Zhi Li

List of Publications by Year in descending order

103 papers	18,047 citations	29994 54 h-index	37111 96 g-index
106 all docs	106 docs citations	106 times ranked	19024 citing authors

#	Article	IF	Citations
1	Isolated Single Iron Atoms Anchored on Nâ€Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2017, 56, 6937-6941.	7.2	1,542
2	Lithium ion battery applications of molybdenum disulfide (MoS₂) nanocomposites. Energy and Environmental Science, 2014, 7, 209-231.	15.6	1,172
3	Mesoporous nitrogen-rich carbons derived from protein for ultra-high capacity battery anodes and supercapacitors. Energy and Environmental Science, 2013, 6, 871.	15.6	983
4	Interconnected Carbon Nanosheets Derived from Hemp for Ultrafast Supercapacitors with High Energy. ACS Nano, 2013, 7, 5131-5141.	7.3	869
5	Carbon Nanosheet Frameworks Derived from Peat Moss as High Performance Sodium Ion Battery Anodes. ACS Nano, 2013, 7, 11004-11015.	7.3	813
6	Well-Defined Materials for Heterogeneous Catalysis: From Nanoparticles to Isolated Single-Atom Sites. Chemical Reviews, 2020, 120, 623-682.	23.0	794
7	Direct observation of noble metal nanoparticles transforming to thermally stable single atoms. Nature Nanotechnology, 2018, 13, 856-861.	15.6	741
8	Peanut shell hybrid sodium ion capacitor with extreme energyâ€“power rivals lithium ion capacitors. Energy and Environmental Science, 2015, 8, 941-955.	15.6	740
9	Carbonized Chicken Eggshell Membranes with 3D Architectures as Highâ€Performance Electrode Materials for Supercapacitors. Advanced Energy Materials, 2012, 2, 431-437.	10.2	573
10	Engineering unsymmetrically coordinated Cu-S1N3 single atom sites with enhanced oxygen reduction activity. Nature Communications, 2020, 11, 3049.	5.8	537
11	Fe Isolated Single Atoms on S, N Codoped Carbon by Copolymer Pyrolysis Strategy for Highly Efficient Oxygen Reduction Reaction. Advanced Materials, 2018, 30, e1800588.	11.1	511
12	Iridium single-atom catalyst on nitrogen-doped carbon for formic acid oxidation synthesized using a general hostâ€“guest strategy. Nature Chemistry, 2020, 12, 764-772.	6.6	452
13	Tin and Tin Compounds for Sodium Ion Battery Anodes: Phase Transformations and Performance. Accounts of Chemical Research, 2015, 48, 1657-1665.	7.6	440
14	Single-atom Rh/N-doped carbon electrocatalyst for formic acid oxidation. Nature Nanotechnology, 2020, 15, 390-397.	15.6	420
15	Colossal pseudocapacitance in a high functionalityâ€“high surface area carbon anode doubles the energy of an asymmetric supercapacitor. Energy and Environmental Science, 2014, 7, 1708-1718.	15.6	381
16	Graphene-nickel cobaltite nanocomposite asymmetrical supercapacitor with commercial level mass loading. Nano Research, 2012, 5, 605-617.	5.8	356
17	Isolated Single-Atom Pd Sites in Intermetallic Nanostructures: High Catalytic Selectivity for Semihydrogenation of Alkynes. Journal of the American Chemical Society, 2017, 139, 7294-7301.	6.6	354
18	Constructing NiCo/Fe₃O₄ Heteroparticles within MOF-74 for Efficient Oxygen Evolution Reactions. Journal of the American Chemical Society, 2018, 140, 15336-15341.	6.6	310

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19	Anodes for Sodium Ion Batteries Based on Tinâ€“Germaniumâ€“Antimony Alloys. ACS Nano, 2014, 8, 4415-4429.	7.3	309
20	Isolated Single Iron Atoms Anchored on Nâ€Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction. Angewandte Chemie, 2017, 129, 7041-7045.	1.6	306
