Lijun Yang

List of Publications by Year
in descending order

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111	10,712	66234	30848
papers	citations	42 h-index	102 g-index

114	114	114	12182
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Boronâ€Doped Carbon Nanotubes as Metalâ€Free Electrocatalysts for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2011, 50, 7132-7135.	7.2	1,121
2	Can Boron and Nitrogen Co-doping Improve Oxygen Reduction Reaction Activity of Carbon Nanotubes?. Journal of the American Chemical Society, 2013, 135, 1201-1204.	6.6	855
3	Nitrogenâ€Doped Carbon Nanocages as Efficient Metalâ€Free Electrocatalysts for Oxygen Reduction Reaction. Advanced Materials, 2012, 24, 5593-5597.	11.1	693
4	Hydrophilic Hierarchical Nitrogenâ€Doped Carbon Nanocages for Ultrahigh Supercapacitive Performance. Advanced Materials, 2015, 27, 3541-3545.	11.1	680
5	Carbonâ€Based Metalâ€Free ORR Electrocatalysts for Fuel Cells: Past, Present, and Future. Advanced Materials, 2019, 31, e1804799.	11.1	649
6	Significant Contribution of Intrinsic Carbon Defects to Oxygen Reduction Activity. ACS Catalysis, 2015, 5, 6707-6712.	5.5	519
7	Carbon Nanocages as Supercapacitor Electrode Materials. Advanced Materials, 2012, 24, 347-352.	11.1	508
8	Porous 3D Fewâ€Layer Grapheneâ€like Carbon for Ultrahighâ€Power Supercapacitors with Wellâ€Defined Structureâ€“Performance Relationship. Advanced Materials, 2017, 29, 1604569.	11.1	358
9	Single Cobalt Atom and N Codoped Carbon Nanofibers as Highly Durable Electrocatalyst for Oxygen Reduction Reaction. ACS Catalysis, 2017, 7, 6864-6871.	5.5	256
10	Compressing Carbon Nanocages by Capillarity for Optimizing Porous Structures toward Ultrahighâ€Volumetricâ€Performance Supercapacitors. Advanced Materials, 2017, 29, 1700470.	11.1	243
11	Hierarchical carbon nanocages confining high-loading sulfur for high-rate lithiumâ€“sulfur batteries. Nano Energy, 2015, 12, 657-665.	8.2	231
12	Engineering Lower Coordination Atoms onto NiO/Co₃O₄ Heterointerfaces for Boosting Oxygen Evolution Reactions. ACS Catalysis, 2020, 10, 12376-12384.	5.5	223
13	The simplest construction of single-site catalysts by the synergism of micropore trapping and nitrogen anchoring. Nature Communications, 2019, 10, 1657.	5.8	220
14	Promotion Effects of Nitrogen Doping into Carbon Nanotubes on Supported Iron Fischerâ€“Tropsch Catalysts for Lower Olefins. ACS Catalysis, 2014, 4, 613-621.	5.5	218
15	Mesostructured NiO/Ni composites for high-performance electrochemical energy storage. Energy and Environmental Science, 2016, 9, 2053-2060.	15.6	212
16	From Carbon-Based Nanotubes to Nanocages for Advanced Energy Conversion and Storage. Accounts of Chemical Research, 2017, 50, 435-444.	7.6	196
17	Co nanoparticle embedded in atomically-dispersed Co-N-C nanofibers for oxygen reduction with high activity and remarkable durability. Nano Energy, 2018, 52, 485-493.	8.2	188
18	Alloyed Coâ€“Mo Nitride as High-Performance Electrocatalyst for Oxygen Reduction in Acidic Medium. ACS Catalysis, 2015, 5, 1857-1862.	5.5	172

