Xianmao Lu

List of Publications by Year
in descending order

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112 papers	13,906 citations	29994 54 h-index	22764 112 g-index
116 all docs	116 docs citations	116 times ranked	18545 citing authors

#	Article	IF	Citations
1	Pd-Pt Bimetallic Nanodendrites with High Activity for Oxygen Reduction. Science, 2009, 324, 1302-1305.	6.0	2,814
2	Gold Nanocages: Synthesis, Properties, and Applications. Accounts of Chemical Research, 2008, 41, 1587-1595.	7.6	1,336
3	Chemical Synthesis of Novel Plasmonic Nanoparticles. Annual Review of Physical Chemistry, 2009, 60, 167-192.	4.8	616
4	Dimers of Silver Nanospheres: Facile Synthesis and Their Use as Hot Spots for Surface-Enhanced Raman Scattering. Nano Letters, 2009, 9, 485-490.	4.5	578
5	Gold Nanocages for Biomedical Applications. Advanced Materials, 2007, 19, 3177-3184.	11.1	464
6	Ultrathin Gold Nanowires Can Be Obtained by Reducing Polymeric Strands of Oleylamineâ^'AuCl Complexes Formed via Aurophilic Interaction. Journal of the American Chemical Society, 2008, 130, 8900-8901.	6.6	460
7	Fabrication of Cubic Nanocages and Nanoframes by Dealloying Au/Ag Alloy Nanoboxes with an Aqueous Etchant Based on Fe(NO3)3 or NH4OH. Nano Letters, 2007, 7, 1764-1769.	4.5	360
8	Mechanistic Studies on the Galvanic Replacement Reaction between Multiply Twinned Particles of Ag and HAuCl4in an Organic Medium. Journal of the American Chemical Society, 2007, 129, 1733-1742.	6.6	331
9	Fabrication of Field-Effect Transistors from Hexathiapentacene Single-Crystal Nanowires. Nano Letters, 2007, 7, 668-675.	4.5	272
10	Highly Symmetric Gold Nanostars: Crystallographic Control and Surface-Enhanced Raman Scattering Property. Journal of the American Chemical Society, 2015, 137, 10460-10463.	6.6	261
11	Tailoring Galvanic Replacement Reaction for the Preparation of Pt/Ag Bimetallic Hollow Nanostructures with Controlled Number of Voids. ACS Nano, 2012, 6, 7397-7405.	7.3	247
12	A Comparative Study of Galvanic Replacement Reactions Involving Ag Nanocubes and AuCl₂^{â^'} or AuCl₄^{â^'}. Advanced Materials, 2008, 20, 2517-2522.	11.1	246
13	Facile Synthesis of Highly Faceted Multioctahedral Pt Nanocrystals through Controlled Overgrowth. Nano Letters, 2008, 8, 4043-4047.	4.5	236
14	Seed-Mediated Synthesis of Monodisperse Concave Trisoctahedral Gold Nanocrystals with Controllable Sizes. Journal of Physical Chemistry C, 2010, 114, 11119-11126.	1.5	187
15	Suppressing self-discharge of supercapacitors via electrorheological effect of liquid crystals. Nano Energy, 2018, 47, 43-50.	8.2	183
16	Image-guided combination chemotherapy and photodynamic therapy using a mitochondria-targeted molecular probe with aggregation-induced emission characteristics. Chemical Science, 2015, 6, 4580-4586.	3.7	182
17	Na+-functionalized carbon quantum dots: a new draw solute in forward osmosis for seawater desalination. Chemical Communications, 2014, 50, 7318.	2.2	161
18	Thermoresponsive copolymer-based draw solution for seawater desalination in a combined process of forward osmosis and membrane distillation. Desalination, 2014, 348, 26-32.	4.0	153

