

# Peter Banzer

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Lattice-plasmon-induced asymmetric transmission in two-dimensional chiral arrays. <i>APL Photonics</i> , 2022, 7, .	3.0	4
2	Sub-diffraction-limit Fourier-plane laser scanning microscopy. <i>Optica</i> , 2022, 9, 455.	4.8	2
3	Transverse spinning of unpolarized light. <i>Nature Photonics</i> , 2021, 15, 156-161.	15.6	82
4	Kelvin's chirality of optical beams. <i>Physical Review A</i> , 2021, 103, .	1.0	15
5	A tribute to Marat Soskin. <i>Journal of Optics (United Kingdom)</i> , 2021, 23, 050201.	1.0	1
6	Microsphere kinematics from the polarization of tightly focused nonseparable light. <i>Optics Express</i> , 2021, 29, 12429.	1.7	4
7	Absolute characterization of high numerical aperture microscope objectives utilizing a dipole scatterer. <i>Light: Science and Applications</i> , 2021, 10, 223.	7.7	2
8	Towards All-Integrated Optical Nanometrology. , 2021, , .		0
9	Nanocalization: Toward High-Speed Nanoscopic Particle Tracking via Time-Resolved Detection of Directional Scattering ( <i>Laser Photonics Rev.</i> 14(9)/2020). <i>Laser and Photonics Reviews</i> , 2020, 14, 2070049.	4.4	0
10	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
11	Toward High-Speed Nanoscopic Particle Tracking via Time-Resolved Detection of Directional Scattering. <i>Laser and Photonics Reviews</i> , 2020, 14, 2000110.	4.4	2
12	Chiral Materials: Chiral Surface Lattice Resonances ( <i>Adv. Mater.</i> 22/2020). <i>Advanced Materials</i> , 2020, 32, 2070173.	11.1	1
13	Towards fully integrated photonic displacement sensors. <i>Nature Communications</i> , 2020, 11, 2915.	5.8	36
14	Shaping Field Gradients for Nanocalization. <i>ACS Photonics</i> , 2020, 7, 581-587.	3.2	6
15	Chiral Surface Lattice Resonances. <i>Advanced Materials</i> , 2020, 32, e2001330.	11.1	68
16	Ultrafast spinning twisted ribbons of confined electric fields. <i>Optica</i> , 2020, 7, 1228.	4.8	16
17	Toward a Corrected Knife-Edge-Based Reconstruction of Tightly Focused Higher Order Beams. <i>Frontiers in Physics</i> , 2020, 8, .	1.0	4
18	On-chip Nano-localization via Transverse Kerker Scattering. , 2020, , .		0

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19	High-Speed Detection of Directional Scattering for Nanolocalization. , 2020, , .		0
20	Towards polarization-based excitation tailoring for extended Raman spectroscopy. Optics Express, 2020, 28, 10239.	1.7	5
21	Substrate-Induced Chirality in an Individual Nanostructure. ACS Photonics, 2019, 6, 1876-1881.	3.2	24
22	Emission of circularly polarized light by a linear dipole. Science Advances, 2019, 5, eaav7588.	4.7	27
23	Tuning the Chirality of a Dipole Moment in an Achiral Particle with Structured Light. , 2019, , .		0
24	Experimental demonstration of linear and spinning Janus dipoles for polarisation- and wavelength-selective near-field coupling. Light: Science and Applications, 2019, 8, 52.	7.7	40
25	Vectorial vortex generation and phase singularities upon Brewster reflection. Physical Review A, 2019, 99, .	1.0	18
26	Mimicking chiral light-matter interaction. Physical Review B, 2019, 99, .	1.1	13
27	Large-€Area 3D Plasmonic Crescents with Tunable Chirality. Advanced Optical Materials, 2019, 7, 1801770.	3.6	22
28	Multi-twist polarization ribbon topologies in highly-confined optical fields. New Journal of Physics, 2019, 21, 053020.	1.2	41
29	Investigating the Optical Properties of a Laser Induced 3D Self-€Assembled Carbon-€Metal Hybrid Structure. Small, 2019, 15, e1900512.	5.2	6
30	Huygens' dipole for polarization-controlled nanoscale light routing. Physical Review A, 2019, 99, .	1.0	26
31	Orbital-to-spin angular momentum conversion employing local helicity. Physical Review B, 2019, 99, .	1.1	34
32	Weak Measurement Enhanced Spin Hall Effect of Light for Particle Displacement Sensing. Nano Letters, 2019, 19, 422-425.	4.5	43
33	Spin-orbit coupling affecting the evolution of transverse spin. Physical Review Research, 2019, 1, .	1.3	23
34	Interaction of light carrying orbital angular momentum with a chiral dipolar scatterer. Optica, 2019, 6, 961.	4.8	62
35	Optical Properties of Hybrid Carbon Flakes and their Dependence on Fabrication Parameters. , 2019, , .		0
36	Towards an integrated AlGaAs waveguide platform for phase and polarisation shaping. Journal of Optics (United Kingdom), 2018, 20, 05LT01.	1.0	11

