

Bing Gu

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5774745/publications.pdf>

Version: 2024-02-01

143
papers

2,662
citations

186265
28
h-index

254184
43
g-index

144
all docs

144
docs citations

144
times ranked

2285
citing authors

#	ARTICLE	IF	CITATIONS
1	Focal field properties of toroidal double-mode vector beams. Optics Communications, 2022, 505, 127514.	2.1	1
2	Surface-Enhanced Circular Dichroism by Localized Superchiral Hotspots in a Dielectric Dimer Array Metasurface. Journal of Physical Chemistry C, 2022, 126, 2199-2206.	3.1	12
3	Understanding of transverse spin angular momentum in tightly focused linearly polarized vortex beams. Optics Express, 2022, 30, 5121.	3.4	21
4	Superchiral hotspot enhanced circular dichroism in coaxial plasmonic nanoaperture. Optics Communications, 2022, 512, 128044.	2.1	1
5	Broadband third-order nonlinear optical responses of black phosphorus nanosheets via spatial self-phase modulation using truncated Gaussian beams. Optics and Laser Technology, 2022, 151, 108018.	4.6	6
6	Synthesis, characterization, and femtosecond third-order optical nonlinearity of Au@Ag core-shell nanoparticles. Journal of Nonlinear Optical Physics and Materials, 2022, 31, .	1.8	1
7	Spatial self-phase modulation with tunable dynamic process and its applications in all-optical nonlinear photonic devices. Optics and Lasers in Engineering, 2022, 158, 107168.	3.8	5
8	Optical manipulation of nanoparticles with structured light. , 2021, , 139-177.		1
9	Angular momentum separation in focused fractional vector beams for optical manipulation. Optics Express, 2021, 29, 14705.	3.4	21
10	Curved periodic ripples fabricated by double time-delayed femtosecond laser beams on the silicon surface. Optics Express, 2021, 29, 14326.	3.4	3
11	Enhanced circular dichroism of sparse nanoobjects by localized superchiral optical field. Journal of Optics (United Kingdom), 2021, 23, 065002.	2.2	3
12	Phase-change metasurface with tunable and switchable circular dichroism. Optics Letters, 2021, 46, 2525.	3.3	37
13	Sorting chiral nanoparticles with longitudinal polarization vortex structures. Optics Express, 2021, 29, 19001-19014.	3.4	11
14	Effect of the thermal optical nonlinearity on optical trapping Rayleigh particles. Optics Communications, 2021, 495, 127071.	2.1	3
15	Nonlinear accelerated orbiting motions of optical trapped particles through two-photon absorption. Optics Letters, 2021, 46, 110.	3.3	5
16	Degradation behaviors of photoelectrical properties of mixed cation perovskite solar cells under equivalent 1 MeV electron irradiation. Journal Physics D: Applied Physics, 2021, 54, 065103.	2.8	0
17	Force measurement goes to femto-Newton sensitivity of single microscopic particle. Light: Science and Applications, 2021, 10, 243.	16.6	7
18	Preparation of Ag@ZnO core-shell nanostructures by liquid-phase laser ablation and investigation of their femtosecond nonlinear optical properties. Applied Physics B: Lasers and Optics, 2020, 126, 1.	2.2	10

