Li Xiao

List of Publications by Year
in descending order

96 papers	9,478 citations	57631 44 h-index	37111 96 g-index
100 all docs	100 docs citations	100 times ranked	7754 citing authors

#	Article	IF	Citations
1	Application of rock-salt-type Coâ€“Mn oxides for alkaline polymer electrolyte fuel cells. Journal of Power Sources, 2022, 520, 230868.	4.0	5
2	Customizable CO₂ Electroreduction to C₁ or C₂₊ Products through Cu_{<i>y</i>}/CeO₂ Interface Engineering. ACS Catalysis, 2022, 12, 1004-1011.	5.5	47
3	Electrocatalysis in Alkaline Media and Alkaline Membrane-Based Energy Technologies. Chemical Reviews, 2022, 122, 6117-6321.	23.0	195
4	A completely precious metalâ€“free alkaline fuel cell with enhanced performance using a carbon-coated nickel anode. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119883119.	3.3	54
5	Preanodized Cu Surface for Selective CO₂ Electroreduction to C₁ or C₂₊ Products. ACS Applied Materials & Interfaces, 2022, 14, 20953-20961.	4.0	8
6	A stable zinc-based secondary battery realized by anion-exchange membrane as the separator. Journal of Power Sources, 2021, 486, 229376.	4.0	20
7	Interface-Enhanced Catalytic Selectivity on the C₂ Products of CO₂ Electroreduction. ACS Catalysis, 2021, 11, 2473-2482.	5.5	92
8	Improving the Catalytic Efficiency of NiFe-LDH/ATO by Air Plasma Treatment for Oxygen Evolution Reaction. Chemical Research in Chinese Universities, 2021, 37, 293-297.	1.3	16
9	Comb-shaped anion exchange membranes: Hydrophobic side chains grafted onto backbones or linked to cations?. Journal of Membrane Science, 2021, 626, 119096.	4.1	26
10	Ultrathin Self-Cross-Linked Alkaline Polymer Electrolyte Membrane for APEFC Applications. ACS Applied Energy Materials, 2021, 4, 4297-4301.	2.5	5
11	Regulation of the activity, selectivity, and durability of Cu-based electrocatalysts for CO2 reduction. Science China Chemistry, 2021, 64, 1660-1678.	4.2	38
12	Conductivity and Stability Properties of Anion Exchange Membranes: Cation Effect and Backbone Effect. ChemSusChem, 2021, 14, 5021-5031.	3.6	14
13	Enhanced mass transport and water management of polymer electrolyte fuel cells via 3-D printed architectures. Journal of Power Sources, 2021, 515, 230636.	4.0	17
14	<i>In situ</i> surface enhanced Raman spectroscopy study of electrodeâ€“polyelectrolyte interfaces. Faraday Discussions, 2021, 233, 100-111.	1.6	2
15	Preparation for honeycombed Li3V2(PO4)3/C composites via vacuum-assisted immersion method and their high-rates performance in lithium-ion batteries. Vacuum, 2020, 172, 108926.	1.6	8
16	Manganese carbonate as active material in potassium carbonate electrolyte. Chemical Physics Letters, 2020, 738, 136899.	1.2	2
17	Alkaline polymer electrolyte fuel cells without anode humidification and H2 emission. Journal of Power Sources, 2020, 472, 228471.	4.0	23
18	Hydrogen Oxidation Reaction on Pdâ€Ni(OH) 2 Composite Electrocatalysts in an Alkaline Electrolyte. ChemistrySelect, 2020, 5, 7803-7807.	0.7	6

