Yuri A Eremin

List of Publications by Year
in descending order

60 papers	744 citations	623734 14 h-index	552781 26 g-index
62 all docs	62 docs citations	62 times ranked	554 citing authors

#	Article	IF	Citations
1	Experimental Verification of an Exact Evanescent Light Scattering Model for TIRM. Langmuir, 2008, 24, 1-4.	3.5	63
2	Single-particle evanescent light scattering simulations for total internal reflection microscopy. Applied Optics, 2006, 45, 7299.	2.1	52
3	Optical signature of erythrocytes by light scattering in microfluidic flows. Lab on A Chip, 2015, 15, 3278-3285.	6.0	43
4	Analysis of light scattering by erythrocyte based on discrete sources method. Optics Communications, 2005, 244, 15-23.	2.1	33
5	Modeling scatter from silicon wafer features based on discrete sources method. Optical Engineering, 1999, 38, 1296.	1.0	27
6	Extending the applicability of the T-matrix method to light scattering by flat particles on a substrate via truncation of sommerfeld integrals. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 202, 279-285.	2.3	23
7	Computational nano-optic technology based on discrete sources method. Journal of Modern Optics, 2011, 58, 384-399.	1.3	19
8	Discrete sources method for modeling the nonlocal optical response of a nonspherical particle dimer. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 217, 35-44.	2.3	19
9	Large dielectric non-spherical particle in an evanescent wave field near a plane surface. Optics Communications, 2002, 214, 39-45.	2.1	16
10	Analysis of the light scattering properties of a gold nanorod on a plane surface via discrete sources method. Optics Communications, 2007, 273, 278-285.	2.1	16
11	Different shape models for erythrocyte: Light scattering analysis based on the discrete sources method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 102, 3-10.	2.3	15
12	Total internal reflection microscopy with a multilayered interface: a light scattering model based on a discrete sources method. Journal of Optics, 2006, 8, 999-1006.	1.5	15
13	Simulations of light scattering spectra of a nanoshell on plane interface based on the discrete sources method. Optics Communications, 2006, 267, 524-529.	2.1	14
14	Discrete sources method for simulation of resonance spectra of nonspherical nanoparticles on a plane surface. Optics Communications, 2005, 246, 405-413.	2.1	13
15	Comparison of T-matrix method with discrete sources method applied for total internal reflection microscopy. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 106, 464-474.	2.3	13
16	Analysis of light scattering in the evanescent waves area by a cylindrical nanohole in a noble-metal film. Optics Communications, 2008, 281, 3581-3586.	2.1	12
17	Scattering of evanescent waves by a sensor tip near a plane surface. Optics Communications, 2001, 190, 5-12.	2.1	11
18	Light scattering simulation for the characterization of sintered silver nanoparticles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2008, 109, 1363-1373.	2.3	11

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19	Analysis of the scattering properties of 3D non-spherical plasmonic nanoparticles accounting for non-local effects. Journal of Modern Optics, 2018, 65, 1778-1786.	1.3	11
20	Extension of the discrete sources method to light scattering by highly elongated finite cylinders. Journal of Modern Optics, 2004, 51, 423-435.	1.3	10
21	Discrete sources method model for evanescent waves scattering analysis. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 89, 53-65.	2.3	9
22	Extension of the discrete sources method to investigate the non-local effect influence on non-spherical core-shell particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 235, 300-308.	2.3	8
23	Numerical method for analyzing the near-field enhancement of nonspherical dielectric-core metallic-shell particles accounting for the nonlocal dispersion. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, 1135.	1.5	8
24	Analysis of the extreme scattering effect for particles inside and above a noble metal film via the discrete sources method. Journal of Optics (United Kingdom), 2012, 14, 015001.	2.2	7
25	Transition matrix of a nonspherical particle in the non-local optical response theory. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 242, 106756.	2.3	6
26	Light scattering by needle-type and disk-type particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 165-172.	2.3	5
27	Modeling of nanoshells spectra in evanescent wave field via discrete sources method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 122-130.	2.3	5
28	Analysis of Extreme Light Transmission Through a Nanohole in a Metal Film Based on Discrete Sources Method. Journal of Computational and Theoretical Nanoscience, 2009, 6, 795-803.	0.4	5
29	Extreme Scattering Effect: Light scattering analysis via the Discrete Sources Method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1687-1696.	2.3	5
30	Modelling of different TIRM setups by the Discrete Sources Method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1825-1832.	2.3	5
31	Generalization of the Optical Theorem to the multipole source excitation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 185, 22-26.	2.3	5
32	Discrete Sources Method for analysis of a light scattering by an air bubble on resist for immersion lithography. Journal of Quantitative Spectroscopy and Radiative Transfer, 2006, 100, 131-136.	2.3	4
33	Spectral scattering properties of a nanohole in a noble-metal film in the evanescent waves area. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1518-1525.	2.3	4
34	Implementation and investigation of iterative solvers in the Discrete Sources Method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1697-1704.	2.3	4
35	New scheme of the Discrete Sources Method for light scattering analysis of a particle breaking interface. Computer Physics Communications, 2014, 185, 3141-3150.	7.5	4
36	Discrete Sources Method for light scattering analysis of non-axisymmetric features of a substrate. Computer Physics Communications, 2016, 198, 12-21.	7.5	4

