

Zhenda Lu

List of Publications by Citations

Source: <https://exaly.com/author-pdf/6997033/zhenda-lu-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

118
papers

13,583
citations

49
h-index

116
g-index

128
ext. papers

15,296
ext. citations

11.5
avg, IF

6.58
L-index

#	Paper	IF	Citations
118	A pomegranate-inspired nanoscale design for large-volume-change lithium battery anodes. <i>Nature Nanotechnology</i> , 2014 , 9, 187-92	28.7	1804
117	Selective deposition and stable encapsulation of lithium through heterogeneous seeded growth. <i>Nature Energy</i> , 2016 , 1,	62.3	1065
116	Composite lithium metal anode by melt infusion of lithium into a 3D conducting scaffold with lithiophilic coating. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 2862-7	11.5	643
115	A systematic study of the synthesis of silver nanoplates: is citrate a "magic" reagent?. <i>Journal of the American Chemical Society</i> , 2011 , 133, 18931-9	16.4	563
114	Ultrathin two-dimensional atomic crystals as stable interfacial layer for improvement of lithium metal anode. <i>Nano Letters</i> , 2014 , 14, 6016-22	11.5	545
113	Growth of conformal graphene cages on micrometre-sized silicon particles as stable battery anodes. <i>Nature Energy</i> , 2016 , 1,	62.3	509
112	Challenges and Recent Progress in the Development of Si Anodes for Lithium-Ion Battery. <i>Advanced Energy Materials</i> , 2017 , 7, 1700715	21.8	459
111	Nonfilling carbon coating of porous silicon micrometer-sized particles for high-performance lithium battery anodes. <i>ACS Nano</i> , 2015 , 9, 2540-7	16.7	372
110	A high tap density secondary silicon particle anode fabricated by scalable mechanical pressing for lithium-ion batteries. <i>Energy and Environmental Science</i> , 2015 , 8, 2371-2376	35.4	339
109	Syntheses, Structures, and Physical Properties of Three Novel Metal-Organic Frameworks Constructed from Aromatic Polycarboxylate Acids and Flexible Imidazole-Based Synthons. <i>Crystal Growth and Design</i> , 2007 , 7, 93-99	3.5	328
108	Colloidal nanoparticle clusters: functional materials by design. <i>Chemical Society Reviews</i> , 2012 , 41, 6874-6885	37.5	319
107	Magnetically recoverable core-shell nanocomposites with enhanced photocatalytic activity. <i>Chemistry - A European Journal</i> , 2010 , 16, 6243-50	4.8	285
106	Highly stable silver nanoplates for surface plasmon resonance biosensing. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 5629-33	16.4	281
105	Upconversion luminescence with tunable lifetime in NaYF ₄ :Yb,Er nanocrystals: role of nanocrystal size. <i>Nanoscale</i> , 2013 , 5, 944-52	7.7	278
104	Syntheses and Structures of Four d ¹⁰ Metal-Organic Frameworks Assembled with Aromatic Polycarboxylate and bix [bix = 1,4-Bis(imidazol-1-ylmethyl)benzene]. <i>Crystal Growth and Design</i> , 2006 , 6, 530-537	3.5	256
103	A Three-Dimensionally Interconnected Carbon Nanotube-Conducting Polymer Hydrogel Network for High-Performance Flexible Battery Electrodes. <i>Advanced Energy Materials</i> , 2014 , 4, 1400207	21.8	242
102	Artificial Solid Electrolyte Interphase-Protected Li _x Si Nanoparticles: An Efficient and Stable Prelithiation Reagent for Lithium-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2015 , 137, 8372-5	16.4	232

