

Peter Banzer

List of Publications by Year in descending order

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119
papers

4,784
citations

126708

33
h-index

98622

67
g-index

121
all docs

121
docs citations

121
times ranked

3515
citing authors

#	ARTICLE	IF	CITATIONS
1	Roadmap on structured light. <i>Journal of Optics (United Kingdom)</i> , 2017, 19, 013001.	1.0	888
2	From transverse angular momentum to photonic wheels. <i>Nature Photonics</i> , 2015, 9, 789-795.	15.6	448
3	Observation of optical polarization Möbius strips. <i>Science</i> , 2015, 347, 964-966.	6.0	322
4	Nanointerferometric amplitude and phase reconstruction of tightly focused vector beams. <i>Nature Photonics</i> , 2014, 8, 23-27.	15.6	204
5	Measuring the Transverse Spin Density of Light. <i>Physical Review Letters</i> , 2015, 114, 063901.	2.9	204
6	Free-space propagation of high-dimensional structured optical fields in an urban environment. <i>Science Advances</i> , 2017, 3, e1700552.	4.7	147
7	Polarization-controlled directional scattering for nanoscopic position sensing. <i>Nature Communications</i> , 2016, 7, 11286.	5.8	135
8	Classically entangled optical beams for high-speed kinematic sensing. <i>Optica</i> , 2015, 2, 864.	4.8	131
9	Selective switching of individual multipole resonances in single dielectric nanoparticles. <i>Laser and Photonics Reviews</i> , 2015, 9, 231-240.	4.4	123
10	Polarization Tailored Light Driven Directional Optical Nanobeacon. <i>Nano Letters</i> , 2014, 14, 2546-2551.	4.5	120
11	Entangling Different Degrees of Freedom by Quadrature Squeezing Cylindrically Polarized Modes. <i>Physical Review Letters</i> , 2011, 106, 060502.	2.9	111
12	Optical Polarization Möbius Strips and Points of Purely Transverse Spin Density. <i>Physical Review Letters</i> , 2016, 117, 013601.	2.9	104
13	On the experimental investigation of the electric and magnetic response of a single nano-structure. <i>Optics Express</i> , 2010, 18, 10905.	1.7	102
14	The photonic wheel - demonstration of a state of light with purely transverse angular momentum. <i>Journal of the European Optical Society-Rapid Publications</i> , 0, 8, .	0.9	87
15	Transverse Kerker Scattering for Angstrom Localization of Nanoparticles. <i>Physical Review Letters</i> , 2018, 121, 193902.	2.9	83
16	Transverse spinning of unpolarized light. <i>Nature Photonics</i> , 2021, 15, 156-161.	15.6	82
17	Strong, spectrally-tunable chirality in diffractive metasurfaces. <i>Scientific Reports</i> , 2015, 5, 13034.	1.6	78
18	Chiral optical response of planar and symmetric nanotrimers enabled by heteromaterial selection. <i>Nature Communications</i> , 2016, 7, 13117.	5.8	68

