Jianqi Shen

List of Publications by Year
in descending order

84	716	623734	713466
papers	citations	14 h-index	21 g-index

85	85	85	300
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Data inversion algorithms for droplet characterization based on simulated rainbows. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107986.	2.3	5
2	MÃ¶bius shifts associated with the third-order and the fourth-order rainbows of a spheroidal droplet computation. Applied Optics, 2022, 61, 826.	1.8	0
3	Cylindrical wave spectrum decomposition method for evaluating the expansion coefficients of the shaped beams in spherical coordinates. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 283, 108138.	2.3	7
4	Angular spectrum representation of the Bessel-Gauss beam and its approximation: A comparison with the localized approximation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 284, 108167.	2.3	16
5	Angular spectrum decomposition method and quadrature method in the generalized Lorenâ€"Mie theory for evaluating the beam shape coefficients of TEM<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" id="d1e1235" altimg="si3.svg"><mml:msubsup><mml:mrow /><mml:mrow><mml:mn>0</mml:mn><mml:mi>l</mml:mi></mml:mrow><mml:mrow><mml:mo>â^—</mml:mo></mml:mrow></mm	2.1	8
6	Scattering of Laguerre-Gauss light beam by a sphere: the angular spectrum decomposition method and a comparison with the localized approximation method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 287, 108214.	2.3	6
7	Inclusion of the tunneling phase shift for interferometric particle imaging for bubble sizing. Particuology, 2021, 54, 50-57.	3.6	4
8	Simultaneous measurement of bubble size and growth with phase critical angle scattering. Optics and Lasers in Engineering, 2021, 136, 106302.	3.8	0
9	Internal morphology-dependent resonances of a coated spherical particle. Applied Optics, 2021, 60, 6116.	1.8	0
10	Curved photonic jet produced from a spherical particle illuminated by a Bessel-Gaussian beam. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 272, 107765.	2.3	10
11	Comparison of a standard elliptical Bessel beam and a refracted circular Bessel beam at oblique incidence. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 272, 107773.	2.3	1
12	Measurement of particle size and refractive index based on interferometric particle imaging. Optics and Laser Technology, 2021, 141, 107110.	4.6	6
13	Simulation of the optical caustics associated with the primary rainbow for oblate spheroidal drops illuminated by a Gaussian beam. Optics Express, 2021, 29, 377.	3.4	6
14	Scattering of Shaped Beams by Large Particles: Theoretical Interpretation andÂNumerical Techniques. Springer Series in Light Scattering, 2021, , 125-158.	0.6	5
15	Characterization of refractive index and size of a spherical drop by using Gaussian beam scattering in the secondary rainbow region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 242, 106785.	2.3	5
16	Spherical harmonics expansion of the evanescent waves in angular spectrum decomposition of shaped beams. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 251, 107012.	2.3	9
17	Internal and external-fields of a multilayered sphere illuminated by the shaped beam: Rescaled quantities for numerical calculation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 250, 107004.	2.3	2
18	Model for computing optical caustic partitions for the primary rainbow from tilted spheriodal drops. Optics Letters, 2019, 44, 823.	3.3	8

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19	Phase critical angle scattering for measurement of transient nanoscale growth rate of a micron-sized bubble. Optics Letters, 2019, 44, 5699.	3.3	4
20	Measurements of refractive index and size of a spherical drop from Gaussian beam scattering in the primary rainbow region. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 207, 83-88.	2.3	12
21	Particle Scattering Photography Approach for Poorly Illuminated Multiphase Reactors. I: Theoretical Model and Simulation. Industrial & Engineering Chemistry Research, 2018, 57, 8396-8404.	3.7	3
22	Dependence of the forward light scattering on the refractive index of particles. Optics and Laser Technology, 2018, 101, 232-241.	4.6	9
23	Particle Scattering Photography Approach for Poorly Illuminated Multiphase Reactors. II: Experimental Validation and Optimization. Industrial & Engineering Chemistry Research, 2018, 57, 8405-8412.	3.7	6
24	Beam shape coefficients calculation for an elliptical Gaussian beam with 1-dimensional quadrature and localized approximation methods. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 212, 139-148.	2.3	7
25	Beam shape coefficient calculation for a Gaussian beam: localized approximation, quadrature and angular spectrum decomposition methods. Applied Optics, 2018, 57, 302.	1.8	20
26	Calculation of light scattering of an elliptical Gaussian beam by a spherical particle. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 1288.	1.5	13
27	Study of Drop Measurement Based on Gaussian Beam Scattering in the Primary Rainbow Region. Guangzi Xuebao/Acta Photonica Sinica, 2018, 47, 129003.	0.3	0
28	Calculation of generalized Lorenz-Mie theory based on the localized beam models. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 195, 44-54.	2.3	13
29	Multi-parameter regularization method for particle sizing of forward light scattering. Journal of Modern Optics, 2017, 64, 787-798.	1.3	4
30	Iterative algorithm based on a combination of vector similarity measure and B-spline functions for particle analysis in forward scattering. Optics and Laser Technology, 2017, 91, 13-21.	4.6	5
31	Compact formulation of the beam shape coefficients for elliptical Gaussian beam based on localized approximation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2016, 33, 2256.	1.5	7
32	Modified iterative vector similarity measure for particle size analysis based on forward light scattering. Applied Optics, 2016, 55, 6183.	2.1	3
33	Simulation of optical caustics associated with the tertiary rainbow of oblate droplets. Applied Optics, 2016, 55, 6447.	2.1	2
34	Use of non-negative constraint in Tikhonov regularization for particle sizing based on forward light scattering. Journal of Modern Optics, 2016, 63, 1630-1637.	1.3	2
35	Application of vector ray tracing to the computation of MÃ¶bius shifts for the primary and secondary rainbows. Applied Optics, 2015, 54, 9093.	2.1	14
36	Online measurement of nanoparticle size distribution in flowing Brownian motion system using laser diode self-mixing interferometry. Applied Physics B: Lasers and Optics, 2015, 120, 129-139.	2.2	3