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37	Discrete sources method for investigation of near field enhancement of core-shell nanoparticles on a substrate accounting for spatial dispersion. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 259, 107405.	2.3	4
38	Generalization of the Optical Theorem to an Arbitrary Multipole Excitation of a Particle near a Transparent Substrate. Mathematics, 2021, 9, 3244.	2.2	4
39	New scheme of the discrete sources method for two-dimensional scattering problems by penetrable obstacles. Journal of Computational and Applied Mathematics, 2023, 417, 114556.	2.0	4
40	Preconditioning techniques for iterative solvers in the Discrete Sources Method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 1705-1710.	2.3	3
41	Methods with discrete sources for electromagnetic scattering by large axisymmetric particles with extreme geometries. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 164, 137-146.	2.3	3
42	The numerical scheme of the discrete sources method to analyze 3D plasmonic nanostructures accounting for the non-local effect. Journal of Computational Physics, 2019, 388, 357-370.	3.8	3
43	Wave scattering analysis based on discrete sources method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 89, 349-363.	2.3	2
44	Investigation of the Plasmonic Resonance of Two Coupled Spheroids by the Discrete Sources Method. Journal of Computational and Theoretical Nanoscience, 2012, 9, 469-478.	0.4	2
45	New scheme of the Discrete Sources Method for investigation of a near field enhancement by coupled particles. Computer Physics Communications, 2012, 183, 1753-1759.	7.5	2
46	Analysis of scattered field enhancement in the evanescent wave area based on the Discrete Sources Method. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 146, 235-243.	2.3	2
47	<title>Use of light scatter signals to identify particle material</title>. , 2001, , .		2
48	Influence of Spatial Dispersion on the Electromagnetic Properties of Magnetoplasmonic Nanostructures. Nanomaterials, 2021, 11, 3297.	4.1	2
49	Analysis of evanescent waves conversion by a non-spherical particle near a metal-coated glass prism via discrete sources method. Optics Communications, 2003, 223, 221-232.	2.1	1
50	Analysis of the scattering properties of a core-shell nanoparticle deposited on a plane surface via rigorous computer model. Journal of Modern Optics, 2008, 55, 297-310.	1.3	1
51	Modeling of Light Scattering Properties of a Nanoshell on a Plane Interface: Influence of a Core Material and Polarization. Journal of Computational and Theoretical Nanoscience, 2008, 5, 2186-2193.	0.4	1
52	Total internal reflection microscopy: examination of competitive schemes via discrete sources method. Journal of Optics (United Kingdom), 2010, 12, 095703.	2.2	1
53	The optical theorem for local source excitation of a particle near a plane interface. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 166, 1-5.	2.3	1
54	Methods for Electromagnetic Scattering by Large Axisymmetric Particles with Extreme Geometries. Springer Series on Atomic, Optical, and Plasma Physics, 2018, , 49-69.	0.2	1

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55	Transition matrix of a nonspherical layered particle in the non-local optical response theory. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 254, 107196.	2.3	1
56	Discrete Sources Method for Modeling of the Influence of the Non-local Effect on the Absorption of Bimetallic Core-Shell Non-spherical Plasmonic Nanoparticles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, , 107994.	2.3	1
57	<title>Effects of particle shape on particle identification and scatter predictions</title>. , 2001, , .		0
58	Discrete source method for spectroscopic analysis of nano-particles on a plane interface. Journal of Optics, 2005, 7, 706-710.	1.5	0
59	Extension of the discrete sources method to light scattering by highly elongated finite cylinders. Journal of Modern Optics, 2004, 51, 423-435.	1.3	0
60	Fictitious Particle Approach for Light Scattering Investigation from the Line Features of a Substrate Based on the Discrete Sources Method. Springer Series on Atomic, Optical, and Plasma Physics, 2018, , 71-91.	0.2	0