Xinping Qiu

List of Publications by Year in descending order

121 papers	8,808 citations	36271 51 h-index	42364 92 g-index
124 all docs	124 docs citations	124 times ranked	8101 citing authors

#	Article	IF	Citations
1	Nafion/SiO2 hybrid membrane for vanadium redox flow battery. Journal of Power Sources, 2007, 166, 531-536.	4.0	416
2	Mn(II) deposition on anodes and its effects on capacity fade in spinel lithium manganateâ€“carbon systems. Nature Communications, 2013, 4, 2437.	5.8	409
3	A comparative study of Nafion series membranes for vanadium redox flow batteries. Journal of Membrane Science, 2016, 510, 18-26.	4.1	384
4	New insight into the discharge process of sulfur cathode by electrochemical impedance spectroscopy. Journal of Power Sources, 2009, 189, 127-132.	4.0	345
5	Self-assembled polyelectrolyte multilayer modified Nafion membrane with suppressed vanadium ion crossover for vanadium redox flow batteries. Journal of Materials Chemistry, 2008, 18, 1232.	6.7	277
6	Effectively suppressing dissolution of manganese from spinel lithium manganate via a nanoscale surface-doping approach. Nature Communications, 2014, 5, 5693.	5.8	255
7	SPEEK/Graphene oxide nanocomposite membranes with superior cyclability for highly efficient vanadium redox flow battery. Journal of Materials Chemistry A, 2014, 2, 12423-12432.	5.2	244
8	ZrO₂-Nanoparticle-Modified Graphite Felt: Bifunctional Effects on Vanadium Flow Batteries. ACS Applied Materials & Interfaces, 2016, 8, 15369-15378.	4.0	234
9	Novel Nanocomposite Pt/RuO2â‹…xâ€‰H2O/Carbon Nanotube Catalysts for Direct Methanol Fuel Cells. Angewandte Chemie - International Edition, 2006, 45, 5315-5319.	7.2	220
10	Nafion/organic silica modified TiO2 composite membrane for vanadium redox flow battery via in situ solâ€“gel reactions. Journal of Membrane Science, 2009, 341, 149-154.	4.1	206
11	Toxicity, a serious concern of thermal runaway from commercial Li-ion battery. Nano Energy, 2016, 27, 313-319.	8.2	186
12	PVDFâ€“PEO blends based microporous polymer electrolyte: Effect of PEO on pore configurations and ionic conductivity. Journal of Power Sources, 2006, 157, 501-506.	4.0	171
13	Nafion/organically modified silicate hybrids membrane for vanadium redox flow battery. Journal of Power Sources, 2009, 189, 1240-1246.	4.0	170
14	Effect of degree of sulfonation and casting solvent on sulfonated poly(ether ether ketone) membrane for vanadium redox flow battery. Journal of Power Sources, 2015, 285, 195-204.	4.0	167
15	Influences of Permeation of Vanadium Ions through PVDF-g-PSSA Membranes on Performances of Vanadium Redox Flow Batteries. Journal of Physical Chemistry B, 2005, 109, 20310-20314.	1.2	166
16	Insights into the Impact of the Nafion Membrane Pretreatment Process on Vanadium Flow Battery Performance. ACS Applied Materials & Interfaces, 2016, 8, 12228-12238.	4.0	166
17	Properties Investigation of Sulfonated Poly(ether ether ketone)/Polyacrylonitrile Acidâ€“Base Blend Membrane for Vanadium Redox Flow Battery Application. ACS Applied Materials & Interfaces, 2014, 6, 18885-18893.	4.0	162
18	High Volumetric Capacity of Hollow Structured SnO₂@Si Nanospheres for Lithium-Ion Batteries. Nano Letters, 2017, 17, 3959-3964.	4.5	161