#	ARTICLE	IF	CITATIONS
19	Flexible measurement of high-order optical orbital angular momentum with a variable cylindrical lens pair. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	19
20	Polarization rotation and singularity evolution of fundamental Poincaré beams through anisotropic Kerr nonlinearities. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 085501.	2.2	3
21	Symmetric Ge ₂ Sb ₂ Te ₅ based metamaterial absorber induced dynamic wide-gamut structural color. <i>Journal of Optics (United Kingdom)</i> , 2020, 22, 085003.	2.2	14
22	Monolayer Conveyor for Stably Trapping and Transporting Sub-100 nm Particles. <i>Laser and Photonics Reviews</i> , 2020, 14, 2000030.	8.7	17
23	Anisotropic two-photon absorbers measured by the Z-scan technique and its application in laser beam shaping. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 756.	2.1	7
24	Enantioselective optical trapping of chiral nanoparticles using a transverse optical needle field with a transverse spin. <i>Optics Express</i> , 2020, 28, 27808.	3.4	20
25	Femtosecond laser trapping dynamics of two-photon absorbing hollow-core nanoparticles. <i>Chinese Optics Letters</i> , 2020, 18, 081901.	2.9	1
26	Investigation on magnetization induced by tightly focused azimuthally polarized fractional vortex beam. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 167802.	0.5	1
27	Generating plasmonic vortex field with spin-dependent metananoslots. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 2179.	2.1	0
28	Optical pulling forces on Rayleigh particles using ambient optical nonlinearity. <i>Nanophotonics</i> , 2019, 8, 1117-1124.	6.0	12
29	Conservation of the spin angular momentum in second-harmonic generation with elliptically polarized vortex beams. <i>Applied Physics Letters</i> , 2019, 114, 101101.	3.3	6
30	Gouy phase and wave-front spacing of arbitrary tightly focused cylindrical vector vortex beams. <i>Optics Communications</i> , 2019, 440, 163-170.	2.1	3
31	Computational and experimental studies on third-order optical nonlinearities of novel D-1E-A type chalcone derivatives: (1E,4E)-1-(4-substituted)-5-phenylpenta-1,4-dien-3-one. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2019, 28, 1950024.	1.8	6
32	Single-channel UV/vis dual-band detection with ZnCdS:Mn/ZnS core/shell quantum dots. <i>Nanotechnology</i> , 2019, 30, 075501.	2.6	8
33	Anisotropic nonlinear Kerr media: Z-scan characterization and interaction with hybridly polarized beams. <i>Optics Express</i> , 2019, 27, 13845.	3.4	9
34	Enhanced second harmonic emission with simultaneous polarization state tuning by aluminum metal-insulator-metal cross nanostructures. <i>Optics Express</i> , 2019, 27, 30909.	3.4	6
35	Three-dimensional magnetization needle arrays with controllable orientation. <i>Optics Letters</i> , 2019, 44, 727.	3.3	22
36	Optically induced rotation of Rayleigh particles by arbitrary photonic spin. <i>Photonics Research</i> , 2019, 7, 69.	7.0	30

#	ARTICLE	IF	CITATIONS
37	Title is missing!. Chinese Optics Letters, 2019, 17, 061901.	2.9	8
38	Femtosecond-pulsed Z -scan study on third- and fifth-order refractive nonlinearities in a side-chain azobenzene copolymer film. Journal of Nonlinear Optical Physics and Materials, 2018, 27, 1850007.	1.8	4
39	Thermally switchable photonic band-edge to random laser emission in dye-doped cholesteric liquid crystals. Laser Physics Letters, 2018, 15, 035002.	1.4	7
40	Solvent effects on the fluorescence and effective three-photon absorption of a Zn(II)-[meso-tetrakis(4-octyloxyphenyl)porphyrin]. Optics and Laser Technology, 2018, 102, 47-53.	4.6	11
41	Vector beams excited nonlinear optical effects. Journal of Nonlinear Optical Physics and Materials, 2018, 27, 1850045.	1.8	6
42	Trapping of low-refractive-index nanoparticles in a hollow dark spherical spot. Journal of Physics Communications, 2018, 2, 065015.	1.2	7
43	Theoretical investigation on asymmetrical spinning and orbiting motions of particles in a tightly focused power-exponent azimuthal-variant vector field. Optics Express, 2018, 26, 4318.	3.4	30
44	Structure, morphology, and nonlinear optical properties of orthorhombic $\hat{\pm}$ -Ca(HCOO) ₂ single crystals. Optical Materials Express, 2018, 8, 2238.	3.0	4
45	Optical forces of focused femtosecond laser pulses on nonlinear optical Rayleigh particles. Photonics Research, 2018, 6, 138.	7.0	55
46	Focus shaping and optical manipulation using highly focused second-order full Poincaré beam. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 953.	1.5	13
47	Experimental investigation on the polarization evolution characteristics of arbitrary cylindrical vector beams in uniaxial crystals orthogonal to the optical axis. Optics Communications, 2018, 427, 433-438.	2.1	5
48	Optical forces on a nonlinear optical Rayleigh particle induced by high-repetition-rate femtosecond laser pulses. , 2018, , .		0
49	Manipulation of nanoparticles with tailored optical focal field. , 2018, , .		0
50	Changing optical nonlinearities of homoleptic bis(phthalocyaninato) rare earth praseodymium double-decker complexes by the redox reaction. Dyes and Pigments, 2017, 139, 788-794.	3.7	15
51	A series of polycyclic aromatic hydrocarbon-substituted metal-free porphyrins: Substituent effect on two-photon absorption property. Dyes and Pigments, 2017, 142, 116-120.	3.7	20
52	Study on the Polarization of Random Lasers from Dye-Doped Nematic Liquid Crystals. Nanoscale Research Letters, 2017, 12, 27.	5.7	29
53	Trapping and manipulation of nanoparticles using multifocal optical vortex metalens. Scientific Reports, 2017, 7, 14611.	3.3	53
54	Plasmonic trapping of nanoparticles by metaholograms. Scientific Reports, 2017, 7, 10552.	3.3	4