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37	Transverse Kerker Scattering for Angstrom Localization of Nanoparticles. Physical Review Letters, 2018, 121, 193902.	2.9	83
38	Weak Measurement of Elliptical Dipole Moments by C -Point Splitting. Physical Review Letters, 2018, 121, 243903.	2.9	16
39	Weak Measurements of the Dipolar Emitter Polarization State. , 2018, , .		0
40	Tailoring Multipolar Mie Scattering with Helicity and Angular Momentum. ACS Photonics, 2018, 5, 2936-2944.	3.2	29
41	Magnetic and Electric Transverse Spin Density of Spatially Confined Light. Physical Review X, 2018, 8, .	2.8	46
42	Chirality of Symmetric Resonant Heterostructures. Laser and Photonics Reviews, 2018, 12, 1800109.	4.4	8
43	Generation of Vortex Beams using a Plasmonic Quadrumer Nanocluster. , 2018, , .		0
44	Chiroptical response of a single plasmonic nanohelix. Optics Express, 2018, 26, 19275.	1.7	37
45	Exciting a chiral dipole moment in an achiral nanostructure. Optica, 2018, 5, 954.	4.8	48
46	Investigating the Optical Properties of a Novel 3D Self-Assembled Metamaterial made of Carbon Intercalated with Bimetal Nanoparticles. , 2018, , .		1
47	2D carbon allotrope with incorporated Au-Ag nanoclusters " Laser-induced synthesis and optical characterization. , 2018, , .		0
48	Huygens Dipole for Nanolocalization. , 2018, , .		0
49	Complex polarization topologies in nanostructured light (Conference Presentation). , 2018, , .		0
50	Free space excitation of coupled Anderson-localized modes in photonic crystal waveguides with polarization tailored beam. Applied Physics Letters, 2017, 110, .	1.5	4
51	Free-space propagation of high-dimensional structured optical fields in an urban environment. Science Advances, 2017, 3, e1700552.	4.7	147
52	Roadmap on structured light. Journal of Optics (United Kingdom), 2017, 19, 013001.	1.0	888
53	Exploring Exotic Polarization Topologies in Complex 3D Electromagnetic Fields. , 2017, , .		0
54	Spectral tuning of directional scattering for high precision position sensing. , 2017, , .		0

