

Hionsuck Baik

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5145913/publications.pdf>

Version: 2024-02-01

49
papers

2,569
citations

201674

27
h-index

206112

48
g-index

49
all docs

49
docs citations

49
times ranked

3341
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.	14.6	243
2	Cobalt Assisted Synthesis of IrCu Hollow Octahedral Nanocages as Highly Active Electrocatalysts toward Oxygen Evolution Reaction. Advanced Functional Materials, 2017, 27, 1604688.	14.9	186
3	Skeletal Octahedral Nanoframe with Cartesian Coordinates <i>via</i> Geometrically Precise Nanoscale Phase Segregation in a Pt@Ni Core-Shell Nanocrystal. ACS Nano, 2015, 9, 2856-2867.	14.6	176
4	Vertex-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.	14.9	161
5	Rational design of Pt-Ni-Co ternary alloy nanoframe crystals as highly efficient catalysts toward the alkaline hydrogen evolution reaction. Nanoscale, 2016, 8, 16379-16386.	5.6	128
6	Dendrite-Embedded Platinum-Nickel Multiframes as Highly Active and Durable Electrocatalyst toward the Oxygen Reduction Reaction. Nano Letters, 2018, 18, 2930-2936.	9.1	121
7	Facet-controlled hollow Rh ₂ S ₃ hexagonal nanoprisms as highly active and structurally robust catalysts toward hydrogen evolution reaction. Energy and Environmental Science, 2016, 9, 850-856.	30.8	118
8	Radially Phase Segregated PtCu@PtCuNi Dendrite@Frame Nanocatalyst for the Oxygen Reduction Reaction. ACS Nano, 2017, 11, 10844-10851.	14.6	110
9	Intermetallic PtCu Nanoframes as Efficient Oxygen Reduction Electrocatalysts. Nano Letters, 2020, 20, 7413-7421.	9.1	109
10	Lanthanide metal-assisted synthesis of rhombic dodecahedral MNi (M = Ir and Pt) nanoframes toward efficient oxygen evolution catalysis. Nano Energy, 2017, 42, 17-25.	16.0	94
11	Theoretical and Experimental Understanding of Hydrogen Evolution Reaction Kinetics in Alkaline Electrolytes with Pt-Based Core-Shell Nanocrystals. Journal of the American Chemical Society, 2019, 141, 18256-18263.	13.7	91
12	Cactus-Like Hollow Cu ₂ S@Ru Nanoplates as Excellent and Robust Electrocatalysts for the Alkaline Hydrogen Evolution Reaction. Small, 2017, 13, 1700052.	10.0	86
13	Topotactic Transformations in an Icosahedral Nanocrystal to Form Efficient Water-Splitting Catalysts. Advanced Materials, 2019, 31, e1805546.	21.0	76
14	NiOOH Exfoliation-Free Nickel Octahedra as Highly Active and Durable Electrocatalysts Toward the Oxygen Evolution Reaction in an Alkaline Electrolyte. ACS Applied Materials & Interfaces, 2018, 10, 10115-10122.	8.0	68
15	An IrRu alloy nanocactus on Cu ₂ S@IrS _y as a highly efficient bifunctional electrocatalyst toward overall water splitting in acidic electrolytes. Journal of Materials Chemistry A, 2018, 6, 16130-16138.	10.3	58
16	Synthesis of compositionally tunable, hollow mixed metal sulphide Co _x Ni _y S _z octahedral nanocages and their composition-dependent electrocatalytic activities for oxygen evolution reaction. Nanoscale, 2017, 9, 15397-15406.	5.6	52
17	Hemi-core@frame AuCu@IrNi nanocrystals as active and durable bifunctional catalysts for the water splitting reaction in acidic media. Nanoscale Horizons, 2019, 4, 727-734.	8.0	43
18	An Hetero-Epitaxially Grown Zeolite Membrane. Angewandte Chemie - International Edition, 2019, 58, 18654-18662.	13.8	38

