James R Mckone

List of Publications by Year
in descending order

40 papers	15,734 citations	331538 21 h-index	345118 36 g-index
53 all docs	53 docs citations	53 times ranked	18631 citing authors

#	Article	IF	Citations
1	Solar Water Splitting Cells. Chemical Reviews, 2010, 110, 6446-6473.	23.0	8,307
2	Nanostructured Nickel Phosphide as an Electrocatalyst for the Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2013, 135, 9267-9270.	6.6	2,624
3	Niâ€“Mo Nanopowders for Efficient Electrochemical Hydrogen Evolution. ACS Catalysis, 2013, 3, 166-169.	5.5	725
4	Will Solar-Driven Water-Splitting Devices See the Light of Day?. Chemistry of Materials, 2014, 26, 407-414.	3.2	654
5	Earth-abundant hydrogen evolution electrocatalysts. Chemical Science, 2014, 5, 865-878.	3.7	636
6	Photoelectrochemical Hydrogen Evolution Using Si Microwire Arrays. Journal of the American Chemical Society, 2011, 133, 1216-1219.	6.6	561
7	Evaluation of Pt, Ni, and Niâ€“Mo electrocatalysts for hydrogen evolution on crystalline Si electrodes. Energy and Environmental Science, 2011, 4, 3573.	15.6	440
8	Superior Charge Storage and Power Density of a Conducting Polymer-Modified Covalent Organic Framework. ACS Central Science, 2016, 2, 667-673.	5.3	349
9	Thin-Film Materials for the Protection of Semiconducting Photoelectrodes in Solar-Fuel Generators. Journal of Physical Chemistry C, 2015, 119, 24201-24228.	1.5	245
10	Hydrogen Evolution from Pt/Ru-Coated p-Type WSe₂ Photocathodes. Journal of the American Chemical Society, 2013, 135, 223-231.	6.6	192
11	Hydrogen-evolution characteristics of Niâ€“Mo-coated, radial junction, n+p-silicon microwire array photocathodes. Energy and Environmental Science, 2012, 5, 9653.	15.6	182
12	On the Benefits of a Symmetric Redox Flow Battery. Journal of the Electrochemical Society, 2016, 163, A338-A344.	1.3	141
13	Elucidating the active sites for CO₂ electroreduction on ligand-protected Au₂₅ nanoclusters. Catalysis Science and Technology, 2018, 8, 3795-3805.	2.1	76
14	Electrochemical Hydrogen Evolution at Ordered Mo₇Ni₇. ACS Catalysis, 2017, 7, 3375-3383.	5.5	62
15	Functional integration of Niâ€“Mo electrocatalysts with Si microwire array photocathodes to simultaneously achieve high fill factors and light-limited photocurrent densities for solar-driven hydrogen evolution. Energy and Environmental Science, 2015, 8, 2977-2984.	15.6	60
16	Solar energy conversion, storage, and release using an integrated solar-driven redox flow battery. Journal of Materials Chemistry A, 2017, 5, 5362-5372.	5.2	52
17	Enhancing the Performance of Ni-Mo Alkaline Hydrogen Evolution Electrocatalysts with Carbon Supports. ACS Applied Energy Materials, 2019, 2, 2524-2533.	2.5	43
18	Harnessing Interfacial Electron Transfer in Redox Flow Batteries. Joule, 2021, 5, 360-378.	11.7	32