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19	Activity, Performance, and Durability for the Reduction of Oxygen in PEM Fuel Cells, of Fe/N/C Electrocatalysts Obtained from the Pyrolysis of Metal-Organic-Framework and Iron Porphyrin Precursors. Electrochimica Acta, 2015, 159, 184-197.	2.6	129
20	Is the rapid initial performance loss of Fe/N/C non precious metal catalysts due to micropore flooding?. Energy and Environmental Science, 2017, 10, 296-305.	15.6	127
21	Efficient synergism of electrocatalysis and physical confinement leading to durable high-power lithium-sulfur batteries. Nano Energy, 2019, 57, 34-40.	8.2	104
22	Identifying the Active Site of N-Doped Graphene for Oxygen Reduction by Selective Chemical Modification. ACS Energy Letters, 2018, 3, 986-991.	8.8	102
23	Composition-Graded Cuâ€“Pd Nanospheres with Ir-Doped Surfaces on N-Doped Porous Graphene for Highly Efficient Ethanol Electro-Oxidation in Alkaline Media. ACS Catalysis, 2020, 10, 1171-1184.	5.5	98
24	Effect of oxygen adsorbability on the control of Li2O2 growth in Li-O2 batteries: Implications for cathode catalyst design. Nano Energy, 2017, 36, 68-75.	8.2	93
25	Encapsulation of Iron Nitride by Feâ€“Nâ€“C Shell Enabling Highly Efficient Electroreduction of CO₂ to CO. ACS Energy Letters, 2018, 3, 1205-1211.	8.8	84
26	Carbonâ€Based Nanocages: A New Platform for Advanced Energy Storage and Conversion. Advanced Materials, 2020, 32, e1904177.	11.1	84
27	An active and robust Si-Fe/N/C catalyst derived from waste reed for oxygen reduction. Applied Catalysis B: Environmental, 2018, 237, 85-93.	10.8	78
28	Sub-nanometer-scale fine regulation of interlayer distance in Niâ€“Co layered double hydroxides leading to high-rate supercapacitors. Nano Energy, 2020, 76, 105026.	8.2	77
29	Cobalt/zinc dual-sites coordinated with nitrogen in nanofibers enabling efficient and durable oxygen reduction reaction in acidic fuel cells. Journal of Materials Chemistry A, 2020, 8, 3686-3691.	5.2	76
30	Hierarchical carbon nanocages as high-rate anodes for Li- and Na-ion batteries. Nano Research, 2015, 8, 3535-3543.	5.8	71
31	Hierarchical sulfur and nitrogen co-doped carbon nanocages as efficient bifunctional oxygen electrocatalysts for rechargeable Zn-air battery. Journal of Energy Chemistry, 2019, 34, 64-71.	7.1	69
32	Growth and Characterization of Ternary AlGaN Alloy Nanocones across the Entire Composition Range. ACS Nano, 2011, 5, 1291-1296.	7.3	60
33	Sulfur and Nitrogen Codoped Carbon Tubes as Bifunctional Metalâ€Free Electrocatalysts for Oxygen Reduction and Hydrogen Evolution in Acidic Media. Chemistry - A European Journal, 2016, 22, 10326-10329.	1.7	59
34	Achieving Ultrahigh Volumetric Energy Storage by Compressing Nitrogen and Sulfur Dualâ€Doped Carbon Nanocages via Capillarity. Advanced Materials, 2020, 32, e2004632.	11.1	56
35	Axial ligand effect on the stability of Feâ€“Nâ€“C electrocatalysts for acidic oxygen reduction reaction. Nano Energy, 2020, 78, 105128.	8.2	54
36	In situ construction of porous hierarchical (Ni3-xFex)FeN/Ni heterojunctions toward efficient electrocatalytic oxygen evolution. Nano Research, 2020, 13, 328-334.	5.8	52

