Min-Ho Seo

List of Publications by Year
in descending order

80 papers	5,203 citations	61984 43 h-index	85541 71 g-index
81 all docs	81 docs citations	81 times ranked	7405 citing authors

#	Article	IF	Citations
1	How to Change the Reaction Chemistry on Nonprecious Metal Oxide Nanostructure Materials for Electrocatalytic Oxidation of Biomassâ€Derived Glycerol to Renewable Chemicals. Advanced Materials, 2023, 35, .	21.0	17
2	Hierarchical porous structure construction for highly stable self-supporting lithium metal anode. Nano Energy, 2022, 93, 106905.	16.0	21
3	Efficient Zn Metal Anode Enabled by O,N-Codoped Carbon Microflowers. Nano Letters, 2022, 22, 1350-1357.	9.1	63
4	Plasma-induced oxygen vacancies in amorphous MnOx boost catalytic performance for electrochemical CO2 reduction. Nano Energy, 2021, 79, 105492.	16.0	78
5	High-performance anion exchange membrane alkaline seawater electrolysis. Journal of Materials Chemistry A, 2021, 9, 9586-9592.	10.3	67
6	Enhancement of Catalytic Activity and Durability of Pt Nanoparticle through Strong Chemical Interaction with Electrically Conductive Support of MagnÃ©li Phase Titanium Oxide. Nanomaterials, 2021, 11, 829.	4.1	14
7	High Pressure Nitrogen-Infused Ultrastable Fuel Cell Catalyst for Oxygen Reduction Reaction. ACS Catalysis, 2021, 11, 5525-5531.	11.2	22
8	Metalâ€“Organic Frameworks Reinforce the Carbon Nanotube Sponge-Derived Robust Three-Dimensional Sulfur Host for Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2021, 13, 28036-28048.	8.0	23
9	First-Principles-Based Machine-Learning Molecular Dynamics for Crystalline Polymers with van der Waals Interactions. Journal of Physical Chemistry Letters, 2021, 12, 6000-6006.	4.6	14
10	Fluorine-Decorated Graphene Nanoribbons for an Anticorrosive Polymer Electrolyte Membrane Fuel Cell. ACS Applied Materials & Interfaces, 2021, 13, 26936-26947.	8.0	18
11	Hierarchical Ni-Mo2C/N-doped carbon Mott-Schottky array for water electrolysis. Applied Catalysis B: Environmental, 2021, 292, 120168.	20.2	60
12	Atomic iridium species anchored on porous carbon network support: An outstanding electrocatalyst for CO2 conversion to CO. Applied Catalysis B: Environmental, 2021, 292, 120173.	20.2	20
13	Commercial anion exchange membrane water electrolyzer stack through non-precious metal electrocatalysts. Applied Catalysis B: Environmental, 2021, 292, 120170.	20.2	59
14	A practical approach to measuring the ion-transport number of cation-exchange membranes: Effects of junction potential and analyte concentration. Journal of Membrane Science, 2021, 635, 119471.	8.2	7
15	Cubic garnet solid polymer electrolyte for room temperature operable all-solid-state-battery. Journal of Materials Research and Technology, 2021, 15, 5849-5863.	5.8	7
16	Hierarchical Chestnut-Burr Like Structure of Copper Cobalt Oxide Electrocatalyst Directly Grown on Ni Foam for Anion Exchange Membrane Water Electrolysis. ACS Sustainable Chemistry and Engineering, 2020, 8, 2344-2349.	6.7	45
17	Superior performance of anion exchange membrane water electrolyzer: Ensemble of producing oxygen vacancies and controlling mass transfer resistance. Applied Catalysis B: Environmental, 2020, 278, 119276.	20.2	80
18	Superior performance and stability of anion exchange membrane water electrolysis: pH-controlled copper cobalt oxide nanoparticles for the oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 4290-4299.	10.3	73