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19	Chemical prelithiation of Al for use as an ambient air compatible and polysulfide resistant anode for Li-ion/S batteries. Journal of Materials Chemistry A, 2020, 8, 18715-18720.	5.2	24
20	Electrochemical CO2 reduction on heterogeneous cobalt phthalocyanine catalysts with different carbon supports. Chemical Physics Letters, 2020, 754, 137655.	1.2	24
21	Improving the Antioxidation Capability of the Ni Catalyst by Carbon Shell Coating for Alkaline Hydrogen Oxidation Reaction. ACS Applied Materials & Interfaces, 2020, 12, 31575-31581.	4.0	44
22	Highly Selective Reduction of CO₂ to C₂₊ Hydrocarbons at Copper/Polyaniline Interfaces. ACS Catalysis, 2020, 10, 4103-4111.	5.5	220
23	Dendrite-Free Sn Anode with High Reversibility for Aqueous Batteries Enabled by â€œWater-in-Saltâ€• Electrolyte. ACS Applied Energy Materials, 2020, 3, 5031-5038.	2.5	4
24	Aggregated and ionic cross-linked anion exchange membrane with enhanced hydroxide conductivity and stability. Journal of Power Sources, 2020, 459, 227838.	4.0	32
25	The Comparability of Pt to Ptâ€Ru in Catalyzing the Hydrogen Oxidation Reaction for Alkaline Polymer Electrolyte Fuel Cells Operated at 80â€‰Â°C. Angewandte Chemie, 2019, 131, 1456-1460.	1.6	22
26	A high-performance dual-redox electrochemical capacitor using stabilized Zn2+/Zn anolyte and Br3Ë‰/BrË‰ catholyte. Journal of Power Sources, 2019, 436, 226843.	4.0	14
27	Powerful Thermogalvanic Cells Based on a Reversible Hydrogen Electrode and Gas-Containing Electrolytes. ACS Energy Letters, 2019, 4, 1810-1815.	8.8	28
28	Viologen/Bromide Dual-Redox Electrochemical Capacitor with Two-Electron Reduction of Viologen. ACS Applied Materials & Interfaces, 2019, 11, 41215-41221.	4.0	16
29	Hydrogen oxidation reaction on modified platinum model electrodes in alkaline media. Electrochimica Acta, 2019, 327, 135016.	2.6	17
30	Hydrophobic Side-Chain Attached Polyarylether-Based Anion Exchange Membranes with Enhanced Alkaline Stability. ACS Applied Energy Materials, 2019, 2, 8052-8059.	2.5	20
31	Theoretical search for novel Au or Ag bimetallic alloys capable of transforming CO2 into hydrocarbons. Journal of Materials Chemistry A, 2019, 7, 20567-20573.	5.2	15
32	Two-Dimensional Ga₂O₃/C Nanosheets as Durable and High-Rate Anode Material for Lithium Ion Batteries. Langmuir, 2019, 35, 13607-13613.	1.6	19
33	NiGa2O4/rGO Composite as Long-Cycle-Life Anode Material for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 8025-8031.	4.0	18
34	An alkaline polymer electrolyte CO₂ electrolyzer operated with pure water. Energy and Environmental Science, 2019, 12, 2455-2462.	15.6	231
35	High-Loading Composition-Tolerant Coâ€“Mn Spinel Oxides with Performance beyond 1 W/cm² in Alkaline Polymer Electrolyte Fuel Cells. ACS Energy Letters, 2019, 4, 1251-1257.	8.8	77
36	Synergistic Mn-Co catalyst outperforms Pt on high-rate oxygen reduction for alkaline polymer electrolyte fuel cells. Nature Communications, 2019, 10, 1506.	5.8	212

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37	Bio-templated fabrication of lotus root-like Li3V2(PO4)3/C composite from dandelion for use in lithium-ion batteries. Ceramics International, 2019, 45, 13438-13446.	2.3	8
38	Exploring the Compositionâ€“Activity Relation of Niâ€“Cu Binary Alloy Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Media. ACS Applied Energy Materials, 2019, 2, 3160-3165.	2.5	47
39	<i>In Situ</i> X-ray Absorption Spectroscopy of a Synergistic Coâ€“Mn Oxide Catalyst for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2019, 141, 1463-1466.	6.6	121
40	The Comparability of Pt to Ptâ€Ru in Catalyzing the Hydrogen Oxidation Reaction for Alkaline Polymer Electrolyte Fuel Cells Operated at 80â€‰Â°C. Angewandte Chemie - International Edition, 2019, 58, 1442-1446.	7.2	99
41	Effect of Micromorphology on Alkaline Polymer Electrolyte Stability. ACS Applied Materials & Interfaces, 2019, 11, 469-477.	4.0	36
42	Porous, nitrogen-doped Li3V2(PO4)3/C cathode materials derived from oroxylum and their exceptional electrochemical properties in lithium-ion batteries. Ceramics International, 2019, 45, 4980-4989.	2.3	11
43	Unraveling the composition-activity relationship of Pt Ru binary alloy for hydrogen oxidation reaction in alkaline media. Journal of Power Sources, 2019, 412, 282-286.	4.0	29
44	Ni(OH)2-Ni/C for hydrogen oxidation reaction in alkaline media. Journal of Energy Chemistry, 2019, 29, 111-115.	7.1	51
45	High-Loading Intermetallic Pt₃Co/C Coreâ€“Shell Nanoparticles as Enhanced Activity Electrocatalysts toward the Oxygen Reduction Reaction (ORR). Chemistry of Materials, 2018, 30, 1532-1539.	3.2	131
46	High-Performance Ga₂O₃ Anode for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 5519-5526.	4.0	60
47	Li 3 V 2 (PO 4) 3 /C composite with hollow coaxial structure for high-capacity and high-rate performance in lithium-ion batteries. Materials Letters, 2018, 216, 46-49.	1.3	9
48	Highly conductive and stable hybrid ionic cross-linked sulfonated PEEK for fuel cell. Electrochimica Acta, 2018, 291, 353-361.	2.6	17
49	Molecularly Defined Interface Created by Porous Polymeric Networks on Gold Surface for Concerted and Selective CO₂ Reduction. ACS Sustainable Chemistry and Engineering, 2018, 6, 17277-17283.	3.2	26
50	Sulfonated Nanobamboo Fiber-Reinforced Quaternary Ammonia Poly(ether ether ketone) Membranes for Alkaline Polymer Electrolyte Fuel Cells. ACS Applied Materials & Interfaces, 2018, 10, 33581-33588.	4.0	24
51	Water induced phase segregation in hydrocarbon proton exchange membranes. Journal of Energy Chemistry, 2018, 27, 1517-1520.	7.1	19
52	Seed-induced synthesis of flower-like a Li3V2(PO4)3/carbon composite and its application in lithium-ion batteries. Journal of Alloys and Compounds, 2018, 766, 54-65.	2.8	6
53	Preparation of Mn3O4-CNTs microspheres as an improved sulfur hosts for lithium-sulfur batteries. Materials Letters, 2018, 229, 272-276.	1.3	12
54	Alkaline polymer electrolyte fuel cells stably working at 80â€¯Â°C. Journal of Power Sources, 2018, 390, 165-167.	4.0	256

