

Lei Shao

List of Publications by Year in descending order

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79
papers

6,040
citations

101543

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79698

73
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80
all docs

80
docs citations

80
times ranked

8495
citing authors

#	ARTICLE	IF	CITATIONS
1	Plasmon-coupling-induced photon scattering torque. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2022, 39, 671.	2.1	0
2	All-State Switching of the Mie Resonance of Conductive Polyaniline Nanospheres. <i>Nano Letters</i> , 2022, 22, 1406-1414.	9.1	18
3	Phonon Thermal Transport in Silicene/Graphene Heterobilayer Nanostructures: Effect of Interlayer Interactions. <i>ACS Omega</i> , 2022, 7, 5844-5852.	3.5	11
4	Assembly of gold nanorods functionalized by zirconium-based metal-organic frameworks for surface enhanced Raman scattering. <i>Nanoscale</i> , 2022, 14, 5561-5568.	5.6	22
5	Synthesis of Colloidal Semiconductor Nanocrystals With Tunable Plasmonic Properties. , 2022, , 3-45.		0
6	Observation of chiral and slow plasmons in twisted bilayer graphene. <i>Nature</i> , 2022, 605, 63-68.	27.8	45
7	Generation and Detection of Strain-Localized Excitons in WS ₂ Monolayer by Plasmonic Metal Nanocrystals. <i>ACS Nano</i> , 2022, 16, 10647-10656.	14.6	14
8	Asymmetric Light Scattering on Heterodimers Made of Au Nanorods Vertically Standing on Au Nanodisks. <i>Advanced Optical Materials</i> , 2021, 9, 2001595.	7.3	8
9	Directional Control of Light with Nanoantennas. <i>Advanced Optical Materials</i> , 2021, 9, .	7.3	44
10	Control of light-valley interactions in 2D transition metal dichalcogenides with nanophotonic structures. <i>Nanoscale</i> , 2021, 13, 6357-6372.	5.6	7
11	Chirality-selective transparency induced by lattice resonance in bilayer metasurfaces. <i>Photonics Research</i> , 2021, 9, 484.	7.0	21
12	Electrophoretic Plasmonic Ink for Dynamic Color Display. <i>Advanced Optical Materials</i> , 2021, 9, 2100091.	7.3	5
13	Selective Deposition of Catalytic Metals on Plasmonic Au Nanocups for Room-Light-Active Photooxidation of <i>o</i> -Phenylenediamine. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 51855-51866.	8.0	12
14	How to Utilize Excited Plasmon Energy Efficiently. <i>ACS Nano</i> , 2021, 15, 10759-10768.	14.6	39
15	Facet- and Gas-Dependent Reshaping of Au Nanoplates by Plasma Treatment. <i>ACS Nano</i> , 2021, 15, 9860-9870.	14.6	9
16	Site-Selective Deposition of Metal-Organic Frameworks on Gold Nanobipyramids for Surface-Enhanced Raman Scattering. <i>Nano Letters</i> , 2021, 21, 8205-8212.	9.1	46
17	Gold Nanorods: The Most Versatile Plasmonic Nanoparticles. <i>Chemical Reviews</i> , 2021, 121, 13342-13453.	47.7	237
18	Plasmon-Enhanced, Self-Traced Nanomotors on the Surface of Silicon. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 24958-24967.	13.8	7

