Lena Trotochaud

List of Publications by Year
in descending order

39	8,075	331670 21	289244 40
papers	citations	h-index	g-index

40	40	40	9409
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nickelâ€"Iron Oxyhydroxide Oxygen-Evolution Electrocatalysts: The Role of Intentional and Incidental Iron Incorporation. Journal of the American Chemical Society, 2014, 136, 6744-6753.	13.7	2,659
2	Cobaltâ€"Iron (Oxy)hydroxide Oxygen Evolution Electrocatalysts: The Role of Structure and Composition on Activity, Stability, and Mechanism. Journal of the American Chemical Society, 2015, 137, 3638-3648.	13.7	1,587
3	Solution-Cast Metal Oxide Thin Film Electrocatalysts for Oxygen Evolution. Journal of the American Chemical Society, 2012, 134, 17253-17261.	13.7	1,403
4	Effects of Fe Electrolyte Impurities on Ni(OH)₂/NiOOH Structure and Oxygen Evolution Activity. Journal of Physical Chemistry C, 2015, 119, 7243-7254.	3.1	806
5	Electrochemical Study of the Energetics of the Oxygen Evolution Reaction at Nickel Iron (Oxy)Hydroxide Catalysts. Journal of Physical Chemistry C, 2015, 119, 19022-19029.	3.1	282
6	Precise oxygen evolution catalysts: Status and opportunities. Scripta Materialia, 2014, 74, 25-32.	5.2	165
7	Contributions to activity enhancement via Fe incorporation in Ni-(oxy)hydroxide/borate catalysts for near-neutral pH oxygen evolution. Chemical Communications, 2015, 51, 5261-5263.	4.1	138
8	An Optocatalytic Model for Semiconductorâ€"Catalyst Water-Splitting Photoelectrodes Based on In Situ Optical Measurements on Operational Catalysts. Journal of Physical Chemistry Letters, 2013, 4, 931-935.	4.6	130
9	Role of Catalyst Preparation on the Electrocatalytic Activity of Ni_{1â€"<i>x</i>}Fe_{<i>x</i>}OOH for the Oxygen Evolution Reaction. Journal of Physical Chemistry C, 2015, 119, 18303-18316.	3.1	114
10	Unravelling the Chemical Influence of Water on the PMMA/Aluminum Oxide Hybrid Interface In Situ. Scientific Reports, 2017, 7, 13341.	3.3	76
11	Adsorption of Dimethyl Methylphosphonate on MoO₃: The Role of Oxygen Vacancies. Journal of Physical Chemistry C, 2016, 120, 29077-29088.	3.1	66
12	Ambient pressure photoelectron spectroscopy: Practical considerations and experimental frontiers. Journal of Physics Condensed Matter, 2017, 29, 053002.	1.8	63
13	Water Adsorption and Dissociation on Polycrystalline Copper Oxides: Effects of Environmental Contamination and Experimental Protocol. Journal of Physical Chemistry B, 2018, 122, 1000-1008.	2.6	61
14	Direct Mapping of Band Positions in Doped and Undoped Hematite during Photoelectrochemical Water Splitting. Journal of Physical Chemistry Letters, 2017, 8, 5579-5586.	4.6	53
15	Spectroscopic and Computational Investigation of Room-Temperature Decomposition of a Chemical Warfare Agent Simulant on Polycrystalline Cupric Oxide. Chemistry of Materials, 2017, 29, 7483-7496.	6.7	48
16	Synthesis of Rutile-Phase Sn_{<i>x</i>}Ti_{1â€"<i>x</i>}O₂ Solid-Solution and (SnO₂)_{<i>x</i>}/(TiO₂)_{1â€"<i>x</i>} Core/Shell Nanoparticles with Tunable Lattice Constants and Controlled Morphologies. Chemistry of Materials, 2011, 23, 4920-4930.	6.7	45
17	Experimental and Computational Evidence of Highly Active Fe Impurity Sites on the Surface of Oxidized Au for the Electrocatalytic Oxidation of Water in Basic Media. ChemElectroChem, 2016, 3, 66-73.	3.4	44
18	Constructing a pathway for mixed ion and electron transfer reactions for O2 incorporation in Pr0.1Ce0.9O2âˆ'x. Nature Catalysis, 2020, 3, 116-124.	34.4	40

