Jia Liu

List of Publications by Year in descending order

80 papers	4,763 citations	136740 32 h-index	98622 67 g-index
81 all docs	81 docs citations	81 times ranked	6113 citing authors

#	Article	IF	Citations
1	Bismuth Single Atoms Resulting from Transformation of Metalâ€“Organic Frameworks and Their Use as Electrocatalysts for CO₂ Reduction. Journal of the American Chemical Society, 2019, 141, 16569-16573.	6.6	501
2	Multiscale Assembly of Grape-Like Ferroferric Oxide and Carbon Nanotubes: A Smart Absorber Prototype Varying Temperature to Tune Intensities. ACS Applied Materials & Interfaces, 2015, 7, 19408-19415.	4.0	330
3	Electromagnetic Property and Tunable Microwave Absorption of 3D Nets from Nickel Chains at Elevated Temperature. ACS Applied Materials & Interfaces, 2016, 8, 22615-22622.	4.0	307
4	Enhanced wave absorption of nanocomposites based on the synthesized complex symmetrical CuS nanostructure and poly(vinylidene fluoride). Journal of Materials Chemistry A, 2013, 1, 4685.	5.2	264
5	Controllable fabrication of mono-dispersed RGOâ€“hematite nanocomposites and their enhanced wave absorption properties. Journal of Materials Chemistry A, 2013, 1, 5996.	5.2	251
6	Enhanced permittivity and multi-region microwave absorption of nanoneedle-like ZnO in the X-band at elevated temperature. Journal of Materials Chemistry C, 2015, 3, 4670-4677.	2.7	224
7	Nanointerface Chemistry: Lattice-Mismatch-Directed Synthesis and Application of Hybrid Nanocrystals. Chemical Reviews, 2020, 120, 2123-2170.	23.0	206
8	Catalytic nanoarchitectonics for environmentally compatible energy generation. Materials Today, 2016, 19, 12-18.	8.3	163
9	Facile fabrication of ultrathin graphene papers for effective electromagnetic shielding. Journal of Materials Chemistry C, 2014, 2, 5057-5064.	2.7	159
10	Visually resolving the direct Z-scheme heterojunction in CdS@ZnIn2S4 hollow cubes for photocatalytic evolution of H2 and H2O2 from pure water. Applied Catalysis B: Environmental, 2021, 293, 120213.	10.8	123
11	Metal@semiconductor core-shell nanocrystals with atomically organized interfaces for efficient hot electron-mediated photocatalysis. Nano Energy, 2018, 48, 44-52.	8.2	118
12	Polystyrene sulphonic acid resins with enhanced acid strength via macromolecular self-assembly within confined nanospace. Nature Communications, 2014, 5, 3170.	5.8	114
13	Nature-Inspired Na₂Ti₃O₇ Nanosheets-Formed Three-Dimensional Microflowers Architecture as a High-Performance Anode Material for Rechargeable Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 11669-11677.	4.0	103
14	Improved dielectric properties and highly efficient and broadened bandwidth electromagnetic attenuation of thickness-decreased carbon nanosheet/wax composites. Journal of Materials Chemistry C, 2013, 1, 1846.	2.7	98
15	Two-Dimensional All-in-One Sulfide Monolayers Driving Photocatalytic Overall Water Splitting. Nano Letters, 2021, 21, 6228-6236.	4.5	88
16	Efficient Plasmonic Au/CdSe Nanodumbbell for Photoelectrochemical Hydrogen Generation beyond Visible Region. Advanced Energy Materials, 2019, 9, 1803889.	10.2	85
17	Coaxial multi-interface hollow Ni-Al2O3-ZnO nanowires tailored by atomic layer deposition for selective-frequency absorptions. Nano Research, 2017, 10, 1595-1607.	5.8	82
18	Cation/Anion Exchange Reactions toward the Syntheses of Upgraded Nanostructures: Principles and Applications. Matter, 2020, 2, 554-586.	5.0	81

