Zhong-jie Jiang

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Catalytic Properties of Silver Nanoparticles Supported on Silica Spheres. Journal of Physical Chemistry B, 2005, 109, 1730-1735.	1.2	642
2	Seed-Mediated Growth Technique for the Preparation of a Silver Nanoshell on a Silica Sphere. Journal of Physical Chemistry B, 2003, 107, 12411-12415.	1.2	195
3	Phase evolution of an alpha MnO 2 -based electrode for pseudo-capacitors probed by in operando Raman spectroscopy. Nano Energy, 2014, 9, 161-167.	8.2	195
4	Woodâ€Derived Hierarchically Porous Electrodes for Highâ€Performance Allâ€Solidâ€State Supercapacitors. Advanced Functional Materials, 2018, 28, 1806207.	7.8	170
5	A high-performance anode for lithium ion batteries: Fe ₃ O ₄ microspheres encapsulated in hollow graphene shells. Journal of Materials Chemistry A, 2015, 3, 11847-11856.	5.2	159
6	Woodâ€Derived Materials for Advanced Electrochemical Energy Storage Devices. Advanced Functional Materials, 2019, 29, 1902255.	7.8	157
7	Cobalt oxide-coated N- and B-doped graphene hollow spheres as bifunctional electrocatalysts for oxygen reduction and oxygen evolution reactions. Journal of Materials Chemistry A, 2016, 4, 5877-5889.	5.2	155
8	A DNAâ€Threaded ZIFâ€8 Membrane with High Proton Conductivity and Low Methanol Permeability. Advanced Materials, 2018, 30, 1705155.	11.1	142
9	FeCo Alloy Nanoparticles Coated by an Ultrathin N-Doped Carbon Layer and Encapsulated in Carbon Nanotubes as a Highly Efficient Bifunctional Air Electrode for Rechargeable Zn-Air Batteries. ACS Sustainable Chemistry and Engineering, 2019, 7, 8530-8541.	3.2	140
10	The role of holes in improving the performance of nitrogen-doped holey graphene as an active electrode material for supercapacitor and oxygen reduction reaction. Journal of Power Sources, 2014, 251, 55-65.	4.0	123
11	Amine-functionalized holey graphene as a highly active metal-free catalyst for the oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 441-450.	5.2	119
12	Role of Magic-Sized Clusters in the Synthesis of CdSe Nanorods. ACS Nano, 2010, 4, 1561-1572.	7.3	89
13	High catalytic performance of nickel foam supported Co2P-Ni2P for overall water splitting and its structural evolutions during hydrogen/oxygen evolution reactions in alkaline solutions. Journal of Catalysis, 2019, 373, 81-92.	3.1	86
14	High performance of a free-standing sulfonic acid functionalized holey graphene oxide paper as a proton conducting polymer electrolyte for air-breathing direct methanol fuel cells. Journal of Materials Chemistry A, 2014, 2, 6494.	5.2	83
15	Hydrothermal Synthesis of Boron and Nitrogen Codoped Hollow Graphene Microspheres with Enhanced Electrocatalytic Activity for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 19398-19407.	4.0	83
16	Interaction Induced High Catalytic Activities of CoO Nanoparticles Grown on Nitrogen-Doped Hollow Graphene Microspheres for Oxygen Reduction and Evolution Reactions. Scientific Reports, 2016, 6, 27081.	1.6	76
17	General synthesis of MFe ₂ O ₄ /carbon (M = Zn, Mn, Co, Ni) spindles from mixed metal organic frameworks as high performance anodes for lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 23641-23650.	5.2	73
18	Hot and Relaxed Electron Transfer from the CdSe Core and Core/Shell Nanorods. Journal of Physical Chemistry C, 2011, 115, 4594-4602.	1.5	66

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19	Phase transition–induced electrochemical performance enhancement of hierarchical CoCO3/CoO nanostructure for pseudocapacitor electrode. Nano Energy, 2015, 11, 736-745.	8.2	65