101	Reconstruction of silver nanoplates by UV irradiation: tailored optical properties and enhanced stability. <i>Angewandte Chemie - International Edition</i> , 2009 , 48, 3516-9	16.4	219
100	High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. <i>ACS Energy Letters</i> , 2016 , 1, 1247-1255	20.1	218
99	Magnetochromatic microspheres: rotating photonic crystals. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15687-94	16.4	214
98	Rewritable Photonic Paper with Hygroscopic Salt Solution as Ink. <i>Advanced Materials</i> , 2009 , 21, 4259-4264	24	204
97	Dry-air-stable lithium silicide-lithium oxide core-shell nanoparticles as high-capacity prelithiation reagents. <i>Nature Communications</i> , 2014 , 5, 5088	17.4	203
96	Crab shells as sustainable templates from nature for nanostructured battery electrodes. <i>Nano Letters</i> , 2013 , 13, 3385-90	11.5	185
95	Porous monodisperse V ₂ O ₅ microspheres as cathode materials for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2011 , 21, 6365		176
94	Templated synthesis of metal nanorods in silica nanotubes. <i>Journal of the American Chemical Society</i> , 2011 , 133, 19706-9	16.4	168
93	High-Areal-Capacity Silicon Electrodes with Low-Cost Silicon Particles Based on Spatial Control of Self-Healing Binder. <i>Advanced Energy Materials</i> , 2015 , 5, 1401826	21.8	166
92	Rattle-type silica colloidal particles prepared by a surface-protected etching process. <i>Nano Research</i> , 2009 , 2, 583-591	10	164
91	Photocatalytic synthesis and photovoltaic application of Ag-TiO ₂ nanorod composites. <i>Nano Letters</i> , 2013 , 13, 5698-702	11.5	162
90	Direct Conversion of Perovskite Thin Films into Nanowires with Kinetic Control for Flexible Optoelectronic Devices. <i>Nano Letters</i> , 2016 , 16, 871-6	11.5	147
89	Core-Shell Nanoparticle Coating as an Interfacial Layer for Dendrite-Free Lithium Metal Anodes. <i>ACS Central Science</i> , 2017 , 3, 135-140	16.8	140
88	Self-assembly and photocatalysis of mesoporous TiO ₂ nanocrystal clusters. <i>Nano Research</i> , 2011 , 4, 103-114	114	126
87	Self-assembled TiO ₂ nanocrystal clusters for selective enrichment of intact phosphorylated proteins. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 1862-6	16.4	119
86	A Sulfur Cathode with Pomegranate-Like Cluster Structure. <i>Advanced Energy Materials</i> , 2015 , 5, 1500211	21.8	108
85	Mesoporous TiO ₂ nanocrystal clusters for selective enrichment of phosphopeptides. <i>Analytical Chemistry</i> , 2010 , 82, 7249-58	7.8	108
84	Metallurgically lithiated SiO _x anode with high capacity and ambient air compatibility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 7408-13	11.5	103

83	Role of salt in the spontaneous assembly of charged gold nanoparticles in ethanol. <i>Langmuir</i> , 2011 , 27, 5282-9	4	91
82	Direct assembly of hydrophobic nanoparticles to multifunctional structures. <i>Nano Letters</i> , 2011 , 11, 3404-13	4	91
81	Precise Perforation and Scalable Production of Si Particles from Low-Grade Sources for High-Performance Lithium Ion Battery Anodes. <i>Nano Letters</i> , 2016 , 16, 7210-7215	11.5	89
80	In situ observation of divergent phase transformations in individual sulfide nanocrystals. <i>Nano Letters</i> , 2015 , 15, 1264-71	11.5	86
79	One-pot synthesis and optical property of copper(I) sulfide nanodisks. <i>Inorganic Chemistry</i> , 2010 , 49, 6601-8	5.1	85
78	Gram-scale synthesis of silica nanotubes with controlled aspect ratios by templating of nickel-hydrazine complex nanorods. <i>Langmuir</i> , 2011 , 27, 12201-8	4	77
77	Syntheses, Structures, and Photoluminescent and Magnetic Studies of Metal-Organic Frameworks Assembled with 5-Sulfosalicylic Acid and 1,4-Bis(imidazol-1-ylmethyl)-benzene. <i>Crystal Growth and Design</i> , 2007 , 7, 268-274	3.5	75
76	Shape- and Size-Controlled Synthesis of Calcium Molybdate Doughnut-Shaped Microstructures. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 16414-16423	3.8	65
75	Surface passivation of mixed-halide perovskite CsPb(BrI) nanocrystals by selective etching for improved stability. <i>Nanoscale</i> , 2017 , 9, 7391-7396	7.7	58
74	Enhancing Luminescence and Photostability of CsPbBr ₃ Nanocrystals via Surface Passivation with Silver Complex. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 12994-13000	3.8	55
73	Highly Efficient Water Decontamination by Using Sub-10 nm FeOOH Confined within Millimeter-Sized Mesoporous Polystyrene Beads. <i>Environmental Science & Technology</i> , 2017 , 51, 9210-9218	10.3	55
72	Two types of novel layer framework structures assembled from 5-sulfosalicylic acid and lanthanide ions. <i>CrystEngComm</i> , 2006 , 8, 847	3.3	55
71	Efficient plasmon-hot electron conversion in Ag-CsPbBr hybrid nanocrystals. <i>Nature Communications</i> , 2019 , 10, 1163	17.4	54
70	Reconstruction of Silver Nanoplates by UV Irradiation: Tailored Optical Properties and Enhanced Stability. <i>Angewandte Chemie</i> , 2009 , 121, 3568-3571	3.6	54
69	Synthesis and thermochromic properties of vanadium dioxide colloidal particles. <i>Journal of Materials Chemistry</i> , 2011 , 21, 14776		49
68	Magnetic Field-Controlled Lithium Polysulfide Semiliquid Battery with Ferrofluidic Properties. <i>Nano Letters</i> , 2015 , 15, 7394-9	11.5	48
67	Nanopurification of silicon from 84% to 99.999% purity with a simple and scalable process. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 13473-7	11.5	46
66	Self-assembly and tunable plasmonic property of gold nanoparticles on mercapto-silica microspheres. <i>Journal of Materials Chemistry</i> , 2009 , 19, 4597		41

