

# Xianmao Lu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5947426/publications.pdf>

Version: 2024-02-01

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	Peptide-based nanomaterials: Self-assembly, properties and applications. <i>Bioactive Materials</i> , 2022, 11, 268-282.	8.6	132
2	Hydrogels with highly concentrated salt solution as electrolytes for solid-state supercapacitors with a suppressed self-discharge rate. <i>Journal of Materials Chemistry A</i> , 2022, 10, 2966-2972.	5.2	14
3	Fluorinated Ether-Based Electrolyte for Supercapacitors with Increased Working Voltage and Suppressed Self-Discharge. <i>ChemElectroChem</i> , 2022, 9, .	1.7	4
4	Polydopamine-coated graphene for supercapacitors with improved electrochemical performances and reduced self-discharge. <i>Electrochimica Acta</i> , 2022, 426, 140776.	2.6	13
5	Reduced Self-Discharge of Supercapacitors Using Piezoelectric Separators. <i>ACS Applied Energy Materials</i> , 2021, 4, 8070-8075.	2.5	27
6	Self-discharge of supercapacitors based on carbon nanosheets with different pore structures. <i>Electrochimica Acta</i> , 2021, 390, 138783.	2.6	9
7	Reducing the Self-Discharge Rate of Supercapacitors by Suppressing Electron Transfer in the Electric Double Layer. <i>Journal of the Electrochemical Society</i> , 2021, 168, 120548.	1.3	10
8	Ultrafast lithium-ion capacitors for efficient storage of energy generated by triboelectric nanogenerators. <i>Energy Storage Materials</i> , 2020, 24, 297-303.	9.5	29
9	Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> •TiO <sub>2</sub> Composite Coated on Carbon Foam as Anode Material for Lithium Ion Capacitors: Evaluation of Rate Performance and Self-Discharge. <i>ChemNanoMat</i> , 2020, 6, 280-284.	1.5	4
10	Self-discharge of supercapacitors based on carbon nanotubes with different diameters. <i>Electrochimica Acta</i> , 2020, 357, 136855.	2.6	45
11	Triboelectric Power Generation from Heterostructured Air-Laid Paper for Breathable and Wearable Self-Charging Power System. <i>Advanced Materials Technologies</i> , 2019, 4, 1900745.	3.0	15
12	Triboelectric nanogenerators with simultaneous outputs in both single-electrode mode and freestanding-triboelectric-layer mode. <i>Nano Energy</i> , 2019, 66, 104169.	8.2	41
13	Graphitic Mesoporous Carbon/Mn <sub>7</sub> C <sub>3</sub> as Polysulfide Host for High Rate Li-S Batteries. <i>Journal of the Electrochemical Society</i> , 2019, 166, A2028-A2034.	1.3	11
14	Suppressing Lithium Dendrite Growth via Sinusoidal Ripple Current Produced by Triboelectric Nanogenerators. <i>Advanced Energy Materials</i> , 2019, 9, 1900487.	10.2	21
15	Lyotropic Liquid Crystal as an Electrolyte Additive for Suppressing Self-Discharge of Supercapacitors. <i>ChemElectroChem</i> , 2019, 6, 2531-2535.	1.7	21
16	High-frequency supercapacitors based on carbonized melamine foam as energy storage devices for triboelectric nanogenerators. <i>Nano Energy</i> , 2019, 55, 447-453.	8.2	54
17	Magnesium Anodes with Extended Cycling Stability for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1806400.	7.8	12
18	Suppressing self-discharge of supercapacitors via electrorheological effect of liquid crystals. <i>Nano Energy</i> , 2018, 47, 43-50.	8.2	183