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19	Heterostructures Built through Site-Selective Deposition on Anisotropic Plasmonic Metal Nanocrystals and Their Applications. <i>Small Structures</i> , 2021, 2, .	12.0	21
20	Strengthening Fano resonance on gold nanoplates with gold nanospheres. <i>Nanoscale</i> , 2020, 12, 1975-1984.	5.6	18
21	(Metal yolk)/(porous ceria shell) nanostructures for high-performance plasmonic photocatalysis under visible light. <i>Nano Research</i> , 2020, 13, 1354-1362.	10.4	15
22	Plasmonic Color Laser Printing inside Transparent Gold Nanodisk-Embedded Poly(dimethylsiloxane) Matrices. <i>Advanced Optical Materials</i> , 2020, 8, 1901605.	7.3	27
23	Anapole States and Toroidal Resonances Realized in Simple Gold Nanoplate-Mirror Structures. <i>Advanced Optical Materials</i> , 2020, 8, 2001173.	7.3	27
24	Room-temperature valleytronic transistor. <i>Nature Nanotechnology</i> , 2020, 15, 743-749.	31.5	87
25	(Gold nanorod core)/(poly(3,4-ethylene-dioxythiophene) shell) nanostructures and their monolayer arrays for plasmonic switching. <i>Nanoscale</i> , 2020, 12, 20684-20692.	5.6	8
26	Identifying the functional groups effect on passivating perovskite solar cells. <i>Science Bulletin</i> , 2020, 65, 1726-1734.	9.0	52
27	Plasmonically enabled two-dimensional material-based optoelectronic devices. <i>Nanoscale</i> , 2020, 12, 8095-8108.	5.6	38
28	Recent Progress in Optical-Resonance-Assisted Movement Control of Nanomotors. <i>Advanced Intelligent Systems</i> , 2020, 2, 1900160.	6.1	6
29	Controlling the emission frequency of graphene nanoribbon emitters based on spatially excited topological boundary states. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8277-8283.	2.8	5
30	Gold Nanobipyramids: An Emerging and Versatile Type of Plasmonic Nanoparticles. <i>Accounts of Chemical Research</i> , 2019, 52, 2136-2146.	15.6	133
31	Switching plasmonic Fano resonance in gold nanosphere-nanoplate heterodimers. <i>Nanoscale</i> , 2019, 11, 9641-9653.	5.6	19
32	Plasmon Excited Ultrahot Carriers and Negative Differential Photoresponse in a Vertical Graphene van der Waals Heterostructure. <i>Nano Letters</i> , 2019, 19, 3295-3304.	9.1	28
33	Fabrication of plasmonic nanostructures by hole-mask colloidal lithography: Recent development. <i>Applied Materials Today</i> , 2019, 15, 6-17.	4.3	15
34	Photothermal DNA Release from Laser-Tweezed Individual Gold Nanomotors Driven by Photon Angular Momentum. <i>ACS Photonics</i> , 2018, 5, 2168-2175.	6.6	15
35	Light-Driven Rotation of Plasmonic Nanomotors. <i>Advanced Functional Materials</i> , 2018, 28, 1706272.	14.9	77
36	Advanced Plasmonic Materials for Dynamic Color Display. <i>Advanced Materials</i> , 2018, 30, e1704338.	21.0	176

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37	Molecular Tunnel Junction-Controlled High-Order Charge Transfer Plasmon and Fano Resonances. ACS Nano, 2018, 12, 12541-12550.	14.6	24
38	Antibody–Antigen Interaction Dynamics Revealed by Analysis of Single-Molecule Equilibrium Fluctuations on Individual Plasmonic Nanoparticle Biosensors. ACS Nano, 2018, 12, 9958-9965.	14.6	34
39	Optically controlled stochastic jumps of individual gold nanorod rotary motors. Physical Review B, 2018, 98, .	3.2	13
40	Morphology Engineering of Au/(PdAg alloy) Nanostructures for Enhanced Electrocatalytic Ethanol Oxidation. Particle and Particle Systems Characterization, 2018, 35, 1800258.	2.3	13
41	Probing Photothermal Effects on Optically Trapped Gold Nanorods by Simultaneous Plasmon Spectroscopy and Brownian Dynamics Analysis. ACS Nano, 2017, 11, 10053-10061.	14.6	34
42	Brownian fluctuations of an optically rotated nanorod. Optica, 2017, 4, 746.	9.3	33
43	Metasurfaces and Colloidal Suspensions Composed of 3D Chiral Si Nanoresonators. Advanced Materials, 2017, 29, 1701352.	21.0	39
44	Functional Metal Nanocrystals for Biomedical Applications. , 2017, , 809-840.		1
45	Fabrication of continuous gradient plasmonic nanostructures. , 2016, , .		0
46	Metasurfaces: Continuous-Gradient Plasmonic Nanostructures Fabricated by Evaporation on a Partially Exposed Rotating Substrate (Adv. Mater. 23/2016). Advanced Materials, 2016, 28, 4756-4756.	21.0	1
47	Electronic Paper: Plasmonic Metasurfaces with Conjugated Polymers for Flexible Electronic Paper in Color (Adv. Mater. 45/2016). Advanced Materials, 2016, 28, 10103-10103.	21.0	5
48	Plasmonic Metasurfaces with Conjugated Polymers for Flexible Electronic Paper in Color. Advanced Materials, 2016, 28, 9956-9960.	21.0	128
49	Hot Electron Generation and Cathodoluminescence Nanoscopy of Chiral Split Ring Resonators. Nano Letters, 2016, 16, 5183-5190.	9.1	92
50	Continuous-Gradient Plasmonic Nanostructures Fabricated by Evaporation on a Partially Exposed Rotating Substrate. Advanced Materials, 2016, 28, 4658-4664.	21.0	32
51	Evaluating Conditions for Strong Coupling between Nanoparticle Plasmons and Organic Dyes Using Scattering and Absorption Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 20588-20596.	3.1	58
52	Gold Nanorod Rotary Motors Driven by Resonant Light Scattering. ACS Nano, 2015, 9, 12542-12551.	14.6	109
53	Comparison of the plasmonic performances between lithographically fabricated and chemically grown gold nanorods. Physical Chemistry Chemical Physics, 2015, 17, 10861-10870.	2.8	46
54	Functional Metal Nanocrystals for Biomedical Applications. , 2015, , 1-32.		0