20	Cation exchange synthesis of Ni _x Co _(3â^'x) O ₄ (<i>x</i> = 1.25) nanoparticles on aminated carbon nanotubes with high catalytic bifunctionality for the oxygen reduction/evolution reaction toward efficient Zn–air batteries. Journal of Materials Chemistry A, 2018, 6, 9517-9527.	5.2	65
21	Adsorption of arsenic by activated charcoal coated zirconium-manganese nanocomposite: Performance and mechanism. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 575, 318-328.	2.3	64
22	Nitrogen-rich graphene hollow microspheres as anode materials for sodium-ion batteries with super-high cycling and rate performance. Carbon, 2018, 130, 574-583.	5.4	63
23	Exploration of the Active Center Structure of Nitrogen-Doped Graphene for Control over the Growth of Co ₃ O ₄ for a High-Performance Supercapacitor. ACS Applied Energy Materials, 2018, 1, 143-153.	2.5	63
24	Fabrication of Nitrogen-Doped Holey Graphene Hollow Microspheres and Their Use as an Active Electrode Material for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 19082-19091.	4.0	62
25	Effects of carbon content on the electrochemical performance of LiFePO4/C core/shell nanocomposites fabricated using FePO4/polyaniline as an iron source. Journal of Alloys and Compounds, 2012, 537, 308-317.	2.8	59
26	Self-Templated Synthesis of Hierarchically Porous N-Doped Carbon Derived from Biomass for Supercapacitors. ACS Sustainable Chemistry and Engineering, 2018, 6, 13932-13939.	3.2	58
27	Controlled thermal oxidation derived Mn3O4 encapsulated in nitrogen doped carbon as an anode for lithium/sodium ion batteries with enhanced performance. Chemical Engineering Journal, 2021, 406, 126894.	6.6	57
28	Nitrogen-doped Graphene Hollow Microspheres as an Efficient Electrode Material for Lithium Ion Batteries. Electrochimica Acta, 2014, 146, 455-463.	2.6	56
29	Sulfonated Holey Graphene Oxide (SHGO) Filled Sulfonated Poly(ether ether ketone) Membrane: The Role of Holes in the SHGO in Improving Its Performance as Proton Exchange Membrane for Direct Methanol Fuel Cells. ACS Applied Materials & Interfaces, 2017, 9, 20046-20056.	4.0	56
30	Morphology and crystal phase evolution induced performance enhancement of MnO ₂ grown on reduced graphene oxide for lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 2643-2650.	5.2	54
31	Plasma techniques for the fabrication of polymer electrolyte membranes for fuel cells. Journal of Membrane Science, 2014, 456, 85-106.	4.1	51
32	Synthesis of reduced graphene oxide-montmorillonite nanocomposite and its application in hexavalent chromium removal from aqueous solutions. RSC Advances, 2015, 5, 47408-47417.	1.7	49
33	Tailoring the thickness of MoSe2 layer of the hierarchical double-shelled N-doped carbon@MoSe2 hollow nanoboxes for efficient and stable hydrogen evolution reaction. Journal of Catalysis, 2020, 381, 363-373.	3.1	49
34	Electronic coupling induced high performance of N, S-codoped graphene supported CoS2 nanoparticles for catalytic reduction and evolution of oxygen. Journal of Power Sources, 2018, 389, 178-187.	4.0	46
35	Amine group induced high activity of highly torn amine functionalized nitrogen-doped graphene as the metal-free catalyst for hydrogen evolution reaction. Carbon, 2018, 138, 169-178.	5.4	46
36	Synthesis of monodispersed Pt nanoparticles on plasma processed carbon nanotubes for methanol electro-oxidation reaction. Journal of Materials Chemistry, 2009, 19, 6720.	6.7	45

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37	Effects of Inhomogeneous Shell Thickness in the Charge Transfer Dynamics of ZnTe/CdSe Nanocrystals. Journal of Physical Chemistry C, 2012, 116, 12958-12968.	1.5	45