#	ARTICLE	IF	CITATIONS
19	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
20	Tip-Selective Growth of Silver on Gold Nanostars for Surface-Enhanced Raman Scattering. ACS Applied Materials & Interfaces, 2018, 10, 14850-14856.	4.0	46
21	Stretchable V <sub>2</sub> O <sub>5</sub> /PEDOT supercapacitors: a modular fabrication process and charging with triboelectric nanogenerators. Nanoscale, 2018, 10, 7719-7725.	2.8	26
22	Enhancing the Rate Performance of a Li <sub>3</sub> VO <sub>4</sub> Anode through Cu Doping. ChemElectroChem, 2018, 5, 478-482.	1.7	26
23	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
24	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
25	Enhanced Electrochemical Properties of Li <sub>3</sub> VO <sub>4</sub> with Controlled Oxygen Vacancies as Li-ion Battery Anode. Chemistry - A European Journal, 2017, 23, 5368-5374.	1.7	44
26	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
27	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
28	Cross-linker mediated formation of sulfur-functionalized V <sub>2</sub> O <sub>5</sub> /graphene aerogels and their enhanced pseudocapacitive performance. Nanoscale, 2017, 9, 802-811.	2.8	68
29	Structure-Dependent <i>cis/trans</i> Isomerization of Tetraphenylethene Derivatives: Consequences for Aggregation-Induced Emission. Angewandte Chemie, 2016, 128, 6300-6304.	1.6	19
30	Direct Growth of 3D Hierarchical Porous Ni <sub>3</sub> S <sub>2</sub> Nanostructures on Nickel Foam for High-Performance Supercapacitors. ChemNanoMat, 2016, 2, 719-725.	1.5	20
31	Enhanced Electrochemical Properties of Sn-doped V <sub>2</sub> O <sub>5</sub> as a Cathode Material for Lithium Ion Batteries. Electrochimica Acta, 2016, 222, 1831-1838.	2.6	51
32	High-Performance Solid-State Supercapacitors Based on V <sub>2</sub> O <sub>5</sub> /Carbon Nanotube Composites. ChemElectroChem, 2016, 3, 158-164.	1.7	62
33	Structure-Dependent <i>cis/trans</i> Isomerization of Tetraphenylethene Derivatives: Consequences for Aggregation-Induced Emission. Angewandte Chemie - International Edition, 2016, 55, 6192-6196.	7.2	75
34	Thermoresponsive magnetic ionic liquids: synthesis and temperature switchable magnetic separation. RSC Advances, 2016, 6, 15731-15734.	1.7	12
35	Multi-functional forward osmosis draw solutes for seawater desalination. Chinese Journal of Chemical Engineering, 2016, 24, 23-30.	1.7	45
36	CHAPTER 2. Smart Materials as Forward Osmosis Draw Solutes. RSC Smart Materials, 2016, , 19-50.	0.1	2

#	ARTICLE	IF	CITATIONS
37	Pd@Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. <i>Angewandte Chemie</i> , 2015, 127, 8389-8392.	1.6	27
38	Pd@Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8271-8274.	7.2	125
39	Tuning Interior Nanogaps of Double-shelled Au/Ag Nanoboxes for Surface-Enhanced Raman Scattering. <i>Scientific Reports</i> , 2015, 5, 8382.	1.6	35
40	Single Molecule with Dual Function on Nanogold: Biofunctionalized Construct for In Vivo Photoacoustic Imaging and SERS Biosensing. <i>Advanced Functional Materials</i> , 2015, 25, 2316-2325.	7.8	65
41	Image-guided combination chemotherapy and photodynamic therapy using a mitochondria-targeted molecular probe with aggregation-induced emission characteristics. <i>Chemical Science</i> , 2015, 6, 4580-4586.	3.7	182
42	Highly Symmetric Gold Nanostars: Crystallographic Control and Surface-Enhanced Raman Scattering Property. <i>Journal of the American Chemical Society</i> , 2015, 137, 10460-10463.	6.6	261
43	Layered V <sub>2</sub> O <sub>5</sub> /PEDOT Nanowires and Ultrathin Nanobelts Fabricated with a Silk Reelinglike Process. <i>Chemistry of Materials</i> , 2015, 27, 5813-5819.	3.2	74
44	Sandwich-structured Fe <sub>2</sub> O <sub>3</sub> @SiO <sub>2</sub> @Au nanoparticles with magnetoplasmonic responses. <i>Journal of Materials Chemistry C</i> , 2015, 3, 11645-11652.	2.7	13
45	Hierarchical nanocomposite composed of layered V <sub>2</sub> O <sub>5</sub> /PEDOT/MnO <sub>2</sub> nanosheets for high-performance asymmetric supercapacitors. <i>Nano Energy</i> , 2015, 12, 76-87.	8.2	90
46	Metallic Nanostructures. , 2015, , .		24
47	Metallic Nanostructures: Fundamentals. , 2015, , 1-47.		2
48	One-Pot Synthesis of CO <sub>2</sub> -Responsive Magnetic Nanoparticles with Switchable Hydrophilicity. <i>Chemistry - A European Journal</i> , 2014, 20, 14057-14062.	1.7	20
49	A Dendrimer-Based Forward Osmosis Draw Solute for Seawater Desalination. <i>Industrial &amp; Engineering Chemistry Research</i> , 2014, 53, 16170-16175.	1.8	73
50	Controlled Synthesis of Palladium Concave Nanocubes with Sub-10-Nanometer Edges and Corners for Tunable Plasmonic Property. <i>Chemistry of Materials</i> , 2014, 26, 2180-2186.	3.2	72
51	In situ gold-loaded titania photonic crystals with enhanced photocatalytic activity. <i>Journal of Materials Chemistry A</i> , 2014, 2, 545-553.	5.2	73
52	Ethylenediamine-mediated synthesis of Mn <sub>3</sub> O <sub>4</sub> nano-octahedrons and their performance as electrocatalysts for the oxygen evolution reaction. <i>Nanoscale</i> , 2014, 6, 10896-10901.	2.8	36
53	A solventless thermolysis route to large-scale production of ultra-small hydrophilic and biocompatible magnetic ferrite nanocrystals and their application for efficient protein enrichment. <i>Green Chemistry</i> , 2014, 16, 2571.	4.6	32
54	Volume-confined synthesis of ligand-free gold nanoparticles with tailored sizes for enhanced catalytic activity. <i>Chemical Physics Letters</i> , 2014, 613, 95-99.	1.2	15