21	Atomic interface effect of a single atom copper catalyst for enhanced oxygen reduction reactions. Energy and Environmental Science, 2019, 12, 3508-3514.	15.6	278
22	Hybrid Device Employing Three-Dimensional Arrays of MnO in Carbon Nanosheets Bridges Batteryâ€“Supercapacitor Divide. Nano Letters, 2014, 14, 1987-1994.	4.5	276
23	Confined Pyrolysis within Metalâ€“Organic Frameworks To Form Uniform Ru₃ Clusters for Efficient Oxidation of Alcohols. Journal of the American Chemical Society, 2017, 139, 9795-9798.	6.6	258
24	Direct-current triboelectricity generation by a sliding Schottky nanocontact on MoS2 multilayers. Nature Nanotechnology, 2018, 13, 112-116.	15.6	230
25	Discovering Partially Charged Single-Atom Pt for Enhanced Anti-Markovnikov Alkene Hydrosilylation. Journal of the American Chemical Society, 2018, 140, 7407-7410.	6.6	218
26	A General Strategy for Fabricating Isolated Single Metal Atomic Site Catalysts in Y Zeolite. Journal of the American Chemical Society, 2019, 141, 9305-9311.	6.6	191
27	Exceptional energy and new insight with a sodiumâ€“selenium battery based on a carbon nanosheet cathode and a pseudographite anode. Energy and Environmental Science, 2017, 10, 153-165.	15.6	184
28	Excellent energyâ€“power characteristics from a hybrid sodium ion capacitor based on identical carbon nanosheets in both electrodes. Journal of Materials Chemistry A, 2016, 4, 5149-5158.	5.2	176
29	Electrochemical Supercapacitor Electrodes from Sponge-like Graphene Nanoarchitectures with Ultrahigh Power Density. Journal of Physical Chemistry Letters, 2012, 3, 2928-2933.	2.1	173
30	Heteroatom enhanced sodium ion capacity and rate capability in a hydrogel derived carbon give record performance in a hybrid ion capacitor. Nano Energy, 2016, 23, 129-137.	8.2	170
31	Atomically Dispersed Ruthenium Species Inside Metalâ€“Organic Frameworks: Combining the High Activity of Atomic Sites and the Molecular Sieving Effect of MOFs. Angewandte Chemie - International Edition, 2019, 58, 4271-4275.	7.2	162
32	Supercapacitors based on carbons with tuned porosity derived from paper pulp mill sludge biowaste. Carbon, 2013, 57, 317-328.	5.4	155
33	Carbonized nanocellulose sustainably boosts the performance of activated carbon in ionic liquid supercapacitors. Nano Energy, 2016, 25, 161-169.	8.2	133
34	High rate SnO2â€“Graphene Dual Aerogel anodes and their kinetics of lithiation and sodiation. Nano Energy, 2015, 15, 369-378.	8.2	129
35	One-Pot Pyrolysis to N-Doped Graphene with High-Density Pt Single Atomic Sites as Heterogeneous Catalyst for Alkene Hydrosilylation. ACS Catalysis, 2018, 8, 10004-10011.	5.5	121
36	Supercapacitive carbon nanotube-cobalt molybdate nanocomposites prepared via solvent-free microwave synthesis. RSC Advances, 2012, 2, 2753.	1.7	113

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37	Atomically dispersed Fe atoms anchored on COF-derived N-doped carbon nanospheres as efficient multi-functional catalysts. Chemical Science, 2020, 11, 786-790.	3.7	110
38	Facile Synthesis of ZnS/N,S Co-doped Carbon Composite from Zinc Metal Complex for High-Performance Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 704-712.	4.0	108
39	Sustained electron tunneling at unbiased metal-insulator-semiconductor triboelectric contacts. Nano Energy, 2018, 48, 320-326.	8.2	103
40	Sulfur Refines MoO₂ Distribution Enabling Improved Lithium Ion Battery Performance. Journal of Physical Chemistry C, 2014, 118, 18387-18396.	1.5	100