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19	Facile Synthesis of Gold Nanoparticles with Narrow Size Distribution by Using AuCl or AuBr as the Precursor. Chemistry - A European Journal, 2008, 14, 1584-1591.	1.7	143
20	Thermoresponsive Magnetic Nanoparticles for Seawater Desalination. ACS Applied Materials & Interfaces, 2013, 5, 11453-11461.	4.0	143
21	Gold nanocages for cancer detection and treatment. Nanomedicine, 2007, 2, 657-668.	1.7	140
22	Growth of Single Crystal Silicon Nanowires in Supercritical Solution from Tethered Gold Particles on a Silicon Substrate. Nano Letters, 2003, 3, 93-99.	4.5	137
23	Electrogenerated Chemiluminescence of Ge Nanocrystals. Nano Letters, 2004, 4, 183-185.	4.5	137
24	Peptide-based nanomaterials: Self-assembly, properties and applications. Bioactive Materials, 2022, 11, 268-282.	8.6	132
25	Pdâ€“Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. Angewandte Chemie - International Edition, 2015, 54, 8271-8274.	7.2	125
26	Facile synthesis of thermosensitive magnetic nanoparticles as â€œsmartâ€•draw solutes in forward osmosis. Chemical Communications, 2011, 47, 10788.	2.2	123
27	Buckling down for flexible electronics. Nature Nanotechnology, 2006, 1, 163-164.	15.6	118
28	Hierarchically structured MnO2 nanowires supported on hollow Ni dendrites for high-performance supercapacitors. Nanoscale, 2013, 5, 4379.	2.8	111
29	High Yield Solutionâ^'Liquidâ^'Solid Synthesis of Germanium Nanowires. Journal of the American Chemical Society, 2005, 127, 15718-15719.	6.6	107
30	Synthesis of Germanium Nanocrystals in High Temperature Supercritical Fluid Solvents. Nano Letters, 2004, 4, 969-974.	4.5	106
31	Chiral Transformation: From Single Nanowire to Double Helix. Journal of the American Chemical Society, 2011, 133, 20060-20063.	6.6	101
32	A Solid-State Reaction Route to Anchoring Ni(OH)₂ Nanoparticles on Reduced Graphene Oxide Sheets for Supercapacitors. Industrial & Engineering Chemistry Research, 2012, 51, 9973-9979.	1.8	99
33	High Yield of Germanium Nanocrystals Synthesized from Germanium Diiodide in Solution. Chemistry of Materials, 2005, 17, 6479-6485.	3.2	97
34	Direct Oxidation of Methanol on Pt Nanostructures Supported on Electrospun Nanofibers of Anatase. Journal of Physical Chemistry C, 2008, 112, 9970-9975.	1.5	97
35	Enhanced storage of sodium ions in Prussian blue cathode material through nickel doping. Journal of Materials Chemistry A, 2017, 5, 9604-9610.	5.2	95
36	Synergistic Effect of Ag and Pd Ions on Shape-Selective Growth of Polyhedral Au Nanocrystals with High-Index Facets. Journal of Physical Chemistry C, 2011, 115, 3638-3645.	1.5	93