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55	Growth of Monodisperse Gold Nanospheres with Diameters from 20 nm to 220 nm and Their Core/Satellite Nanostructures. <i>Advanced Optical Materials</i> , 2014, 2, 65-73.	7.3	158
56	Nanoantenna-Embedded Graphene with Giant Spectral Tuning in the Visible-to-Near-Infrared Region. <i>Advanced Optical Materials</i> , 2014, 2, 162-170.	7.3	39
57	Macroscopic Colloidal Noble Metal Nanocrystal Arrays and Their Refractive Index-Based Sensing Characteristics. <i>Small</i> , 2014, 10, 802-811.	10.0	59
58	Photocurrent Enhancement of HgTe Quantum Dot Photodiodes by Plasmonic Gold Nanorod Structures. <i>ACS Nano</i> , 2014, 8, 8208-8216.	14.6	116
59	(Gold Nanorod Core)/(Polyaniline Shell) Plasmonic Switches with Large Plasmon Shifts and Modulation Depths. <i>Advanced Materials</i> , 2014, 26, 3282-3289.	21.0	129
60	Correlating the Plasmonic and Structural Evolutions during the Sulfidation of Silver Nanocubes. <i>ACS Nano</i> , 2013, 7, 9354-9365.	14.6	57
61	Gold nanorods and their plasmonic properties. <i>Chemical Society Reviews</i> , 2013, 42, 2679-2724.	38.1	1,576
62	Mass-Based Photothermal Comparison Among Gold Nanocrystals, PbS Nanocrystals, Organic Dyes, and Carbon Black. <i>Journal of Physical Chemistry C</i> , 2013, 117, 8909-8915.	3.1	97
63	Nanoparticle-Loaded Cylindrical Micelles from Nanopore Extrusion of Block Copolymer Spherical Micelles. <i>Macromolecular Rapid Communications</i> , 2013, 34, 1850-1855.	3.9	9
64	Plasmonic Properties of Single Multispiked Gold Nanostars: Correlating Modeling with Experiments. <i>Langmuir</i> , 2012, 28, 8979-8984.	3.5	80
65	Distinct Plasmonic Manifestation on Gold Nanorods Induced by the Spatial Perturbation of Small Gold Nanospheres. <i>Nano Letters</i> , 2012, 12, 1424-1430.	9.1	106
66	Plasmonic-Molecular Resonance Coupling: Plasmonic Splitting versus Energy Transfer. <i>Journal of Physical Chemistry C</i> , 2012, 116, 14088-14095.	3.1	85
67	Fano Resonance in (Gold Core)~(Dielectric Shell) Nanostructures without Symmetry Breaking. <i>Small</i> , 2012, 8, 1503-1509.	10.0	63
68	Unraveling the Evolution and Nature of the Plasmons in (Au Core)~(Ag Shell) Nanorods. <i>Advanced Materials</i> , 2012, 24, OP200-7.	21.0	225
69	Plasmon-Controlled Förster Resonance Energy Transfer. <i>Journal of Physical Chemistry C</i> , 2012, 116, 8287-8296.	3.1	96
70	A Gold Nanocrystal/Poly(dimethylsiloxane) Composite for Plasmonic Heating on Microfluidic Chips. <i>Advanced Materials</i> , 2012, 24, 94-98.	21.0	88
71	Observation of the Fano Resonance in Gold Nanorods Supported on High-Dielectric-Constant Substrates. <i>ACS Nano</i> , 2011, 5, 6754-6763.	14.6	124
72	Universal Scaling and Fano Resonance in the Plasmon Coupling between Gold Nanorods. <i>ACS Nano</i> , 2011, 5, 5976-5986.	14.6	119

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73	Understanding the Photothermal Conversion Efficiency of Gold Nanocrystals. <i>Small</i> , 2010, 6, 2272-2280.	10.0	505
74	Plasmon-Modulated Light Scattering from Gold Nanocrystal-Decorated Hollow Mesoporous Silica Microspheres. <i>ACS Nano</i> , 2010, 4, 6565-6572.	14.6	33
75	Angle- and Energy-Resolved Plasmon Coupling in Gold Nanorod Dimers. <i>ACS Nano</i> , 2010, 4, 3053-3062.	14.6	158
76	Enhancing the crystallinity and surface roughness of sputtered TiO ₂ thin film by ZnO underlayer. <i>Applied Surface Science</i> , 2009, 255, 6781-6785.	6.1	9
77	Shape-Dependent Refractive Index Sensitivities of Gold Nanocrystals with the Same Plasmon Resonance Wavelength. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17691-17697.	3.1	130
78	Plasmon-Enhanced, Self-Traced Nanomotors on the Surface of Silicon. <i>Angewandte Chemie</i> , 0, , .	2.0	0
79	A Data-Mining-Assisted Design of Structural Colors on Diamond Metasurfaces. <i>Advanced Photonics Research</i> , 0, , 2100292.	3.6	4