#	ARTICLE	IF	CITATIONS
19	Scalable synthesis of djurleite copper sulphide (Cu _{1.94} S) hexagonal nanoplates from a single precursor copper thiocyanate and their photothermal properties. CrystEngComm, 2015, 17, 4627-4631.	2.6	36
20	Highly Crystalline Pd ₁₃ Cu ₃ S ₇ Nanoplates Prepared via Partial Cation Exchange of Cu _{1.81} S Templates as an Efficient Electrocatalyst for the Hydrogen Evolution Reaction. Chemistry of Materials, 2018, 30, 6884-6892.	6.7	36
21	Janus Nanoparticle Structural Motif Control <i>via</i> Asymmetric Cation Exchange in Edge-Protected Cu _{1.81} S@Ir _x S _y Hexagonal Nanoplates. ACS Nano, 2018, 12, 7996-8005.	14.6	36
22	Vertical-crystalline Fe-doped Ir ² -Ni oxyhydroxides for highly active and stable oxygen evolution reaction. Matter, 2021, 4, 3585-3604.	10.0	34
23	Rational Synthesis of Heterostructured M/Pt (M = Ru or Rh) Octahedral Nanoboxes and Octapods and Their Structure-Dependent Electrochemical Activity Toward the Oxygen Evolution Reaction. Small, 2015, 11, 4462-4468.	10.0	32
24	Uniform Si-CHA Zeolite Layers Formed by a Selective Sonication-Assisted Deposition Method. Angewandte Chemie - International Edition, 2013, 52, 5280-5284.	13.8	31
25	Mn-Dopant Differentiating the Ru and Ir Oxidation States in Catalytic Oxides Toward Durable Oxygen Evolution Reaction in Acidic Electrolyte. Small Methods, 2022, 6, e2101236.	8.6	31
26	Gold Nanotetrapods with Unique Topological Structure and Ultranarrow Plasmonic Band as Multifunctional Therapeutic Agents. Journal of Physical Chemistry Letters, 2019, 10, 4505-4510.	4.6	30
27	Fabrication of hierarchical Rh nanostructures by understanding the growth kinetics of facet-controlled Rh nanocrystals. Chemical Communications, 2013, 49, 2225.	4.1	29
28	A facet-controlled Rh ₃ Pb ₂ S ₂ nanocage as an efficient and robust electrocatalyst toward the hydrogen evolution reaction. Nanoscale, 2018, 10, 9845-9850.	5.6	28
29	Crystal Phase Transition Creates a Highly Active and Stable RuC _x Nanosurface for Hydrogen Evolution Reaction in Alkaline Media. Advanced Materials, 2021, 33, e2105248.	21.0	27
30	Highly Crystalline Hollow Toroidal Copper Phosphosulfide <i>via</i> Anion Exchange: A Versatile Cation Exchange Nanoplatfrom. ACS Nano, 2020, 14, 11205-11214.	14.6	24
31	Janus to Core-Shell to Janus: Facile Cation Movement in Cu ₂ S/Ag ₂ S Hexagonal Nanoplates Induced by Surface Strain Control. ACS Nano, 2019, 13, 11834-11842.	14.6	23
32	Understanding the Grain Boundary Behavior of Bimetallic Platinum-Cobalt Alloy Nanowires toward Oxygen Electro-Reduction. ACS Catalysis, 2022, 12, 3516-3523.	11.2	23
33	RuO _x -decorated multimetallic hetero-nanocages as highly efficient electrocatalysts toward the methanol oxidation reaction. Nanoscale, 2018, 10, 21178-21185.	5.6	21
34	Synthesis and sonication-induced assembly of Si-DDR particles for close-packed oriented layers. Chemical Communications, 2013, 49, 7418.	4.1	20
35	Microfluidics-Assisted Synthesis of Hierarchical Cu ₂ O Nanocrystal as C ₂ -selective CO ₂ Reduction Electrocatalyst. Small Methods, 2022, 6, e2200074.	8.6	19
36	Facet-controlled {100}Rh-Pt and {100}Pt-Pt dendritic nanostructures by transferring the {100} facet nature of the core nanocube to the branch nanocubes. Nanoscale, 2015, 7, 3941-3946.	5.6	18

#	ARTICLE	IF	CITATIONS
37	Plasmon Enhanced Direct Bandgap Emissions in Cu ₇ S ₄ @Au ₂ S@Au Nanorings. <i>Small</i> , 2016, 12, 5728-5733.	10.0	16
38	Longitudinal Strain Engineering of Cu ₂ S by the Juxtaposed Cu ₅ FeS ₄ Phase in the Cu ₅ FeS ₄ /Cu ₂ S/Cu ₅ FeS ₄ Nanosandwich. <i>Chemistry of Materials</i> , 2019, 31, 9070-9077.	6.7	12
39	An Extrinsic Pore-Containing Molecular Sieve Film: A Robust, High-Throughput Membrane Filter. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1323-1331.	13.8	11
40	A Hybrid Zeolite Membrane-Based Breakthrough for Simultaneous CO ₂ Capture and CH ₄ Upgrading from Biogas. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 2893-2907.	8.0	11
41	Pt ²⁺ -Exchanged ZIF-8 nanocube as a solid-state precursor for L1 ₀ -PtZn intermetallic nanoparticles embedded in a hollow carbon nanocage. <i>Nanoscale</i> , 2020, 12, 1118-1127.	5.6	10
42	An unprecedented c-oriented DDR@MWW zeolite hybrid membrane: new insights into H ₂ -permselectivities via six membered-ring pores. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14071-14081.	10.3	10
43	Mitrofanovite, Layered Platinum Telluride, for Active Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 2437-2446.	8.0	10
44	Nanoporous Silver Telluride for Active Hydrogen Evolution. <i>ACS Nano</i> , 2021, 15, 6540-6550.	14.6	10
45	Blue Emission of In-GaN Colloidal Quantum Dots via Zn Doping. <i>Chemistry of Materials</i> , 2019, 31, 5370-5375.	6.7	9
46	Partial Edge Dislocations Comprised of Metallic Ga Bonds in Heteroepitaxial GaN. <i>Nano Letters</i> , 2018, 18, 4866-4870.	9.1	5
47	Stacked CdTe/CdS Nanodiscs via Intraparticle Migration of CdTe on CdS. <i>Chemistry of Materials</i> , 2020, 32, 10104-10112.	6.7	5
48	Revealing the Quasi-Periodic Crystallographic Structure of Self-Assembled SnTiS ₃ Misfit Compound. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9956-9964.	3.1	4
49	Vertical Alignment of Fe-Doped Ni ₂ Ni Oxyhydroxides for Highly Active and Stable Oxygen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0