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19	Chiral Surface Lattice Resonances. <i>Advanced Materials</i> , 2020, 32, e2001330.	11.1	68
20	Interaction of light carrying orbital angular momentum with a chiral dipolar scatterer. <i>Optica</i> , 2019, 6, 961.	4.8	62
21	Observation of the Geometric Spin Hall Effect of Light. <i>Physical Review Letters</i> , 2014, 112, 113902.	2.9	58
22	Exotic looped trajectories of photons in three-slit interference. <i>Nature Communications</i> , 2016, 7, 13987.	5.8	52
23	Exciting a chiral dipole moment in an achiral nanostructure. <i>Optica</i> , 2018, 5, 954.	4.8	48
24	Geometric spin Hall effect of light in tightly focused polarization-tailored light beams. <i>Physical Review A</i> , 2014, 89, .	1.0	47
25	Magnetic and Electric Transverse Spin Density of Spatially Confined Light. <i>Physical Review X</i> , 2018, 8, .	2.8	46
26	Weak Measurement Enhanced Spin Hall Effect of Light for Particle Displacement Sensing. <i>Nano Letters</i> , 2019, 19, 422-425.	4.5	43
27	Extraordinary transmission through a single coaxial aperture in a thin metal film. <i>Optics Express</i> , 2010, 18, 10896.	1.7	41
28	Multi-twist polarization ribbon topologies in highly-confined optical fields. <i>New Journal of Physics</i> , 2019, 21, 053020.	1.2	41
29	Experimental demonstration of linear and spinning Janus dipoles for polarisation- and wavelength-selective near-field coupling. <i>Light: Science and Applications</i> , 2019, 8, 52.	7.7	40
30	Experimental cross-polarization detection of coupling far-field light to highly confined plasmonic gap modes via nanoantennas. <i>Applied Physics Letters</i> , 2011, 98, 101109.	1.5	39
31	Chiroptical response of a single plasmonic nanohelix. <i>Optics Express</i> , 2018, 26, 19275.	1.7	37
32	Towards fully integrated photonic displacement sensors. <i>Nature Communications</i> , 2020, 11, 2915.	5.8	36
33	The ubiquitous photonic wheel. <i>Journal of Optics (United Kingdom)</i> , 2016, 18, 085605.	1.0	35
34	Birefringence and dispersion of cylindrically polarized modes in nanobore photonic crystal fiber. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2011, 28, 193.	0.9	34
35	Enhanced Raman Scattering of Graphene using Arrays of Split Ring Resonators. <i>Advanced Optical Materials</i> , 2013, 1, 151-157.	3.6	34
36	Orbital-to-spin angular momentum conversion employing local helicity. <i>Physical Review B</i> , 2019, 99, .	1.1	34

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37	Waveguide properties of single subwavelength holes demonstrated with radially and azimuthally polarized light. <i>Applied Physics B: Lasers and Optics</i> , 2007, 89, 517-520.	1.1	30
38	Analytical expansion of highly focused vector beams into vector spherical harmonics and its application to Mie scattering. <i>Physical Review A</i> , 2012, 85, .	1.0	29
39	Tailoring Multipolar Mie Scattering with Helicity and Angular Momentum. <i>ACS Photonics</i> , 2018, 5, 2936-2944.	3.2	29
40	Emission of circularly polarized light by a linear dipole. <i>Science Advances</i> , 2019, 5, eaav7588.	4.7	27
41	Huygens' dipole for polarization-controlled nanoscale light routing. <i>Physical Review A</i> , 2019, 99, .	1.0	26
42	Substrate-Induced Chirality in an Individual Nanostructure. <i>ACS Photonics</i> , 2019, 6, 1876-1881.	3.2	24
43	Spin-orbit coupling affecting the evolution of transverse spin. <i>Physical Review Research</i> , 2019, 1, .	1.3	23
44	Large- ϵ Area 3D Plasmonic Crescents with Tunable Chirality. <i>Advanced Optical Materials</i> , 2019, 7, 1801770.	3.6	22
45	The polarization properties of a tilted polarizer. <i>Optics Express</i> , 2013, 21, 27032.	1.7	21
46	Vectorial complex-source vortex beams. <i>Physical Review A</i> , 2014, 90, .	1.0	21
47	Geometric Spin Hall Effect of Light at polarizing interfaces. <i>Applied Physics B: Lasers and Optics</i> , 2011, 102, 427-432.	1.1	18
48	Tighter spots of light with superposed orbital-angular-momentum beams. <i>Physical Review A</i> , 2016, 94, .	1.0	18
49	Vectorial vortex generation and phase singularities upon Brewster reflection. <i>Physical Review A</i> , 2019, 99, .	1.0	18
50	Interaction of highly focused vector beams with a metal knife-edge. <i>Optics Express</i> , 2011, 19, 7244.	1.7	16
51	Weak Measurement of Elliptical Dipole Moments by C-Point Splitting. <i>Physical Review Letters</i> , 2018, 121, 243903.	2.9	16
52	Ultrafast spinning twisted ribbons of confined electric fields. <i>Optica</i> , 2020, 7, 1228.	4.8	16
53	Kelvin's chirality of optical beams. <i>Physical Review A</i> , 2021, 103, .	1.0	15
54	Mimicking chiral light-matter interaction. <i>Physical Review B</i> , 2019, 99, .	1.1	13