41	Sodiation vs. lithiation phase transformations in a high rate â€“ high stability SnO₂ in carbon nanocomposite. Journal of Materials Chemistry A, 2015, 3, 7100-7111.	5.2	100
42	Highly corrosion resistant platinumâ€“niobium oxideâ€“carbon nanotube electrodes for the oxygen reduction in PEM fuel cells. Energy and Environmental Science, 2012, 5, 6156.	15.6	94
43	Preparation and Surface Activity of Singleâ€Crystalline NiO(111) Nanosheets with Hexagonal Holes: A Semiconductor Nanospanner. Advanced Materials, 2008, 20, 267-271.	11.1	90
44	Coupling In Situ TEM and Ex Situ Analysis to Understand Heterogeneous Sodiation of Antimony. Nano Letters, 2015, 15, 6339-6348.	4.5	90
45	Tailoring Biomassâ€Derived Carbon Nanoarchitectures for Highâ€Performance Supercapacitors. ChemElectroChem, 2014, 1, 332-337.	1.7	80
46	Photo-driven redox-neutral decarboxylative carbon-hydrogen trifluoromethylation of (hetero)arenes with trifluoroacetic acid. Nature Communications, 2017, 8, 14353.	5.8	75
47	Interfacial friction-induced electronic excitation mechanism for tribo-tunneling current generation. Materials Horizons, 2019, 6, 1020-1026.	6.4	70
48	Fabricating polyoxometalates-stabilized single-atom site catalysts in confined space with enhanced activity for alkynes diboration. Nature Communications, 2021, 12, 4205.	5.8	69
49	Heterogeneous Gold Catalysts for Efficient Access to Functionalized Lactones. Chemistry - A European Journal, 2008, 14, 9412-9418.	1.7	65
50	Solâ€“gel-entrapped nano silver catalysts-correlation between active silver species and catalytic behavior. Journal of Catalysis, 2010, 272, 92-100.	3.1	65
51	Fabricating Pd isolated single atom sites on C3N4/rGO for heterogenization of homogeneous catalysis. Nano Research, 2020, 13, 947-951.	5.8	65
52	Anomalous interfacial stress generation during sodium intercalation/extraction in MoS ₂ thin-film anodes. Science Advances, 2019, 5, eaav2820.	4.7	60
53	Formation of Hexagonal-Close Packed (HCP) Rhodium as a Size Effect. Journal of the American Chemical Society, 2017, 139, 575-578.	6.6	58
54	Separation and Quantum Tunneling of Photo-generated Carriers Using a Tribo-Induced Field. Matter, 2019, 1, 650-660.	5.0	56

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55	Size Tunable Gold Nanorods Evenly Distributed in the Channels of Mesoporous Silica. ACS Nano, 2008, 2, 1205-1212.	7.3	55
56	Freestanding hierarchical porous carbon film derived from hybrid nanocellulose for high-power supercapacitors. Nano Research, 2017, 10, 1847-1860.	5.8	55
57	Scaled-up Direct-Current Generation in MoS₂ Multilayer-Based Moving Heterojunctions. ACS Applied Materials & Interfaces, 2019, 11, 35404-35409.	4.0	55
58	A simple method for selective immobilization of silver nanoparticles. Applied Surface Science, 2005, 250, 109-116.	3.1	50
59	Edge-Rich Quasi-Mesoporous Nitrogen-Doped Carbon Framework Derived from Palm Tree Bark Hair for Electrochemical Applications. ACS Applied Materials & Interfaces, 2018, 10, 27047-27055.	4.0	49
60	Almond-derived origami-like hierarchically porous and N/O co-functionalized carbon sheet for high-performance supercapacitor. Applied Surface Science, 2019, 467-468, 229-235.	3.1	49
61	Sulfur nanodots as MoS₂ antiblocking agent for stable sodium ion battery anodes. Journal of Materials Chemistry A, 2018, 6, 10535-10542.	5.2	48
62	Triboâ€Tunneling DC Generator with Carbon Aerogel/Silicon Multiâ€Nanocontacts. Advanced Electronic Materials, 2019, 5, 1900464.	2.6	46