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19	Enzyme confined in silica-based nanocages for biocatalysis in a Pickering emulsion. Chemical Communications, 2013, 49, 9558.	2.2	66
20	â€œRecent advances on support materials for lipase immobilization and applicability as biocatalysts in inhibitors screening methodsâ€•A review. Analytica Chimica Acta, 2020, 1101, 9-22.	2.6	66
21	Hydrothermal Cation Exchange Enabled Gradual Evolution of Au@ZnSâ€“AgAuS Yolkâ€“Shell Nanocrystals and Their Visible Light Photocatalytic Applications. Advanced Science, 2018, 5, 1700376.	5.6	64
22	Hydrophilic Doped Quantum Dots â€œInkâ€•and Their Inkjetâ€Printed Patterns for Dual Mode Anticounterfeiting by Reversible Cation Exchange Mechanism. Advanced Functional Materials, 2019, 29, 1808762.	7.8	63
23	Ultrathin single-crystalline TiO2 nanosheets anchored on graphene to be hybrid network for high-rate and long cycle-life sodium battery electrode application. Journal of Power Sources, 2017, 342, 405-413.	4.0	60
24	Heterovalent Doping in Colloidal Semiconductor Nanocrystals: Cation-Exchange-Enabled New Accesses to Tuning Dopant Luminescence and Electronic Impurities. Journal of Physical Chemistry Letters, 2017, 8, 4943-4953.	2.1	59
25	Highly Selective Photoreduction of CO₂ with Suppressing H₂ Evolution by Plasmonic Au/CdSeâ€“Cu₂O Hierarchical Nanostructures under Visible Light. Small, 2020, 16, e2000426.	5.2	53
26	Sintering-Resistant Nanoparticles in Wide-Mouthed Compartments for Sustained Catalytic Performance. Scientific Reports, 2017, 7, 41773.	1.6	44
27	Improved Catalytic Performance of Lipase Accommodated in the Mesoporous Silicas with Polymer-Modified Microenvironment. Langmuir, 2012, 28, 9788-9796.	1.6	42
28	Electronic doping-enabled transition from n- to p-type conductivity over Au@CdS coreâ€“shell nanocrystals toward unassisted photoelectrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 23038-23045.	5.2	42
29	Antibacterial Effect of Silver-Incorporated Flake-Shell Nanoparticles under Dual-Modality. ACS Applied Materials & Interfaces, 2016, 8, 18922-18929.	4.0	40
30	Evolution of Hollow CuInS₂ Nanododecahedrons via Kirkendall Effect Driven by Cation Exchange for Efficient Solar Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 27170-27177.	4.0	40
31	Au@HgxCd1-xTe core@shell nanorods by sequential aqueous cation exchange for near-infrared photodetectors. Nano Energy, 2019, 57, 57-65.	8.2	38
32	Towards efficient chemical synthesis via engineering enzyme catalysis in biomimetic nanoreactors. Chemical Communications, 2015, 51, 13731-13739.	2.2	36
33	Controlled Synthesis and Flexible Self-Assembly of Monodisperse Au@Semiconductor Core/Shell Hetero-Nanocrystals into Diverse Superstructures. Chemistry of Materials, 2017, 29, 2355-2363.	3.2	33
34	Versatile synthesis of yolk/shell hybrid nanocrystals via ion-exchange reactions for novel metal/semiconductor and semiconductor/semiconductor conformations. Nano Research, 2017, 10, 2977-2987.	5.8	32
35	Fabrication of coreâ€“shell structured mesoporous silica nanospheres with dually oriented mesochannels through pore engineering. Journal of Materials Chemistry A, 2014, 2, 8118-8125.	5.2	30
36	Enhanced thermostability of enzymes accommodated in thermo-responsive nanopores. Chemical Science, 2012, 3, 3398.	3.7	29