#	ARTICLE	IF	CITATIONS
55	Strong two-photon absorptions in heteroleptic bis(phthalocyaninato) rare earth sandwich complexes. <i>Dyes and Pigments</i> , 2017, 136, 553-558.	3.7	6
56	Nonlinear polarization rotation of two types of vector beams through isotropic Kerr nonlinearities. <i>Journal of Physics: Conference Series</i> , 2017, 867, 012012.	0.4	2
57	Creation of identical multiple focal spots with three-dimensional arbitrary shifting. <i>Optics Express</i> , 2017, 25, 17737.	3.4	21
58	Polarization rotation of hybridly polarized beams in a uniaxial crystal orthogonal to the optical axis: theory and experiment. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2017, 34, 1.	1.5	14
59	Radial-variant nonlinear ellipse rotation. <i>Optics Letters</i> , 2017, 42, 3988.	3.3	4
60	Polarization rotation of hybridly polarized beams in a uniaxial crystal orthogonal to the optical axis: theory and experiment. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2017, 34, 2526.	1.5	0
61	Synthesis of focused beam with controllable arbitrary homogeneous polarization using engineered vectorial optical fields. <i>Optics Express</i> , 2016, 24, 23667.	3.4	17
62	Manipulation of resonant metallic nanoparticle using 4Pi focusing system. <i>Optics Express</i> , 2016, 24, 24143.	3.4	22
63	Nonlinear polarization evolution of hybridly polarized vector beams through isotropic Kerr nonlinearities. <i>Optics Express</i> , 2016, 24, 25867.	3.4	17
64	Large enhancement of optical limiting effects in anisotropic two-photon absorbers by radially polarized beams. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2016, 33, 2512.	2.1	10
65	Nonlinear polarization evolution of hybridly polarized beams by isotropic Kerr nonlinearity. , 2016, , .		0
66	Enhanced sensitivity of the Z-scan technique on saturable absorbers using radially polarized beams. <i>Journal of Applied Physics</i> , 2016, 119, .	2.5	13
67	Varying polarization and spin angular momentum flux of radially polarized beams by anisotropic Kerr media. <i>Optics Letters</i> , 2016, 41, 1566.	3.3	32
68	Manipulation metallic nanoparticle at resonant wavelength using engineered azimuthally polarized optical field. <i>Optics Express</i> , 2016, 24, 7212.	3.4	24
69	Generation of arbitrary vector fields based on a pair of orthogonal elliptically polarized base vectors. <i>Optics Express</i> , 2016, 24, 4177.	3.4	39
70	Detection of orbital angular momentum using a photonic integrated circuit. <i>Scientific Reports</i> , 2016, 6, 28262.	3.3	27
71	Generation and manipulation of super-resolution spherical magnetization chains. <i>Applied Optics</i> , 2016, 55, 5783.	2.1	31
72	Multi-channel orbital angular momentum detection with metahologram. <i>Optics Letters</i> , 2016, 41, 4379.	3.3	3