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55	Mechanically Robust Anion Exchange Membranes via Long Hydrophilic Cross-Linkers. Macromolecules, 2017, 50, 2329-2337.	2.2	103
56	A nickel nanocatalyst within a h-BN shell for enhanced hydrogen oxidation reactions. Chemical Science, 2017, 8, 5728-5734.	3.7	113
57	Highly efficient Fe/N/C catalyst using adenosine as C/N-source for APEFC. Journal of Energy Chemistry, 2017, 26, 616-621.	7.1	10
58	Tuning the Morphology of Li₂O₂ by Noble and 3d metals: A Planar Model Electrode Study for Liâ€“O₂ Battery. ACS Applied Materials & Interfaces, 2017, 9, 19800-19806.	4.0	39
59	Elastic Long-Chain Multication Cross-Linked Anion Exchange Membranes. Macromolecules, 2017, 50, 3323-3332.	2.2	159
60	Fe/N/C Nanotubes with Atomic Fe Sites: A Highly Active Cathode Catalyst for Alkaline Polymer Electrolyte Fuel Cells. ACS Catalysis, 2017, 7, 6485-6492.	5.5	141
61	Spatially Resolved Quantification of the Surface Reactivity of Solid Catalysts. Angewandte Chemie - International Edition, 2016, 55, 6239-6243.	7.2	87
62	Pd skin on AuCu intermetallic nanoparticles: A highly active electrocatalyst for oxygen reduction reaction in alkaline media. Nano Energy, 2016, 29, 268-274.	8.2	55
63	Tuning the Morphology and Crystal Structure of Li₂O₂: A Graphene Model Electrode Study for Liâ€“O₂ Battery. ACS Applied Materials & Interfaces, 2016, 8, 21350-21357.	4.0	48
64	Spatially Resolved Quantification of the Surface Reactivity of Solid Catalysts. Angewandte Chemie, 2016, 128, 6347-6351.	1.6	21
65	Varying the microphase separation patterns of alkaline polymer electrolytes. Journal of Materials Chemistry A, 2016, 4, 4071-4081.	5.2	61
66	Multication Side Chain Anion Exchange Membranes. Macromolecules, 2016, 49, 815-824.	2.2	303
67	An Effective Approach for Alleviating Cation-Induced Backbone Degradation in Aromatic Ether-Based Alkaline Polymer Electrolytes. ACS Applied Materials & Interfaces, 2015, 7, 2809-2816.	4.0	79
68	Carbonation effects on the performance of alkaline polymer electrolyte fuel cells. International Journal of Hydrogen Energy, 2015, 40, 6655-6660.	3.8	42
69	Ptâ€“Ru catalyzed hydrogen oxidation in alkaline media: oxophilic effect or electronic effect?. Energy and Environmental Science, 2015, 8, 177-181.	15.6	418
70	Noble fabrication of Niâ€“Mo cathode for alkaline water electrolysis and alkaline polymer electrolyte water electrolysis. International Journal of Hydrogen Energy, 2014, 39, 3055-3060.	3.8	59
71	Constructing ionic highway in alkaline polymer electrolytes. Energy and Environmental Science, 2014, 7, 354-360.	15.6	439
72	A morphology effect of hematite photoanode for photoelectrochemical water oxidation. RSC Advances, 2014, 4, 37701.	1.7	14