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19	Electrochemical oxidation of ethanol on Ptâ€“ZrO2/C catalyst. Electrochemistry Communications, 2005, 7, 1087-1090.	2.3	150
20	Inhibition of transition metals dissolution in cobalt-free cathode with ultrathin robust interphase in concentrated electrolyte. Nature Communications, 2020, 11, 3629.	5.8	137
21	Monodispersed hard carbon spherules as a catalyst support for the electrooxidation of methanol. Carbon, 2005, 43, 11-16.	5.4	132
22	CeO₂decorated graphite felt as a high-performance electrode for vanadium redox flow batteries. RSC Advances, 2014, 4, 61912-61918.	1.7	128
23	Hydrogen from steam reforming of ethanol in low and middle temperature range for fuel cell application. International Journal of Hydrogen Energy, 2004, 29, 1075-1081.	3.8	127
24	Structural designing of Pt-CeO2/CNTs for methanol electro-oxidation. Journal of Power Sources, 2007, 164, 555-560.	4.0	127
25	Holey-engineered electrodes for advanced vanadium flow batteries. Nano Energy, 2018, 43, 55-62.	8.2	127
26	Sulfonated poly(ether ether ketone)/mesoporous silica hybrid membrane for high performance vanadium redox flow battery. Journal of Power Sources, 2014, 257, 221-229.	4.0	113
27	Preparation and characterization of sulfonated poly(ether ether ketone)/poly(vinylidene fluoride) blend membrane for vanadium redox flow battery application. Journal of Power Sources, 2013, 237, 132-140.	4.0	94
28	Ternary Platinumâ€“Copperâ€“Nickel Nanoparticles Anchored to Hierarchical Carbon Supports as Free-Standing Hydrogen Evolution Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 3464-3472.	4.0	93
29	Synthesis and high rate properties of nanoparticled lithium cobalt oxides as the cathode material for lithium-ion battery. Electrochemistry Communications, 2002, 4, 488-491.	2.3	91
30	Composite polymer electrolyte doped with mesoporous silica SBA-15 for lithium polymer battery. Solid State Ionics, 2005, 176, 1249-1260.	1.3	91
31	Effect of heat treatment on the performance of TiO2-Pt/CNT catalysts for methanol electro-oxidation. Electrochimica Acta, 2008, 53, 3708-3713.	2.6	91
32	Electrochemical characterization of Pt-CeO2/C and Pt-CexZr1â^'xO2/C catalysts for ethanol electro-oxidation. Applied Catalysis B: Environmental, 2007, 73, 144-149.	10.8	89
33	Ethanol electro-oxidation on catalysts with TiO2 coated carbon nanotubes as support. Electrochemistry Communications, 2007, 9, 1416-1421.	2.3	87
34	ESR and vibrational spectroscopy study on poly(vinylidene fluoride) membranes with alkaline treatment. Journal of Power Sources, 2006, 153, 234-238.	4.0	84
35	Enhanced electrochemical properties of PEO-based composite polymer electrolyte with shape-selective molecular sieves. Journal of Power Sources, 2006, 156, 581-588.	4.0	84
36	Synthesis of hydrous ruthenium oxide supported platinum catalysts for direct methanol fuel cells. Electrochemistry Communications, 2005, 7, 593-596.	2.3	79

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37	The benefits and limitations of electrolyte mixing in vanadium flow batteries. Applied Energy, 2017, 204, 373-381.	5.1	76
38	Reduction of capacity decay in vanadium flow batteries by an electrolyte-reflow method. Journal of Power Sources, 2017, 338, 17-25.	4.0	73
39	TiO2 nanotubes promoting Pt/C catalysts for ethanol electro-oxidation in acidic media. Journal of Power Sources, 2007, 170, 50-54.	4.0	71
40	Promotion of carbon nanotube-supported Pt catalyst for methanol and ethanol electro-oxidation by ZrO2 in acidic media. Applied Catalysis A: General, 2009, 364, 1-7.	2.2	71
41	Influence of metal oxides on Pt catalysts for methanol electrooxidation using electrochemical impedance spectroscopy. Journal of Power Sources, 2009, 188, 8-13.	4.0	69
42	Facile approach to enhance the Pt utilization and CO-tolerance of Pt/C catalysts by physically mixing with transition-metal oxide nanoparticles. Chemical Communications, 2007, , 1656.	2.2	63
43	Characterization of sulfonated poly(ether ether ketone)/poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 507 Td (fluoric Journal of Power Sources, 2014, 272, 427-435.	4.0	63
44	PVDF-g-PSSA and Al2O3 composite proton exchange membranes. Journal of Power Sources, 2006, 161, 54-60.	4.0	59
45	Enhanced electrochemical properties of poly(ethylene oxide)-based composite polymer electrolyte with ordered mesoporous materials for lithium polymer battery. Microporous and Mesoporous Materials, 2006, 88, 1-7.	2.2	56
46	Broad temperature adaptability of vanadium redox flow battery-Part 3: The effects of total vanadium concentration and sulfuric acid concentration. Electrochimica Acta, 2018, 259, 11-19.	2.6	56
47	FeP/C Composites as an Anode Material for K-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 22364-22370.	4.0	56
48	State of charge monitoring for vanadium redox flow batteries by the transmission spectra of V(IV)/V(V) electrolytes. Journal of Applied Electrochemistry, 2012, 42, 1025-1031.	1.5	55
49	The Microstructure and Character of the PVDF-g-PSSA Membrane Prepared by Solution Grafting. Journal of the Electrochemical Society, 2003, 150, A917.	1.3	54
50	Polysulfides Capture-Copper Additive for Long Cycle Life Lithium Sulfur Batteries. ACS Applied Materials & Interfaces, 2016, 8, 30248-30255.	4.0	54
51	Nanocomposite polymer electrolyte comprising PEO/LiClO4 and solid super acid: effect of sulphated-zirconia on the crystallization kinetics of PEO. Polymer, 2005, 46, 5702-5706.	1.8	53
52	Preparation and characterization of tin-based three-dimensional cellular anode for lithium ion battery. Journal of Power Sources, 2007, 166, 503-508.	4.0	48
53	Lithiation Behavior of Coaxial Hollow Nanocables of Carbonâ€“Silicon Composite. ACS Nano, 2019, 13, 2274-2280.	7.3	47
54	A nanocomposite proton exchange membrane based on PVDF, poly(2-acrylamido-2-methyl propylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 894-899.	4.0	46