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19	Synthesis and Characterization of the Cu_{0.72}Co_{2.28}O₄ Catalyst for Oxygen Evolution Reaction in an Anion Exchange Membrane Water Electrolyzer. Journal of Korean Institute of Metals and Materials, 2020, 58, 49-58.	1.0	12
20	A Review on Recent Progress in the Aspect of Stability of Oxygen Reduction Electrocatalysts for Protonâ€Exchange Membrane Fuel Cell: Quantum Mechanics and Experimental Approaches. Energy Technology, 2019, 7, 1900312.	3.8	26
21	High Lithium Ion Transport Through rGO-Wrapped LiNi0.6Co0.2Mn0.2O2 Cathode Material for High-Rate Capable Lithium Ion Batteries. Frontiers in Chemistry, 2019, 7, 361.	3.6	21
22	Three-Dimensional Dendritic Cuâ€“Coâ€“P Electrode by One-Step Electrodeposition on a Hydrogen Bubble Template for Hydrogen Evolution Reaction. ACS Sustainable Chemistry and Engineering, 2019, 7, 10734-10741.	6.7	100
23	Boosting the electrocatalytic glycerol oxidation performance with highly-dispersed Pt nanoclusters loaded on 3D graphene-like microporous carbon. Applied Catalysis B: Environmental, 2019, 245, 555-568.	20.2	45
24	Pressure-Induced Control of Core-Shell Nanoparticles for Oxygen Reduction Reaction. ECS Meeting Abstracts, 2019, , .	0.0	0
25	Chemisorption of polysulfides through redox reactions with organic molecules for lithiumâ€“sulfur batteries. Nature Communications, 2018, 9, 705.	12.8	207
26	Comparative investigation of the molybdenum sulphide doped with cobalt and selenium towards hydrogen evolution reaction. Electrochimica Acta, 2018, 271, 211-219.	5.2	30
27	Three-Dimensional Honeycomb-Like Cu_{0.81}Co_{2.19}O₄ Nanosheet Arrays Supported by Ni Foam and Their High Efficiency as Oxygen Evolution Electrodes. ACS Applied Materials & Interfaces, 2018, 10, 38663-38668.	8.0	45
28	Nitrogen-doped carbon supported platinum catalyst via direct soft nitriding for high-performance polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2018, 43, 17873-17879.	7.1	10
29	Tuning the catalytic activity of heterogeneous two-dimensional transition metal dichalcogenides for hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 20005-20014.	10.3	63
30	Hollow Multivoid Nanocuboids Derived from Ternary Niâ€“Coâ€“Fe Prussian Blue Analog for Dualâ€Electrocatalysis of Oxygen and Hydrogen Evolution Reactions. Advanced Functional Materials, 2018, 28, 1802129.	14.9	242
31	Bifunctionally active and durable hierarchically porous transition metal-based hybrid electrocatalyst for rechargeable metal-air batteries. Applied Catalysis B: Environmental, 2018, 239, 677-687.	20.2	64
32	Understanding and Designing Oxygen Reduction/Evolution Reaction (ORR/OER) Catalysts By Combining Experimental and Ab-Initio Studies. ECS Meeting Abstracts, 2018, , .	0.0	0
33	Non-Precious Electrocatalysts for Anion Exchange Membrane Water Electrolysis Cell. ECS Meeting Abstracts, 2018, , .	0.0	0
34	Design of ultralong single-crystal nanowire-based bifunctional electrodes for efficient oxygen and hydrogen evolution in a mild alkaline electrolyte. Journal of Materials Chemistry A, 2017, 5, 10895-10901.	10.3	23
35	Specific approaches to dramatic reduction in stack activation time and perfect long-term storage for high-performance air-breathing polymer electrolyte membrane fuel cell. International Journal of Hydrogen Energy, 2017, 42, 16288-16293.	7.1	6
36	Selfâ€Assembly of Spinel Nanocrystals into Mesoporous Spheres as Bifunctionally Active Oxygen Reduction and Evolution Electrocatalysts. ChemSusChem, 2017, 10, 2258-2266.	6.8	24