#	ARTICLE	IF	CITATIONS
55	Dodecahedral Gold Nanocrystals: The Missing Platonic Shape. <i>Journal of the American Chemical Society</i> , 2014, 136, 3010-3012.	6.6	39
56	Thermoresponsive copolymer-based draw solution for seawater desalination in a combined process of forward osmosis and membrane distillation. <i>Desalination</i> , 2014, 348, 26-32.	4.0	153
57	DNA-assisted assembly of carbon nanotubes and MnO <sub>2</sub> nanospheres as electrodes for high-performance asymmetric supercapacitors. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 4672.	1.3	55
58	Fabrication of Well-Ordered Binary Colloidal Crystals with Extended Size Ratios for Broadband Reflectance. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 10265-10273.	4.0	31
59	Na <sup>+</sup> -functionalized carbon quantum dots: a new draw solute in forward osmosis for seawater desalination. <i>Chemical Communications</i> , 2014, 50, 7318.	2.2	161
60	Thermoresponsive nanoparticles + plasmonic nanoparticles = photoresponsive heterodimers: facile synthesis and sunlight-induced reversible clustering. <i>Chemical Communications</i> , 2013, 49, 6122.	2.2	59
61	Highly permeable aquaporin-embedded biomimetic membranes featuring a magnetic-aided approach. <i>RSC Advances</i> , 2013, 3, 9178.	1.7	51
62	In Situ "Doping" Inverse Silica Opals with Size-Controllable Gold Nanoparticles for Refractive Index Sensing. <i>Journal of Physical Chemistry C</i> , 2013, 117, 9440-9445.	1.5	48
63	Hierarchically structured MnO <sub>2</sub> nanowires supported on hollow Ni dendrites for high-performance supercapacitors. <i>Nanoscale</i> , 2013, 5, 4379.	2.8	111
64	Thermoresponsive Magnetic Nanoparticles for Seawater Desalination. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 11453-11461.	4.0	143
65	Morphology control of bimetallic nanostructures for electrochemical catalysts. <i>Nanotechnology Reviews</i> , 2013, 2, 487-514.	2.6	24
66	Growth of Au@Ag Core-Shell Pentatwinned Nanorods: Tuning the End Facets. <i>Chemistry - A European Journal</i> , 2013, 19, 12732-12738.	1.7	25
67	Reduced Graphene Oxide Nanosheets Functionalized with Bile Salts as Support for Electrochemical Catalysts. <i>Advanced Materials Research</i> , 2012, 535-537, 1467-1477.	0.3	2
68	Fabrication of Large Domain Crack-Free Colloidal Crystal Heterostructures with Superposition Bandgaps Using Hydrophobic Polystyrene Spheres. <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 5562-5569.	4.0	68
69	Tunneling behavior of bismuth telluride nanoplates in electrical transport. <i>Chemical Physics Letters</i> , 2012, 546, 125-128.	1.2	3
70	Silver Nanocube-Enhanced Far-Red/Near-Infrared Fluorescence of Conjugated Polyelectrolyte for Cellular Imaging. <i>Langmuir</i> , 2012, 28, 11302-11309.	1.6	31
71	Tailoring Galvanic Replacement Reaction for the Preparation of Pt/Ag Bimetallic Hollow Nanostructures with Controlled Number of Voids. <i>ACS Nano</i> , 2012, 6, 7397-7405.	7.3	247
72	Highly ordered and gap controllable two-dimensional non-close-packed colloidal crystals and plasmonic "photonic crystals with enhanced optical transmission. <i>Journal of Materials Chemistry</i> , 2012, 22, 24668.	6.7	39