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37	Morphological Evolution of Single-Crystal Ag Nanospheres during the Galvanic Replacement Reaction with HAuCl₄. Journal of Physical Chemistry C, 2008, 112, 7872-7876.	1.5	91
38	Hierarchical nanocomposite composed of layered V2O5/PEDOT/MnO2 nanosheets for high-performance asymmetric supercapacitors. Nano Energy, 2015, 12, 76-87.	8.2	90
39	Facile Synthesis of Ultrathin Au Nanorods by Aging the AuCl(oleylamine) Complex with Amorphous Fe Nanoparticles in Chloroform. Nano Letters, 2008, 8, 3052-3055.	4.5	78
40	Structureâ€Ðependent cis/trans Isomerization of Tetraphenylethene Derivatives: Consequences for Aggregationâ€Induced Emission. Angewandte Chemie - International Edition, 2016, 55, 6192-6196.	7.2	75
41	Layered V₂O₅/PEDOT Nanowires and Ultrathin Nanobelts Fabricated with a Silk Reelinglike Process. Chemistry of Materials, 2015, 27, 5813-5819.	3.2	74
42	Multishelled Si@Cu Microparticles Supported on 3D Cu Current Collectors for Stable and Binder-free Anodes of Lithium-Ion Batteries. ACS Nano, 2018, 12, 3587-3599.	7.3	74
43	A Dendrimer-Based Forward Osmosis Draw Solute for Seawater Desalination. Industrial & Engineering Chemistry Research, 2014, 53, 16170-16175.	1.8	73
44	Insitu gold-loaded titania photonic crystals with enhanced photocatalytic activity. Journal of Materials Chemistry A, 2014, 2, 545-553.	5.2	73
45	Fabrication of TiO₂ Binary Inverse Opals without Overlayers via the Sandwich-Vacuum Infiltration of Precursor. Langmuir, 2011, 27, 5157-5164.	1.6	72
46	Controlled Synthesis of Palladium Concave Nanocubes with Sub-10-Nanometer Edges and Corners for Tunable Plasmonic Property. Chemistry of Materials, 2014, 26, 2180-2186.	3.2	72
47	Synthesis and characterization of magnetic Co nanoparticles: A comparison study of three different capping surfactants. Journal of Solid State Chemistry, 2008, 181, 1530-1538.	1.4	68
48	Fabrication of Large Domain Crack-Free Colloidal Crystal Heterostructures with Superposition Bandgaps Using Hydrophobic Polystyrene Spheres. ACS Applied Materials & Interfaces, 2012, 4, 5562-5569.	4.0	68
49	Cross-linker mediated formation of sulfur-functionalized V₂O₅/graphene aerogels and their enhanced pseudocapacitive performance. Nanoscale, 2017, 9, 802-811.	2.8	68
50	Single Molecule with Dual Function on Nanogold: Biofunctionalized Construct for In Vivo Photoacoustic Imaging and SERS Biosensing. Advanced Functional Materials, 2015, 25, 2316-2325.	7.8	65
51	Highâ€Performance Solidâ€State Supercapacitors Based on V₂O₅/Carbon Nanotube Composites. ChemElectroChem, 2016, 3, 158-164.	1.7	62
52	Thermoresponsive nanoparticles + plasmonic nanoparticles = photoresponsive heterodimers: facile synthesis and sunlight-induced reversible clustering. Chemical Communications, 2013, 49, 6122.	2.2	59
53	Integrating in situ high pressure small and wide angle synchrotron x-ray scattering for exploiting new physics of nanoparticle supercrystals. Review of Scientific Instruments, 2010, 81, 093902.	0.6	57
54	DNA-assisted assembly of carbon nanotubes and MnO2 nanospheres as electrodes for high-performance asymmetric supercapacitors. Physical Chemistry Chemical Physics, 2014, 16, 4672.	1.3	55

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55	High-frequency supercapacitors based on carbonized melamine foam as energy storage devices for triboelectric nanogenerators. Nano Energy, 2019, 55, 447-453.	8.2	54
56	Highly permeable aquaporin-embedded biomimetic membranes featuring a magnetic-aided approach. RSC Advances, 2013, 3, 9178.	1.7	51
57	Enhanced Electrochemical Properties of Sn-doped V2O5 as a Cathode Material for Lithium Ion Batteries. Electrochimica Acta, 2016, 222, 1831-1838.	2.6	51
58	In Situ â€œDopingâ€•Inverse Silica Opals with Size-Controllable Gold Nanoparticles for Refractive Index Sensing. Journal of Physical Chemistry C, 2013, 117, 9440-9445.	1.5	48
59	Shaping Gold Nanocrystals in Dimethyl Sulfoxide: Toward Trapezohedral and Bipyramidal Nanocrystals Enclosed by {311} Facets. Journal of the American Chemical Society, 2017, 139, 5817-5826.	6.6	48
60	Tip-Selective Growth of Silver on Gold Nanostars for Surface-Enhanced Raman Scattering. ACS Applied Materials & Interfaces, 2018, 10, 14850-14856.	4.0	46
61	Multi-functional forward osmosis draw solutes for seawater desalination. Chinese Journal of Chemical Engineering, 2016, 24, 23-30.	1.7	45
62	Self-discharge of supercapacitors based on carbon nanotubes with different diameters. Electrochimica Acta, 2020, 357, 136855.	2.6	45
63	Enhanced Electrochemical Properties of Li₃VO₄ with Controlled Oxygen Vacancies as Liâ€ion Battery Anode. Chemistry - A European Journal, 2017, 23, 5368-5374.	1.7	44
64	Improved rate performance of Prussian blue cathode materials for sodium ion batteries induced by ion-conductive solid-electrolyte interphase layer. Journal of Power Sources, 2018, 399, 42-48.	4.0	41
65	Triboelectric nanogenerators with simultaneous outputs in both single-electrode mode and freestanding-triboelectric-layer mode. Nano Energy, 2019, 66, 104169.	8.2	41
66	Adding new functions to organic semiconductor nanowires by assembling metal nanoparticles onto their surfaces. Journal of Materials Chemistry, 2008, 18, 5395.	6.7	40
67	Highly ordered and gap controllable two-dimensional non-close-packed colloidal crystals and plasmonicâ€“photonic crystals with enhanced optical transmission. Journal of Materials Chemistry, 2012, 22, 24668.	6.7	39
68	Dodecahedral Gold Nanocrystals: The Missing Platonic Shape. Journal of the American Chemical Society, 2014, 136, 3010-3012.	6.6	39
69	Galvanic replacement reaction: A simple and powerful route to hollow and porous metal nanostructures. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2007, 221, 1-16.	0.1	37
70	Zinc(II)-Tetradentate-Coordinated Probe with Aggregation-Induced Emission Characteristics for Selective Imaging and Photoinactivation of Bacteria. ACS Omega, 2017, 2, 546-553.	1.6	37
71	Ethylenediamine-mediated synthesis of Mn₃O₄nano-octahedrons and their performance as electrocatalysts for the oxygen evolution reaction. Nanoscale, 2014, 6, 10896-10901.	2.8	36
72	Tuning Interior Nanogaps of Double-shelled Au/Ag Nanoboxes for Surface-Enhanced Raman Scattering. Scientific Reports, 2015, 5, 8382.	1.6	35

