp focus of laser light: Theory and experiment. Physical Review A, 2020, 102, .	1.0	23
24	Comparison of Photonic Nanojets Produced by Dielectric Prism and Cylinder. , 2020, , .		0
25	Mechanism of formation of an inverse energy flow in a sharp focus. Physical Review A, 2020, 101, .	1.0	19
26	Inversion of the axial projection of the spin angular momentum in the region of the backward energy flow in sharp focus. Optics Express, 2020, 28, 33830.	1.7	7
27	Tight focusing of a cylindrical vector beam by a hyperbolic secant gradient index lens. Optics Letters, 2020, 45, 1687.	1.7	8
28	Transfer of spin angular momentum to a dielectric particle. Computer Optics, 2020, 44, .	1.3	5
29	Toroidal polarization vortices in tightly focused beams with singularity. Computer Optics, 2020, 44, .	1.3	2
30	Conventional Raman and surface-enhanced Raman spectroscopy for human skin components analysis. , 2020, , .		1
31	Optimizing of Poynting vector and light intensity after secant gradient lens. , 2020, , .		0
32	Experimental investigation of the energy backflow in the tight focal spot. Computer Optics, 2020, 44, .	1.3	5
33	Optical force acting on a particle in a reverse energy flow near the focus of a gradient lens. Journal of Optics (United Kingdom), 2020, 22, 115001.	1.0	3
34	High numerical aperture metalens to generate an energy backflow. Computer Optics, 2020, 44, .	1.3	6
35	Two-petal laser beam near a binary spiral axicon with topological charge 2. Optics and Laser Technology, 2019, 119, 105649.	2.2	8
36	The Non-Vortex Inverse Propagation of Energy in a Tightly Focused High-Order Cylindrical Vector Beam. IEEE Photonics Journal, 2019, 11, 1-10.	1.0	31

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37	Elongation of the area of energy backflow through the use of ring apertures. Optics Communications, 2019, 450, 67-71.	1.0	9
38	Energy backflow in the focus of a light beam with phase or polarization singularity. Physical Review A, 2019, 99, .	1.0	54
39	Subwavelength grating-based spiral metalens for tight focusing of laser light. Applied Physics Letters, 2019, 114, .	1.5	19
40	Single metalens for generating polarization and phase singularities leading to a reverse flow of energy. Journal of Optics (United Kingdom), 2019, 21, 055004.	1.0	17
41	Backward Energy Flux in Sharp Focus of Beams with Linear and Circular Polarization. , 2019, , .		0
42	Metalens for polarization conversion and focusing of laser light. Journal of Physics: Conference Series, 2019, 1368, 022035.	0.3	1
43	Energy backflow in in a tightly focused high-order cylindrical vector beam. , 2019, , .		1
44	Exploiting the circular polarization of light to obtain a spiral energy flow at the subwavelength focus. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2850.	0.9	40
45	Reverse and toroidal flux of light fields with both phase and polarization higher-order singularities in the sharp focus area. Optics Express, 2019, 27, 16689.	1.7	58
46	Sharp focusing of a light field with polarization and phase singularities of an arbitrary order. Computer Optics, 2019, 43, .	1.3	18
47	Focusing of laser light by sectoral spiral metalens. , 2019, , .		2
48	Photonic jets for mid-IR focal plane arrays produced by the triangular dielectric prism. , 2019, , .		0
49	Subwavelength Gratings for Polarization Control. Journal of Physics: Conference Series, 2018, 1096, 012020.	0.3	1
50	Longitudinal component of the Poynting vector of tightly focused cylindrical vector beam. Journal of Physics: Conference Series, 2018, 1135, 012064.	0.3	3
51	Energy backflow in the focus of an optical vortex. Laser Physics, 2018, 28, 126203.	0.6	12
52	Energy Backflow in Tightly Focused Optical Vortex. , 2018, , .		1
53	Negative longitudinal component of the Poynting vector of tightly focused optical vortex. , 2018, , .		1
54	Longitudinal component of the Poynting vector of a tightly focused optical vortex with circular polarization. Computer Optics, 2018, 42, 190-196.	1.3	20

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55	Rotation of two-petal laser beams in the near field of a spiral microaxicon. Computer Optics, 2018, 42, 385-391.	1.3	4
56	The near-axis backflow of energy in a tightly focused optical vortex with circular polarization. Computer Optics, 2018, 42, 392-400.	1.3	10
57	Energy backflow in a focal spot of the cylindrical vector beam. Computer Optics, 2018, 42, 744-750.	1.3	14
58	Effects of fabrication errors on the focusing performance of a sector metalens. Computer Optics, 2018, 42, 970-976.	1.3	2
59	Tight focusing of a nonhomogeneously polarized optical vortex. , 2018, , .		0
60	Subwavelength focusing of azimuthally polarized optical vortex. , 2018, , .		0
61	Tight focusing of laser light propagated through subwavelength micropolarizer using Fresnel zone plate. , 2017, , .		0
62	Subwavelength gratings for polarization conversion and focusing of laser light. Photonics and Nanostructures - Fundamentals and Applications, 2017, 27, 32-41.	1.0	30
63	Focusing zone plate based on subwavelength grating. , 2017, , .		1
64	Tight focusing of a quasi-cylindrical optical vortex. Optics Communications, 2017, 403, 277-282.	1.0	8
65	Tight focusing of azimuthally polarized optical vortex produced by subwavelength grating. Procedia Engineering, 2017, 201, 83-89.	1.2	0
66	Subwavelength focusing of laser light using zone plates with silver and chromium rings. , 2017, , .		1
67	A metalens for subwavelength focus of light. , 2017, , .		0
68	Thin high numerical aperture metalens. Optics Express, 2017, 25, 8158.	1.7	24
69	Tight focusing of laser light using a chromium Fresnel zone plate. Optics Express, 2017, 25, 19662.	1.7	32
70	Dependence of the focal spot parameters on the relief height of the amplitude zone plate. , 2017, , .		2
71	Tight focusing of circularly polarized laser light by amplitude zone plate with chromium rings. , 2017, , .		0
72	THIN METALENS WITH HIGH NUMERICAL APERTURE. Computer Optics, 2017, 41, 5-12.	1.3	5