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37	Enzyme Entrapped in Polymerâ€Modified Nanopores: The Effects of Macromolecular Crowding and Surface Hydrophobicity. Chemistry - A European Journal, 2013, 19, 2711-2719.	1.7	29
38	Domain Structure and Enhanced Electrical Properties in Sodium Bismuth Titanate Ceramics Sintered from Crystals with Different Morphologies. Journal of the American Ceramic Society, 2016, 99, 2316-2326.	1.9	29
39	Semiconductor Nanocrystal Engineering by Applying Thiolâ€and Solventâ€Coordinated Cation Exchange Kinetics. Angewandte Chemie - International Edition, 2019, 58, 4852-4857.	7.2	29
40	A flexible conductive film prepared by the oriented stacking of Ag and Au/Ag alloy nanoplates and its chemically roughened surface for explosive SERS detection and cell adhesion. RSC Advances, 2017, 7, 7073-7078.	1.7	28
41	Simultaneous harnessing of hot electrons and hot holes achieved via n-metal-p Janus plasmonic heteronanocrystals. Nano Energy, 2022, 98, 107217.	8.2	26
42	From core-shell to yolk-shell: Keeping the intimately contacted interface for plasmonic metal@semiconductor nanorods toward enhanced near-infrared photoelectrochemical performance. Nano Research, 2020, 13, 1162-1170.	5.8	25
43	Cu x O self-assembled mesoporous microspheres with effective surface oxygen vacancy and their room temperature NO2 gas sensing performance. Science China Materials, 2018, 61, 1085-1094.	3.5	24
44	Atomically thin PdSeO₃ nanosheets: a promising 2D photocatalyst produced by quaternary ammonium intercalation and exfoliation. Chemical Communications, 2020, 56, 5504-5507.	2.2	23
45	Good Dispersion of Large-Stokes-Shift Heterovalent-Doped CdX Quantum Dots into Bulk PMMA Matrix and Their Optical Properties Characterization. Journal of Physical Chemistry C, 2017, 121, 6152-6159.	1.5	22
46	Compressive surface strained atomic-layer Cu2O on Cu@Ag nanoparticles. Nano Research, 2019, 12, 1187-1192.	5.8	21
47	Porous platinumâ€“silver bimetallic alloys: surface composition and strain tunability toward enhanced electrocatalysis. Nanoscale, 2018, 10, 21703-21711.	2.8	20
48	Metal@I₂â€“IIâ€“IVâ€“VI₄ coreâ€“shell nanocrystals: controlled synthesis by aqueous cation exchange for efficient photoelectrochemical hydrogen generation. Journal of Materials Chemistry A, 2018, 6, 11898-11908.	5.2	20
49	From Indiumâ€Doped Ag₂S to AgInS₂ Nanocrystals: Lowâ€Temperature In Situ Conversion of Colloidal Ag₂S Nanoparticles and Their NIR Fluorescence. Chemistry - A European Journal, 2018, 24, 13676-13680.	1.7	20
50	Phosphine ligand-mediated kinetics manipulation of aqueous cation exchange: a case study on the synthesis of Au@SnS_x coreâ€“shell nanocrystals for photoelectrochemical water splitting. Chemical Communications, 2018, 54, 9993-9996.	2.2	19
51	Unique Cation Exchange in Nanocrystal Matrix via Surface Vacancy Engineering Overcoming Chemical Kinetic Energy Barriers. CheM, 2020, 6, 3086-3099.	5.8	18
52	High-Performance Quantum Dots with Synergistic Doping and Oxide Shell Protection Synthesized by Cation Exchange Conversion of Ternary-Composition Nanoparticles. Journal of Physical Chemistry Letters, 2019, 10, 2606-2615.	2.1	17
53	Hollow anisotropic semiconductor nanoprisms with highly crystalline frameworks for high-efficiency photoelectrochemical water splitting. Journal of Materials Chemistry A, 2019, 7, 8061-8072.	5.2	16
54	Vacuum-tuned-atmosphere induced assembly of Au@Ag core/shell nanocubes into multi-dimensional superstructures and the ultrasensitive IAPP proteins SERS detection. Nano Research, 2019, 12, 1375-1379.	5.8	16