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73	A solventless thermolysis route to large-scale production of ultra-small hydrophilic and biocompatible magnetic ferrite nanocrystals and their application for efficient protein enrichment. Green Chemistry, 2014, 16, 2571.	4.6	32
74	Silver Nanocube-Enhanced Far-Red/Near-Infrared Fluorescence of Conjugated Polyelectrolyte for Cellular Imaging. Langmuir, 2012, 28, 11302-11309.	1.6	31
75	Fabrication of Well-Ordered Binary Colloidal Crystals with Extended Size Ratios for Broadband Reflectance. ACS Applied Materials & Interfaces, 2014, 6, 10265-10273.	4.0	31
76	Synthesis of germanium nanocrystals in high temperature supercritical CO2. Nanotechnology, 2005, 16, S389-S394.	1.3	29
77	Ultrafast lithium-ion capacitors for efficient storage of energy generated by triboelectric nanogenerators. Energy Storage Materials, 2020, 24, 297-303.	9.5	29
78	Hypersonic Vibrations of Ag@SiO₂(Cubic Core)â˜Shell Nanospheres. ACS Nano, 2010, 4, 7692-7698.	7.3	28
79	Pdâ€“Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. Angewandte Chemie, 2015, 127, 8389-8392.	1.6	27
80	Reduced Self-Discharge of Supercapacitors Using Piezoelectric Separators. ACS Applied Energy Materials, 2021, 4, 8070-8075.	2.5	27
81	Stretchable V₂O₅/PEDOT supercapacitors: a modular fabrication process and charging with triboelectric nanogenerators. Nanoscale, 2018, 10, 7719-7725.	2.8	26
82	Enhancing the Rate Performance of a Li₃VO₄ Anode through Cu Doping. ChemElectroChem, 2018, 5, 478-482.	1.7	26
83	Growth of Au@Ag Coreâ€“Shell Pentatwinned Nanorods: Tuning the End Facets. Chemistry - A European Journal, 2013, 19, 12732-12738.	1.7	25
84	Morphology control of bimetallic nanostructures for electrochemical catalysts. Nanotechnology Reviews, 2013, 2, 487-514.	2.6	24
85	Metallic Nanostructures. , 2015, , .		24
86	Synthesis of shield-like singly twinned high-index Au nanoparticles. Nanoscale, 2011, 3, 1497.	2.8	21
87	Suppressing Lithium Dendrite Growth via Sinusoidal Ripple Current Produced by Triboelectric Nanogenerators. Advanced Energy Materials, 2019, 9, 1900487.	10.2	21
88	Lyotropic Liquid Crystal as an Electrolyte Additive for Suppressing Selfâ€Discharge of Supercapacitors. ChemElectroChem, 2019, 6, 2531-2535.	1.7	21
89	Synthesis and application of RuSe₂_{+ Î´}nanotubes as a methanol tolerant electrocatalyst for the oxygen reduction reaction. Journal of Materials Chemistry, 2009, 19, 1024-1030.	6.7	20
90	Oneâ€Pot Synthesis of CO 2 â€Responsive Magnetic Nanoparticles with Switchable Hydrophilicity. Chemistry - A European Journal, 2014, 20, 14057-14062.	1.7	20