38	A novel NiCo2O4@GO hybrid composite with core-shell structure as high-performance anodes for lithium-ion batteries. Journal of Alloys and Compounds, 2018, 731, 1095-1102.	2.8	45
39	Static and Dynamic Emission Quenching in Core/Shell Nanorod Quantum Dots with Hole Acceptors. Journal of Physical Chemistry C, 2009, 113, 19161-19171.	1.5	43
40	Resonance Raman spectra of wurtzite and zincblende CdSe nanocrystals. Chemical Physics, 2013, 422, 272-276.	0.9	43
41	Shell thickness controlled core–shell Fe ₃ O ₄ @CoO nanocrystals as efficient bifunctional catalysts for the oxygen reduction and evolution reactions. Chemical Communications, 2019, 55, 525-528.	2.2	42
42	Sulfonic acid functionalized graphene oxide paper sandwiched in sulfonated poly(ether ether ketone): A proton exchange membrane with high performance for semi-passive direct methanol fuel cells. International Journal of Hydrogen Energy, 2017, 42, 16731-16740.	3.8	40
43	Facile Assembly of Co-Ni Layered Double Hydroxide Nanoflakes on Carbon Nitride Coated N-doped Graphene Hollow Spheres with High Electrochemical Capacitive Performance. Electrochimica Acta, 2017, 253, 21-30.	2.6	39
44	Reduction of the oxygen reduction reaction overpotential of nitrogen-doped graphene by designing it to a microspherical hollow shape. Journal of Materials Chemistry A, 2014, 2, 14071.	5.2	38
45	Core@shell structured Co–CoO@NC nanoparticles supported on nitrogen doped carbon with high catalytic activity for oxygen reduction reaction. RSC Advances, 2018, 8, 14462-14472.	1.7	38
46	Facile synthesis of Co3O4 with different morphologies loaded on amine modified graphene and their application in supercapacitors. Journal of Alloys and Compounds, 2016, 685, 507-517.	2.8	37
47	Preparation of Proton Exchange Membranes by a Plasma Polymerization Method and Application in Direct Methanol Fuel Cells (DMFCs). Plasma Processes and Polymers, 2010, 7, 382-389.	1.6	33
48	NiFe nanoparticles supported on N-doped graphene hollow spheres entangled with self-grown N-doped carbon nanotubes for liquid electrolyte/flexible all-solid-state rechargeable zinc–air batteries. Journal of Materials Chemistry A, 2022, 10, 12616-12631.	5.2	33
49	Zwitterion threaded metal–organic framework membranes for direct methanol fuel cells. Journal of Materials Chemistry A, 2018, 6, 19547-19554.	5.2	32
50	Spindle-like MOFs-derived porous carbon filled sulfonated poly (ether ether ketone): A high performance proton exchange membrane for direct methanol fuel cells. Journal of Membrane Science, 2021, 636, 119585.	4.1	32
51	Hierarchical porous ZnMn2O4 microspheres architectured with sub-nanoparticles as a high performance anode for lithium ion batteries. Journal of Alloys and Compounds, 2016, 679, 231-238.	2.8	30
52	Stranski–Krastanov Shell Growth in ZnTe/CdSe Core/Shell Nanocrystals. Journal of Physical Chemistry C, 2013, 117, 6826-6834.	1.5	29
53	Amino functionalized carbon nanotubes supported CoNi@CoO–NiO core/shell nanoparticles as highly efficient bifunctional catalyst for rechargeable Zn-air batteries. International Journal of Hydrogen Energy, 2021, 46, 374-388	3.8	28
54	A NiFe/NiSe ₂ heterojunction bifunctional catalyst rich in oxygen vacancies introduced using dielectric barrier discharge plasma for liquid and flexible all-solid-state rechargeable Zn–air batteries. Journal of Materials Chemistry A, 2022, 10, 8739-8750.	5.2	28