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19	In Situ Characterization of the Initial Effect of Water on Molecular Interactions at the Interface of Organic/Inorganic Hybrid Systems. Scientific Reports, 2017, 7, 45123.	3.3	36
20	Water (Non-)Interaction with MoO₃. Journal of Physical Chemistry C, 2019, 123, 16836-16842.	3.1	35
21	CO adsorption on Pd(100) studied by multimodal ambient pressure X-ray photoelectron and infrared reflection absorption spectroscopies. Surface Science, 2017, 665, 51-55.	1.9	25
22	X-Ray Spectroscopic Characterization of BaO, Ba(OH)2, BaCO3, and Ba(NO3)2. Journal of Electron Spectroscopy and Related Phenomena, 2018, 225, 55-61.	1.7	22
23	Room temperature decomposition of dimethyl methylphosphonate on cuprous oxide yields atomic phosphorus. Surface Science, 2019, 680, 75-87.	1.9	20
24	Thermal desorption of dimethyl methylphosphonate from MoO₃. Journal of Lithic Studies, 2017, 3, 112-118.	0.5	19
25	Dimethyl methylphosphonate adsorption and decomposition on MoO₂ as studied by ambient pressure x-ray photoelectron spectroscopy and DFT calculations. Journal of Physics Condensed Matter, 2018, 30, 134005.	1.8	19
26	Enhancing Graphene Protective Coatings by Hydrogen-Induced Chemical Bond Formation. ACS Applied Nano Materials, 2018, 1, 4509-4515.	5.0	19
27	Identifying the Role of Dynamic Surface Hydroxides in the Dehydrogenation of Ti-Doped NaAlH₄. ACS Applied Materials & Interfaces, 2019, 11, 4930-4941.	8.0	19
28	Electron Spectroscopy and Computational Studies of Dimethyl Methylphosphonate. Journal of Physical Chemistry A, 2016, 120, 1985-1991.	2.5	17
29	Quantitative Characterization of a Desalination Membrane Model System by X-ray Photoelectron Spectroscopy. Langmuir, 2019, 35, 11315-11321.	3.5	12
30	Laboratory Demonstration and Preliminary Techno-Economic Analysis of an Onsite Wastewater Treatment System. Environmental Science & Technology, 2020, 54, 16147-16155.	10.0	10
31	Coupling Ambient Pressure X-ray Photoelectron Spectroscopy with Density Functional Theory to Study Complex Surface Chemistry and Catalysis. Topics in Catalysis, 2018, 61, 2175-2184.	2.8	8
32	Mechanisms of Degradation of Toxic Nerve Agents: Quantum-chemical Insight into Interactions of Sarin and Soman with Molybdenum Dioxide. Surface Science, 2020, 700, 121639.	1.9	7
33	Non-biological methods for phosphorus and nitrogen removal from wastewater: A gap analysis ofÂreinvented-toilet technologies with respect to ISO 30500. Gates Open Research, 2019, 3, 559.	1.1	7
34	NO2 Interactions with MoO3 and CuO at Atmospherically Relevant Pressures. Journal of Physical Chemistry C, 2021, 125, 16489-16497.	3.1	5
35	Advanced and In Situ Analytical Methods for Solar Fuel Materials. Topics in Current Chemistry, 2015, 371, 253-324.	4.0	4
36	Non-biological methods for phosphorus and nitrogen removal from wastewater: A gap analysis ofÂreinvented-toilet technologies with respect to ISO 30500. Gates Open Research, 2019, 3, 559.	1.1	4

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37	Water-polyamide chemical interplay in desalination membranes explored by ambient pressure X-ray photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 15658-15663.	2.8	3
38	Prospects for the expansion of standing wave ambient pressure photoemission spectroscopy to reactions at elevated temperatures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 013207.	2.1	2
39	Potential Pitfalls in Wastewater Phosphorus Analysis and How to Avoid Them. Environmental Health Insights, 2021, 15, 117863022110192.	1.7	1