#	ARTICLE	IF	CITATIONS
73	A Solid-State Reaction Route to Anchoring Ni(OH) <sub>2</sub> Nanoparticles on Reduced Graphene Oxide Sheets for Supercapacitors. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 9973-9979.	1.8	99
74	Brillouin study of confined eigenvibrations of silver nanocubes. <i>Solid State Communications</i> , 2012, 152, 501-503.	0.9	4
75	Facile synthesis of thermosensitive magnetic nanoparticles as "smart" draw solutes in forward osmosis. <i>Chemical Communications</i> , 2011, 47, 10788.	2.2	123
76	Synthesis of shield-like singly twinned high-index Au nanoparticles. <i>Nanoscale</i> , 2011, 3, 1497.	2.8	21
77	Synergistic Effect of Ag and Pd Ions on Shape-Selective Growth of Polyhedral Au Nanocrystals with High-Index Facets. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3638-3645.	1.5	93
78	Fabrication of TiO <sub>2</sub> Binary Inverse Opals without Overlayers via the Sandwich-Vacuum Infiltration of Precursor. <i>Langmuir</i> , 2011, 27, 5157-5164.	1.6	72
79	Chiral Transformation: From Single Nanowire to Double Helix. <i>Journal of the American Chemical Society</i> , 2011, 133, 20060-20063.	6.6	101
80	Hypersonic confined eigenvibrations of gold nano-octahedra. <i>Applied Physics Letters</i> , 2011, 98, 133123.	1.5	8
81	Integrating <i>in situ</i> high pressure small and wide angle synchrotron x-ray scattering for exploiting new physics of nanoparticle supercrystals. <i>Review of Scientific Instruments</i> , 2010, 81, 093902.	0.6	57
82	Seed-Mediated Synthesis of Monodisperse Concave Trisoctahedral Gold Nanocrystals with Controllable Sizes. <i>Journal of Physical Chemistry C</i> , 2010, 114, 11119-11126.	1.5	187
83	Hypersonic Vibrations of Ag@SiO <sub>2</sub> (Cubic Core)~Shell Nanospheres. <i>ACS Nano</i> , 2010, 4, 7692-7698.	7.3	28
84	Pd-Pt Bimetallic Nanodendrites with High Activity for Oxygen Reduction. <i>Science</i> , 2009, 324, 1302-1305.	6.0	2,814
85	Chemical Synthesis of Novel Plasmonic Nanoparticles. <i>Annual Review of Physical Chemistry</i> , 2009, 60, 167-192.	4.8	616
86	Synthesis and application of RuSe <sub>2</sub> + Ir nanotubes as a methanol tolerant electrocatalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry</i> , 2009, 19, 1024-1030.	6.7	20
87	Dimers of Silver Nanospheres: Facile Synthesis and Their Use as Hot Spots for Surface-Enhanced Raman Scattering. <i>Nano Letters</i> , 2009, 9, 485-490.	4.5	578
88	Crystalline heaven. <i>Nano Today</i> , 2008, 3, 47.	6.2	1
89	Facile Synthesis of Gold Nanoparticles with Narrow Size Distribution by Using AuCl or AuBr as the Precursor. <i>Chemistry - A European Journal</i> , 2008, 14, 1584-1591.	1.7	143
90	A Comparative Study of Galvanic Replacement Reactions Involving Ag Nanocubes and AuCl <sub>2</sub> <sup>+</sup> or AuCl <sub>4</sub> <sup>+</sup> . <i>Advanced Materials</i> , 2008, 20, 2517-2522.	11.1	246