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55	Sulfonated holey graphene oxide paper with SPEEK membranes on its both sides: a sandwiched membrane with high performance for semi-passive direct methanol fuel cells. Electrochimica Acta, 2017, 250, 68-76.	2.6	27
56	Fabrication of 3-Dimensional Porous Graphene Materials for Lithium Ion Batteries. Electrochimica Acta, 2014, 146, 437-446.	2.6	26
57	Defect-Rich, Mesoporous Cobalt Sulfide Hexagonal Nanosheets as Superior Sulfur Hosts for High-Rate, Long-Cycle Rechargeable Lithium–Sulfur Batteries. Journal of Physical Chemistry C, 2020, 124, 12259-12268.	1.5	26
58	Optimization and synthesis of plasma polymerized proton exchange membranes for direct methanol fuel cells. Journal of Membrane Science, 2011, 372, 303-313.	4.1	25
59	High performance of yolk-shell structured MnO@nitrogen doped carbon microspheres as lithium ion battery anode materials and their in operando X-ray diffraction study. Electrochimica Acta, 2018, 282, 719-727.	2.6	25
60	High catalytic performance of Pt nanoparticles on plasma treated carbon nanotubes for electrooxidation of ethanol in a basic solution. Applied Surface Science, 2011, 257, 2923-2928.	3.1	24
61	Formation of silver nanoparticles in an acid-catalyzed silica colloidal solution. Applied Surface Science, 2004, 233, 135-140.	3.1	23
62	MOF-derived Co nanoparticles embedded in N,S-codoped carbon layer/MWCNTs for efficient oxygen reduction in alkaline media. Ionics, 2019, 25, 785-796.	1.2	23
63	Accelerated hydrogen evolution reaction in Ni ₃ P/MoP ₂ /MoO ₂ tri-phase composites with rich crystalline interfaces and oxygen vacancies achieved by plasma assisted phosphorization. Journal of Materials Chemistry A, 2021, 9, 25934-25943.	5.2	23
64	Improvements of electrocatalytic activity of PtRu nanoparticles on multi-walled carbon nanotubes by a H2 plasma treatment in methanol and formic acid oxidation. Electrochimica Acta, 2011, 56, 8662-8673.	2.6	21
65	Role of Surface States in the Exciton Dynamics in CdSe Core and Core/Shell Nanorods. Journal of Physical Chemistry C, 2010, 114, 17519-17528.	1.5	20
66	Sulfonic acid-functionalized mesoporous carbon/silica as efficient catalyst for dehydration of fructose into 5-hydroxymethylfurfural. RSC Advances, 2016, 6, 101526-101534.	1.7	20
67	A novel particle-in-nanoplate architecture of iron nickel phosphide intertwined with carbon nanotubes for efficient water oxidation and high-performance sodium-ion batteries. Journal of Alloys and Compounds, 2019, 791, 1220-1230.	2.8	20
68	Hierarchically Porous Co and N odoped Carbon Hollow Structure Derived from PS@ZIFâ€67 as an Electrocatalyst for Oxygen Reduction. ChemistrySelect, 2018, 3, 4831-4837.	0.7	19
69	Atmospheric-Pressure Plasma Jet-Induced Ultrafast Construction of an Ultrathin Nonstoichiometric Nickel Oxide Layer with Mixed Ni ³⁺ /Ni ²⁺ Ions and Rich Oxygen Defects as an Efficient Electrocatalyst for Oxygen Evolution Reaction. ACS Applied Energy Materials, 2021, 4, 5059-5069	2.5	19
70	More active sites exposed few-layer MoSe2 supported on nitrogen-doped carbon as highly efficient and durable electrocatalysts for water splitting. Electrochimica Acta, 2018, 285, 103-110.	2.6	18
71	Electrochemical Studies of Silver Nanoparticles Tethered on Silica Sphere. Chemistry Letters, 2004, 33, 498-499.	0.7	17
72	Naked Au nanoparticles monodispersed onto multifunctional cellulose nanocrystal–graphene hybrid sheets: towards efficient and sustainable heterogeneous catalysts. New Journal of Chemistry, 2018, 42, 2197-2203.	1.4	17