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37	Is iron nitride or carbide highly active for oxygen reduction reaction in acidic medium?. Catalysis Science and Technology, 2017, 7, 51-55.	2.1	50
38	Mesostructured carbon-based nanocages: an advanced platform for energy chemistry. Science China Chemistry, 2020, 63, 665-681.	4.2	48
39	Revealing the importance of kinetics in N-coordinated dual-metal sites catalyzed oxygen reduction reaction. Journal of Catalysis, 2021, 396, 215-223.	3.1	47
40	Advanced Ni-Nx-C single-site catalysts for CO2 electroreduction to CO based on hierarchical carbon nanocages and S-doping. Nano Research, 2020, 13, 2777-2783.	5.8	46
41	Carbonâ€Based Nanocages: Carbonâ€Based Nanocages: A New Platform for Advanced Energy Storage and Conversion (Adv. Mater. 27/2020). Advanced Materials, 2020, 32, 2070206.	11.1	46
42	Electrocatalysis of S-doped carbon with weak polysulfide adsorption enhances lithiumâ€“sulfur battery performance. Chemical Communications, 2019, 55, 6365-6368.	2.2	45
43	Efficient Ternary Synergism of Platinum/Tin Oxide/Nitrogen-Doped Carbon Leading to High-Performance Ethanol Oxidation. ACS Catalysis, 2018, 8, 8477-8483.	5.5	44
44	A mini review on carbon-based metal-free electrocatalysts for oxygen reduction reaction. Chinese Journal of Catalysis, 2013, 34, 1986-1991.	6.9	42
45	Construction of hierarchical FeNi3@(Fe,Ni)S2 core-shell heterojunctions for advanced oxygen evolution. Nano Research, 2021, 14, 4220-4226.	5.8	42
46	The Influence of the Epitaxial Growth Process Parameters on Layer Characteristics and Device Performance in Si-Passivated Ge pMOSFETs. Journal of the Electrochemical Society, 2009, 156, H979.	1.3	41
47	Stabilizing the active phase of iron-based Fischerâ€“Tropsch catalysts for lower olefins: mechanism and strategy. Chemical Science, 2019, 10, 6083-6090.	3.7	41
48	Sulfur and Nitrogen Codoped Carbon Tubes as Bifunctional Metal-Free Electrocatalysts for Oxygen Reduction and Hydrogen Evolution in Acidic Media. Chemistry - A European Journal, 2016, 22, 10261-10261.	1.7	40
49	Tungstenâ€Doped CoP Nanoneedle Arrays Grown on Carbon Cloth as Efficient Bifunctional Electrocatalysts for Overall Water Splitting. ChemElectroChem, 2019, 6, 5229-5236.	1.7	36
50	High reaction activity of nitrogen-doped carbon nanotubes toward the electrooxidation of nitric oxide. Chemical Communications, 2011, 47, 7137.	2.2	35
51	Tailoring the nano heterointerface of hematite/magnetite on hierarchical nitrogen-doped carbon nanocages for superb oxygen reduction. Journal of Materials Chemistry A, 2018, 6, 21313-21319.	5.2	34
52	Manganese oxide-induced strategy to high-performance iron/nitrogen/carbon electrocatalysts with highly exposed active sites. Nanoscale, 2016, 8, 8480-8485.	2.8	33
53	A general strategy to construct yolk-shelled metal oxides inside carbon nanocages for high-stable lithium-ion battery anodes. Nano Energy, 2020, 68, 104368.	8.2	32
54	Identifying Ironâ€“Nitrogen/Carbon Active Structures for Oxygen Reduction Reaction under the Effect of Electrode Potential. Journal of Physical Chemistry Letters, 2020, 11, 2896-2901.	2.1	32

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55	In situ construction of Î³-MoC/VN heterostructured electrocatalysts with strong electron coupling for highly efficient hydrogen evolution reaction. Chemical Engineering Journal, 2021, 416, 129130.	6.6	31
56	Tuning metal catalysts via nitrogen-doped nanocarbons for energy chemistry: From metal nanoparticles to single metal sites. EnergyChem, 2021, 3, 100066.	10.1	31
57	Alcohol-Tolerant Platinum Electrocatalyst for Oxygen Reduction by Encapsulating Platinum Nanoparticles inside Nitrogen-Doped Carbon Nanocages. ACS Applied Materials & Interfaces, 2016, 8, 16664-16669.	4.0	28
58	Boosting faradaic efficiency of CO2 electroreduction to CO for Feâ^'Nâ^'C single-site catalysts by stabilizing Fe3+ sites via F-doping. Nano Research, 2022, 15, 7896-7902.	5.8	27
59	Convenient immobilization of Ptâ€“Sn bimetallic catalysts on nitrogen-doped carbon nanotubes for direct alcohol electrocatalytic oxidation. Nanotechnology, 2011, 22, 395401.	1.3	26
60	Superionic conductor-mediated growth of ternary ZnCdS nanorods over a wide composition range. Nano Research, 2015, 8, 584-591.	5.8	26
61	Promoting Effects of Au Submonolayer Shells on Structure-Designed Cuâ€“Pd/Ir Nanospheres: Greatly Enhanced Activity and Durability for Alkaline Ethanol Electro-Oxidation. ACS Applied Materials & Interfaces, 2020, 12, 25961-25971.	4.0	26
62	Creation of Geâ€“Nxâ€“Cy Configures in Carbon Nanotubes: Origin of Enhanced Electrocatalytic Performance for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2016, 8, 10383-10391.	4.0	23
63	Design of Thiazolo[5,4-‹i›d‹/i›]thiazole-Bridged Ionic Covalent Organic Polymer for Highly Selective Oxygen Reduction to H‹sub›2‹/sub›O‹sub›2‹/sub›. Chemistry of Materials, 2020, 32, 8553-8560.	3.2	23
64	Thermally Conductive AlNâ€Network Shield for Separators to Achieve Dendriteâ€Free Plating and Fast Liâ€Ion Transport toward Durable and Highâ€Rate Lithiumâ€Metal Anodes. Advanced Science, 2022, 9, e2200411.	5.6	23
65	Regulation of oxygen vacancy within oxide pyrochlores by F-doping to boost oxygen-evolution activity. Journal of Power Sources, 2021, 502, 229903.	4.0	22
66	Atomistic simulation of the 60â^˜ dislocation mobility in silicon crystal. Superlattices and Microstructures, 2006, 40, 113-118.	1.4	20
67	Structural and Compositional Regulation of Nitrogen-Doped Carbon Nanotubes with Nitrogen-Containing Aromatic Precursors. Journal of Physical Chemistry C, 2013, 117, 7811-7817.	1.5	18
68	Boosting oxygen reduction activity of spinel CoFe 2 O 4 by strong interaction with hierarchical nitrogen-doped carbon nanocages. Science Bulletin, 2017, 62, 1365-1372.	4.3	18
69	First-principles study of catalytic activity of W-doped cobalt phosphide toward the hydrogen evolution reaction. Chinese Journal of Catalysis, 2020, 41, 1698-1705.	6.9	18
70	Advanced non-precious electrocatalyst of the mixed valence CoO x nanocrystals supported on N-doped carbon nanocages for oxygen reduction. Science China Chemistry, 2015, 58, 180-186.	4.2	17
71	Theoretical Exploration of the Thermodynamic Process Competition between NRR and HER on Transition-Metal-Doped CoP (101) Facets. Journal of Physical Chemistry C, 2021, 125, 17051-17057.	1.5	15
72	Spinel Nickel Cobaltite Mesostructures Assembled from Ultrathin Nanosheets for High-Performance Electrochemical Energy Storage. ACS Applied Energy Materials, 2018, 1, 684-691.	2.5	14