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91	Direct Growth of 3â€‰D Hierarchical Porous Ni₃S₂ Nanostructures on Nickel Foam for Highâ€Performance Supercapacitors. ChemNanoMat, 2016, 2, 719-725.	1.5	20
92	Structureâ€Dependent cis/trans Isomerization of Tetraphenylethene Derivatives: Consequences for Aggregationâ€Induced Emission. Angewandte Chemie, 2016, 128, 6300-6304.	1.6	19
93	Volume-confined synthesis of ligand-free gold nanoparticles with tailored sizes for enhanced catalytic activity. Chemical Physics Letters, 2014, 613, 95-99.	1.2	15
94	Triboelectric Power Generation from Heterostructured Airâ€Laid Paper for Breathable and Wearable Selfâ€Charging Power System. Advanced Materials Technologies, 2019, 4, 1900745.	3.0	15
95	Hydrogels with highly concentrated salt solution as electrolytes for solid-state supercapacitors with a suppressed self-discharge rate. Journal of Materials Chemistry A, 2022, 10, 2966-2972.	5.2	14
96	Sandwich-structured Fe₂O₃@SiO₂@Au nanoparticles with magnetoplasmonic responses. Journal of Materials Chemistry C, 2015, 3, 11645-11652.	2.7	13
97	Polydopamine-coated graphene for supercapacitors with improved electrochemical performances and reduced self-discharge. Electrochimica Acta, 2022, 426, 140776.	2.6	13
98	Thermoresponsive magnetic ionic liquids: synthesis and temperature switchable magnetic separation. RSC Advances, 2016, 6, 15731-15734.	1.7	12
99	Magnesium Anodes with Extended Cycling Stability for Lithiumâ€Ion Batteries. Advanced Functional Materials, 2019, 29, 1806400.	7.8	12
100	Graphitic Mesoporous Carbon/Mn7C3 as Polysulfide Host for High Rate Li-S Batteries. Journal of the Electrochemical Society, 2019, 166, A2028-A2034.	1.3	11
101	Reducing the Self-Discharge Rate of Supercapacitors by Suppressing Electron Transfer in the Electric Double Layer. Journal of the Electrochemical Society, 2021, 168, 120548.	1.3	10
102	Self-discharge of supercapacitors based on carbon nanosheets with different pore structures. Electrochimica Acta, 2021, 390, 138783.	2.6	9
103	Hypersonic confined eigenvibrations of gold nano-octahedra. Applied Physics Letters, 2011, 98, 133123.	1.5	8
104	Brillouin study of confined eigenvibrations of silver nanocubes. Solid State Communications, 2012, 152, 501-503.	0.9	4
105	Li 4 Ti 5 O 12 â^'TiO 2 Composite Coated on Carbon Foam as Anode Material for Lithium Ion Capacitors: Evaluation of Rate Performance and Selfâ€Discharge. ChemNanoMat, 2020, 6, 280-284.	1.5	4
106	Fluorinated Etherâ€Based Electrolyte for Supercapacitors with Increased Working Voltage and Suppressed Selfâ€discharge. ChemElectroChem, 2022, 9, .	1.7	4
107	Wet Chemical Synthesis of Germanium Nanocrystals. Materials Research Society Symposia Proceedings, 2005, 879, 1.	0.1	3
108	Tunneling behavior of bismuth telluride nanoplates in electrical transport. Chemical Physics Letters, 2012, 546, 125-128.	1.2	3

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109	Reduced Graphene Oxide Nanosheets Functionalized with Bile Salts as Support for Electrochemical Catalysts. Advanced Materials Research, 2012, 535-537, 1467-1477.	0.3	2
110	Metallic Nanostructures: Fundamentals. , 2015, , 1-47.		2
111	CHAPTER 2. Smart Materials as Forward Osmosis Draw Solutes. RSC Smart Materials, 2016, , 19-50.	0.1	2
112	Crystalline heaven. Nano Today, 2008, 3, 47.	6.2	1