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55	Alcohol electro-oxidation on platinumâ€“ceria/graphene nanosheet in alkaline solutions. International Journal of Hydrogen Energy, 2016, 41, 20709-20719.	3.8	46
56	Hollow Structured Silicon Anodes with Stabilized Solid Electrolyte Interphase Film for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 23501-23506.	4.0	45
57	In situ mapping of activity distribution and oxygen evolution reaction in vanadium flow batteries. Nature Communications, 2019, 10, 5286.	5.8	45
58	A new supported catalyst for methanol oxidation prepared by a reverse micelles method. Electrochemistry Communications, 2002, 4, 550-553.	2.3	43
59	High performance lithium cobalt oxides prepared in molten KCl for rechargeable lithium-ion batteries. Electrochemistry Communications, 2004, 6, 505-509.	2.3	43
60	Promoting the current for methanol electro-oxidation by mixing Pt-based catalysts with CeO2 nanoparticles. Journal of Power Sources, 2007, 170, 297-302.	4.0	43
61	Role of structural H2O in TiO2 nanotubes in enhancing Pt/C direct ethanol fuel cell anode electro-catalysts. Journal of Power Sources, 2008, 178, 97-102.	4.0	42
62	Improve First-Cycle Efficiency and Rate Performance of Layered-Layered Li_{1.2}Mn_{0.6}Ni_{0.2}O₂Using Oxygen Stabilizing Dopant. ACS Applied Materials & Interfaces, 2015, 7, 16040-16045.	4.0	42
63	Amperometric glucose sensor based on enzyme-modified boron-doped diamond electrode by cross-linking method. Sensors and Actuators B: Chemical, 2004, 99, 499-504.	4.0	41
64	Analysis of high rate performance of nanoparticled lithium cobalt oxides prepared in molten KNO3 for rechargeable lithium-ion batteries. Electrochemistry Communications, 2004, 6, 789-794.	2.3	41
65	A new proton conducting membrane based on copolymer of methyl methacrylate and 2-acrylamido-2-methyl-1-propanesulfonic acid for direct methanol fuel cells. Electrochimica Acta, 2007, 52, 6956-6961.	2.6	41
66	Enhance performances of Co-free Li-rich cathode by eutesctic melting salt treatment. Nano Energy, 2022, 92, 106760.	8.2	40
67	A facile approach to fabricate free-standing hydrogen evolution electrodes: riveting tungsten carbide nanocrystals to graphite felt fabrics by carbon nanosheets. Journal of Materials Chemistry A, 2016, 4, 5817-5822.	5.2	39
68	Tuning the Mn Deposition on the Anode to Improve the Cycle Performance of the Mnâ€Based Lithium Ion Battery. Advanced Materials Interfaces, 2016, 3, 1500856.	1.9	35
69	N-doped graphene-based copper nanocomposite with ultralow electrical resistivity and high thermal conductivity. Scientific Reports, 2018, 8, 9248.	1.6	32
70	Hierarchical Mesoporous Iron Fluoride and Reduced Graphene Oxide Nanocomposite as Cathode Materials for High-Performance Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 17538-17546.	4.0	32
71	Impacts of Dissolved Ni²⁺ on the Solid Electrolyte Interphase on a Graphite Anode. Angewandte Chemie - International Edition, 2022, 61, .	7.2	31
72	Design and preparation of highly active carbon nanotube-supported sulfated TiO2 and platinum catalysts for methanol electrooxidation. Journal of Power Sources, 2010, 195, 1610-1614.	4.0	30