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73	Tight focusing of a sector-wise azimuthally polarized optical vortex. Computer Optics, 2017, 41, 147-154.	1.3	6
74	Binary diffraction gratings for controlling polarization and phase of laser light [review]. Computer Optics, 2017, 41, 299-314.	1.3	3
75	Subwavelength focusing of laser light using a chromium zone plate. Computer Optics, 2017, 41, 356-362.	1.3	3
76	Indexing of Computer Optics in the Emerging Sources Citation Index database. Computer Optics, 2017, 41, 592-592.	1.3	10
77	Transmitting subwavelength azimuthal micropolarizer. Proceedings of SPIE, 2017, , .	0.8	0
78	Subwavelength micropolarizer in a gold film for visible light. Applied Optics, 2016, 55, 5025.	2.1	14
79	The tight focusing of laser radiation using 4-sector polarization converter. Journal of Physics: Conference Series, 2016, 735, 012006.	0.3	0
80	Microlens-aided focusing of linearly and azimuthally polarized laser light. Optics Express, 2016, 24, 29800.	1.7	21
81	Azimuthal polarizer with phase shift for subwavelength focusing of laser light. , 2016, , .		0
82	Behavior of asymmetric Bessel beam in focal plane of high numerical aperture objective. Proceedings of SPIE, 2016, , .	0.8	0
83	A four-zone transmission azimuthal micropolarizer with phase shift. Computer Optics, 2016, 40, 12-18.	1.3	13
84	Subwavelength focusing of laser light of a mixture of linearly and azimuthally polarized beams. Computer Optics, 2016, 40, 458-466.	1.3	3
85	Subwavelength gratings for generating azimuthally polarized beams. , 2016, , .		1
86	Measurement of photonic nanojet generated by square-profile microstep. Proceedings of SPIE, 2015, , .	0.8	0
87	Tight focus of light using micropolarizer and microlens. Applied Optics, 2015, 54, 4388.	0.9	24
88	Tight focusing of an asymmetric Bessel beam. Optics Communications, 2015, 357, 45-51.	1.0	11
89	Photonic nanojets produced by microcubes. , 2015, , .		0
90	Four-zone reflective polarization conversion plate. , 2015, , .		0

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91	A four-zone reflective azimuthal micropolarizer. Computer Optics, 2015, 39, 709-715.	1.3	6
92	Near-field diffraction of laser light by dielectric corner step. , 2014, , .		0
93	Photonic nanojets generated using square-profile microsteps. Applied Optics, 2014, 53, 5322.	0.9	28
94	PHOTONIC NANOJETS FORMED BY SQUARE MICROSTEPS. Computer Optics, 2014, 38, 72-80.	1.3	9
95	Reflected four-zones subwavelenghth mictooptics element for polarization conversion from linear to radial. Computer Optics, 2014, 38, 229-236.	1.3	27
96	Sharp focusing of a mixture of radially and linearly polarized beams using a binary microlens. Computer Optics, 2014, 38, 606-613.	1.3	7
97	POLARIZING AND FOCUSING PROPERTIES OF REFLECTIVE FRESNEL ZONE PLATE. Computer Optics, 2014, 38, 456-462.	1.3	0
98	Subwavelength focusing of laser light by microoptics. Journal of Modern Optics, 2013, 60, 1050-1059.	0.6	17
99	An asymmetric optical vortex generated by a spiral refractive plate. Journal of Optics (United) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	1.0	11
100	Subwavelength elliptical focal spot generated by a binary zone plate. , 2013, , .		0
101	Curved laser microjet in near field. Applied Optics, 2013, 52, 4131.	0.9	9
102	Analysis of the shape of a subwavelength focal spot for the linearly polarized light. Applied Optics, 2013, 52, 330.	0.9	60
103	SPECIAL ASPECTS OF SUBWAVELENGTH FOCAL SPOT MEASUREMENT USING NEARFIELD OPTICAL MICROSCOPE. Computer Optics, 2013, 37, 332-340.	1.3	1
104	Elongated Photonic Nanojet from Truncated Cylindrical Zone Plate. Journal of Atomic, Molecular, and Optical Physics, 2012, 2012, 1-3.	0.5	2
105	Near-Field Diffraction from a Binary Microaxicon. Advances in Optical Technologies, 2012, 2012, 1-11.	0.8	3
106	High Resolution through Graded-Index Microoptics. Advances in Optical Technologies, 2012, 2012, 1-9.	0.8	6
107	Diffraction of a Gaussian beam by a logarithmic axicon. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 844.	0.8	8
108	Tight focusing with a binary microaxicon. Optics Letters, 2011, 36, 3100.	1.7	29

#	Article	IF	Citations
109	Modeling the sharp focus of a radially polarized laser mode using a conical and a binary microaxicon. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1991.	0.9	30
110	Sharply focusing a radially polarized laser beam using a gradient Mikaelianâ€™s microlens. Optics Communications, 2009, 282, 459-464.	1.0	10