63	Porous Î³-Fe2O3 nanoparticle decorated with atomically dispersed platinum: Study on atomic site structural change and gas sensor activity evolution. Nano Research, 2021, 14, 1435-1442.	5.8	46
64	Synthesis of Grainâ€like MoS₂ for Highâ€Performance Sodiumâ€Ion Batteries. ChemSusChem, 2018, 11, 2130-2137.	3.6	42
65	Two-dimensional SnO2/graphene heterostructures for highly reversible electrochemical lithium storage. Science China Materials, 2018, 61, 1527-1535.	3.5	42
66	Single-atom Sn-Zn pairs in CuO catalyst promote dimethyldichlorosilane synthesis. National Science Review, 2020, 7, 600-608.	4.6	42
67	Experimental and DFT studies of gold nanoparticles supported on MgO(111) nano-sheets and their catalytic activity. Physical Chemistry Chemical Physics, 2011, 13, 2582.	1.3	41
68	Tridentate citrate chelation towards stable fiber zinc-polypyrrole battery with hybrid mechanism. Energy Storage Materials, 2021, 43, 585-594.	9.5	39
69	Interfaceâ€Engineered Dendriteâ€Free Anode and Ultraconductive Cathode for Durable and Highâ€Rate Fiber Zn Dualâ€Ion Microbattery. Advanced Functional Materials, 2021, 31, 2008894.	7.8	35
70	Large-scale doping-engineering enables boron/nitrogen dual-doped porous carbon for high-performance zinc ion capacitors. Rare Metals, 2022, 41, 2505-2516.	3.6	35
71	Atomically Dispersed Ruthenium Species Inside Metalâ€“Organic Frameworks: Combining the High Activity of Atomic Sites and the Molecular Sieving Effect of MOFs. Angewandte Chemie, 2019, 131, 4315-4319.	1.6	25
72	Carbon nanosheets derived from reconstructed lignin for potassium and sodium storage with low voltage hysteresis. Nano Research, 2021, 14, 4664-4673.	5.8	24

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73	Square-pyramidal Fe-N4 with defect-modulated O-coordination: Two-tier electronic structure fine-tuning for enhanced oxygen reduction. Chem Catalysis, 2022, 2, 816-835.	2.9	23
74	Spatially Confined â€œEdgeâ€toâ€Edgeâ€•Strategy for Achieving Compact Na⁺/K⁺ Storage: Constructing Heteroâ€Ni/Ni₃S₂ in Densified Carbons. Advanced Functional Materials, 2022, 32, .	7.8	23
75	Atomically dispersed Ni anchored on polymer-derived mesh-like N-doped carbon nanofibers as an efficient CO2 electrocatalytic reduction catalyst. Nano Research, 2022, 15, 3959-3963.	5.8	18
76	Flame normalizing-induced robust and oriented metallic layer for stable Zn anode. Chemical Engineering Journal, 2022, 437, 135246.	6.6	18
77	Selfâ€Integrated Porous Leafâ€like CuO Nanoplate Arrayâ€Based Anodes for Highâ€Performance Lithiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 2774-2780.	1.7	17
78	Thermally stable gold/alumina aerogel catalysts prepared by a simultaneous synthesis process for solvent-free aerobic benzyl alcohol oxidation. Catalysis Science and Technology, 2014, 4, 2520-2525.	2.1	16
79	Au@Pt Nanotubes within CoZn-Based Metal-Organic Framework for Highly Efficient Semi-hydrogenation of Acetylene. IScience, 2020, 23, 101233.	1.9	12
80	Single-atom site catalysts based on high specific surface area supports. Physical Chemistry Chemical Physics, 2022, 24, 17417-17438.	1.3	11
81	Gold tubes membrane with novel morphology replicated from ZnO template. Journal of Solid State Chemistry, 2005, 178, 1765-1772.	1.4	10
82	Carbonized Chicken Eggshell Membranes with 3D Architectures as High-Performance Electrode Materials for Supercapacitors (Adv. Energy Mater. 4/2012). Advanced Energy Materials, 2012, 2, 430-430.	10.2	10