65	Stable Bulky Particles Formed by TS-1 Zeolite Nanocrystals in the Presence of H ₂ O ₂ . <i>ChemCatChem</i> , 2010 , 2, 407-412	5.2	38
64	Mesoporous Ce-Ti-Zr ternary oxide millispheres for efficient catalytic ozonation in bubble column. <i>Chemical Engineering Journal</i> , 2018 , 338, 261-270	14.7	35
63	Assembly of LiMnPO Nanoplates into Microclusters as a High-Performance Cathode in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 27618-27624	9.5	33
62	Ultrasonic activation of inert poly(tetrafluoroethylene) enables piezocatalytic generation of reactive oxygen species. <i>Nature Communications</i> , 2021 , 12, 3508	17.4	33
61	A systematic study of the synthesis of cesium lead halide nanocrystals: does CsPbBr ₃ or CsPbBr form?. <i>Nanoscale</i> , 2019 , 11, 1784-1789	7.7	32
60	Assembly and photonic properties of superparamagnetic colloids in complex magnetic fields. <i>Langmuir</i> , 2011 , 27, 13444-50	4	32
59	Highly luminescent CsPbBr ₃ nanorods synthesized by a ligand-regulated reaction at the water/oil interface. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 1854-1858	7.1	31
58	Self-Assembled TiO ₂ Nanorods as Electron Extraction Layer for High-Performance Inverted Polymer Solar Cells. <i>Chemistry of Materials</i> , 2015 , 27, 44-52	9.6	31
57	Thermal Lithiated-TiO: A Robust and Electron-Conducting Protection Layer for Li-Si Alloy Anode. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 12750-12758	9.5	29
56	Li-Containing, Continuous Silica Nanofibers for High Li Conductivity in Composite Polymer Electrolyte. <i>Small</i> , 2019 , 15, e1902729	11	29
55	Fine-tuning the metallic core-shell nanostructures for plasmonic perovskite solar cells. <i>Applied Physics Letters</i> , 2016 , 109, 183901	3.4	28
54	Highly enhanced durability of a graphitic carbon layer decorated PtNi alloy electrocatalyst toward the oxygen reduction reaction. <i>Chemical Communications</i> , 2019 , 55, 5693-5696	5.8	26
53	Oxygen-Deficient Ferric Oxide as an Electrochemical Cathode Catalyst for High-Energy Lithium-Sulfur Batteries. <i>Small</i> , 2020 , 16, e2000870	11	26
52	Superparamagnetic nanocrystal clusters for enrichment of low-abundance peptides and proteins. <i>Chemical Communications</i> , 2010 , 46, 6174-6	5.8	26
51	Self-Assembled TiO ₂ Nanocrystal Clusters for Selective Enrichment of Intact Phosphorylated Proteins. <i>Angewandte Chemie</i> , 2010 , 122, 1906-1910	3.6	26
50	Formation mechanism and size control in one-pot synthesis of mercapto-silica colloidal spheres. <i>Langmuir</i> , 2011 , 27, 3372-80	4	25
49	A new strategy to address the challenges of nanoparticles in practical water treatment: mesoporous nanocomposite beads via flash freezing. <i>Nanoscale</i> , 2017 , 9, 19154-19161	7.7	24
48	Mesoporous titanate-based cation exchanger for efficient removal of metal cations. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 5097	13	24