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55	Measuring the transverse spin density of the magnetic field. , 2017, , .		0
56	Novel 2D carbon allotrope intercalated with Au-Ag nanoclusters: from laser design to functionality. , 2017, , .		1
57	Linear and angular momenta in tightly focused vortex segmented beams of light (Invited Paper). Chinese Optics Letters, 2017, 15, 030003-30007.	1.3	5
58	Quantum Uncertainty in the Beam Width for Optical Spatial Modes. , 2016, , .		0
59	Unveiling the optical properties of a metamaterial synthesized by electron-beam-induced deposition. Nanotechnology, 2016, 27, 025705.	1.3	7
60	The ubiquitous photonic wheel. Journal of Optics (United Kingdom), 2016, 18, 085605.	1.0	35
61	Exotic looped trajectories of photons in three-slit interference. Nature Communications, 2016, 7, 13987.	5.8	52
62	Polarization-controlled directional scattering for nanoscopic position sensing. Nature Communications, 2016, 7, 11286.	5.8	135
63	Chiral optical response of planar and symmetric nanotrimers enabled by heteromaterial selection. Nature Communications, 2016, 7, 13117.	5.8	68
64	Experimental generation of amplitude squeezed vector beams. Optics Express, 2016, 24, 12385.	1.7	11
65	Tighter spots of light with superposed orbital-angular-momentum beams. Physical Review A, 2016, 94, .	1.0	18
66	Measurement and applications of transverse spin angular momentum in structured light. , 2016, , .		0
67	Single-mode squeezing in arbitrary spatial modes. Optics Express, 2016, 24, 7633.	1.7	10
68	Optical Polarization Möbius Strips and Points of Purely Transverse Spin Density. Physical Review Letters, 2016, 117, 013601.	2.9	104
69	Lateral spin transport in paraxial beams of light. Optics Letters, 2016, 41, 3499.	1.7	11
70	Influence of the substrate material on the knife-edge based profiling of tightly focused light beams. Optics Express, 2016, 24, 8214.	1.7	6
71	Long Distance Free-Space Propagation of light carrying Orbital Angular Momentum. , 2016, , .		1
72	Measuring the fully vectorial nature of light at the nanoscale. , 2015, , .		0

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73	Quantum uncertainty in the beam width of spatial optical modes. <i>Optics Express</i> , 2015, 23, 32777.	1.7	6
74	Strong, spectrally-tunable chirality in diffractive metasurfaces. <i>Scientific Reports</i> , 2015, 5, 13034.	1.6	78
75	Classically entangled optical beams for high-speed kinematic sensing. <i>Optica</i> , 2015, 2, 864.	4.8	131
76	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
77	Exploiting cellophane birefringence to generate radially and azimuthally polarised vector beams. <i>European Journal of Physics</i> , 2015, 36, 025011.	0.3	5
78	Measuring the Transverse Spin Density of Light. <i>Physical Review Letters</i> , 2015, 114, 063901.	2.9	204
79	Observation of optical polarization Möbius strips. <i>Science</i> , 2015, 347, 964-966.	6.0	322
80	Selective switching of individual multipole resonances in single dielectric nanoparticles. <i>Laser and Photonics Reviews</i> , 2015, 9, 231-240.	4.4	123
81	From transverse angular momentum to photonic wheels. <i>Nature Photonics</i> , 2015, 9, 789-795.	15.6	448
82	Direct Reconstruction of Transversally Spinning Electric Fields in Tightly Focused Vector Beams. , 2014, , .		0
83	AFM-Based Pick-and-Place Handling of Individual Nanoparticles inside an SEM for the Fabrication of Plasmonic Nano-Patterns. , 2014, , .		3
84	Geometric spin Hall effect of light in tightly focused polarization-tailored light beams. <i>Physical Review A</i> , 2014, 89, .	1.0	47
85	Observation of the Geometric Spin Hall Effect of Light. <i>Physical Review Letters</i> , 2014, 112, 113902.	2.9	58
86	Nanointerferometric amplitude and phase reconstruction of tightly focused vector beams. <i>Nature Photonics</i> , 2014, 8, 23-27.	15.6	204
87	Generation and subwavelength focusing of longitudinal magnetic fields in a metallized fiber tip. <i>Optics Express</i> , 2014, 22, 13744.	1.7	10
88	Vectorial complex-source vortex beams. <i>Physical Review A</i> , 2014, 90, .	1.0	21
89	Polarization Tailored Light Driven Directional Optical Nanobeacon. <i>Nano Letters</i> , 2014, 14, 2546-2551.	4.5	120
90	Demonstration of an optical nano beacon for controlled directional emission and coupling. , 2014, , .		0