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37	Vector similarity measure for particle size analysis based on forward light scattering. Applied Optics, 2015, 54, 3855.	2.1	6
38	Optical caustics associated with the primary and the secondary rainbows of oblate droplets. Proceedings of SPIE, 2014, , .	0.8	1
39	Fast and economic signal processing technique of laser diode self-mixing interferometry for nanoparticle size measurement. Applied Physics B: Lasers and Optics, 2014, 115, 285-291.	2.2	9
40	Influences of refractive index on forward light scattering. Optics Communications, 2014, 316, 198-205.	2.1	17
41	Particle analysis based on light scattering of particles illuminated by a divergent Gaussian beam. Optics and Lasers in Engineering, 2013, 51, 826-831.	3.8	2
42	Diffraction of a plane wave by an infinitely long circular cylinder or a sphere: solution from Mie theory. Applied Optics, 2013, 52, 5707.	1.8	3
43	Diffraction effects in planar wave-sphere interaction. Chinese Optics Letters, 2013, 11, 050501-50504.	2.9	5
44	Light scattering of particles illuminated by a divergent beam. Optics and Lasers in Engineering, 2012, 50, 1410-1415.	3.8	5
45	Power spectral density of self-mixing signals from a flowing Brownian motion system. Applied Physics B: Lasers and Optics, 2012, 106, 127-134.	2.2	12
46	Laser diode feedback interferometry in flowing Brownian motion system: a novel theory. Applied Physics B: Lasers and Optics, 2010, 101, 173-183.	2.2	17
47	Stability in Debye series calculation for light scattering by absorbing particles and bubbles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 772-781.	2.3	18
48	Particle analysis on concentrated particle suspensions by transmission fluctuation spectrometry with band-pass filters: part 2. Experimental results. Measurement Science and Technology, 2010, 21, 065106.	2.6	1
49	Particle analysis on concentrated particle suspensions by transmission fluctuation spectrometry with band-pass filters: part 1. Simulation. Measurement Science and Technology, 2010, 21, 065105.	2.6	4
50	Calculation of Debye series expansion of light scattering. Applied Optics, 2010, 49, 2422.	2.1	37
51	å¸æ”¶ä»‹è´¨ä¸çš„å…‰æ•£å°„åŠå…¶æ•°å€¼è®¡ç®—. Chinese Optics Letters, 2010, 8, 111.	2.9	8
52	Numerical calculation of multiple scattering with the layer model. Particuology, 2009, 7, 76-82.	3.6	3
53	Geometrical optics approximation for light scattering by absorbing spherical particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1178-1189.	2.3	15
54	EFFECTS OF PARTICLE OVERLAPPING ON TRANSMISSION FLUCTUATION SPECTROMETRY WITH TEMPORAL CORRELATION. Chemical Engineering Communications, 2009, 197, 134-144.	2.6	0

