Sunghak Park

List of Publications by Year
in descending order

28 papers	2,112 citations	430874 18 h-index	501196 28 g-index
29 all docs	29 docs citations	29 times ranked	3515 citing authors

#	Article	IF	Citations
1	Reversible and cooperative photoactivation of single-atom Cu/TiO2 photocatalysts. Nature Materials, 2019, 18, 620-626.	27.5	501
2	Photocatalytic hydrogen generation from hydriodic acid using methylammonium lead iodide in dynamic equilibrium with aqueous solution. Nature Energy, 2017, 2, .	39.5	438
3	Organolead Halide Perovskites for Low Operating Voltage Multilevel Resistive Switching. Advanced Materials, 2016, 28, 6562-6567.	21.0	285
4	Tyrosine-mediated two-dimensional peptide assembly and its role as a bio-inspired catalytic scaffold. Nature Communications, 2014, 5, 3665.	12.8	98
5	Mechanistic Investigation of Biomass Oxidation Using Nickel Oxide Nanoparticles in a CO₂-Saturated Electrolyte for Paired Electrolysis. Journal of Physical Chemistry Letters, 2020, 11, 2941-2948.	4.6	88
6	Electronic interaction between transition metal single-atoms and anatase TiO₂ boosts CO₂ photoreduction with H₂O. Energy and Environmental Science, 2022, 15, 601-609.	30.8	88
7	Chemically Deposited Amorphous Zn-Doped NiFeO_xH_y for Enhanced Water Oxidation. ACS Catalysis, 2020, 10, 235-244.	11.2	86
8	Manganese oxide-based heterogeneous electrocatalysts for water oxidation. Energy and Environmental Science, 2020, 13, 2310-2340.	30.8	81
9	Revealing Structural Disorder in Hydrogenated Amorphous Silicon for a Lowâ€Loss Photonic Platform at Visible Frequencies. Advanced Materials, 2021, 33, e2005893.	21.0	69
10	Uniform, Assembled 4 nm Mn₃O₄ Nanoparticles as Efficient Water Oxidation Electrocatalysts at Neutral pH. Advanced Functional Materials, 2020, 30, 1910424.	14.9	55
11	Highly Selective Active Chlorine Generation Electrocatalyzed by Co₃O₄ Nanoparticles: Mechanistic Investigation through in Situ Electrokinetic and Spectroscopic Analyses. Journal of Physical Chemistry Letters, 2019, 10, 1226-1233.	4.6	44
12	Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy. Angewandte Chemie - International Edition, 2021, 60, 4673-4681.	13.8	41
13	Nickelâ€Doping Effect on Mn₃O₄ Nanoparticles for Electrochemical Water Oxidation under Neutral Condition. Small Methods, 2020, 4, 1900733.	8.6	36
14	Importance of Entropic Contribution to Electrochemical Water Oxidation Catalysis. ACS Energy Letters, 2019, 4, 1918-1929.	17.4	31
15	Mechanistic Investigation with Kinetic Parameters on Water Oxidation Catalyzed by Manganese Oxide Nanoparticle Film. ACS Sustainable Chemistry and Engineering, 2019, 7, 10595-10604.	6.7	28
16	Water Oxidation Mechanism for 3d Transition Metal Oxide Catalysts under Neutral Condition. Journal of the Korean Ceramic Society, 2017, 54, 1-8.	2.3	24
17	Importance of Interfacial Band Structure between the Substrate and Mn₃O₄ Nanocatalysts during Electrochemical Water Oxidation. ACS Catalysis, 2020, 10, 1237-1245.	11.2	23
18	Spectroscopic capture of a low-spin Mn(IV)-oxo species in Niâ€“Mn3O4 nanoparticles during water oxidation catalysis. Nature Communications, 2020, 11, 5230.	12.8	21

#	Article	IF	Citations
19	Metal Halide Perovskites for Solar Fuel Production and Photoreactions. Journal of Physical Chemistry Letters, 2021, 12, 8292-8301.	4.6	17
20	Biofunctionalized Ceramic with Self-Assembled Networks of Nanochannels. ACS Nano, 2015, 9, 4447-4457.	14.6	15
21	Methylamine Treated Mn3O4Nanoparticles as a Highly Efficient Water Oxidation Catalyst under Neutral Condition. ChemCatChem, 2019, 11, 1665-1672.	3.7	14
22	High-Density Single-Layer Coating of Gold Nanoparticles onto Multiple Substrates by Using an Intrinsically Disordered Protein of Î±-Synuclein for Nanoapplications. ACS Applied Materials & Interfaces, 2017, 9, 8519-8532.	8.0	8
23	A scalable Alâ€“Ni alloy powder catalyst prepared by metallurgical microstructure control. Journal of Materials Chemistry A, 2020, 8, 11133-11140.	10.3	6
24	Capturing Manganese Oxide Intermediates in Electrochemical Water Oxidation at Neutral pH by In Situ Raman Spectroscopy. Angewandte Chemie, 2021, 133, 4723-4731.	2.0	5
25	Complex Impedance Analysis on Charge Accumulation Step of Mn₃O₄ Nanoparticles during Water Oxidation. ACS Omega, 2021, 6, 18404-18413.	3.5	5
26	Probing the Structure and Binding Mode of EDTA on the Surface of Mn₃O₄ Nanoparticles for Water Oxidation by Advanced Electron Paramagnetic Resonance Spectroscopy. Inorganic Chemistry, 2020, 59, 8846-8854.	4.0	2
27	Electrochemical cell in the brain. Nature Nanotechnology, 2020, 15, 625-626.	31.5	2
28	Engineered Dissolution for Better Electrocatalysts. CheM, 2021, 7, 20-22.	11.7	0