#	ARTICLE	IF	CITATIONS
91	Synthesis and characterization of magnetic Co nanoparticles: A comparison study of three different capping surfactants. <i>Journal of Solid State Chemistry</i> , 2008, 181, 1530-1538.	1.4	68
92	Facile Synthesis of Highly Faceted Multioctahedral Pt Nanocrystals through Controlled Overgrowth. <i>Nano Letters</i> , 2008, 8, 4043-4047.	4.5	236
93	Direct Oxidation of Methanol on Pt Nanostructures Supported on Electrospun Nanofibers of Anatase. <i>Journal of Physical Chemistry C</i> , 2008, 112, 9970-9975.	1.5	97
94	Morphological Evolution of Single-Crystal Ag Nanospheres during the Galvanic Replacement Reaction with $\text{HAuCl}_4$ . <i>Journal of Physical Chemistry C</i> , 2008, 112, 7872-7876.	1.5	91
95	Ultrathin Gold Nanowires Can Be Obtained by Reducing Polymeric Strands of Oleylamine-AuCl Complexes Formed via Auophilic Interaction. <i>Journal of the American Chemical Society</i> , 2008, 130, 8900-8901.	6.6	460
96	Gold Nanocages: Synthesis, Properties, and Applications. <i>Accounts of Chemical Research</i> , 2008, 41, 1587-1595.	7.6	1,336
97	Adding new functions to organic semiconductor nanowires by assembling metal nanoparticles onto their surfaces. <i>Journal of Materials Chemistry</i> , 2008, 18, 5395.	6.7	40
98	Facile Synthesis of Ultrathin Au Nanorods by Aging the AuCl(oleylamine) Complex with Amorphous Fe Nanoparticles in Chloroform. <i>Nano Letters</i> , 2008, 8, 3052-3055.	4.5	78
99	Fabrication of Field-Effect Transistors from Hexathiapentacene Single-Crystal Nanowires. <i>Nano Letters</i> , 2007, 7, 668-675.	4.5	272
100	Fabrication of Cubic Nanocages and Nanoframes by Dealloying Au/Ag Alloy Nanoboxes with an Aqueous Etchant Based on $\text{Fe}(\text{NO}_3)_3$ or $\text{NH}_4\text{OH}$ . <i>Nano Letters</i> , 2007, 7, 1764-1769.	4.5	360
101	Galvanic replacement reaction: A simple and powerful route to hollow and porous metal nanostructures. <i>Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems</i> , 2007, 221, 1-16.	0.1	37
102	Gold nanocages for cancer detection and treatment. <i>Nanomedicine</i> , 2007, 2, 657-668.	1.7	140
103	Mechanistic Studies on the Galvanic Replacement Reaction between Multiply Twinned Particles of Ag and $\text{HAuCl}_4$ in an Organic Medium. <i>Journal of the American Chemical Society</i> , 2007, 129, 1733-1742.	6.6	331
104	Gold Nanocages for Biomedical Applications. <i>Advanced Materials</i> , 2007, 19, 3177-3184.	11.1	464
105	Buckling down for flexible electronics. <i>Nature Nanotechnology</i> , 2006, 1, 163-164.	15.6	118
106	Wet Chemical Synthesis of Germanium Nanocrystals. <i>Materials Research Society Symposia Proceedings</i> , 2005, 879, 1.	0.1	3
107	Synthesis of germanium nanocrystals in high temperature supercritical $\text{CO}_2$ . <i>Nanotechnology</i> , 2005, 16, S389-S394.	1.3	29
108	High Yield of Germanium Nanocrystals Synthesized from Germanium Diodide in Solution. <i>Chemistry of Materials</i> , 2005, 17, 6479-6485.	3.2	97

#	ARTICLE	IF	CITATIONS
109	High Yield Solution~Liquid~Solid Synthesis of Germanium Nanowires. Journal of the American Chemical Society, 2005, 127, 15718-15719.	6.6	107
110	Synthesis of Germanium Nanocrystals in High Temperature Supercritical Fluid Solvents. Nano Letters, 2004, 4, 969-974.	4.5	106
111	Electrogenerated Chemiluminescence of Ge Nanocrystals. Nano Letters, 2004, 4, 183-185.	4.5	137
112	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