83	Elemental Sulfur Nanoparticles Chemically Boost the Sodium Storage Performance of MoS₂/rGO Anodes. Batteries and Supercaps, 2018, 1, 184-191.	2.4	10
84	Tremella-like Mo and N Codoped Graphitic Nanosheets by In Situ Carbonization of Phthalocyanine for Potassium-Ion Battery. ACS Applied Materials & Interfaces, 2021, 13, 30583-30593.	4.0	10
85	Titanium Oxynitride Interlayer to Influence Oxygen Reduction Reaction Activity and Corrosion Stability of Pt and Ptâ€“Ni Alloy. ChemSusChem, 2015, 8, 361-376.	3.6	9
86	Space-confined construction of nitrogen-rich cobalt porphyrin-derived nanoparticulates anchored on activated carbon for high-current lithium thionyl chloride battery. Electrochimica Acta, 2020, 353, 136543.	2.6	9
87	Xâ€Ray Spectromicroscopy Investigation of Heterogeneous Sodiation in Hard Carbon Nanosheets with Vertically Oriented (002) Planes. Small, 2021, 17, e2102109.	5.2	8
88	Strain-induced electrostatic enhancements of BiFeO₃nanowire loops. Physical Chemistry Chemical Physics, 2016, 18, 22772-22777.	1.3	7
89	InnenrÃ¼cktitelbild: Isolated Single Iron Atoms Anchored on Nâ€Doped Porous Carbon as an Efficient Electrocatalyst for the Oxygen Reduction Reaction (Angew. Chem. 24/2017). Angewandte Chemie, 2017, 129, 7107-7107.	1.6	6
90	Enhanced Nucleation of LiCl during Lithium Battery Discharging with Carbon Nanotubes Supported Nitrogen-Rich Manganese Phthalocyanine Catalysts. Journal of the Electrochemical Society, 2020, 167, 040506.	1.3	4

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91	Enhanced Stable and High Voltage of Li/SOCl₂ Battery Catalyzed by FePc Particulates Fixed on Activated Carbon Substrates. Journal of the Electrochemical Society, 2021, 168, 100528.	1.3	4
92	1T MoS₂ growth from exfoliated MoS₂ nucleation as high rate anode for sodium storage. Nanotechnology, 2022, 33, 025602.	1.3	3
93	Defective Lithium Storage Boosts High Rate and Longâ€Life Span of Carbon Fibers. ChemistrySelect, 2019, 4, 5768-5775.	0.7	2
94	Oxidation Catalysis by Nanoscale Gold, Silver, and Copper. , 0, , 333-364.		1
95	Thermal annealingâ€enhanced bioelectrocatalysis in membraneâ€less glucose/O2 biofuel cell basedâ€on hydrophilic carbon fibresâ€. ChemElectroChem, 0, , .	1.7	1
96	Walnut-like MoO2 with interconnected skeleton and opened muti-channel for fast sodium storage. Nanotechnology, 2020, 31, 475405.	1.3	1
97	Localized anisotropic stress in the sodiation of antimony anode. Nano Energy, 2022, 98, 107349.	8.2	1
98	Carbonized Nanocellulose Sustainably Boosts the Performance of Activated Carbon in Ionic Liquid Supercapacitors. ECS Meeting Abstracts, 2016, , .	0.0	0
99	Square-Pyramidal Fe-N4 with Defect-Modulated O-Coordination: Two-Tier Electronic Structure Fine-Tuning for Enhanced Oxygen Reduction. ECS Meeting Abstracts, 2022, MA2022-01, 1536-1536.	0.0	0
100	Microcantilever: An Unique Apparatus to Revolve the Mechanical Stress in Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 106-106.	0.0	0
101	Xâ€Ray Spectromicroscopy Investigation of Heterogeneous Sodiation in Hard Carbon Nanosheets with Vertically Oriented (002) Planes. ECS Meeting Abstracts, 2022, MA2022-01, 658-658.	0.0	0
102	High-Performance Fiber-Shaped Zn Microbattery Based on Dendrite-Free Anode and Ultraconductive Cathode. ECS Meeting Abstracts, 2022, MA2022-01, 454-454.	0.0	0
103	Carbon Nanosheets Derived from Reconstructed Lignin for Potassium and Sodium Storage with Low Voltage Hysteresis. ECS Meeting Abstracts, 2022, MA2022-01, 2480-2480.	0.0	0