#	ARTICLE	IF	CITATIONS
73	Effect of a spiral phase on a vector optical field with hybrid polarization states. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 065605.	2.2	6
74	A series of homoleptic bis(phthalocyaninato) rare earth sandwich complexes with large two-photon absorption cross-section. <i>Dyes and Pigments</i> , 2015, 122, 346-350.	3.7	18
75	Donor-acceptor type porphyrins with large two-photon absorption cross section. <i>Dyes and Pigments</i> , 2015, 119, 116-121.	3.7	33
76	Enhanced optical limiting effects in multiphoton absorbers using cylindrical vector beams. , 2015, , .		2
77	Manipulation of dielectric Rayleigh particles using highly focused elliptically polarized vector fields. <i>Applied Optics</i> , 2015, 54, 8123.	2.1	14
78	Varying focal fields with asymmetric-sector-shaped vector beams. <i>Journal of Optics (United Kingdom)</i> , 2015, 17, 015603.	2.2	5
79	Manipulation of radial-variant polarization for creating tunable bifocusing spots. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2014, 31, 253.	1.5	15
80	Enhanced optical limiting effects in a double-decker bis(phthalocyaninato) rare earth complex using radially polarized beams. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	29
81	Tight focusing properties of spatial-variant linearly-polarized vector beams. <i>Journal of Optics (India)</i> , 2014, 43, 18-27.	1.7	11
82	Z-scan characterization of optical nonlinearities of an imperfect sample profits from radially polarized beams. <i>Applied Physics B: Lasers and Optics</i> , 2014, 117, 1141-1147.	2.2	15
83	Polarization evolution characteristics of focused hybridly polarized vector fields. <i>Applied Physics B: Lasers and Optics</i> , 2014, 117, 915-926.	2.2	25
84	Nonparaxial propagation and focusing properties of azimuthal-variant vector fields diffracted by an annular aperture. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2014, 31, 1657.	1.5	3
85	Controllable vector bottle-shaped fields generated by focused spatial-variant linearly polarized vector beams. <i>Applied Physics B: Lasers and Optics</i> , 2013, 113, 165-170.	2.2	7
86	Effect of sample imperfections on far-field self-diffraction patterns of a Gaussian beam passing through Kerr media. <i>Optik</i> , 2013, 124, 7070-7074.	2.9	3
87	Achievement of needle-like focus by engineering radial-variant vector fields. <i>Optics Express</i> , 2013, 21, 30444.	3.4	13
88	Young's two-slit interference of vector light fields. <i>Optics Letters</i> , 2012, 37, 1790.	3.3	21
89	Two-dimensional microstructures induced by femtosecond vector light fields on silicon. <i>Optics Express</i> , 2012, 20, 120.	3.4	78
90	Vectorial self-diffraction effect in optically Kerr medium. <i>Optics Express</i> , 2012, 20, 149.	3.4	16

