Guoquan Zhou

List of Publications by Year
in descending order

49 papers	2,338 citations	361413 20 h-index	206112 48 g-index
49 all docs	49 docs citations	49 times ranked	2500 citing authors

#	Article	IF	Citations
1	Ion sieving in graphene oxide membranes via cationic control of interlayer spacing. Nature, 2017, 550, 380-383.	27.8	1,171
2	Interaction of Graphene and its Oxide with Lipid Membrane: A Molecular Dynamics Simulation Study. Journal of Physical Chemistry C, 2016, 120, 6225-6231.	3.1	101
3	Propagation of Airy beams in uniaxial crystals orthogonal to the optical axis. Optics Express, 2012, 20, 2196.	3.4	87
4	Propagation of an Airy beam in a strongly nonlocal nonlinear media. Laser Physics Letters, 2014, 11, 105001.	1.4	85
5	Fractional Fourier transform of Lorentz-Gauss beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 350.	1.5	64
6	Focal shift of focused truncated Lorentz-Gauss beam. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 2594.	1.5	51
7	The beam propagation factors and the kurtosis parameters of a Lorentz beam. Optics and Laser Technology, 2009, 41, 953-955.	4.6	44
8	Average intensity and spreading of a Lorentz-Gauss beam in turbulent atmosphere. Optics Express, 2010, 18, 726.	3.4	43
9	Propagation of a partially coherent cosine-Gaussian beam through an ABCD optical system in turbulent atmosphere. Optics Express, 2009, 17, 10529.	3.4	42
10	Beam propagation of a higher-order cosh-Gaussian beam. Optics and Laser Technology, 2009, 41, 202-208.	4.6	41
11	The far-field divergent properties of an Airy beam. Optics and Laser Technology, 2012, 44, 1318-1323.	4.6	38
12	The analytical vectorial structure of a nonparaxial Gaussian beam close to the source. Optics Express, 2008, 16, 3504.	3.4	35
13	Propagation of cosh-Airy beams in uniaxial crystals orthogonal to the optical axis. Optics and Laser Technology, 2019, 116, 72-82.	4.6	33
14	Propagation of a partially coherent Lorentz-Gauss beam through a paraxial ABCD optical system. Optics Express, 2010, 18, 4637.	3.4	32
15	Fractional Fourier transform of Airy beams. Applied Physics B: Lasers and Optics, 2012, 109, 549-556.	2.2	32
16	Generalized beam propagation factors of truncated partially coherent cosine-Gaussian and cosh-Gaussian beams. Optics and Laser Technology, 2010, 42, 489-496.	4.6	31
17	Fractional Fourier transform of a higher-order coshâ€“Gaussian beam. Journal of Modern Optics, 2009, 56, 886-892.	1.3	27
18	Abruptly autofocusing of generalized circular Airy derivative beams. Optics Express, 2022, 30, 3804.	3.4	26

#	Article	IF	Citations
19	Airy transform of Laguerre-Gaussian beams. Optics Express, 2020, 28, 19683.	3.4	25
20	Beam Propagation Factor of a Cosh-Airy Beam. Applied Sciences (Switzerland), 2019, 9, 1817.	2.5	20
21	Self-healing properties of cosh-Airy beams. Laser Physics, 2019, 29, 025001.	1.2	20
22	Propagation dynamics of abruptly autofocusing circular Airyprime beam with an optical vortex. Optics and Laser Technology, 2022, 155, 108398.	4.6	19
23	Investigation in the far field characteristics of Lorentz beam from the vectorial structure. Journal of Modern Optics, 2008, 55, 993-1002.	1.3	18
24	Analytical vectorial structure of controllable dark-hollow beams in the far field. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 1654.	1.5	18
25	Airyprime beams and their propagation characteristics. Laser Physics Letters, 2014, 12, 025003.	1.4	18
26	Transformation of a Hermite-Gaussian beam by an Airy transform optical system. Optics Express, 2020, 28, 28518.	3.4	18
27	Fractional Fourier transform of Ince-Gaussian beams. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 2586.	1.5	15
28	Encapsulation and Release of Drug Molecule Pregabalin Based on Ultrashort Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2019, 123, 9567-9574.	3.1	15
29	Selective Transport through the Ultrashort Carbon Nanotubes Embedded in Lipid Bilayers. Journal of Physical Chemistry C, 2018, 122, 27681-27688.	3.1	14
30	Characteristics of Partially Coherent Circular Flattened Gaussian Vortex Beams in Turbulent Biological Tissues. Applied Sciences (Switzerland), 2019, 9, 969.	2.5	14
31	Propagation of Cosh-Airy and Cos-Airy Beams in Parabolic Potential. Applied Sciences (Switzerland), 2019, 9, 5530.	2.5	14
32	Realization and measurement of Airy transform of Gaussian vortex beams. Optics and Laser Technology, 2021, 143, 107334.	4.6	14
33	Propagation of vectorial Lorentz beam beyond the paraxial approximation. Journal of Modern Optics, 2008, 55, 3573-3579.	1.3	13
34	Properties of Airy transform of elegant Hermite-Gaussian beams. Optics and Laser Technology, 2021, 140, 107034.	4.6	13
35	Generation of finite energy Airyprime beams by Airy transformation. Optics Express, 2022, 30, 24948.	3.4	11
36	Change of the paraxiality of a Gaussian beam diffracted by a circular aperture. Optics Express, 2009, 17, 8417.	3.4	10

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37	Beam propagation factor and kurtosis parameter of hollow vortex Gaussian beams: an alternative method. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 1908.	1.5	10
38	Super Lorentz-Gauss modes and their paraxial propagation properties. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 563.	1.5	9
39	Carbon Nanotubes Translocation through a Lipid Membrane and Transporting Small Hydrophobic and Hydrophilic Molecules. Applied Sciences (Switzerland), 2019, 9, 4271.	2.5	9
40	Non-paraxial investigation in the far field properties of controllable dark-hollow beams diffracted by a circular aperture. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 890.	1.5	8
41	Fullerene-intercalated graphene nanocontainers for gas storage and sustained release. Journal of Molecular Modeling, 2020, 26, 166.	1.8	7
42	The structural properties of cosine-Gaussian beam in the far field. Journal of Modern Optics, 2008, 55, 2485-2495.	1.3	6
43	Investigation in the propagation of non-paraxial TE vector Gaussian beam from vectorial structure. Journal of Modern Optics, 2007, 54, 1151-1163.	1.3	4
44	Vectorial structural properties of a Gaussian vortex beam in the far-field. Laser Physics, 2015, 25, 125001.	1.2	4
45	The vertical beam quality of GaInP/AlGaInP strained multiple quantum well laser. Journal of Modern Optics, 2001, 48, 1855-1861.	1.3	3
46	Vectorial structure of Inceâ€“Gaussian beam in the far field. Journal of Modern Optics, 2007, 54, 2807-2817.	1.3	3
47	Characteristics of a Gaussian beam after n times Airy transforms. Optics and Laser Technology, 2022, 149, 107892.	4.6	2
48	Analytical non-paraxial TM polarized Gaussian beam in the source region. Journal of Modern Optics, 2009, 56, 910-918.	1.3	1
49	Progress in New Laser Beam on Optical Beam Quality. The Review of Laser Engineering, 2004, 32, 237-240.	0.0	0