Philip Niehoff

List of Publications by Year
in descending order

30 papers	1,264 citations	471509 17 h-index	454955 30 g-index
31 all docs	31 docs citations	31 times ranked	1744 citing authors

#	Article	IF	Citations
1	Fluoroethylene Carbonate as Electrolyte Additive in Tetraethylene Glycol Dimethyl Ether Based Electrolytes for Application in Lithium Ion and Lithium Metal Batteries. Journal of the Electrochemical Society, 2015, 162, A1094-A1101.	2.9	211
2	Influence of electrolyte additives on the cathode electrolyte interphase (CEI) formation on LiNi1/3Mn1/3Co1/3O2 in half cells with Li metal counter electrode. Journal of Power Sources, 2016, 329, 31-40.	7.8	202
3	Interface Investigations of a Commercial Lithium Ion Battery Graphite Anode Material by Sputter Depth Profile X-ray Photoelectron Spectroscopy. Langmuir, 2013, 29, 5806-5816.	3.5	127
4	Composition and Growth Behavior of the Surface and Electrolyte Decomposition Layer of/on a Commercial Lithium Ion Battery Li_xNi_{1/3}Mn_{1/3}Co_{1/3}O₂ Cathode Determined by Sputter Depth Profile X-ray Photoelectron Spectroscopy. Langmuir, 2013, 29, 15813-15821.	3.5	83
5	Investigations on the electrochemical decomposition of the electrolyte additive vinylene carbonate in Li metal half cells and lithium ion full cells. Journal of Power Sources, 2016, 332, 60-71.	7.8	80
6	Al2O3 coating on anode surface in lithium ion batteries: Impact on low temperature cycling and safety behavior. Journal of Power Sources, 2017, 363, 70-77.	7.8	50
7	A 3D porous Li-rich cathode material with an in situ modified surface for high performance lithium ion batteries with reduced voltage decay. Journal of Materials Chemistry A, 2016, 4, 7230-7237.	10.3	46
8	Towards water based ultra-thick Li ion battery electrodes â€“ A binder approach. Journal of Power Sources, 2019, 423, 183-191.	7.8	46
9	Truncated Octahedral High-Voltage Spinel LiNi_{0.5}Mn_{1.5}O₄Cathode Materials for Lithium Ion Batteries: Positive Influences of Ni/Mn Disordering and Oxygen Vacancies. Journal of the Electrochemical Society, 2018, 165, A1886-A1896.	2.9	44
10	Challenges of â€œGoing Nanoâ€• Enhanced Electrochemical Performance of Cobalt Oxide Nanoparticles by Carbothermal Reduction and In Situ Carbon Coating. ChemPhysChem, 2014, 15, 2177-2185.	2.1	38
11	Aging of Li2FeSiO4 cathode material in fluorine containing organic electrolytes for lithium-ion batteries. Electrochimica Acta, 2012, 85, 66-71.	5.2	32
12	Comparison of Different Synthesis Methods for LiNi_{0.5}Mn_{1.5}O₄â€”Influence on Battery Cycling Performance, Degradation, and Aging. Energy Technology, 2016, 4, 1631-1640.	3.8	32
13	Investigations on the electrochemical performance and thermal stability of two new lithium electrolyte salts in comparison to LiPF6. Electrochimica Acta, 2013, 114, 658-666.	5.2	30
14	Comparative Performance Evaluation of Flame Retardant Additives for Lithium Ion Batteries â€“ II. Full Cell Cycling and Postmortem Analyses. Energy Technology, 2018, 6, 2023-2035.	3.8	29
15	Parametrisation of the influence of different cycling conditions on the capacity fade and the internal resistance increase for lithium nickel manganese cobalt oxide/graphite cells. Journal of Electroanalytical Chemistry, 2013, 707, 110-116.	3.8	28
16	Effect of Li plating during formation of lithium ion batteries on their cycling performance and thermal safety. Journal of Power Sources, 2021, 484, 229306.	7.8	25
17	SEI-forming mechanism of 1-Fluoropropane-2-one in lithium-ion batteries. Electrochimica Acta, 2012, 81, 161-165.	5.2	21
18	The Effects of Mechanical and Thermal Loads during Lithiumâ€•ion Pouch Cell Formation and Their Impacts on Process Time. Energy Technology, 2020, 8, 1900118.	3.8	18

#	Article	IF	Citations
19	Protective coatings on silicon particles and their effect on energy density and specific energy in lithium ion battery cells: A model study. Journal of Energy Storage, 2020, 29, 101376.	8.1	18
20	Quantitative determination of solid electrolyte interphase and cathode electrolyte interphase homogeneity in multi-layer lithium ion cells. Journal of Energy Storage, 2021, 44, 103208.	8.1	17
21	Investigation of nano-sized Cu(<scp>ii</scp>)O as a high capacity conversion material for Li-metal cells and lithium-ion full cells. Journal of Materials Chemistry A, 2017, 5, 6556-6568.	10.3	14
22	The role of the pH value in water-based pastes on the processing and performance of Ni-rich LiNi0.5Mn0.3Co0.2O2 based positive electrodes. Journal of Power Sources, 2020, 475, 228608.	7.8	14
23	Al2O3 protective coating on silicon thin film electrodes and its effect on the aging mechanisms of lithium metal and lithium ion cells. Journal of Energy Storage, 2021, 44, 103479.	8.1	13
24	Determination of the mechanical integrity of polyvinylidene difluoride in LiNi1/3Co1/3Mn1/3O2 electrodes for lithium ion batteries by use of the micro-indentation technique. Journal of Power Sources, 2018, 391, 80-85.	7.8	9
25	Quantification of aging mechanisms of carbon-coated and uncoated silicon thin film anodes in lithium metal and lithium ion cells. Journal of Energy Storage, 2021, 41, 102812.	8.1	9
26	Comparative X-ray Photoelectron Spectroscopy Study of the SEI and CEI in Three Different Lithium Ion Cell Formats. Journal of the Electrochemical Society, 2022, 169, 030533.	2.9	8
27	The Impact of the Câ€Rate on Gassing During Formation of NMC622 II Graphite Lithiumâ€Ion Battery Cells. Batteries and Supercaps, 2021, 4, 1344-1350.	4.7	7
28	Monolayer formation of octyltrimethoxysilane and 7-octenyltrimethoxysilane on silicon (100) covered with native oxide. Applied Surface Science, 2012, 258, 3191-3196.	6.1	5
29	A Method to Determine Fast Charging Procedures by Operando Overvoltage Analysis. Journal of the Electrochemical Society, 2022, 169, 070525.	2.9	5
30	Coexistence of conversion and intercalation mechanisms in lithium ion batteries: Consequences for microstructure and interaction between the active material and electrolyte. International Journal of Materials Research, 2017, 108, 971-983.	0.3	3