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73	Confined Solid Electrolyte Interphase Growth Space with Solid Polymer Electrolyte in Hollow Structured Silicon Anode for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 13247-13254.	4.0	30
74	Bilayer Designed Hydrocarbon Membranes for All-Climate Vanadium Flow Batteries To Shield Catholyte Degradation and Mitigate Electrolyte Crossover. ACS Applied Materials & Interfaces, 2019, 11, 13285-13294.	4.0	30
75	A Well-Defined Silicon Nanoconeâ€"Carbon Structure for Demonstrating Exclusive Influences of Carbon Coating on Silicon Anode of Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 2806-2814.	4.0	29
76	Hard carbon derived from rice husk as anode material for high performance potassium-ion batteries. Solid State Ionics, 2020, 351, 115319.	1.3	28
77	Insights into the endurance promotion of PtSn/CNT catalysts by thermal annealing for ethanol electro-oxidation. Electrochimica Acta, 2016, 213, 578-586.	2.6	26
78	Hierarchical Mesoporous Iron Fluoride with Superior Rate Performance for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 32869-32874.	4.0	26
79	Quantification of lithium dendrite and solid electrolyte interphase (SEI) in lithium-ion batteries. Journal of Power Sources, 2022, 529, 231219.	4.0	26
80	Size-effect on the activity of anodic catalysts in alcohol and CO electrooxidation. Journal of Power Sources, 2008, 184, 353-360.	4.0	25
81	Steam reforming of ethanol for hydrogen production over NiO/ZnO/ZrO2 catalysts. International Journal of Hydrogen Energy, 2008, 33, 1008-1008.	3.8	25
82	Improving coulombic efficiency by confinement of solid electrolyte interphase film in pores of silicon/carbon composite. Journal of Materials Chemistry A, 2013, 1, 14075.	5.2	24
83	Rapid detection of the positive side reactions in vanadium flow batteries. Applied Energy, 2017, 185, 452-462.	5.1	23
84	The effects of composition and thermal treatment on the magnetic properties of Fe100-xCox nanowire arrays based on AAO templates. Journal of Materials Science, 2006, 41, 2211-2218.	1.7	21
85	Conductivities and transport properties of microporous molecular sieves doped composite polymer electrolyte used for lithium polymer battery. New Journal of Chemistry, 2005, 29, 1454.	1.4	20
86	A Cobaltâ€Free Li(Li_{0.17}Ni_{0.17}Fe_{0.17}Mn_{0.49})O₂ Cathode with More Oxygenâ€Involving Charge Compensation for Lithiumâ€Ion Batteries. ChemSusChem, 2019, 12, 2471-2479.	3.6	20
87	A Cobaltâ€Free Li(Li 0.16 Ni 0.19 Fe 0.18 Mn 0.46)O 2 Cathode for Lithiumâ€Ion Batteries with Anionic Redox Reactions. ChemSusChem, 2019, 12, 1162-1168.	3.6	20
88	Study on the co-catalytic effect of titanate nanotubes on Pt-based catalysts in direct alcohol fuel cells. Applied Catalysis B: Environmental, 2010, 97, 204-212.	10.8	18
89	Substituents and the induced partial charge effects on cobalt porphyrins catalytic oxygen reduction reactions in acidic medium. Journal of Colloid and Interface Science, 2021, 597, 269-277.	5.0	16
90	High capacity lithium-manganese-nickel-oxide composite cathodes with low irreversible capacity loss and good cycle life for lithium ion batteries. Science China Chemistry, 2016, 59, 1479-1485.	4.2	13