47	Gallium-Carbenicillin Framework Coated Defect-Rich Hollow TiO ₂ as a Photocatalyzed Oxidative Stress Amplifier against Complex Infections. <i>Advanced Functional Materials</i> , 2020 , 30, 2004861	15.6	24
46	Free-Standing Graphene-Encapsulated Silicon Nanoparticle Aerogel as an Anode for Lithium Ion Batteries. <i>ChemNanoMat</i> , 2016 , 2, 671-674	3.5	22
45	Highly Stable Silver Nanoplates for Surface Plasmon Resonance Biosensing. <i>Angewandte Chemie</i> , 2012 , 124, 5727-5731	3.6	21
44	A novel 2D herringbone-like zinc coordination polymer built from helical motif: Hydrothermal synthesis, structure and properties. <i>Inorganic Chemistry Communication</i> , 2007 , 10, 74-76	3.1	20
43	Atomic Characterization of Byproduct Nanoparticles on Cesium Lead Halide Nanocrystals Using High-Resolution Scanning Transmission Electron Microscopy. <i>Crystals</i> , 2018 , 8, 2	2.3	19
42	Systematic Investigation of Prelithiated SiO ₂ Particles for High-Performance Anodes in Lithium-Ion Battery. <i>Applied Sciences (Switzerland)</i> , 2018 , 8, 1245	2.6	17
41	Ultrasensitive Detection of Bacterial Protein Toxins on Patterned Microarray via Surface Plasmon Resonance Imaging with Signal Amplification by Conjugate Nanoparticle Clusters. <i>ACS Sensors</i> , 2018 , 3, 1639-1646	9.2	16
40	Water-assisted crystallization of mesoporous anatase TiO ₂ nanospheres. <i>Nanoscale</i> , 2016 , 8, 9113-7	7.7	15
39	Lanthanide upconversion within microstructured optical fibers: improved detection limits for sensing and the demonstration of a new tool for nanocrystal characterization. <i>Nanoscale</i> , 2012 , 4, 7448-77	3.7	14
38	Understanding the role of conductive polymer in thermal lithiation and battery performance of Li-Sn alloy anode. <i>Energy Storage Materials</i> , 2019 , 20, 7-13	19.4	14
37	Selective removal of nitrate via the synergistic effect of oxygen vacancies and plasmon-induced hot carriers. <i>Chemical Engineering Journal</i> , 2020 , 397, 125435	14.7	13
36	Epitaxial growth of gold on silver nanoplates for imaging-guided photothermal therapy. <i>Materials Science and Engineering C</i> , 2019 , 105, 110023	8.3	13
35	Fabrication of Homogeneous Non-Noble Metal Nanoparticles within Metal-Organic Framework Nanosheets for Catalytic Reduction of 4-Nitrophenol. <i>Crystal Growth and Design</i> , 2020 , 20, 6217-6225	3.5	13
34	Preventing Anion Exchange between Perovskite Nanocrystals by Confinement in Porous SiO Nanobeads. <i>ACS Omega</i> , 2019 , 4, 22209-22213	3.9	13
33	Boosting the cycling stability of Li _x Si alloy microparticles through electroless copper deposition. <i>Chemical Engineering Journal</i> , 2019 , 370, 1019-1026	14.7	12
32	Fluorescence hydrogel array based on interfacial cation exchange amplification for highly sensitive microRNA detection. <i>Analytica Chimica Acta</i> , 2019 , 1080, 206-214	6.6	12
31	In Situ Tuning of Defects and Phase Transition in Titanium Dioxide by Lithiothermic Reduction. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 5750-5758	9.5	12
30	Three-Dimensional-Percolated Ceramic Nanoparticles along Natural-Cellulose-Derived Hierarchical Networks for High Li Conductivity and Mechanical Strength. <i>Nano Letters</i> , 2020 , 20, 7397-7404	11.5	12