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37	Self-assembled nitrogen-doped fullerenes and their catalysis for fuel cell and rechargeable metalâ€“air battery applications. Nanoscale, 2017, 9, 7373-7379.	5.6	56
38	Carbon-Coated Silicon Nanowires on Carbon Fabric as Self-Supported Electrodes for Flexible Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 9551-9558.	8.0	101
39	Enhanced Reversible Sodiumâ€Ion Intercalation by Synergistic Coupling of Fewâ€Layered MoS₂ and Sâ€Doped Graphene. Advanced Functional Materials, 2017, 27, 1702562.	14.9	132
40	3D Ordered Mesoporous Bifunctional Oxygen Catalyst for Electrically Rechargeable Zincâ€“Air Batteries. Small, 2016, 12, 2707-2714.	10.0	144
41	Degradation of polymer electrolyte membrane fuel cell by siloxane in biogas. Journal of Power Sources, 2016, 316, 44-52.	7.8	7
42	Towards a comprehensive understanding of FeCo coated with N-doped carbon as a stable bi-functional catalyst in acidic media. NPG Asia Materials, 2016, 8, e312-e312.	7.9	82
43	Fast stack activation procedure and effective long-term storage for high-performance polymer electrolyte membrane fuel cell. Journal of Power Sources, 2016, 328, 75-80.	7.8	11
44	Sulfur Nanogranular Film-Coated Three-Dimensional Graphene Sponge-Based High Power Lithium Sulfur Battery. ACS Applied Materials & Interfaces, 2016, 8, 1984-1991.	8.0	63
45	Optimization of sulfur-doped graphene as an emerging platinum nanowires support for oxygen reduction reaction. Nano Energy, 2016, 19, 27-38.	16.0	58
46	Sulfur Atoms Bridging Fewâ€Layered MoS₂ with Sâ€Doped Graphene Enable Highly Robust Anode for Lithiumâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1501106.	19.5	165
47	Shape-controlled octahedral cobalt disulfide nanoparticles supported on nitrogen and sulfur-doped graphene/carbon nanotube composites for oxygen reduction in acidic electrolyte. Journal of Materials Chemistry A, 2015, 3, 6340-6350.	10.3	100
48	Perovskiteâ€“Nitrogenâ€Doped Carbon Nanotube Composite as Bifunctional Catalysts for Rechargeable Lithiumâ€“Air Batteries. ChemSusChem, 2015, 8, 1058-1065.	6.8	92
49	Design of Highly Active Perovskite Oxides for Oxygen Evolution Reaction by Combining Experimental and ab Initio Studies. ACS Catalysis, 2015, 5, 4337-4344.	11.2	107
50	Exploring the effects of the size of reduced graphene oxide nanosheets for Pt-catalyzed electrode reactions. Nanoscale, 2015, 7, 9438-9442.	5.6	34
51	Highly active Co-doped LaMnO 3 perovskite oxide and N-doped carbon nanotube hybrid bi-functional catalyst for rechargeable zincâ€“air batteries. Electrochemistry Communications, 2015, 60, 38-41.	4.7	86
52	Design of an active and durable catalyst for oxygen reduction reactions using encapsulated Cu with N-doped carbon shells (Cu@N-C) activated by CO₂ treatment. Journal of Materials Chemistry A, 2015, 3, 22031-22034.	10.3	77
53	Highly Active and Durable Nanocrystalâ€Decorated Bifunctional Electrocatalyst for Rechargeable Zincâ€“Air Batteries. ChemSusChem, 2015, 8, 3129-3138.	6.8	57
54	Correlation between theoretical descriptor and catalytic oxygen reduction activity of graphene supported palladium and palladium alloy electrocatalysts. Journal of Power Sources, 2015, 300, 1-9.	7.8	38

