Hoyoung Kim

List of Publications by Year
in descending order

31 papers	759 citations	567281 15 h-index	526287 27 g-index
31 all docs	31 docs citations	31 times ranked	830 citing authors

#	ARTICLE	IF	CITATIONS
1	Design of nanocatalyst for electrode structure: Electrophoretic deposition of iron phosphide nanoparticles to produce a highly active hydrogen evolution reaction catalyst. Chemical Engineering Journal, 2022, 431, 133217.	12.7	15
2	Restructured <scp>Coâ€Ru</scp> alloys via electrodeposition for efficient hydrogen production in proton exchange membrane water electrolyzers. International Journal of Energy Research, 2022, 46, 7975-7987.	4.5	7
3	A highly active and stable 3D dandelion spore-structured self-supporting Ir-based electrocatalyst for proton exchange membrane water electrolysis fabricated using structural reconstruction. Energy and Environmental Science, 2022, 15, 3449-3461.	30.8	44
4	Electrodeposited <scp>NiRh</scp> alloy as an efficient lowâ€precious metal catalyst for alkaline hydrogen oxidation reaction. International Journal of Energy Research, 2021, 45, 5325-5336.	4.5	8
5	Facile fabrication of amorphous NiMo catalysts for alkaline hydrogen oxidation reaction. Journal of Industrial and Engineering Chemistry, 2021, 94, 309-316.	5.8	19
6	Acidâ€durable, highâ€performance cobalt phosphide catalysts for hydrogen evolution in proton exchange membrane water electrolysis. International Journal of Energy Research, 2021, 45, 16842-16855.	4.5	12
7	Multicomponent nonprecious hydrogen evolution catalysts for high performance and durable proton exchange membrane water electrolyzer. Journal of Power Sources, 2021, 506, 230200.	7.8	17
8	Structure engineering defective and mass transfer-enhanced RuO2 nanosheets for proton exchange membrane water electrolyzer. Nano Energy, 2021, 88, 106276.	16.0	49
9	Ag-deposited Ti gas diffusion electrode in proton exchange membrane CO2 electrolyzer for CO production. Journal of Industrial and Engineering Chemistry, 2020, 82, 374-382.	5.8	13
10	Facile electrochemical preparation of nonprecious Coâ€Cu alloy catalysts for hydrogen production in proton exchange membrane water electrolysis. International Journal of Energy Research, 2020, 44, 2833-2844.	4.5	22
11	Electrodeposition-fabricated catalysts for polymer electrolyte water electrolysis. Korean Journal of Chemical Engineering, 2020, 37, 1275-1294.	2.7	6
12	Performance deterioration and recovery in high-temperature polymer electrolyte membrane fuel cells: Effects of deliquescence of phosphoric acid. International Journal of Hydrogen Energy, 2020, 45, 32844-32855.	7.1	8
13	Fabrication of Large Area Ag Gas Diffusion Electrode via Electrodeposition for Electrochemical CO2 Reduction. Coatings, 2020, 10, 341.	2.6	12
14	Binder-coated electrodeposited PtNiCu catalysts for the oxygen reduction reaction in high-temperature polymer electrolyte membrane fuel cells. Applied Surface Science, 2020, 510, 145444.	6.1	14
15	Performance enhancement of high-temperature polymer electrolyte membrane fuel cells using Pt pulse electrodeposition. Journal of Power Sources, 2019, 438, 227022.	7.8	17
16	Pulse-electrodeposited nickel phosphide for high-performance proton exchange membrane water electrolysis. Journal of Alloys and Compounds, 2019, 785, 296-304.	5.5	40
17	Chemical transformation of solution-processed Ag nanocrystal thin films into electrically conductive and catalytically active Pt-based nanostructures. Journal of Industrial and Engineering Chemistry, 2019, 76, 388-395.	5.8	3
18	Electrochemically Fabricated NiW on a Cu Nanowire as a Highly Porous Non-Precious-Metal Cathode Catalyst for a Proton Exchange Membrane Water Electrolyzer. ACS Sustainable Chemistry and Engineering, 2019, 7, 8265-8273.	6.7	30

#	Article	IF	Citations
19	Phase transformation of iron phosphide nanoparticles for hydrogen evolution reaction electrocatalysis. International Journal of Hydrogen Energy, 2018, 43, 11326-11334.	7.1	43
20	Electrodeposition-fabricated PtCu-alloy cathode catalysts for high-temperature proton exchange membrane fuel cells. Korean Journal of Chemical Engineering, 2018, 35, 1547-1555.	2.7	26
21	Direct fabrication of gas diffusion cathode by pulse electrodeposition for proton exchange membrane water electrolysis. Applied Surface Science, 2018, 444, 303-311.	6.1	23
22	Non-precious metal electrocatalysts for hydrogen production in proton exchange membrane water electrolyzer. Applied Catalysis B: Environmental, 2017, 206, 608-616.	20.2	54
23	Electrochemically Fabricated Pdâ€“In Catalysts for Carbon Dioxideâ€Formate/Formic Acid Interâ€Conversion. Bulletin of the Korean Chemical Society, 2017, 38, 607-613.	1.9	13
24	AgIn dendrite catalysts for electrochemical reduction of CO2 to CO. Applied Catalysis B: Environmental, 2017, 219, 123-131.	20.2	64
25	An extremely low Pt loading cathode for a highly efficient proton exchange membrane water electrolyzer. Nanoscale, 2017, 9, 19045-19049.	5.6	44
26	Electrochemical Reduction of Carbon Dioxide Using Ag Catalysts Prepared by Electrodeposition in the Presence of Additives. Journal of Nanoscience and Nanotechnology, 2017, 17, 7843-7851.	0.9	12
27	Pdâ€“Sn Alloy Electrocatalysts for Interconversion Between Carbon Dioxide and Formate/Formic Acid. Journal of Nanoscience and Nanotechnology, 2017, 17, 7547-7555.	0.9	13
28	Electrochemical Preparation of Ru/Co Biâ€layered Catalysts on Ti Substrates for the Oxygen Evolution Reaction. Bulletin of the Korean Chemical Society, 2016, 37, 1270-1277.	1.9	5
29	Electrochemical Conversion of Carbon Dioxide to Formic Acid on Snâ€“Zn Alloy Catalysts Prepared by Electrodeposition. Journal of Nanoscience and Nanotechnology, 2016, 16, 10470-10474.	0.9	10
30	High-activity electrodeposited NiW catalysts for hydrogen evolution in alkaline water electrolysis. Applied Surface Science, 2015, 349, 629-635.	6.1	85
31	Activity and stability of the oxygen evolution reaction on electrodeposited Ru and its thermal oxides. Applied Surface Science, 2015, 359, 227-235.	6.1	31