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55	An immobilization enzyme for screening lipase inhibitors from Tibetan medicines. Journal of Chromatography A, 2020, 1615, 460711.	1.8	16
56	Ru-Co-Mn trimetallic alloy nanocatalyst driving bifunctional redox electrocatalysis. Science China Materials, 2022, 65, 131-138.	3.5	16
57	Hierarchical Self-Assembly of Cu₇Te₅ Nanorods into Superstructures with Enhanced SERS Performance. ACS Applied Materials & Interfaces, 2016, 8, 35426-35434.	4.0	15
58	Construction of Plasmonic Metal@Semiconductor Coreâ€“Shell Photocatalysts: From Epitaxial to Nonepitaxial Strategies. Small Structures, 2022, 3, .	6.9	13
59	Surface passivation enabled-structural engineering of I-III-VI₂ nanocrystal photocatalysts. Journal of Materials Chemistry A, 2020, 8, 9951-9962.	5.2	12
60	Shell Thickness Dependence of the Plasmon-Induced Hot-Electron Injection Process in Au@CdS Coreâ€“Shell Nanocrystals. Journal of Physical Chemistry C, 2021, 125, 19906-19913.	1.5	12
61	Efficient Co3O4/SiO2 catalyst for the Baeyerâ€“Villiger oxidation of cyclohexanone. Reaction Kinetics, Mechanisms and Catalysis, 2014, 112, 159-171.	0.8	11
62	Colloidâ€Interfaceâ€Assisted Laser Irradiation of Nanocrystals Superlattices to be Scalable Plasmonic Superstructures with Novel Activities. Small, 2018, 14, e1703501.	5.2	10
63	Micro-scale 2D quasi-nanosheets formed by 0D nanocrystals: from single to multicomponent building blocks. Science China Materials, 2020, 63, 1265-1271.	3.5	10
64	Lipase immobilization on magnetic cellulose microspheres for rapid screening inhibitors from traditional herbal medicines. Talanta, 2021, 231, 122374.	2.9	10
65	Cu nanocrystal enhancement of C₃N₄/Cu hetero-structures and new applications in photo-electronic catalysis: hydrazine oxidation and redox reactions of organic molecules. Inorganic Chemistry Frontiers, 2018, 5, 2420-2424.	3.0	9
66	Defect Engineering in 2D Photocatalytic Materials for CO₂ Reduction. ChemNanoMat, 2021, 7, 737-747.	1.5	9
67	Semiconductor Nanocrystal Engineering by Applying Thiolâ€and Solventâ€Coordinated Cation Exchange Kinetics. Angewandte Chemie, 2019, 131, 4906-4911.	1.6	8
68	Stable quantum dots/polymer matrix and their versatile 3D printing frameworks. Journal of Materials Chemistry C, 2021, 9, 7194-7199.	2.7	8
69	A telluride shell on plasmonic Au nanoparticles: amorphous/crystalline phase and shape evolution engineering via aqueous cation exchange. Materials Chemistry Frontiers, 2021, 5, 4571-4578.	3.2	8
70	Perovskite nanocrystals: across-dimensional attachment, film-scale assembly on a flexible substrate and their fluorescence properties. Nanotechnology, 2018, 29, 125606.	1.3	6
71	Nanoclusterâ€Mediated Synthesis of Diverse ZnTe Nanostructures: from Nanocrystals to 1D Nanobelts. Chemistry - A European Journal, 2018, 24, 2999-3004.	1.7	5
72	Nearâ€Infrared Luminescent Ternary Ag₃SbS₃ Quantum Dots by in situ Conversion of Ag Nanocrystals with Sb(C₉H₁₉COOS)₃. Chemistry - A European Journal, 2018, 24, 18643-18647.	1.7	5

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73	High Pressure Induced in Situ Solid-State Phase Transformation of Nonepitaxial Grown Metal@Semiconductor Nanocrystals. Journal of Physical Chemistry Letters, 2018, 9, 6544-6549.	2.1	5
74	Doping transition metal in PdSeO3 atomic layers by aqueous cation exchange: A new doping protocol for a new 2D photocatalyst. Chinese Chemical Letters, 2022, 33, 3739-3744.	4.8	5
75	Synergistically Modulating Geometry and Electronic Structures of a Chalcogenide Photocatalyst via an Ion-Exchange Strategy. Journal of Physical Chemistry Letters, 2022, 13, 969-976.	2.1	5
76	Model Iron Phosphate Catalysts for the Oxy-bromination of Methane. Catalysis Letters, 2014, 144, 1384-1392.	1.4	4
77	Assembly-promoted photocatalysis: Three-dimensional assembly of CdS x Se 1â˜’x (xÂ=Â0â€“1) quantum dots into nanospheres with enhanced photocatalytic performance. Journal of Materiomics, 2017, 3, 63-70.	2.8	3
78	Two-dimensional CdX (X = Se, Te) nanosheets: controlled synthesis and their photoluminescence properties. Journal of Materials Chemistry C, 2019, 7, 13849-13858.	2.7	3
79	Hollow urchin-shaped manganese dioxide microspheres immobilized acetylcholinesterase for rapid screening inhibitors from traditional herbal medicines. Journal of Chromatography A, 2022, 1665, 462824.	1.8	3
80	Wet-Phase Synthesis of Typical Magnetic Nanoparticles with Controlled Morphologies. , 2017, , 291-326.		1