Taehyun Kwon

List of Publications by Year
in descending order

34	1,834	471371 17	377752 34
papers	citations	h-index	g-index

34	34	34	2598
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Iridium-Based Multimetallic Nanoframe@Nanoframe Structure: An Efficient and Robust Electrocatalyst toward Oxygen Evolution Reaction. ACS Nano, 2017, 11, 5500-5509.	7.3	243
2	Hollow nanoparticles as emerging electrocatalysts for renewable energy conversion reactions. Chemical Society Reviews, 2018, 47, 8173-8202.	18.7	222
3	Cobalt Assisted Synthesis of IrCu Hollow Octahedral Nanocages as Highly Active Electrocatalysts toward Oxygen Evolution Reaction. Advanced Functional Materials, 2017, 27, 1604688.	7.8	186
4	Potential Link between Cu Surface and Selective CO₂ Electroreduction: Perspective on Future Electrocatalyst Designs. Advanced Materials, 2020, 32, e1908398.	11.1	182
5	Vertexâ€Reinforced PtCuCo Ternary Nanoframes as Efficient and Stable Electrocatalysts for the Oxygen Reduction Reaction and the Methanol Oxidation Reaction. Advanced Functional Materials, 2018, 28, 1706440.	7.8	161
6	Nanoscale hetero-interfaces between metals and metal compounds for electrocatalytic applications. Journal of Materials Chemistry A, 2019, 7, 5090-5110.	5.2	128
7	Intermetallic PtCu Nanoframes as Efficient Oxygen Reduction Electrocatalysts. Nano Letters, 2020, 20, 7413-7421.	4.5	109
8	High entropy alloy electrocatalysts: a critical assessment of fabrication and performance. Journal of Materials Chemistry A, 2020, 8, 14844-14862.	5.2	108
9	Safeguarding the RuO₂ phase against lattice oxygen oxidation during acidic water electrooxidation. Energy and Environmental Science, 2022, 15, 1119-1130.	15.6	66
10	Catalytic Nanoframes and Beyond. Advanced Materials, 2020, 32, e2001345.	11.1	57
11	Ni@Ru and NiCo@Ru Coreâ€“Shell Hexagonal Nanosandwiches with a Compositionally Tunable Core and a Regioselectively Grown Shell. Small, 2018, 14, 1702353.	5.2	50
12	Pt Dopant: Controlling the Ir Oxidation States toward Efficient and Durable Oxygen Evolution Reaction in Acidic Media. Advanced Functional Materials, 2020, 30, 2003935.	7.8	50
13	Mnâ€Dopant Differentiating the Ru and Ir Oxidation States in Catalytic Oxides Toward Durable Oxygen Evolution Reaction in Acidic Electrolyte. Small Methods, 2022, 6, e2101236.	4.6	31
14	Ideal design of air electrodeâ€”A step closer toward robust rechargeable Znâ€“air battery. APL Materials, 2020, 8, .	2.2	27
15	Interfacing RuO₂ with Pt to induce efficient charge transfer from Pt to RuO₂ for highly efficient and stable oxygen evolution in acidic media. Journal of Materials Chemistry A, 2021, 9, 14352-14362.	5.2	25
16	Dopants in the Design of Noble Metal Nanoparticle Electrocatalysts and their Effect on Surface Energy and Coordination Chemistry at the Nanocrystal Surface. Advanced Energy Materials, 2021, 11, 2100265.	10.2	25
17	RuO_x-decorated multimetallic hetero-nanocages as highly efficient electrocatalysts toward the methanol oxidation reaction. Nanoscale, 2018, 10, 21178-21185.	2.8	21
18	Antioxidant technology for durability enhancement in polymer electrolyte membranes for fuel cell applications. Materials Today, 2022, 58, 135-163.	8.3	18

#	Article	IF	Citations
19	Dopant-Assisted Control of the Crystallite Domain Size in Hollow Ternary Iridium Alloy Octahedral Nanocages toward the Oxygen Evolution Reaction. Cell Reports Physical Science, 2020, 1, 100260.	2.8	14
20	Multimetallic nanostructures for electrocatalytic oxygen evolution reaction in acidic media. Materials Chemistry Frontiers, 2021, 5, 4445-4473.	3.2	14
21	Longitudinal Strain Engineering of Cu2â€“xS by the Juxtaposed Cu5FeS4 Phase in the Cu5FeS4/Cu2â€“xS/Cu5FeS4 Nanosandwich. Chemistry of Materials, 2019, 31, 9070-9077.	3.2	12
22	IrCo nanocacti on Co_xS_y nanocages as a highly efficient and robust electrocatalyst for the oxygen evolution reaction in acidic media. Nanoscale, 2020, 12, 17074-17082.	2.8	11
23	Pt²⁺-Exchanged ZIF-8 nanocube as a solid-state precursor for L1₀-PtZn intermetallic nanoparticles embedded in a hollow carbon nanocage. Nanoscale, 2020, 12, 1118-1127.	2.8	10
24	Boosting antioxidation efficiency of nonstoichiometric CeOx nanoparticles via surface passivation toward robust polymer electrolyte membrane fuel cells. Chemical Engineering Journal, 2022, 432, 134419.	6.6	10
25	Pd₃Pb Nanosponges for Selective Conversion of Furfural to Furfuryl Alcohol under Mild Condition. Small Methods, 2021, 5, e2100400.	4.6	8
26	Recent advances in the electrochemical CO reduction reaction towards highly selective formation of Cx products (XÂ= 1â€“3). Chem Catalysis, 2022, 2, 1961-1988.	2.9	7
27	Singleâ€step Fabrication of Polymeric Composite Membrane via Centrifugal Colloidal Casting for Fuel Cell Applications. Small Methods, 2021, 5, e2100285.	4.6	6
28	Double Hypercrosslinked Porous Organic Polymer-Derived Electrocatalysts for a Water Splitting Device. ACS Applied Energy Materials, 2022, 5, 3269-3274.	2.5	6
29	Unexpected solution phase formation of hollow PtSn alloy nanoparticles from Sn deposition on Pt dendritic structures. CrystEngComm, 2016, 18, 6019-6023.	1.3	5
30	Stacked CdTe/CdS Nanodiscs via Intraparticle Migration of CdTe on CdS. Chemistry of Materials, 2020, 32, 10104-10112.	3.2	5
31	Facile oneâ€step synthesis of Ru doped NiCoP nanoparticles as highly efficient electrocatalysts for oxygen evolution reaction. Chemistry - an Asian Journal, 2021, 16, 3630-3635.	1.7	5
32	Ce(III)â€Based Coordinationâ€Complexâ€Based Efficient Radical Scavenger for Exceptional Durability Enhancement of Polymer Application in Protonâ€Exchange Membrane Fuel Cells and Organic Photovoltaics. Advanced Energy and Sustainability Research, 2022, 3, .	2.8	5
33	Electrocatalysts: Pt Dopant: Controlling the Ir Oxidation States toward Efficient and Durable Oxygen Evolution Reaction in Acidic Media (Adv. Funct. Mater. 38/2020). Advanced Functional Materials, 2020, 30, 2070253.	7.8	4
34	Chemical Fields: Directing Atom Migration in the Multiphasic Nanocrystal. Accounts of Chemical Research, 2022, 55, 1015-1024.	7.6	3