James E Thorne

List of Publications by Year
in descending order

23 papers	1,789 citations	471509 17 h-index	677142 22 g-index
26 all docs	26 docs citations	26 times ranked	3123 citing authors

#	Article	IF	Citations
1	Enabling unassisted solar water splitting by iron oxide and silicon. Nature Communications, 2015, 6, 7447.	12.8	429
2	Stable iridium dinuclear heterogeneous catalysts supported on metal-oxide substrate for solar water oxidation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2902-2907.	7.1	229
3	Understanding the origin of photoelectrode performance enhancement by probing surface kinetics. Chemical Science, 2016, 7, 3347-3354.	7.4	185
4	Forming Buried Junctions to Enhance the Photovoltage Generated by Cuprous Oxide in Aqueous Solutions. Angewandte Chemie - International Edition, 2014, 53, 13493-13497.	13.8	160
5	Comparison of heterogenized molecular and heterogeneous oxide catalysts for photoelectrochemical water oxidation. Energy and Environmental Science, 2016, 9, 1794-1802.	30.8	136
6	Energetics at the Surface of Photoelectrodes and Its Influence on the Photoelectrochemical Properties. Journal of Physical Chemistry Letters, 2015, 6, 4083-4088.	4.6	94
7	Enabling practical electrocatalyst-assisted photoelectron-chemical water splitting with earth abundant materials. Nano Research, 2015, 8, 56-81.	10.4	92
8	End-On Bound Iridium Dinuclear Heterogeneous Catalysts on WO₃ for Solar Water Oxidation. ACS Central Science, 2018, 4, 1166-1172.	11.3	69
9	Controlling the Electronic Coupling between CdSe Quantum Dots and Thiol Capping Ligands via pH and Ligand Selection. Langmuir, 2012, 28, 11072-11077.	3.5	51
10	Understanding Photocharging Effects on Bismuth Vanadate. ACS Applied Materials & Interfaces, 2017, 9, 22083-22087.	8.0	47
11	Observation of a potential-dependent switch of water-oxidation mechanism on Co-oxide-based catalysts. CheM, 2021, 7, 2101-2117.	11.7	42
12	Understanding the role of co-catalysts on silicon photocathodes using intensity modulated photocurrent spectroscopy. Physical Chemistry Chemical Physics, 2017, 19, 29653-29659.	2.8	40
13	Impact of the Synthesis Route on the Water Oxidation Kinetics of Hematite Photoanodes. Journal of Physical Chemistry Letters, 2020, 11, 7285-7290.	4.6	34
14	Charge carrier kinetics in hematite with NiFeOx coating in aqueous solutions: Dependence on bias voltage. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 344-348.	3.9	30
15	Uncovering Photo-Excited Charge Carrier Dynamics in Hematite (Î±-Fe₂O₃) Hidden in the Nanosecond Range by the Heterodyne Transient Grating Technique Combined with the Randomly Interleaved Pulse-Train Method. Journal of Physical Chemistry C, 2019, 123, 6693-6700.	3.1	25
16	Investigation of Photoexcited Carrier Dynamics in Hematite and the Effect of Surface Modifications by an Advanced Transient Grating Technique. ACS Omega, 2017, 2, 1031-1035.	3.5	23
17	Interaction of Mn with reducible CeO2(111) thin films. Applied Surface Science, 2013, 283, 1-5.	6.1	19
18	Photosensitization of ZnO single crystal electrodes with PbS quantum dots. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1954-1959.	1.8	18

#	Article	IF	Citations
19	Strong O 2pâ€“Fe 3d Hybridization Observed in Solution-Grown Hematite Films by Soft X-ray Spectroscopies. Journal of Physical Chemistry B, 2018, 122, 927-932.	2.6	18
20	Comparative study of photo-excited charge carrier dynamics of atomic layer deposited and solution-derived hematite films: Dependence of charge carrier kinetics on surface orientations. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 364, 645-649.	3.9	16
21	Sensitization of ZnO Single Crystal Electrodes with CdSe Quantum Dots. Langmuir, 2014, 30, 12551-12558.	3.5	13
22	Nanostructured Materials. , 2016, , 463-492.		0
23	Efficient Photocatalysis using Hematite Nanostructures and their Derivatives. World Scientific Series in Nanoscience and Nanotechnology, 2016, , 27-55.	0.1	0