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91	Structural Transformation and Cycling Improvement of Nanosized Flower-like Î³-MnO₂ in a Sodium Battery. ACS Applied Energy Materials, 2019, 2, 5050-5056.	2.5	13
92	Electrochemical characters and structure changes of electrochemically treated Pt nanoparticles. Electrochemistry Communications, 2010, 12, 14-17.	2.3	11
93	Mechanism of capacity fading caused by Mn (II) deposition on anodes for spinel lithium manganese oxide cell. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 1-10.	0.4	11
94	Interfacial charge transfer mechanism of oxygen reduction reaction in alkali media: Effects of molecular charge states and triphenylamine substituent on cobalt porphyrin electrocatalysts. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 629, 127435.	2.3	11
95	Stabilized cobalt-free lithium-rich cathode materials with an artificial lithium fluoride coating. International Journal of Minerals, Metallurgy and Materials, 2022, 29, 917-924.	2.4	11
96	Mesocarbon microbeads supported PtSn catalysts for electrochemical oxidation of ethanol. Journal of Materials Science, 2007, 42, 4508-4512.	1.7	10
97	Thermal behaviors of Ni-MH batteries using a novel impedance spectroscopy. Journal of Power Sources, 2008, 182, 377-382.	4.0	10
98	Sodium storage performance and mechanism of Ag2S nanospheres as electrode material for sodium-ion batteries. Solid State Ionics, 2019, 343, 115071.	1.3	10
99	Preparation of Ptâ•CeO[sub 2]â€“CNTs Through Spontaneous Adsorbing Pt Nanoparticles onto CNTs Aided by CeO[sub 2]. Electrochemical and Solid-State Letters, 2007, 10, B114.	2.2	9
100	Study on solid electrolyte interphase excessive growth caused by Mn (II) deposition on silicon anode. Electrochimica Acta, 2018, 282, 602-608.	2.6	9
101	Quantification on Growing Mass of Solid Electrolyte Interphase and Deposited Mn(II) on the Silicon Anode of LiMn2O4 Full Lithium-Ion Cells. ACS Applied Materials & Interfaces, 2019, 11, 27839-27845.	4.0	8
102	Na/K Diffusion in FeP as an Anode Material for Ion Batteries. Journal of Physical Chemistry C, 2020, 124, 6495-6501.	1.5	7
103	Displacement reaction-based Ag2S electrode for lithium batteries with high volumetric energy density. Solid State Ionics, 2019, 340, 115015.	1.3	6
104	Characterizing the Onset Potential Distribution of Pt/C Catalyst Deposition by a Total Internal Reflection Imaging Method. Small, 2021, 17, e2102407.	5.2	6
105	Low-cost and high-rate porous carbon anode material for potassium-ion batteries. Solid State Ionics, 2022, 381, 115944.	1.3	5
106	A micro direct methanol fuel cell using PDMS assembly technology. , 0, , .		4
107	Development of composite anode electrocatalyst for direct methanol fuel cells. Journal of Applied Electrochemistry, 2009, 39, 1779-1787.	1.5	4
108	Silicon dioxide molecular sieve with mono-layer carbon deposited in the channels and carbon nanotubes on the outside for lithiumâ€“sulfur batteries. RSC Advances, 2016, 6, 60550-60555.	1.7	4

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109	Impacts of Dissolved Ni²⁺ on the Solid Electrolyte Interphase on a Graphite Anode. Angewandte Chemie, 2022, 134, .	1.6	4
110	A silicon-based micro direct methanol fuel cell stack with compact structure and PDMS packaging. , 2007, , .		3
111	A comparison of iron phthalocyanine and cobalt porphyrin on the electrochemical catalysis in Ni-MH battery. Science Bulletin, 2007, 52, 71-77.	1.7	3
112	New Anhydrous Proton Exchange Membrane for Intermediate Temperature Proton Exchange Membrane Fuel Cells. ChemPhysChem, 2011, 12, 1196-1201.	1.0	3
113	Cr-Doped Fe_{1â€“x}Cr_xF₃Â·0.33H₂O Nanomaterials as Cathode Materials for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 48653-48660.	4.0	3
114	A silicon-based micro direct methanol fuel cell with microblocks in anode structure. Proceedings of the IEEE International Conference on Micro Electro Mechanical Systems (MEMS), 2008, , .	0.0	2
115	Structural transformation and electrochemical properties of a nanosized flower-like R-MnO₂cathode in a sodium battery. Physical Chemistry Chemical Physics, 2021, 24, 551-559.	1.3	2
116	Effects of Mn(<scp>II</scp>) on nano silicon@polyaniline electrodes in both half and full cells. International Journal of Energy Research, 2021, 45, 4357-4369.	2.2	1
117	Research on catalysis of sodium-metallochlorophylls in Ni/MH battery. Science Bulletin, 2009, 54, 3005-3013.	1.7	0
118	A Micro Direct Methanol Fuel Cell Integrated with a Temperature Control System for Extreme Environments. , 2009, , .		0
119	Effects of Clâ¯ and Fâ¯ Adsorption on Methanol Oxidation on Polycrystalline Platinum Electrode. , 2000, , .		0
120	Methanol Permeability and Conductivity of Alkali Ion-doped Nafion Membrane. , 2000, , .		0
121	InnenrÃ¼cktitelbild: Impacts of Dissolved Ni²⁺ on the Solid Electrolyte Interphase on a Graphite Anode (Angew. Chem. 30/2022). Angewandte Chemie, 2022, 134, .	1.6	0