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55	Electrochemistry: Development and Simulation of Sulfur-doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction (Adv. Funct. Mater. 27/2014). Advanced Functional Materials, 2014, 24, 4324-4324.	14.9	4
56	Development and Simulation of Sulfurâ€doped Graphene Supported Platinum with Exemplary Stability and Activity Towards Oxygen Reduction. Advanced Functional Materials, 2014, 24, 4325-4336.	14.9	214
57	Toward New Fuel Cell Support Materials: A Theoretical and Experimental Study of Nitrogenâ€Đoped Graphene. ChemSusChem, 2014, 7, 2609-2620.	6.8	45
58	Electrospun porous nanorod perovskite oxide/nitrogen-doped graphene composite as a bi-functional catalyst for metal air batteries. Nano Energy, 2014, 10, 192-200.	16.0	168
59	Theoretical insight into highly durable iron phthalocyanine derived non-precious catalysts for oxygen reduction reactions. Journal of Materials Chemistry A, 2014, 2, 19707-19716.	10.3	52
60	First principles study of oxygen reduction reaction mechanisms on N-doped graphene with a transition metal support. Electrochimica Acta, 2014, 140, 225-231.	5.2	50
61	First principles computational study on the electrochemical stability of Ptâ€“Co nanocatalysts. Nanoscale, 2013, 5, 8625.	5.6	71
62	Highly dispersed Ag nanoparticles on nanosheets of reduced graphene oxide for oxygen reduction reaction in alkaline media. Electrochemistry Communications, 2013, 28, 100-103.	4.7	115
63	First-principles thermodynamic study of the electrochemical stability ofÂPtÂnanoparticles in fuel cell applications. Journal of Power Sources, 2013, 238, 137-143.	7.8	40
64	The graphene-supported palladium and palladiumâ€“yttrium nanoparticles for the oxygen reduction and ethanol oxidation reactions: Experimental measurement and computational validation. Applied Catalysis B: Environmental, 2013, 129, 163-171.	20.2	86
65	Shape- and Composition-Sensitive Activity of Pt and PtAu Catalysts for Formic Acid Electrooxidation. Journal of Physical Chemistry C, 2012, 116, 18093-18100.	3.1	102
66	The promotional effect of Ni on bimetallic PtNi/C catalysts for glycerol electrooxidation. Applied Catalysis A: General, 2012, 429-430, 39-47.	4.3	77
67	Synthesis and characterization of graphene-supported metal nanoparticles by impregnation method with heat treatment in H2 atmosphere. Synthetic Metals, 2011, 161, 2405-2411.	3.9	69
68	Efficient electrooxidation of biomass-derived glycerol over a graphene-supported PtRu electrocatalyst. Electrochemistry Communications, 2011, 13, 890-893.	4.7	61
69	Synthesis, characterization, and electrocatalytic properties of a polypyrrole-composited Pd/C catalyst. International Journal of Hydrogen Energy, 2011, 36, 11545-11553.	7.1	40
70	Synthesis of surface-functionalized graphene nanosheets with high Pt-loadings and their applications to methanol electrooxidation. Carbon, 2011, 49, 904-909.	10.3	188
71	The graphene-supported Pd and Pt catalysts for highly active oxygen reduction reaction in an alkaline condition. Electrochemistry Communications, 2011, 13, 182-185.	4.7	231
72	Stability Enhancement of Pd Catalysts by Compositing with Polypyrrole Layer for Polymer Electrolyte Fuel Cell Electrodes. Topics in Catalysis, 2010, 53, 678-685.	2.8	17

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73	Effect of polyoxometalate amount deposited on Pt/C electrocatalysts for CO tolerant electrooxidation of H2 in polymer electrolyte fuel cells. International Journal of Hydrogen Energy, 2010, 35, 6853-6862.	7.1	32
74	Highly improved oxygen reduction performance over Pt/C-dispersed nanowire network catalysts. Electrochemistry Communications, 2010, 12, 32-35.	4.7	38
75	Pt and PtRh nanowire electrocatalysts for cyclohexane-fueled polymer electrolyte membrane fuel cell. Electrochemistry Communications, 2009, 11, 446-449.	4.7	65
76	Carbon-supported PtNi catalysts for electrooxidation of cyclohexane to benzene over polymer electrolyte fuel cells. Catalysis Today, 2009, 146, 9-14.	4.4	34
77	Effect of Rh content on carbon-supported PtRh catalysts for dehydrogenative electrooxidation of cyclohexane to benzene over polymer electrolyte membrane fuel cell. Applied Catalysis A: General, 2009, 352, 145-151.	4.3	32
78	Electrochemical benzene hydrogenation using PtRhM/C (M=W, Pd, or Mo) electrocatalysts over a polymer electrolyte fuel cell system. Applied Catalysis A: General, 2009, 359, 136-143.	4.3	14
79	A polyoxometalate-deposited Pt/CNT electrocatalyst via chemical synthesis for methanol electrooxidation. Journal of Power Sources, 2008, 179, 81-86.	7.8	81
80	Influence of Sn content on PtSn/C catalysts for electrooxidation of C1â€“C3 alcohols: Synthesis, characterization, and electrocatalytic activity. Applied Catalysis B: Environmental, 2008, 82, 89-102.	20.2	261