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91	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
92	Enhanced Raman Scattering of Graphene using Arrays of Split Ring Resonators. Advanced Optical Materials, 2013, 1, 151-157.	3.6	34
93	The polarization properties of a tilted polarizer. Optics Express, 2013, 21, 27032.	1.7	21
94	Corrections to the knife-edge based reconstruction scheme of tightly focused light beams. Optics Express, 2013, 21, 25069.	1.7	10
95	An azimuthally polarized light source for the optical near field. , 2013, , .		0
96	Experimental investigation of a single chiral nano-structure made of a composite material. , 2013, , .		0
97	Demonstration of a State of Light with Purely Transverse Angular Momentum. , 2013, , .		0
98	Demonstration of a State of Light with Purely Transverse Angular Momentum. , 2013, , .		0
99	Reconstruction of tightly focused beams using Mie-scattering. , 2012, , .		0
100	Resonant metamaterials for contrast enhancement in optical lithography. Optics Express, 2012, 20, 19928.	1.7	2
101	Analytical expansion of highly focused vector beams into vector spherical harmonics and its application to Mie scattering. Physical Review A, 2012, 85, .	1.0	29
102	Nonlinear Effects in Subwavelength Plasmonic Directional Couplers. , 2012, , .		1
103	Direct Measurement of the Geometric Spin Hall Effect of Light. , 2012, , .		0
104	Experimental demonstration of the geometric spin Hall effect of light in highly focused vector beams. , 2012, , .		0
105	Entangling Different Degrees of Freedom by Quadrature Squeezing Cylindrically Polarized Modes. Physical Review Letters, 2011, 106, 060502.	2.9	111
106	Experimental cross-polarization detection of coupling far-field light to highly confined plasmonic gap modes via nanoantennas. Applied Physics Letters, 2011, 98, 101109.	1.5	39
107	Birefringence and dispersion of cylindrically polarized modes in nanobore photonic crystal fiber. Journal of the Optical Society of America B: Optical Physics, 2011, 28, 193.	0.9	34
108	Interaction of highly focused vector beams with a metal knife-edge. Optics Express, 2011, 19, 7244.	1.7	16

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109	Geometric Spin Hall Effect of Light at polarizing interfaces. Applied Physics B: Lasers and Optics, 2011, 102, 427-432.	1.1	18
110	Optical properties of a tilted polarizer and geometric Spin Hall Effect of Light. , 2011, , .		0
111	Nanobore PCF Maintaining Cylindrically Polarized Modes. , 2010, , .		0
112	Excitation of Gap Plasmonic Waveguides by Nano Antennas. , 2010, , .		1
113	Extraordinary transmission through a single coaxial aperture in a thin metal film. Optics Express, 2010, 18, 10896.	1.7	41
114	On the experimental investigation of the electric and magnetic response of a single nano-structure. Optics Express, 2010, 18, 10905.	1.7	102
115	Polarization effect in the transmission through a single nanoscopic aperture. , 2007, , .		0
116	Waveguide properties of single subwavelength holes demonstrated with radially and azimuthally polarized light. Applied Physics B: Lasers and Optics, 2007, 89, 517-520.	1.1	30
117	The photonic wheel - demonstration of a state of light with purely transverse angular momentum. Journal of the European Optical Society-Rapid Publications, 0, 8, .	0.9	87
118	Single nanoparticle real and k-space spectroscopy with structured light. New Journal of Physics, 0, , .	1.2	1
119	Extreme Concentration and Nanoscale Interaction of Light. ACS Photonics, 0, , .	3.2	0