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73	Breaking the scaling relationship of ORR on carbon-based single-atom catalysts through building a local collaborative structure. Catalysis Science and Technology, 2021, 11, 7764-7772.	2.1	14
74	The Influence of the Epitaxial Growth Process Parameters on Layer Characteristics and Device Performance in Si-passivated Ge pMOSFETs. ECS Transactions, 2009, 19, 183-194.	0.3	13
75	Doping sp² carbon to boost the activity for oxygen reduction in an acidic medium: a theoretical exploration. RSC Advances, 2016, 6, 48498-48503.	1.7	13
76	An Inâ€Depth Theoretical Exploration of Influences of Nonâ€Metalâ€Elements Doping on the ORR Performance of Coâ^'gN₄. ChemCatChem, 2021, 13, 2303-2310.	1.8	12
77	Vertically Grown Fewâ€Layer MoS₂ Nanosheets on Hierarchical Carbon Nanocages for Pseudocapacitive Lithium Storage with Ultrahighâ€Rate Capability and Longâ€Term Recyclability. Chemistry - A European Journal, 2019, 25, 3843-3848.	1.7	11
78	Carbon Nanocages: Nitrogenâ€Doped Carbon Nanocages as Efficient Metalâ€Free Electrocatalysts for Oxygen Reduction Reaction (Adv. Mater. 41/2012). Advanced Materials, 2012, 24, 5646-5646.	11.1	10
79	Enlarging ion-transfer micropore channels of hierarchical carbon nanocages for ultrahigh energy and power densities. Science China Materials, 2021, 64, 2173-2181.	3.5	10
80	Free-Standing Monolithic Sulfur Cathode of Reduced Graphene Oxide Wrapped Sulfur-Filled Carbon Nanocages with High Areal Capacity. Acta Chimica Sinica, 2018, 76, 627.	0.5	10
81	The Compositeâ€Template Method to Construct Hierarchical Carbon Nanocages for Supercapacitors with Ultrahigh Energy and Power Densities. Small, 2022, 18, e2107082.	5.2	10
82	Effective enhancement of electrochemical energy storage of cobalt-based nanocrystals by hybridization with nitrogen-doped carbon nanocages. Science China Materials, 2019, 62, 1393-1402.	3.5	8
83	Construction of Cobalt/Nitrogen/Carbon Electrocatalysts with Highly Exposed Active Sites for Oxygen Reduction Reaction. Acta Chimica Sinica, 2019, 77, 60.	0.5	8
84	Confinement and Electrocatalysis of Cerium Fluoride Nanocages to Boost the Lithiumâ€“Sulfur Batteries Performance. Small Structures, 2022, 3, .	6.9	8
85	Hierarchical LiNixCoyO2 mesostructures as high-performance cathode materials for lithium ion batteries. Journal of Power Sources, 2016, 326, 279-284.	4.0	7
86	Defect-induced deposition of manganese oxides on hierarchical carbon nanocages for high-performance lithium-oxygen batteries. Nano Research, 2022, 15, 4132-4136.	5.8	7
87	Ge-H empirical potential and simulation of Si epitaxy on Ge(100) by chemical vapor deposition fromSiH4. Physical Review B, 2009, 79, .	1.1	6
88	Supercapacitor Nanostructures: Carbon Nanocages as Supercapacitor Electrode Materials (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1	11.1	6
89	Multi-scale simulation of lithium diffusion in the presence of a 30Â° partial dislocation and stacking fault in Si. Journal of Applied Physics, 2014, 115, 043532.	1.1	6
90	Carbon Nanocages Supported LiFePO₄Nanoparticles as High-Performance Cathode for Lithium Ion Batteries. Acta Chimica Sinica, 2014, 72, 653.	0.5	6