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19	The Sensitivity of Metal Oxide Electrocatalysis to Bulk Hydrogen Intercalation: Hydrogen Evolution on Tungsten Oxide. Journal of the American Chemical Society, 2022, 144, 6420-6433.	6.6	32
20	Concerted Multiprotonâ€“Multielectron Transfer for the Reduction of O₂ to H₂O with a Polyoxovanadate Cluster. Journal of the American Chemical Society, 2021, 143, 15756-15768.	6.6	24
21	Direct Observation of Niâ€“Mo Bimetallic Catalyst Formation via Thermal Reduction of Nickel Molybdate Nanorods. ACS Catalysis, 2020, 10, 10390-10398.	5.5	23
22	Electrochemical surface science twenty years later: Expeditions into the electrocatalysis of reactions at the core of artificial photosynthesis. Surface Science, 2015, 631, 285-294.	0.8	22
23	Flow Battery Electroanalysis. 2. Influence of Surface Pretreatment on Fe(III/II) Redox Chemistry at Carbon Electrodes. Journal of Physical Chemistry C, 2019, 123, 144-152.	1.5	22
24	Revisiting trends in the exchange current for hydrogen evolution. Catalysis Science and Technology, 2021, 11, 6832-6838.	2.1	21
25	Electric Double-Layer Gating of Two-Dimensional Field-Effect Transistors Using a Single-Ion Conductor. ACS Applied Materials & Interfaces, 2019, 11, 35879-35887.	4.0	20
26	An Organofunctionalized Polyoxovanadium Cluster as a Molecular Model of Interfacial Pseudocapacitance. ACS Applied Energy Materials, 2019, 2, 8985-8993.	2.5	17
27	Unassisted HI photoelectrolysis using n-WSe₂ solar absorbers. Physical Chemistry Chemical Physics, 2015, 17, 13984-13991.	1.3	15
28	Comparison between the measured and modeled hydrogen-evolution activity of Ni- or Pt-coated silicon photocathodes. International Journal of Hydrogen Energy, 2014, 39, 16220-16226.	3.8	13
29	Photoelectrochemical water splitting: silicon photocathodes for hydrogen evolution. , 2010, , .		11
30	Translational Science for Energy and Beyond. Inorganic Chemistry, 2016, 55, 9131-9143.	1.9	11
31	Comparisons of WO₃ reduction to H_xWO₃ under thermochemical and electrochemical control. Journal of Materials Chemistry A, 2019, 7, 23756-23761.	5.2	11
32	Predicting the Energetics of Hydrogen Intercalation in Metal Oxides Using Acidâ€“Base Properties. ACS Applied Materials & Interfaces, 2020, 12, 44658-44670.	4.0	10
33	CHAPTER 3. Structured Materials for Photoelectrochemical Water Splitting. RSC Energy and Environment Series, 0, , 52-82.	0.2	9
34	Flow Battery Electroanalysis: Hydrodynamic Voltammetry of Aqueous Fe(III/II) Redox Couples at Polycrystalline Pt and Au. ACS Applied Energy Materials, 2018, 1, 4743-4753.	2.5	7
35	The Solar Army: A Case Study in Outreach Based on Solar Photoelectrochemistry. Reviews in Advanced Sciences and Engineering, 2014, 3, 288-303.	0.6	6
36	Surface ligands influence the selectivity of cation uptake in polyoxovanadateâ€“alkoxide clusters. Journal of Materials Chemistry A, 2022, 10, 12070-12078.	5.2	5

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37	Flow battery electroanalysis 3: online kinetics measurements using ultramicroelectrodes in channel flow. Journal of Materials Chemistry A, 2022, 10, 13917-13927.	5.2	4
38	Environmental TEM Study of NiMoO4 Nanorods Undergoing Thermal Reduction: Observing the Formation of a Niâ€“Mo Alloy@oxide Core-shell Catalyst. Microscopy and Microanalysis, 2019, 25, 1472-1473.	0.2	0
39	Building Analogies between the Thermal and Electrochemical Reactivity of Hydrogen Using Proton-Intercalating Metal Oxides. ECS Meeting Abstracts, 2020, MA2020-02, 3757-3757.	0.0	0
40	Carbon Supported Ni-Mo Catalysts for Reversible Alkaline Hydrogen Electrochemistry. ECS Meeting Abstracts, 2020, MA2020-02, 3764-3764.	0.0	0