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73	Preparation of proton exchange membranes with high performance by a pulsed plasma enhanced chemical vapor deposition technique (PPECVD). RSC Advances, 2012, 2, 2743.	1.7	16
74	PREPARATION OF HIGHLY SULFONATED ULTRA-THIN PROTON-EXCHANGE POLYMER MEMBRANES FOR PROTON EXCHANGE MEMBRANE FUEL CELLS. Surface Review and Letters, 2009, 16, 297-302.	0.5	15
75	Preparation and characteristics of acrylic acid/styrene composite plasma polymerized membranes. Applied Surface Science, 2010, 256, 6473-6479.	3.1	15
76	Synthesis and optimization of proton exchange membranes by a pulsed plasma enhanced chemical vapor deposition technique. International Journal of Hydrogen Energy, 2012, 37, 11276-11289.	3.8	15
77	Synthesis of Ultrasmall, Homogeneously Distributed Ni ₃ Fe Alloy Nanoparticles on N-Doped Porous Graphene as a Bifunctional Electrocatalyst for Rechargeable Flexible Solid Zinc-Air Batteries. ACS Applied Energy Materials, 2020, 3, 12148-12161.	2.5	15
78	Plus green emission of ZnO nanorods induced by Ce3+ doping and concentration. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 195, 151-155.	2.0	14
79	Surface Charge and Piezoelectric Fields Control Auger Recombination in Semiconductor Nanocrystals. Nano Letters, 2011, 11, 4067-4073.	4.5	14
80	Sulfurization synthesis of a new anode material for Li-ion batteries: understanding the role of sulfurization in lithium ion conversion reactions and promoting lithium storage performance. Journal of Materials Chemistry A, 2019, 7, 21270-21279.	5.2	14
81	Understanding the role of graphene intercalation layers on both sides of sandwich structured graphene@MoS2@porous graphene anode in promoting sodium storage performance and stability. Journal of Alloys and Compounds, 2020, 845, 155336.	2.8	14
82	Co nanoparticles coupling induced high catalytic activity of nitrogen doped carbon towards hydrogen evolution reaction in acidic/alkaline solutions. Electrochimica Acta, 2020, 342, 136076.	2.6	14
83	Carbon nitride decorated nitrogen doped graphene hollow spheres loaded Ni/Co and corresponding oxides nanoparticles as reversible air electrode catalysts for rechargeable zinc-air batteries. Journal of Alloys and Compounds, 2021, 865, 158940.	2.8	14
84	Effects of nitrogen-doping structural changes of spherical hollow graphene on the growth of MoS2+x nanosheets and the enhanced hydrogen evolution reaction. Journal of Alloys and Compounds, 2021, 884, 161073.	2.8	14
85	PREPARATION OF ULTRA-THIN CATION EXCHANGE COMPOSITE MEMBRANES BY A NOVEL PLASMA POLYMERIZATION TECHNIQUE. Surface Review and Letters, 2007, 14, 1165-1168.	0.5	13
86	High catalytic activity of Co ₃ O ₄ nanoparticles encapsulated in a graphene supported carbon matrix for oxygen reduction reaction. RSC Advances, 2016, 6, 50349-50357.	1.7	13
87	Co-polymerization of polysilicic-zirconium with enhanced coagulation properties for water purification. Separation and Purification Technology, 2018, 200, 59-67.	3.9	13
88	Graphene oxide assisted template-free synthesis of nanoscale splode-like NiCo2O4 hollow microsphere with superior lithium storage properties. Journal of Colloid and Interface Science, 2018, 511, 119-127.	5.0	13
89	Origin of the ligand effect in the cobalt catalyzed regioselective hydroboration of 1,3-diene. Organic and Biomolecular Chemistry, 2020, 18, 3747-3753.	1.5	13
90	Porous carbon-coated LiFePO4 nanocrystals prepared by in situ plasma-assisted pyrolysis as superior cathode materials for lithium ion batteries. Ionics, 2020, 26, 2715-2726.	1.2	13

