Jianqi Shen

List of Publications by Year
in descending order

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

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

#	Article	IF	Citations
1	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
2	Calculation of Debye series expansion of light scattering. Applied Optics, 2010, 49, 2422.	2.1	37
3	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
4	Improved algorithm of light scattering by a coated sphere. Particuology: Science and Technology of Particles, 2007, 5, 230-236.	0.4	28
5	Geometrical optics approximation of light scattering by large air bubbles. Particuology, 2008, 6, 340-346.	3.6	28
6	The Fundamentals of Particle Size Analysis by Transmission Fluctuation Spectrometry.. Particle and Particle Systems Characterization, 2003, 20, 94-103.	2.3	25
7	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
8	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
9	Beam shape coefficient calculation for a Gaussian beam: localized approximation, quadrature and angular spectrum decomposition methods. Applied Optics, 2018, 57, 302.	1.8	20
10	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
11	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
12	Influences of refractive index on forward light scattering. Optics Communications, 2014, 316, 198-205.	2.1	17
13	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
14	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
15	Geometrical optics approximation for light scattering by absorbing spherical particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1178-1189.	2.3	15
16	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
17	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
18	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

#	Article	IF	Citations
19	Transmission Fluctuation Spectrometry with Spatial Correlation. Particle and Particle Systems Characterization, 2005, 22, 24-37.	2.3	12
20	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
21	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
22	Extinction by a Large Spherical Particle Located in a Narrow Gaussian Beam. Particle and Particle Systems Characterization, 2001, 18, 254-261.	2.3	11
23	Measurements of particle-size distribution and concentration by transmission fluctuation spectrometry with temporal correlation. Optics Letters, 2005, 30, 2098.	3.3	11
24	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
25	Transmission Fluctuation Spectrometry in Concentrated Suspensions Part Two: Particle Overlapping. Particle and Particle Systems Characterization, 2004, 21, 440-454.	2.3	10
26	Smoothness-constrained projection method for particle analysis based on forward light scattering. Applied Optics, 2008, 47, 1718.	2.1	10
27	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
28	Size measurement of nano-particles using self-mixing effect. Chinese Optics Letters, 2008, 6, 871-874.	2.9	9
29	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
30	Dependence of the forward light scattering on the refractive index of particles. Optics and Laser Technology, 2018, 101, 232-241.	4.6	9
31	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
32	Fundamentals of transmission fluctuation spectrometry with variable spatial averaging. Particuology: Science and Technology of Particles, 2003, 1, 242-246.	0.4	8
33	å¸æ”¶ä»‹è´¨ä¸çš„å…‰ä¼ æ’åŠåº”ç”¨. Chinese Optics Letters, 2010, 8, 111.	2.9	8
34	Model for computing optical caustic partitions for the primary rainbow from tilted spheriodal drops. Optics Letters, 2019, 44, 823.	3.3	8
35	Angular spectrum decomposition method and quadrature method in the generalized Lorenzâ€"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 doughnut beam. Optics Communications, 2022, 515, 128224.	2.1	8
36	Transmission Fluctuation Spectrometry in Concentrated Suspensions. Part Three: Measurements. Particle and Particle Systems Characterization, 2005, 22, 14-23.	2.3	7

#	Article	IF	Citations
37	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
38	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
39	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
40	Vector similarity measure for particle size analysis based on forward light scattering. Applied Optics, 2015, 54, 3855.	2.1	6
41	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
42	Measurement of particle size and refractive index based on interferometric particle imaging. Optics and Laser Technology, 2021, 141, 107110.	4.6	6
43	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
44	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
45	Light scattering of particles illuminated by a divergent beam. Optics and Lasers in Engineering, 2012, 50, 1410-1415.	3.8	5
46	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
47	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
48	Diffraction effects in planar wave-sphere interaction. Chinese Optics Letters, 2013, 11, 050501-50504.	2.9	5
49	Data inversion algorithms for droplet characterization based on simulated rainbows. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 277, 107986.	2.3	5
50	Scattering of Shaped Beams by Large Particles: Theoretical Interpretation andÂNumerical Techniques. Springer Series in Light Scattering, 2021, , 125-158.	0.6	5
51	Signal Processing In Transmission Fluctuation Spectrometry With Band-Pass Filter. AIP Conference Proceedings, 2007, , .	0.4	4
52	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
53	Particle size analysis by transmission fluctuation spectrometry with band-pass filters. Powder Technology, 2008, 184, 291-297.	4.2	4
54	Transmission fluctuation method for particle analysis in multiphase flow. International Journal of Multiphase Flow, 2008, 34, 931-937.	3.4	4

#	Article	IF	Citations
55	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
56	Multi-parameter regularization method for particle sizing of forward light scattering. Journal of Modern Optics, 2017, 64, 787-798.	1.3	4
57	Inclusion of the tunneling phase shift for interferometric particle imaging for bubble sizing. Particuology, 2021, 54, 50-57.	3.6	4
58	Phase critical angle scattering for measurement of transient nanoscale growth rate of a micron-sized bubble. Optics Letters, 2019, 44, 5699.	3.3	4
59	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
60	Numerical calculation of multiple scattering with the layer model. Particuology, 2009, 7, 76-82.	3.6	3
61	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
62	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
63	Modified iterative vector similarity measure for particle size analysis based on forward light scattering. Applied Optics, 2016, 55, 6183.	2.1	3
64	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
65	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
66	Simulation of optical caustics associated with the tertiary rainbow of oblate droplets. Applied Optics, 2016, 55, 6447.	2.1	2
67	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
68	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
69	Transmission and diffraction pattern by a monolayer of opaque spheres. Particuology: Science and Technology of Particles, 2004, 2, 248-252.	0.4	1
70	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
71	Particle sizing by spectral analysis on transmission fluctuations. Powder Technology, 2006, 166, 91-99.	4.2	1
72	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

#	ARTICLE	IF	CITATIONS
73	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
74	Optical caustics associated with the primary and the secondary rainbows of oblate droplets. Proceedings of SPIE, 2014, , .	0.8	1
75	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
76	<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
77	Particle Size Analysis By Transmission Fluctuation Spectrometry With Temporal Correlation: Theory And Simulations On Particle Overlapping. AIP Conference Proceedings, 2007, , .	0.4	0
78	Particle analysis by transmission fluctuation spectrometry with temporal correlation in multiphase flow. Flow Measurement and Instrumentation, 2007, 18, 166-174.	2.0	0
79	EFFECTS OF PARTICLE OVERLAPPING ON TRANSMISSION FLUCTUATION SPECTROMETRY WITH TEMPORAL CORRELATION. Chemical Engineering Communications, 2009, 197, 134-144.	2.6	0
80	High concentration effects of transmission fluctuation spectrometry with temporal correlation. Journal of Physics: Conference Series, 2009, 147, 012085.	0.4	0
81	Simultaneous measurement of bubble size and growth with phase critical angle scattering. Optics and Lasers in Engineering, 2021, 136, 106302.	3.8	0
82	Internal morphology-dependent resonances of a coated spherical particle. Applied Optics, 2021, 60, 6116.	1.8	0
83	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
84	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