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55	Towards an optical far-field measurement of higher-order multipole contributions to the scattering response of nanoparticles. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	12
56	Experimental generation of amplitude squeezed vector beams. <i>Optics Express</i> , 2016, 24, 12385.	1.7	11
57	Lateral spin transport in paraxial beams of light. <i>Optics Letters</i> , 2016, 41, 3499.	1.7	11
58	Towards an integrated AlGaAs waveguide platform for phase and polarisation shaping. <i>Journal of Optics (United Kingdom)</i> , 2018, 20, 05LT01.	1.0	11
59	Corrections to the knife-edge based reconstruction scheme of tightly focused light beams. <i>Optics Express</i> , 2013, 21, 25069.	1.7	10
60	Generation and subwavelength focusing of longitudinal magnetic fields in a metallized fiber tip. <i>Optics Express</i> , 2014, 22, 13744.	1.7	10
61	Single-mode squeezing in arbitrary spatial modes. <i>Optics Express</i> , 2016, 24, 7633.	1.7	10
62	Chirality of Symmetric Resonant Heterostructures. <i>Laser and Photonics Reviews</i> , 2018, 12, 1800109.	4.4	8
63	Unveiling the optical properties of a metamaterial synthesized by electron-beam-induced deposition. <i>Nanotechnology</i> , 2016, 27, 025705.	1.3	7
64	Quantum uncertainty in the beam width of spatial optical modes. <i>Optics Express</i> , 2015, 23, 32777.	1.7	6
65	Influence of the substrate material on the knife-edge based profiling of tightly focused light beams. <i>Optics Express</i> , 2016, 24, 8214.	1.7	6
66	Investigating the Optical Properties of a Laser Induced 3D Self-Assembled Carbon-Metal Hybrid Structure. <i>Small</i> , 2019, 15, e1900512.	5.2	6
67	Shaping Field Gradients for Nanolocalization. <i>ACS Photonics</i> , 2020, 7, 581-587.	3.2	6
68	Exploiting cellophane birefringence to generate radially and azimuthally polarised vector beams. <i>European Journal of Physics</i> , 2015, 36, 025011.	0.3	5
69	Hybrid Orthorhombic Carbon Flakes Intercalated with Bimetallic Au-Ag Nanoclusters: Influence of Synthesis Parameters on Optical Properties. <i>Nanomaterials</i> , 2020, 10, 1376.	1.9	5
70	Linear and angular momenta in tightly focused vortex segmented beams of light (Invited Paper). <i>Chinese Optics Letters</i> , 2017, 15, 030003-30007.	1.3	5
71	Towards polarization-based excitation tailoring for extended Raman spectroscopy. <i>Optics Express</i> , 2020, 28, 10239.	1.7	5
72	Free space excitation of coupled Anderson-localized modes in photonic crystal waveguides with polarization tailored beam. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	4

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73	Microsphere kinematics from the polarization of tightly focused nonseparable light. Optics Express, 2021, 29, 12429.	1.7	4
74	Toward a Corrected Knife-Edge-Based Reconstruction of Tightly Focused Higher Order Beams. Frontiers in Physics, 2020, 8, .	1.0	4
75	Lattice-plasmon-induced asymmetric transmission in two-dimensional chiral arrays. APL Photonics, 2022, 7, .	3.0	4
76	AFM-Based Pick-and-Place Handling of Individual Nanoparticles inside an SEM for the Fabrication of Plasmonic Nano-Patterns. , 2014, , .		3
77	Resonant metamaterials for contrast enhancement in optical lithography. Optics Express, 2012, 20, 19928.	1.7	2
78	Toward High-Speed Nanoscopic Particle Tracking via Time-Resolved Detection of Directional Scattering. Laser and Photonics Reviews, 2020, 14, 2000110.	4.4	2
79	Absolute characterization of high numerical aperture microscope objectives utilizing a dipole scatterer. Light: Science and Applications, 2021, 10, 223.	7.7	2
80	Sub-diffraction-limit Fourier-plane laser scanning microscopy. Optica, 2022, 9, 455.	4.8	2
81	Excitation of Gap Plasmonic Waveguides by Nano Antennas. , 2010, , .		1
82	Split Ring Resonators: Enhanced Raman Scattering of Graphene using Arrays of Split Ring Resonators (Advanced Optical Materials 2/2013). Advanced Optical Materials, 2013, 1, 150-150.	3.6	1
83	Chiral Materials: Chiral Surface Lattice Resonances (Adv. Mater. 22/2020). Advanced Materials, 2020, 32, 2070173.	11.1	1
84	A tribute to Marat Soskin. Journal of Optics (United Kingdom), 2021, 23, 050201.	1.0	1
85	Single nanoparticle real and k -space spectroscopy with structured light. New Journal of Physics, 0, , .	1.2	1
86	Long Distance Free-Space Propagation of light carrying Orbital Angular Momentum. , 2016, , .		1
87	Novel 2D carbon allotrope intercalated with Au-Ag nanoclusters: from laser design to functionality. , 2017, , .		1
88	Investigating the Optical Properties of a Novel 3D Self-Assembled Metamaterial made of Carbon Intercalated with Bimetal Nanoparticles. , 2018, , .		1
89	Nonlinear Effects in Subwavelength Plasmonic Directional Couplers. , 2012, , .		1
90	Polarization effect in the transmission through a single nanoscopic aperture. , 2007, , .		0