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91	Hierarchical nanoassembly of Ni/MoS2@Ni12P5/ZnP2 achieved by a plasma assisted phosphorization with highly improved electrocatalytic activity for overall water splitting. Electrochimica Acta, 2022, 419, 140392.	2.6	13
92	Fabrication of Silver Nanoshell on Functionalized Silica Sphere through Layer-by-Layer Technique. Chemistry Letters, 2003, 32, 668-669.	0.7	12
93	Insight into the effects of microstructure and nitrogen doping configuration for hollow graphene spheres on oxygen reduction reaction and sodium-ion storage performance. International Journal of Hydrogen Energy, 2020, 45, 16569-16582.	3.8	12
94	The Kirkendall effect-induced formation of FeP@C composites comprising interconnected carbon-coated hollow FeP sub-nanoparticles for efficient alkaline metal storage. Journal of Materials Chemistry A, 2021, 9, 18231-18238.	5.2	12
95	Significantly enhanced electrochemical performance of a ZnCo ₂ O ₄ anode in a carbonate based electrolyte with fluoroethylene carbonate. RSC Advances, 2017, 7, 18491-18499.	1.7	9
96	Predictable spectroscopic properties of type-II ZnTe/CdSe nanocrystals and electron/hole quenching. Physical Chemistry Chemical Physics, 2019, 21, 5824-5833.	1.3	9
97	Improvement of the catalytic activity of PtRu bimetallic nanoparticles by a plasma treatment in their application of the ethanol electrooxidation. Journal of Materials Chemistry, 2011, 21, 5565.	6.7	8
98	In-situ plasma assisted formation of graphitic nanosheet supported N-doped carbon-coated antisite defectless LiFePO4 as a high-performance cathode material for lithium-ion batteries. Journal of Alloys and Compounds, 2019, 806, 864-873.	2.8	8
99	Thickness-dependent Shell Homogeneity of ZnSe/CdSe Core/Shell Nanocrystals and Their Spectroscopic and Electron- and Hole-transfer Dynamics Properties. Journal of Physical Chemistry C, 2020, 124, 12049-12064.	1.5	8
100	Plasmaâ€Polymerized Membranes with High Proton Conductivity for a Micro Semiâ€Passive Direct Methanol Fuel Cell. Plasma Processes and Polymers, 2016, 13, 105-115.	1.6	7
101	Co-filling of ZIFs-derived porous carbon and silica in improvement of sulfonated poly(ether ether) Tj ETQq1 1 C 2022, 543, 231853.	.784314 rgB 4.0	T /Overlock 7
102	Plasma deposition of polymer electrolyte membrane for proton exchange membrane fuel cell (PEMFC) applications. Surface and Coatings Technology, 2010, 205, S231-S235.	2.2	6
103	Phase and Morphology Evolution Induced Lithium Storage Capacity Enhancement of Porous CoO Nanowires Intertwined with Reduced Graphene Oxide Nanosheets. ChemElectroChem, 2018, 5, 3679-3687.	1.7	6
104	Desulfurizationâ€Induced Formation of Amorphized Substoichiometric Tin Sulfide for Super Highâ€Rate Capacity and Degradationâ€Free Cycling of Na Ion Storage. Small, 2022, 18, .	5.2	5
105	Fluorescence properties of systems with multiple Förster transfer pairs. Physical Chemistry Chemical Physics, 2008, 10, 4584.	1.3	4
106	Parallelepipedally shaped ZnCo2O4 particles with a hierarchical porous structure as an anode for lithium-ion batteries. Ionics, 2017, 23, 77-85.	1.2	4
107	Unoccupied 3d orbitals make Li-unalloyable transition metals usable as anode materials for lithium ion batteries. Journal of Materials Chemistry A, 2021, 9, 17353-17365.	5.2	4
108	Carbon Nanotubes Supported Metal Nanoparticles for the Applications in Proton Exchange Membrane Fuel Cells (PEMFCs). , 0, , .		2

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109	Computational understanding of catalyst-controlled borylation of fluoroarenes: directed vs. undirected pathway. RSC Advances, 2020, 10, 19562-19569.	1.7	1