Adam Holewinski

List of Publications by Year
in descending order

29 papers	1,913 citations	430874 18 h-index	477307 29 g-index
34 all docs	34 docs citations	34 times ranked	3106 citing authors

#	Article	IF	Citations
1	High-performance Agâ€“Co alloy catalysts for electrochemical oxygen reduction. Nature Chemistry, 2014, 6, 828-834.	13.6	383
2	Elementary Mechanisms in Electrocatalysis: Revisiting the ORR Tafel Slope. Journal of the Electrochemical Society, 2012, 159, H864-H870.	2.9	300
3	Controlling Carbon Surface Chemistry by Alloying:Â Carbon Tolerant Reforming Catalyst. Journal of the American Chemical Society, 2006, 128, 11354-11355.	13.7	172
4	Linking CO₂ Sorption Performance to Polymer Morphology in Aminopolymer/Silica Composites through Neutron Scattering. Journal of the American Chemical Society, 2015, 137, 11749-11759.	13.7	131
5	Electrochemical Routes for the Valorization of Biomass-Derived Feedstocks: From Chemistry to Application. ACS Energy Letters, 0, , 1205-1270.	17.4	130
6	Predictive Structureâ€“Reactivity Models for Rapid Screening of Pt-Based Multimetallic Electrocatalysts for the Oxygen Reduction Reaction. ACS Catalysis, 2012, 2, 12-16.	11.2	127
7	Elucidating Acidic Electro-Oxidation Pathways of Furfural on Platinum. ACS Catalysis, 2019, 9, 10305-10316.	11.2	85
8	Electronic Structure Engineering in Heterogeneous Catalysis: Identifying Novel Alloy Catalysts Based on Rapid Screening for Materials with Desired Electronic Properties. Topics in Catalysis, 2012, 55, 376-390.	2.8	80
9	Identifying optimal active sites for heterogeneous catalysis by metal alloys based on molecular descriptors and electronic structure engineering. Current Opinion in Chemical Engineering, 2013, 2, 312-319.	7.8	54
10	Prospects of Platinum-Based Nanostructures for the Electrocatalytic Reduction of Oxygen. ACS Catalysis, 2018, 8, 9388-9398.	11.2	52
11	Selective Interactions between Free-Atom-like d-States in Single-Atom Alloy Catalysts and Near-Frontier Molecular Orbitals. Journal of the American Chemical Society, 2021, 143, 11897-11902.	13.7	43
12	Decomposition of Trace Li₂CO₃ During Charging Leads to Cathode Interface Degradation with the Solid Electrolyte LLZO. Advanced Functional Materials, 2021, 31, 2103716.	14.9	38
13	Density functional theory study of furfural electrochemical oxidation on the Pt (1â€¯1â€¯1) surface. Journal of Catalysis, 2019, 373, 322-335.	6.2	37
14	Aminopolymer Mobility and Support Interactions in Silica-PEI Composites for CO₂ Capture Applications: A Quasielastic Neutron Scattering Study. Journal of Physical Chemistry B, 2017, 121, 6721-6731.	2.6	30
15	Electro-oxidation of furfural on gold is limited by furoate self-assembly. Journal of Catalysis, 2020, 391, 327-335.	6.2	30
16	Understanding the interplay of bifunctional and electronic effects: Microkinetic modeling of the CO electro-oxidation reaction. Journal of Catalysis, 2020, 384, 1-13.	6.2	27
17	Probing the Role of Zr Addition versus Textural Properties in Enhancement of CO₂ Adsorption Performance in Silica/PEI Composite Sorbents. Langmuir, 2015, 31, 9356-9365.	3.5	26
18	Cathode Interface Compatibility of Amorphous LiMn₂O₄ (LMO) and Li₇La₃Zr₂O₁₂ (LLZO) Characterized with Thin-Film Solid-State Electrochemical Cells. ACS Applied Materials & Interfaces, 2020, 12, 24992-24999.	8.0	26

#	Article	IF	Citations
19	Identifying â€œOptimalâ€•Electrocatalysts: Impact of Operating Potential and Charge Transfer Model. ACS Catalysis, 2017, 7, 8641-8652.	11.2	21
20	Unraveling the Dynamics of Aminopolymer/Silica Composites. Langmuir, 2016, 32, 2617-2625.	3.5	17
21	Highly stable dioxin-linked metallophthalocyanine covalent organic frameworks. Chinese Chemical Letters, 2021, 32, 3799-3802.	9.0	17
22	Predicting macro-kinetic observables in electrocatalysis using the generalized degree of rate control. Journal of Catalysis, 2021, 397, 233-244.	6.2	17
23	Microkinetic modeling in electrocatalysis: Applications, limitations, and recommendations for reliable mechanistic insights. Journal of Catalysis, 2021, 404, 864-872.	6.2	16
24	ATR-SEIRAS Investigation of the Electro-oxidation Mechanism of Biomass-Derived C₅ Furanics on Platinum Electrodes. Journal of Physical Chemistry C, 2022, 126, 7054-7065.	3.1	13
25	Insight into the Oxidation Mechanism of Furanic Compounds on Pt(111). ACS Catalysis, 2019, 9, 11360-11370.	11.2	10
26	Tuning the selectivity of electrochemical levulinic acid reduction to 4-hydroxyvaleric acid: a monomer for biocompatible and biodegradable plastics. Green Chemistry, 2021, 23, 9154-9164.	9.0	10
27	Accelerating Electro-oxidation Turnover Rates via Potential-Modulated Stimulation of Electrocatalytic Activity. Industrial & Engineering Chemistry Research, 2020, 59, 19999-20010.	3.7	8
28	Electrochemical reduction selectivity of crotonaldehyde on copper. Journal of Applied Electrochemistry, 2021, 51, 5-17.	2.9	5
29	Investigating the use of conducting oligomers and redox molecules in CdSâ€“MoFeP biohybrids. Nanoscale Advances, 2021, 3, 1392-1396.	4.6	2