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91	Nanobore PCF Maintaining Cylindrically Polarized Modes. , 2010, , .		0
92	Optical properties of a tilted polarizer and geometric Spin Hall Effect of Light. , 2011, , .		0
93	Reconstruction of tightly focused beams using Mie-scattering. , 2012, , .		0
94	An azimuthally polarized light source for the optical near field. , 2013, , .		0
95	Experimental investigation of a single chiral nano-structure made of a composite material. , 2013, , .		0
96	Direct Reconstruction of Transversally Spinning Electric Fields in Tightly Focused Vector Beams. , 2014, , .		0
97	Measuring the fully vectorial nature of light at the nanoscale. , 2015, , .		0
98	Quantum Uncertainty in the Beam Width for Optical Spatial Modes. , 2016, , .		0
99	Measurement and applications of transverse spin angular momentum in structured light. , 2016, , .		0
100	Exploring Exotic Polarization Topologies in Complex 3D Electromagnetic Fields. , 2017, , .		0
101	Spectral tuning of directional scattering for high precision position sensing. , 2017, , .		0
102	Measuring the transverse spin density of the magnetic field. , 2017, , .		0
103	Weak Measurements of the Dipolar Emitter Polarization State. , 2018, , .		0
104	Generation of Vortex Beams using a Plasmonic Quadrumer Nanocluster. , 2018, , .		0
105	Tuning the Chirality of a Dipole Moment in an Achiral Particle with Structured Light. , 2019, , .		0
106	Nanocalization: Toward High-Speed Nanoscopic Particle Tracking via Time-Resolved Detection of Directional Scattering (Laser Photonics Rev. 14(9)/2020). Laser and Photonics Reviews, 2020, 14, 2070049.	4.4	0
107	Direct Measurement of the Geometric Spin Hall Effect of Light. , 2012, , .		0
108	Experimental demonstration of the geometric spin Hall effect of light in highly focused vector beams. , 2012, , .		0

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109	Demonstration of a State of Light with Purely Transverse Angular Momentum. , 2013, , .		0
110	Demonstration of a State of Light with Purely Transverse Angular Momentum. , 2013, , .		0
111	Demonstration of an optical nano beacon for controlled directional emission and coupling. , 2014, , .		0
112	2D carbon allotrope with incorporated Au-Ag nanoclusters " Laser-induced synthesis and optical characterization. , 2018, , .		0
113	Huygens Dipole for Nanolocalization. , 2018, , .		0
114	Complex polarization topologies in nanostructured light (Conference Presentation). , 2018, , .		0
115	Optical Properties of Hybrid Carbon Flakes and their Dependence on Fabrication Parameters. , 2019, , .		0
116	On-chip Nano-localization via Transverse Kerker Scattering. , 2020, , .		0
117	High-Speed Detection of Directional Scattering for Nanolocalization. , 2020, , .		0
118	Towards All-Integrated Optical Nanometrology. , 2021, , .		0
119	Extreme Concentration and Nanoscale Interaction of Light. ACS Photonics, 0, , .	3.2	0