Maria Hahlin

List of Publications by Year
in descending order

32 papers	1,300 citations	331670 21 h-index	414414 32 g-index
32 all docs	32 docs citations	32 times ranked	2001 citing authors

#	Article	IF	Citations
1	Interface layer formation in solid polymer electrolyte lithium batteries: an XPS study. Journal of Materials Chemistry A, 2014, 2, 7256-7264.	10.3	296
2	Consequences of air exposure on the lithiated graphite SEI. Electrochimica Acta, 2013, 105, 83-91.	5.2	86
3	A Roadmap for Transforming Research to Invent the Batteries of the Future Designed within the European Large Scale Research Initiative BATTERY 2030+. Advanced Energy Materials, 2022, 12, .	19.5	70
4	How the Negative Electrode Influences Interfacial and Electrochemical Properties of LiNi_{1/3}Co_{1/3}Mn_{1/3}O₂Cathodes in Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A3054-A3059.	2.9	67
5	Electric Potential Gradient at the Buried Interface between Lithium-Ion Battery Electrodes and the SEI Observed Using Photoelectron Spectroscopy. Journal of Physical Chemistry Letters, 2016, 7, 1775-1780.	4.6	62
6	HIPPIE: a new platform for ambient-pressure X-ray photoelectron spectroscopy at the MAX IV Laboratory. Journal of Synchrotron Radiation, 2021, 28, 624-636.	2.4	60
7	The impact of size effects on the electrochemical behaviour of Cu2O-coated Cu nanopillars for advanced Li-ion microbatteries. Journal of Materials Chemistry A, 2014, 2, 9574.	10.3	52
8	Nature of the Cathodeâ€“Electrolyte Interface in Highly Concentrated Electrolytes Used in Graphite Dual-Ion Batteries. ACS Applied Materials & Interfaces, 2021, 13, 3867-3880.	8.0	47
9	Manganese in the SEI Layer of Li₄Ti₅O₁₂ Studied by Combined NEXAFS and HAXPES Techniques. Journal of Physical Chemistry C, 2016, 120, 3206-3213.	3.1	44
10	A versatile photoelectron spectrometer for pressures up to 30 mbar. Review of Scientific Instruments, 2014, 85, 075119.	1.3	41
11	Probing a battery electrolyte drop with ambient pressure photoelectron spectroscopy. Nature Communications, 2019, 10, 3080.	12.8	41
12	Preventing Dye Aggregation on ZnO by Adding Water in the Dye-Sensitization Process. Journal of Physical Chemistry C, 2011, 115, 19274-19279.	3.1	40
13	Improved cycling stability in high-capacity Li-rich vanadium containing disordered rock salt oxyfluoride cathodes. Journal of Materials Chemistry A, 2019, 7, 21244-21253.	10.3	37
14	A high pressure x-ray photoelectron spectroscopy experimental method for characterization of solid-liquid interfaces demonstrated with a Li-ion battery system. Review of Scientific Instruments, 2015, 86, 044101.	1.3	34
15	Breaking Down a Complex System: Interpreting PES Peak Positions for Cycled Li-Ion Battery Electrodes. Journal of Physical Chemistry C, 2017, 121, 27303-27312.	3.1	33
16	How Mn/Ni Ordering Controls Electrochemical Performance in High-Voltage Spinel LiNi_{0.44}Mn_{1.56}O₄ with Fixed Oxygen Content. ACS Applied Energy Materials, 2020, 3, 6001-6013.	5.1	33
17	Influence of Water on the Electronic and Molecular Surface Structures of Ru-Dyes at Nanostructured TiO₂. Journal of Physical Chemistry C, 2011, 115, 11996-12004.	3.1	31
18	Degradation Mechanisms in Li₂VO₂F Li-Rich Disordered Rock-Salt Cathodes. Chemistry of Materials, 2019, 31, 6084-6096.	6.7	31

#	Article	IF	Citations
19	Early-stage decomposition of solid polymer electrolytes in Li-metal batteries. Journal of Materials Chemistry A, 2021, 9, 22462-22471.	10.3	26
20	A study of the pressure profiles near the first pumping aperture in a high pressure photoelectron spectrometer. Journal of Electron Spectroscopy and Related Phenomena, 2015, 205, 57-65.	1.7	24
21	Increased photoelectron transmission in High-pressure photoelectron spectrometers using â€œswift accelerationâ€ Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 785, 191-196.	1.6	22
22	Excess Lithium in Transition Metal Layers of Epitaxially Grown Thin Film Cathodes of Li₂MnO₃ Leads to Rapid Loss of Covalency during First Battery Cycle. Journal of Physical Chemistry C, 2019, 123, 28519-28526.	3.1	19
23	Stabilization of Li-Rich Disordered Rocksalt Oxyfluoride Cathodes by Particle Surface Modification. ACS Applied Energy Materials, 2020, 3, 5937-5948.	5.1	19
24	Aging of Electrode/Electrolyte Interfaces in LiFePO₄/Graphite Cells Cycled with and without PMS Additive. Journal of Physical Chemistry C, 2014, 118, 12649-12660.	3.1	17
25	Electronic and Structural Changes in Ni_{0.5}TiOPO₄ Li-Ion Battery Cells Upon First Lithiation and Delithiation, Studied by High-Energy X-ray Spectroscopies. Journal of Physical Chemistry C, 2015, 119, 9692-9704.	3.1	17
26	Mapping the frontier electronic structures of triphenylamine based organic dyes at TiO₂interfaces. Physical Chemistry Chemical Physics, 2011, 13, 3534-3546.	2.8	10
27	Coadsorption of Dye Molecules at TiO2 Surfaces: A Photoelectron Spectroscopy Study. Journal of Physical Chemistry C, 2016, 120, 12484-12494.	3.1	8
28	Influence of Electrolyte Additives on the Degradation of Li₂VO₂F Li-Rich Cathodes. Journal of Physical Chemistry C, 2020, 124, 12956-12967.	3.1	8
29	In-Situ Probing of H2O Effects on a Ru-Complex Adsorbed on TiO2 Using Ambient Pressure Photoelectron Spectroscopy. Topics in Catalysis, 2016, 59, 583-590.	2.8	7
30	Potentials in Li-Ion Batteries Probed by Operando Ambient Pressure Photoelectron Spectroscopy. ACS Applied Materials & Interfaces, 2022, 14, 6465-6475.	8.0	7
31	Probing Electrochemical Potential Differences over the Solid/Liquid Interface in Li-Ion Battery Model Systems. ACS Applied Materials & Interfaces, 2021, 13, 32989-32996.	8.0	6
32	Dissecting the Solid Polymer Electrolyteâ€“Electrode Interface in the Vicinity of Electrochemical Stability Limits. ACS Applied Materials & Interfaces, 2022, 14, 28716-28728.	8.0	5