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73	A PtRu catalyzed rechargeable oxygen electrode for Liâ€“O₂ batteries: performance improvement through Li₂O₂ morphology control. Physical Chemistry Chemical Physics, 2014, 16, 20618-20623.	1.3	44
74	Anion-exchange membranes in electrochemical energy systems. Energy and Environmental Science, 2014, 7, 3135-3191.	15.6	1,617
75	Pt Skin on AuCu Intermetallic Substrate: A Strategy to Maximize Pt Utilization for Fuel Cells. Journal of the American Chemical Society, 2014, 136, 9643-9649.	6.6	220
76	Intermetallic Pt2Si: magnetron-sputtering preparation and electrocatalysis toward ethanol oxidation. Journal of Energy Chemistry, 2014, 23, 265-268.	7.1	6
77	A strategy for disentangling the conductivityâ€“stability dilemma in alkaline polymer electrolytes. Energy and Environmental Science, 2013, 6, 2912.	15.6	150
78	Ultrathin composite membrane of alkaline polymer electrolyte for fuel cell applications. Journal of Materials Chemistry A, 2013, 1, 12497.	5.2	56
79	Alkaline polymer electrolyte fuel cell with Ni-based anode and Co-based cathode. International Journal of Hydrogen Energy, 2013, 38, 16264-16268.	3.8	77
80	Quaternary ammonia polysulfone-PTFE composite alkaline anion exchange membrane for fuel cells application. International Journal of Hydrogen Energy, 2013, 38, 1983-1987.	3.8	61
81	Activating Ag by even more inert Au: a peculiar effect on electrocatalysis toward oxygen reduction in alkaline media. Chemical Communications, 2013, 49, 11023.	2.2	19
82	Bond-energy decoupling: principle and application to heterogeneous catalysis. Chemical Science, 2013, 4, 606-611.	3.7	12
83	Highly Stable Alkaline Polymer Electrolyte Based on a Poly(ether ether ketone) Backbone. ACS Applied Materials & Interfaces, 2013, 5, 13405-13411.	4.0	91
84	AuCu intermetallic nanoparticles: surfactant-free synthesis and novel electrochemistry. Journal of Materials Chemistry, 2012, 22, 15769.	6.7	68
85	New second-order nonlinear optical (NLO) hyperbranched polymers containing isolation chromophore moieties derived from one-pot â€œA2 + B4â€• approach via Suzuki coupling reaction. RSC Advances, 2012, 2, 6520.	1.7	34
86	First implementation of alkaline polymer electrolyte water electrolysis working only with pure water. Energy and Environmental Science, 2012, 5, 7869.	15.6	234
87	A conjugated hyperbranched polymer constructed from carbazole and tetraphenylethylene moieties: convenient synthesis through one-pot â€œA2 + B4â€• Suzuki polymerization, aggregation-induced enhanced emission, and application as explosive chemosensors and PLEDs. Journal of Materials Chemistry, 2012, 22, 6374.	6.7	132
88	Designing Advanced Alkaline Polymer Electrolytes for Fuel Cell Applications. Accounts of Chemical Research, 2012, 45, 473-481.	7.6	359
89	Optimization strategy for fuel-cell catalysts based on electronic effects. RSC Advances, 2011, 1, 1358.	1.7	20
90	Inhibition Effect of Surface Oxygenated Species on Ammonia Oxidation Reaction. Journal of Physical Chemistry C, 2011, 115, 23050-23056.	1.5	47

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91	Highâ€Performance Alkaline Polymer Electrolyte for Fuel Cell Applications. Advanced Functional Materials, 2010, 20, 312-319.	7.8	449
92	Rational determination of exchange current density for hydrogen electrode reactions at carbon-supported Pt catalysts. Electrochimica Acta, 2010, 55, 844-850.	2.6	37
93	Self-crosslinked alkaline polymer electrolyte exceptionally stable at 90 Â°C. Chemical Communications, 2010, 46, 8597.	2.2	122
94	Activating Pd by Morphology Tailoring for Oxygen Reduction. Journal of the American Chemical Society, 2009, 131, 602-608.	6.6	437
95	Collapse in Crystalline Structure and Decline in Catalytic Activity of Pt Nanoparticles on Reducing Particle Size to 1 nm. Journal of the American Chemical Society, 2007, 129, 15465-15467.	6.6	150
96	A feasibility analysis for alkaline membrane direct methanol fuel cell: thermodynamic disadvantages versus kinetic advantages. Electrochemistry Communications, 2003, 5, 662-666.	2.3	248