Jin Hyun Kim

List of Publications by Year
in descending order

34 papers	3,644 citations	279798 23 h-index	395702 33 g-index
34 all docs	34 docs citations	34 times ranked	4564 citing authors

#	Article	IF	Citations
1	Toward practical solar hydrogen production â€“ an artificial photosynthetic leaf-to-farm challenge. Chemical Society Reviews, 2019, 48, 1908-1971.	38.1	781
2	Boosting the performance of Cu2O photocathodes for unassisted solar water splitting devices. Nature Catalysis, 2018, 1, 412-420.	34.4	489
3	Elaborately Modified BiVO₄ Photoanodes for Solar Water Splitting. Advanced Materials, 2019, 31, e1806938.	21.0	333
4	Hetero-type dual photoanodes for unbiased solar water splitting with extended light harvesting. Nature Communications, 2016, 7, 13380.	12.8	263
5	Wireless Solar Water Splitting Device with Robust Cobalt-Catalyzed, Dual-Doped BiVO₄ Photoanode and Perovskite Solar Cell in Tandem: A Dual Absorber Artificial Leaf. ACS Nano, 2015, 9, 11820-11829.	14.6	219
6	Defective ZnFe₂O₄ nanorods with oxygen vacancy for photoelectrochemical water splitting. Nanoscale, 2015, 7, 19144-19151.	5.6	183
7	Benchmark performance of low-cost Sb2Se3 photocathodes for unassisted solar overall water splitting. Nature Communications, 2020, 11, 861.	12.8	135
8	Carbonate-coordinated cobalt co-catalyzed BiVO4/WO3 composite photoanode tailored for CO2 reduction to fuels. Nano Energy, 2015, 15, 153-163.	16.0	113
9	Overall Photoelectrochemical Water Splitting using Tandem Cell under Simulated Sunlight. ChemSusChem, 2016, 9, 61-66.	6.8	112
10	BiVO₄-Based Heterostructured Photocatalysts for Solar Water Splitting: A Review. Energy and Environment Focus, 2014, 3, 339-353.	0.3	96
11	Awakening Solar Waterâ€Splitting Activity of ZnFe₂O₄ Nanorods by Hybrid Microwave Annealing. Advanced Energy Materials, 2015, 5, 1401933.	19.5	95
12	Bifunctional TiO₂ underlayer for Î±-Fe₂O₃ nanorod based photoelectrochemical cells: enhanced interface and Ti⁴⁺ doping. Journal of Materials Chemistry A, 2015, 3, 5007-5013.	10.3	90
13	A versatile photoanode-driven photoelectrochemical system for conversion of CO2 to fuels with high faradaic efficiencies at low bias potentials. Journal of Materials Chemistry A, 2014, 2, 2044.	10.3	85
14	Three Birds, Oneâ€Stone Strategy for Hybrid Microwave Synthesis of Ta and Sn Codoped Fe₂O₃@FeTaO₄ Nanorods for Photoâ€Electrochemical Water Oxidation. Advanced Functional Materials, 2019, 29, 1805737.	14.9	79
15	Palladium oxide as a novel oxygen evolution catalyst on BiVO4 photoanode for photoelectrochemical water splitting. Journal of Catalysis, 2014, 317, 126-134.	6.2	65
16	Solar Water Splitting: Elaborately Modified BiVO₄ Photoanodes for Solar Water Splitting (Adv. Mater. 20/2019). Advanced Materials, 2019, 31, 1970146.	21.0	64
17	Ferrites: emerging light absorbers for solar water splitting. Journal of Materials Chemistry A, 2020, 8, 9447-9482.	10.3	61
18	Engineering Highly Ordered Iron Titanate Nanotube Array Photoanodes for Enhanced Solar Water Splitting Activity. Advanced Functional Materials, 2017, 27, 1702428.	14.9	52

#	Article	IF	Citations
19	A precious metal-free solar water splitting cell with a bifunctional cobalt phosphide electrocatalyst and doubly promoted bismuth vanadate photoanode. Journal of Materials Chemistry A, 2018, 6, 1266-1274.	10.3	51
20	Precipitating Metal Nitrate Deposition of Amorphous Metal Oxyhydroxide Electrodes Containing Ni, Fe, and Co for Electrocatalytic Water Oxidation. ACS Catalysis, 2019, 9, 9650-9662.	11.2	43
21	Ultrafast fabrication of highly active BiVO₄photoanodes by hybrid microwave annealing for unbiased solar water splitting. Nanoscale, 2016, 8, 17623-17631.	5.6	40
22	An exceptionally facile method to produce layered double hydroxides on a conducting substrate and their application for solar water splitting without an external bias. Energy and Environmental Science, 2014, 7, 2301.	30.8	37
23	Immobilizing single atom catalytic sites onto highly reduced carbon hosts: Feâ€“N₄/CNT as a durable oxygen reduction catalyst for Naâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 18891-18902.	10.3	31
24	Innovative strategies toward challenges in PV-powered electrochemical CO2 reduction. Journal of Energy Chemistry, 2021, 60, 410-416.	12.9	23
25	All-Bismuth-Based Oxide Tandem Cell for Solar Overall Water Splitting. ACS Applied Energy Materials, 2018, 1, 6694-6699.	5.1	22
26	Seawater-Mediated Solar-to-Sodium Conversion by Bismuth Vanadate Photoanode- Photovoltaic Tandem Cell: Solar Rechargeable Seawater Battery. IScience, 2019, 19, 232-243.	4.1	16
27	ZnFe₂O₄ Dendrite/SnO₂ Helix 3D Heteroâ€Structure Photoanodes for Enhanced Photoelectrochemical Water Splitting: Triple Functions of SnO₂ Nanohelix. Small, 2021, 17, e2103861.	10.0	14
28	Intentional Extrinsic Doping into ZnFe 2 O 4 Nanorod Photoanode for Enhanced Photoelectrochemical Water Splitting. Solar Rrl, 2020, 4, 1900328.	5.8	13
29	Facile surfactant driven fabrication of transparent WO3 photoanodes for improved photoelectrochemical properties. Applied Catalysis A: General, 2016, 521, 233-239.	4.3	10
30	Hetero-tandem organic solar cells drive water electrolysis with a solar-to-hydrogen conversion efficiency up to 10%. Applied Catalysis B: Environmental, 2022, 309, 121237.	20.2	8
31	Synthesis of high-purity, layered structured K₂Ta₄O₁₁ intermediate phase nanocrystals for photocatalytic water splitting. Physical Chemistry Chemical Physics, 2016, 18, 25831-25836.	2.8	7
32	Water Splitting: Engineering Highly Ordered Iron Titanate Nanotube Array Photoanodes for Enhanced Solar Water Splitting Activity (Adv. Funct. Mater. 35/2017). Advanced Functional Materials, 2017, 27, .	14.9	7
33	Perovskite Tandems Advance Solar Hydrogen Production. Joule, 2019, 3, 2892-2894.	24.0	7
34	Monolithic Solar Seawater Battery: Seawater-Mediated Solar-to-Sodium Conversion with 8.0 % Efficiency by Bismuth Vanadate Photoanode - Photovoltaic Tandem Cell. SSRN Electronic Journal, 0, , .	0.4	0