#	ARTICLE	IF	CITATIONS
91	Spin-sensitive distribution of electromagnetic field via spin-orbit interaction in structured metamaterials. <i>Journal of Applied Physics</i> , 2012, 112, 013102.	2.5	1
92	Spatial splitting of spin states in subwavelength metallic microstructures via partial conversion of spin-to-orbital angular momentum. <i>Physical Review A</i> , 2012, 85, .	2.5	21
93	Angular diffraction of an optical vortex induced by the Gouy phase. <i>Journal of Optics (United Tj ETQq1 1 0.784314,rgBT /Overlock 10</i>	2.5	24
94	Spin Hall effect of reflected light from an air-glass interface around the Brewster's angle. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	82
95	Nonparaxial and paraxial focusing of azimuthal-variant vector beams. <i>Optics Express</i> , 2012, 20, 17684.	3.4	38
96	Focal shift of flat-topped beams passing through a lens system with or without aperture. <i>Optik</i> , 2012, 123, 1440-1443.	2.9	3
97	Z-scan theory with simultaneous two- and three-photon absorption saturation. <i>Optics and Laser Technology</i> , 2012, 44, 390-393.	4.6	17
98	Fano's Feshbach resonance in structural symmetry broken metamaterials. <i>Journal of Applied Physics</i> , 2011, 109, 014901.	2.5	22
99	Optical spin-dependent angular shift in structured metamaterials. <i>Optics Letters</i> , 2011, 36, 3942.	3.3	12
100	Linear and Nonlinear Optical Properties of Ferroelectric Thin Films. , 2011, , .		1
101	Exciton in twisted single-walled carbon nanotube. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 1190-1193.	0.8	0
102	Theoretical study on stability of Z-scan technique by use of quasi-one-dimensional slit beam. <i>Optik</i> , 2011, 122, 1152-1158.	2.9	3
103	Near-field phase singularity in subwavelength metallic microstructures. <i>Physical Review A</i> , 2011, 84, .	2.5	9
104	Unveiling locally linearly polarized vector fields with broken axial symmetry. <i>Physical Review A</i> , 2011, 83, .	2.5	25
105	Vector fields with hybrid states of polarization and their orbital angular momentum. <i>Proceedings of SPIE</i> , 2011, , .	0.8	1
106	Exciton distribution on single-walled carbon nanotube. <i>European Physical Journal B</i> , 2010, 74, 499-506.	1.5	4
107	Z-scan analytical theory for material with saturable absorption and two-photon absorption. <i>Optics Communications</i> , 2010, 283, 3525-3528.	2.1	47
108	Optical optical isomerization mechanism for the third-order optical nonlinearity in side-chain azobenzene copolymer. <i>Physica B: Condensed Matter</i> , 2010, 405, 1480-1483.	2.7	3

#	ARTICLE	IF	CITATIONS
109	Nonlinear properties of polyurethane-urea/multi-wall carbon nanotube composite films. Optics and Laser Technology, 2010, 42, 956-959.	4.6	5
110	Theoretical and experimental studies of three-photon-induced excited-state absorption. Applied Physics Letters, 2010, 96, .	3.3	10
111	STUDY ON THE REFRACTIVE NON-LINEARITY OF THREE-PHOTON ABSORBING MEDIA WITH THE Z-SCAN TECHNIQUE. Journal of Nonlinear Optical Physics and Materials, 2010, 19, 327-338.	1.8	6
112	Excited-state enhancement of third-order optical nonlinearities: photodynamics and characterization. Optics Express, 2010, 18, 26843.	3.4	5
113	Dynamics of two-photon-induced three-photon absorption in nanosecond, picosecond, and femtosecond regimes. Optics Letters, 2010, 35, 417.	3.3	28
114	Determination of the nonlinear refractive index in multiphoton absorbers by Z-scan measurements. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 2438.	2.1	10
115	Observation of a fifth-order optical nonlinearity in Bi _{0.9} La _{0.1} Fe _{0.98} Mg _{0.02} O ₃ ferroelectric thin films. Applied Physics Letters, 2009, 95, 041114.	3.3	20
116	Concentration-dependent two-photon absorption and subsequent excited-state absorption in 4-methoxy-2-nitroaniline. Journal of Applied Physics, 2009, 106, .	2.5	25
117	Z-scan analytical theories for characterizing multiphoton absorbers. Applied Physics B: Lasers and Optics, 2009, 95, 375-381.	2.2	45
118	Enhanced sensitivity of Z-scan technique by use of flat-topped beam. Applied Physics B: Lasers and Optics, 2009, 95, 773-778.	2.2	12
119	Z-scan technique for investigation of the noninstantaneous optical Kerr nonlinearity. Optics Letters, 2009, 34, 2769.	3.3	33
120	Nonlinear optical properties of 2,4,5-Trimethoxy-4'-nitrochalcone: observation of two-photon-induced excited-state nonlinearities. Optics Express, 2009, 17, 1126.	3.4	47
121	Femtosecond third-order optical nonlinearity of BiFeO ₃ . Optics Express, 2009, 17, 10970.	3.4	25
122	Two-photon-induced excited-state absorption: Theory and experiment. Applied Physics Letters, 2008, 92, .	3.3	95
123	Ultrafast optical nonlinearities and figures of merit in acceptor-substituted 3,4,5-trimethoxy chalcone derivatives: Structure-property relationships. Journal of Applied Physics, 2008, 103, .	2.5	108
124	Analytical expression for femtosecond-pulsed Z scans on instantaneous nonlinearity. Applied Optics, 2008, 47, 1187.	2.1	28
125	Two-step four-photon absorption. Optics Express, 2008, 16, 10208.	3.4	19
126	Two-photon-induced excited-state nonlinearities. Optics Express, 2008, 16, 17745.	3.4	40