29	A versatile Click chemistry Route to size-restricted, robust, and functionalizable hydrophilic nanocrystals. <i>Small</i> , 2015 , 11, 1644-8	11	11
28	High-resolution combinatorial patterning of functional nanoparticles. <i>Nature Communications</i> , 2020 , 11, 6002	17.4	11
27	Sulfophobic and Vacancy Design Enables Self-Cleaning Electrodes for Efficient Desulfurization and Concurrent Hydrogen Evolution with Low Energy Consumption. <i>Advanced Functional Materials</i> , 2021 , 31, 2101922	15.6	10
26	An interesting molecular-assembly of Cyclodextrin pipelines with embedded hydrophilic nickel maleonitriledithiolate. <i>Dalton Transactions</i> , 2011 , 40, 11788-94	4.3	9
25	Engineering Two-Dimensional Metal-Organic Framework on Molecular Basis for Fast Li Conduction. <i>Nano Letters</i> , 2021 , 21, 5805-5812	11.5	9
24	Patterned plasmonic gradient for high-precision biosensing using a smartphone reader. <i>Nanoscale</i> , 2019 , 11, 12471-12476	7.7	8
23	Confined growth of CdSe quantum dots in colloidal mesoporous silica for multifunctional nanostructures. <i>Science China Materials</i> , 2015 , 58, 481-489	7.1	8
22	New metallocene-bridged cyclodextrin dimer: A stable derivative of the antitumor drug titanocene dichloride and its potent cytotoxicity against human breast cancer (MCF-7) cells. <i>Journal of Organometallic Chemistry</i> , 2006 , 691, 5895-5899	2.3	8
21	Self-Assembly of Perovskite CsPbBr ₃ Quantum Dots Driven by a Photo-Induced Alkynyl Homocoupling Reaction. <i>Angewandte Chemie</i> , 2020 , 132, 17360-17366	3.6	7
20	Porous gold layer coated silver nanoplates with efficient antimicrobial activity. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020 , 186, 110727	6	7
19	Self-Assembly of Perovskite CsPbBr ₃ Quantum Dots Driven by a Photo-Induced Alkynyl Homocoupling Reaction. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 17207-17213	16.4	6
18	Use of an intermediate solid-state electrode to enable efficient hydrogen production from dilute organic matter. <i>Nano Energy</i> , 2017 , 39, 499-505	17.1	6
17	An inclusion complex of Cyclodextrin with mnt anion (mnt = maleonitriledithiolate) studied by induced circular dichroism. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2008 , 61, 101-106		5
16	Scalable hierarchical lithiophilic engineering of metal foam enables stable lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022 , 435, 134643	14.7	5
15	Deterministic Assembly of Single Sub-20nm Functional Nanoparticles Using a Thermally Modified Template with a Scanning Nanoprobe. <i>Advanced Materials</i> , 2020 , 32, e2005979	24	5
14	Assembly of Colloidal Nanoparticles into Hollow Superstructures by Controlling Phase Separation in Emulsion Droplets. <i>Small Structures</i> , 2021 , 2, 2100005	8.7	4
13	Transferring Liquid Metal to form a Hybrid Solid Electrolyte via a Wettability-Tuning Technology for Lithium Metal Anodes.. <i>Advanced Materials</i> , 2022 , e2200181	24	4
12	Broadband enhancement of photoluminance from colloidal metal halide perovskite nanocrystals on plasmonic nanostructured surfaces. <i>Scientific Reports</i> , 2017 , 7, 14695	4.9	3

11	The Role of Polymer and Inorganic Coatings to Enhance Interparticle Connections Diagnosed by Techniques. <i>Nano Letters</i> , 2021 , 21, 1530-1537	11.5	3
10	Arbitrary Gold Nanoparticle Arrays Fabricated through AFM Nanoxerography and Interfacial Seeded Growth. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 38347-38352	9.5	2
9	A di(thio-1,2-dicyane ethylenylthio)ethane-tethered Cyclodextrin dimer as a molecular carrier of ferrocene in DMF solution. <i>Journal of Inclusion Phenomena and Macrocyclic Chemistry</i> , 2007 , 59, 357-361		2
8	Lithiated Hybrid Polymer/Inorganic PAA/MnO ₂ Protection Layer for High-Performance Tin Oxide Alloy Anode. <i>ACS Applied Energy Materials</i> ,	6.1	2
7	Unexpected Coulomb Interactions in Nonpolar Solvent for Highly Efficient Nanoxerography of Perovskite Quantum Dots. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 59-64	6.4	2
6	Decorating fiber nanotip with single perovskite quantum dot and other luminescent nanocrystals synthesized in oil-phase. <i>Nanotechnology</i> , 2017 , 28, 46LT02	3.4	1
5	Tailoring a nanostructured plasmonic absorber for high efficiency surface-assisted laser desorption/ionization. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 3424-3429	3.6	1
4	Automated pick-and-place of single nanoparticle using electrically controlled low-surface energy nanotweezer. <i>AIP Advances</i> , 2021 , 11, 035219	1.5	1
3	Synthesis of monodispersed VO ₂ @Au core-shell submicroparticles and their switchable optical properties. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 11669-11673	7.1	1
2	In-situ forming Sub-2 nm hydrous iron oxide particles in MOFs for deep-treatment and high anti-interference in arsenic removal. <i>Chemical Engineering Journal</i> , 2021 , 431, 133813	14.7	0
1	Atomic resolution in situ observation on photon-induced reshaping and phase transitions of CsPbBr ₃ nanocube and quantum dot. <i>Applied Physics Letters</i> , 2021 , 119, 203103	3.4	