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91	Multi-scale simulation of the stability and diffusion of lithium in the presence of a 90Â° partial dislocation in silicon. Journal of Applied Physics, 2014, 116, 213504.	1.1	5
92	Nonmacrocyclic Iron(II) Soluble Redox Mediators Leading to High-Rate Liâ€“O ₂ Battery. CCS Chemistry, 2021, 3, 1350-1358.	4.6	5
93	Synthesis and Electrocatalytic Oxygen Reduction Performance of the Sulfur-Doped Carbon Nanocages. Acta Chimica Sinica, 2014, 72, 1070.	0.5	5
94	Influence of Preparation Methods on Catalytic Performance of Fe/NCNTs Fischer-Tropsch Catalysts. Acta Chimica Sinica, 2014, 72, 1017.	0.5	5
95	Surface-diffusion enhanced Ga incorporation in ZnO nanowires by oxygen vacancies. Applied Surface Science, 2016, 361, 221-225.	3.1	4
96	Communicationâ€”An Organic Solvent System-Assisted Electrodeposition of Highly Active Pt for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2018, 165, J3392-J3394.	1.3	4
97	Atomic mechanism of the distribution and diffusion of lithium in a cracked Si anode. Scripta Materialia, 2021, 197, 113807.	2.6	4
98	Ruthenium Nanoparticles Supported on Hierarchical Nitrogen-Doped Carbon Nanocages for Selective Hydrogenation of Acetophenone in Mild Conditions. Acta Chimica Sinica, 2017, 75, 686.	0.5	4
99	Hierarchical Nitrogen-doped Carbon Nanocages as High-rate Long-life Cathode Material for Rechargeable Magnesium Batteries. Acta Chimica Sinica, 2020, 78, 444.	0.5	4
100	Hierarchical Carbon Nanocages as the High-performance Cathode for Li-O2 Battery Promoted by Soluble Redox Mediator. Acta Chimica Sinica, 2020, 78, 572.	0.5	4
101	DIFFUSION OF LITHIUM IN SILICON AFFECTED BY 60Â° MISFIT-DISLOCATION. Modern Physics Letters B, 2013, 27, 1350168.	1.0	3
102	Phase-equilibrium-dominated vapor-liquid-solid mechanism: further evidence. Science China Materials, 2016, 59, 20-27.	3.5	3
103	Morphology and composition evolution of one-dimensional InxAl1â^'xN nanostructures induced by the vapour pressure ratio. CrystEngComm, 2016, 18, 213-217.	1.3	3
104	Hierarchical Carbon Nanocages as Efficient Catalysts for Oxidative Coupling of Benzylamine to N-Benzylidene Benzylamine. Acta Chimica Sinica, 2021, 79, 539.	0.5	3
105	Alloyed Ptâ€“Ru Nanoparticles Immobilized on Mesostructured Nitrogen-Doped Carbon Nanocages for Efficient Methanol Electrooxidation. Acta Chimica Sinica, 2016, 74, 587.	0.5	3
106	Carbon Nanocages//Tungsten Trioxide Nanorods Supercapacitors with in situ Polymerized Gel Electrolytes. Acta Chimica Sinica, 2021, 79, 755.	0.5	2
107	Silicon acid batteries enabled by a copper catalysed electrochemo-mechanical process. Energy and Environmental Science, 2021, 14, 6672-6677.	15.6	2
108	Advanced carbon-based nanotubes/nanocages for energy conversion and storage: synthesis, performance and mechanism. , 2013, , .		1

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109	Constructing monolithic sulfur cathodes with multifunctional N,P dual-doped carbon nanocages to achieve high-areal-capacity lithium-sulfur batteries. FlatChem, 2021, 28, 100253.	2.8	1
110	The influence of crack on the Si anode performance in Na- and Mg-ion batteries: An atomic multiscale study. Computational Materials Science, 2022, 205, 111237.	1.4	1
111	Predicting the growth of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math> nanowires by phase equilibrium-dominated vapor-liquid-solid mechanism. Physical Review Materials, 20	0.9	0