#	ARTICLE	IF	CITATIONS
127	Three-photon absorption saturation in ZnO and ZnS crystals. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	40
128	Z-scan theory of two-photon absorption saturation and experimental evidence. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	66
129	A precise data processing method for extracting $I\ddot{t}(3)$ from Z-scan technique. <i>Optics Communications</i> , 2007, 277, 209-213.	2.1	11
130	Characterization of saturable absorbers using an open-aperture Gaussian-beam Zscan. <i>Physical Review A</i> , 2006, 73, .	2.5	56
131	Synthesis and Properties of Novel Polyurethane \hat{u} Urea/Multiwalled Carbon Nanotube Composites. <i>Macromolecules</i> , 2006, 39, 3540-3545.	4.8	83
132	Theoretical study of saturable Kerr nonlinearity using top-hat beam Z-scan technique. <i>Optics Communications</i> , 2006, 263, 322-327.	2.1	9
133	Determinations of third- and fifth-order nonlinearities by the use of the top-hat-beam Z scan: theory and experiment. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2005, 22, 446.	2.1	18
134	Theory of Gaussian beam Z scan with simultaneous third- and fifth-order nonlinear refraction based on a Gaussian decomposition method. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2005, 22, 2651.	2.1	48
135	Z-scan theory for material with two- and three-photon absorption. <i>Optics Express</i> , 2005, 13, 9230.	3.4	70
136	Nonlinear optical properties of neodymium-doped bismuth titanate thin films using Z-scan technique. <i>Applied Physics Letters</i> , 2004, 84, 1686-1688.	3.3	31
137	Giant optical nonlinearity of a Bi ₂ Nd ₂ Ti ₃ O ₁₂ ferroelectric thin film. <i>Applied Physics Letters</i> , 2004, 85, 3687-3689.	3.3	67
138	THIRD-ORDER NONLINEARITIES AND OPTICAL LIMITING OF C ₆₀ POLYURETHANE \hat{u} UREA FILMS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2004, 13, 45-54.	1.8	12
139	Z-scan technique for characterizing third-order optical nonlinearity by use of quasi-one-dimensional slit beams. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2004, 21, 968.	2.1	15
140	Synthesis, properties of fullerene-containing polyurethane \hat{u} urea and its optical limiting absorption. <i>Polymer</i> , 2003, 44, 2647-2654.	3.8	44
141	Second Z-scan in materials with nonlinear refraction and nonlinear absorption. <i>Journal of Optics</i> , 2002, 4, 504-508.	1.5	16
142	Terahertz multi-frequency splitter and spoof SPPs switch. <i>Journal of Optics (United Kingdom)</i> , 0, , .	2.2	0
143	The transversal energy flow of tightly focused Off-axis circular polarized vortex beams. <i>Applied Optics</i> , 0, , .	1.8	3