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55	High concentration effects of transmission fluctuation spectrometry with temporal correlation. Journal of Physics: Conference Series, 2009, 147, 012085.	0.4	0
56	Measurements on Particle Size Distribution and Concentration by Transmission Fluctuation Spectrometry with Temporal Correlation. Particle and Particle Systems Characterization, 2008, 25, 231-243.	2.3	4
57	Particle size analysis by transmission fluctuation spectrometry with band-pass filters. Powder Technology, 2008, 184, 291-297.	4.2	4
58	Fundamentals of particle size analysis by fluctuating transmission autocorrelation with an extremely narrow beam. Measurement: Journal of the International Measurement Confederation, 2008, 41, 55-64.	5.0	1
59	Geometrical optics approximation of light scattering by large air bubbles. Particuology, 2008, 6, 340-346.	3.6	28
60	Transmission fluctuation method for particle analysis in multiphase flow. International Journal of Multiphase Flow, 2008, 34, 931-937.	3.4	4
61	Smoothness-constrained projection method for particle analysis based on forward light scattering. Applied Optics, 2008, 47, 1718.	2.1	10
62	Size measurement of nano-particles using self-mixing effect. Chinese Optics Letters, 2008, 6, 871-874.	2.9	9
63	Signal Processing In Transmission Fluctuation Spectrometry With Band-Pass Filter. AIP Conference Proceedings, 2007, , .	0.4	4
64	Particle Size Analysis By Transmission Fluctuation Spectrometry With Temporal Correlation: Theory And Simulations On Particle Overlapping. AIP Conference Proceedings, 2007, , .	0.4	0
65	Improved algorithm of light scattering by a coated sphere. Particuology: Science and Technology of Particles, 2007, 5, 230-236.	0.4	28
66	Optimization of regularization parameter of inversion in particle sizing using light extinction method. Particuology: Science and Technology of Particles, 2007, 5, 295-299.	0.4	43
67	Particle analysis by transmission fluctuation spectrometry with temporal correlation in multiphase flow. Flow Measurement and Instrumentation, 2007, 18, 166-174.	2.0	0
68	Extension of geometrical-optics approximation to on-axis Gaussian beam scattering II By a spheroidal particle with end-on incidence. Applied Optics, 2006, 45, 5000.	2.1	34
69	<title>First principle studies on the optical properties of PbWO<formula><inf><roman>4</roman></inf></formula> crystal with oxygen vacancy V<formula><inf><roman>O</roman></inf></formula><formula>^{<roman>2+</roman>}</formula></title>. , 2006, 6029, 340.		0
70	A new algorithm of relaxation method for particle analysis from forward scattered light. Particuology: Science and Technology of Particles, 2006, 4, 13-19.	0.4	3
71	Particle sizing by spectral analysis on transmission fluctuations. Powder Technology, 2006, 166, 91-99.	4.2	1
72	Transmission Fluctuation Spectrometry in Concentrated Suspensions. Part Three: Measurements. Particle and Particle Systems Characterization, 2005, 22, 14-23.	2.3	7

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73	Transmission Fluctuation Spectrometry with Spatial Correlation. Particle and Particle Systems Characterization, 2005, 22, 24-37.	2.3	12
74	Scattering and Transmission by a Monolayer of Spheres: A Study on the Monolayer Structure. Particle and Particle Systems Characterization, 2005, 22, 320-328.	2.3	1
75	Measurements of particle-size distribution and concentration by transmission fluctuation spectrometry with temporal correlation. Optics Letters, 2005, 30, 2098.	3.3	11
76	Algorithm of Numerical Calculation on Lorentz Mie Theory. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2005, 1, 691-694.	0.4	17
77	Transmission and diffraction pattern by a monolayer of opaque spheres. Particuology: Science and Technology of Particles, 2004, 2, 248-252.	0.4	1
78	Transmission Fluctuation Spectrometry in Concentrated Suspensions Part One: Effects of the Monolayer Structure. Particle and Particle Systems Characterization, 2004, 21, 429-439.	2.3	10
79	Transmission Fluctuation Spectrometry in Concentrated Suspensions Part Two: Particle Overlapping. Particle and Particle Systems Characterization, 2004, 21, 440-454.	2.3	10
80	Fundamentals of transmission fluctuation spectrometry with variable spatial averaging. Particuology: Science and Technology of Particles, 2003, 1, 242-246.	0.4	8
81	The Fundamentals of Particle Size Analysis by Transmission Fluctuation Spectrometry.. Particle and Particle Systems Characterization, 2003, 20, 94-103.	2.3	25
82	Particle Size Analysis by Transmission Fluctuation Spectrometry: Experimental Results Obtained with a Gaussian Beam and Analog Signal Processing. Particle and Particle Systems Characterization, 2003, 20, 250-258.	2.3	21
83	The Fundamentals of Particle Size Analysis by Transmission Fluctuation Spectrometry. Part 2: A Theory on Transmission Fluctuations with Combined Spatial and Temporal Averaging. Particle and Particle Systems Characterization, 2001, 18, 134.	2.3	21
84	Extinction by a Large Spherical Particle Located in a Narrow Gaussian Beam. Particle and Particle Systems Characterization, 2001, 18, 254-261.	2.3	11