

Byeongyoon Kim

List of Publications by Year in descending order

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32
papers

2,452
citations

279487

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docs citations

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times ranked

4254
citing authors

#	ARTICLE	IF	CITATIONS
1	MXene: an emerging two-dimensional material for future energy conversion and storage applications. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24564-24579.	5.2	450
2	Nanostructured materials on 3D nickel foam as electrocatalysts for water splitting. <i>Nanoscale</i> , 2017, 9, 12231-12247.	2.8	403
3	Hollow nanoparticles as emerging electrocatalysts for renewable energy conversion reactions. <i>Chemical Society Reviews</i> , 2018, 47, 8173-8202.	18.7	222
4	Skeletal Octahedral Nanoframe with Cartesian Coordinates <i>via</i> Geometrically Precise Nanoscale Phase Segregation in a Pt@Ni Core-Shell Nanocrystal. <i>ACS Nano</i> , 2015, 9, 2856-2867.	7.3	176
5	Rational design of Pt-Ni-Co ternary alloy nanoframe crystals as highly efficient catalysts toward the alkaline hydrogen evolution reaction. <i>Nanoscale</i> , 2016, 8, 16379-16386.	2.8	128
6	Facet-controlled hollow Rh ₂ S ₃ hexagonal nanoprisms as highly active and structurally robust catalysts toward hydrogen evolution reaction. <i>Energy and Environmental Science</i> , 2016, 9, 850-856.	15.6	118
7	Cactus-Like Hollow Cu ₂ S@Ru Nanoplates as Excellent and Robust Electrocatalysts for the Alkaline Hydrogen Evolution Reaction. <i>Small</i> , 2017, 13, 1700052.	5.2	86
8	Topotactic Transformations in an Icosahedral Nanocrystal to Form Efficient Water-Splitting Catalysts. <i>Advanced Materials</i> , 2019, 31, e1805546.	11.1	76
9	NiOOH Exfoliation-Free Nickel Octahedra as Highly Active and Durable Electrocatalysts Toward the Oxygen Evolution Reaction in an Alkaline Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 10115-10122.	4.0	68
10	Transition metal dichalcogenide-decorated MXenes: promising hybrid electrodes for energy storage and conversion applications. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3298-3321.	3.2	66
11	Recent Advances in Transition Metal Phosphide Electrocatalysts for Water Splitting under Neutral pH Conditions. <i>ChemElectroChem</i> , 2020, 7, 3578-3589.	1.7	63
12	Recent advances in electrocatalysts toward the oxygen reduction reaction: the case of PtNi octahedra. <i>Nanoscale</i> , 2018, 10, 20073-20088.	2.8	60
13	An IrRu alloy nanocactus on Cu ₂ S@IrS _y as a highly efficient bifunctional electrocatalyst toward overall water splitting in acidic electrolytes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 16130-16138.	5.2	58
14	Nanodendrites of platinum-group metals for electrocatalytic applications. <i>Nano Research</i> , 2018, 11, 6111-6140.	5.8	54
15	Ni@Ru and NiCo@Ru Core-Shell Hexagonal Nanosandwiches with a Compositionally Tunable Core and a Regioselectively Grown Shell. <i>Small</i> , 2018, 14, 1702353.	5.2	50
16	Pt-Cu based nanocrystals as promising catalysts for various electrocatalytic reactions. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17183-17203.	5.2	48
17	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. <i>Chemistry of Materials</i> , 2018, 30, 6884-6892.	3.2	36
18	High yield synthesis of catalytically active five-fold twinned Pt nanorods from a surfactant-ligated precursor. <i>Chemical Communications</i> , 2013, 49, 573-575.	2.2	35

#	ARTICLE	IF	CITATIONS
19	Vertical-crystalline Fe-doped γ -Ni oxyhydroxides for highly active and stable oxygen evolution reaction. <i>Matter</i> , 2021, 4, 3585-3604.	5.0	34
20	A Highly Crystalline Manganese-Doped Iron Oxide Nanocontainer with Predesigned Void Volume and Shape for Theranostic Applications. <i>Advanced Materials</i> , 2013, 25, 3202-3208.	11.1	31
21	Gold Nanotetrapods with Unique Topological Structure and Ultranarrow Plasmonic Band as Multifunctional Therapeutic Agents. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 4505-4510.	2.1	30
22	Axially twinned nanodumbbell with a Pt bar and two Rh@Pt balls designed for high catalytic activity. <i>Nanoscale</i> , 2013, 5, 5738.	2.8	25
23	Nitrosoreductase-Like Nanocatalyst for Ultrasensitive and Stable Biosensing. <i>Analytical Chemistry</i> , 2018, 90, 807-813.	3.2	25
24	Highly Crystalline Hollow Toroidal Copper Phosphosulfide <i>via</i> Anion Exchange: A Versatile Cation Exchange Nanoplatfrom. <i>ACS Nano</i> , 2020, 14, 11205-11214.	7.3	24
25	Synergistic Effect of Detection and Separation for Pathogen Using Magnetic Clusters. <i>Bioconjugate Chemistry</i> , 2016, 27, 59-65.	1.8	21
26	Multimetallic nanostructures for electrocatalytic oxygen evolution reaction in acidic media. <i>Materials Chemistry Frontiers</i> , 2021, 5, 4445-4473.	3.2	14
27	Ferric phosphide carbon nanocomposites emerging as highly active electrocatalysts for the hydrogen evolution reaction. <i>Dalton Transactions</i> , 2018, 47, 16011-16018.	1.6	12
28	Colourimetric redox-polyaniline nanoindicator for in situ vesicular trafficking of intracellular transport. <i>Nano Research</i> , 2015, 8, 1169-1179.	5.8	8
29	Large-scale one pot synthesis of metal oxide nanoparticles by decomposition of metal carbonates or nitrates. <i>CrystEngComm</i> , 2015, 17, 4977-4981.	1.3	7
30	Chemical Fields: Directing Atom Migration in the Multiphasic Nanocrystal. <i>Accounts of Chemical Research</i> , 2022, 55, 1015-1024.	7.6	3
31	Water Splitting: Topotactic Transformations in an Icosahedral Nanocrystal to Form Efficient Water-Splitting Catalysts (Adv. Mater. 1/2019). <i>Advanced Materials</i> , 2019, 31, 1970002.	11.1	2
32	Vertical Alignment of Fe-Doped γ -Ni Oxyhydroxides for Highly Active and Stable Oxygen Evolution Reaction. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0