

Philip Niehoff

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1865302/publications.pdf>

Version: 2024-02-01

30
papers

1,264
citations

535685

17
h-index

511568

30
g-index

31
all docs

31
docs citations

31
times ranked

2051
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparative X-ray Photoelectron Spectroscopy Study of the SEI and CEI in Three Different Lithium Ion Cell Formats. <i>Journal of the Electrochemical Society</i> , 2022, 169, 030533.	1.3	8
2	A Method to Determine Fast Charging Procedures by Operando Overvoltage Analysis. <i>Journal of the Electrochemical Society</i> , 2022, 169, 070525.	1.3	5
3	Effect of Li plating during formation of lithium ion batteries on their cycling performance and thermal safety. <i>Journal of Power Sources</i> , 2021, 484, 229306.	4.0	25
4	The Impact of the C-Rate on Gassing During Formation of NMC622 Graphite Lithium-Ion Battery Cells. <i>Batteries and Supercaps</i> , 2021, 4, 1344-1350.	2.4	7
5	Quantification of aging mechanisms of carbon-coated and uncoated silicon thin film anodes in lithium metal and lithium ion cells. <i>Journal of Energy Storage</i> , 2021, 41, 102812.	3.9	9
6	Quantitative determination of solid electrolyte interphase and cathode electrolyte interphase homogeneity in multi-layer lithium ion cells. <i>Journal of Energy Storage</i> , 2021, 44, 103208.	3.9	17
7	Al ₂ O ₃ protective coating on silicon thin film electrodes and its effect on the aging mechanisms of lithium metal and lithium ion cells. <i>Journal of Energy Storage</i> , 2021, 44, 103479.	3.9	13
8	The Effects of Mechanical and Thermal Loads during Lithium-Ion Pouch Cell Formation and Their Impacts on Process Time. <i>Energy Technology</i> , 2020, 8, 1900118.	1.8	18
9	The role of the pH value in water-based pastes on the processing and performance of Ni-rich LiNi _{0.5} Mn _{0.3} Co _{0.2} O ₂ based positive electrodes. <i>Journal of Power Sources</i> , 2020, 475, 228608.	4.0	14
10	Protective coatings on silicon particles and their effect on energy density and specific energy in lithium ion battery cells: A model study. <i>Journal of Energy Storage</i> , 2020, 29, 101376.	3.9	18
11	Towards water based ultra-thick Li ion battery electrodes – A binder approach. <i>Journal of Power Sources</i> , 2019, 423, 183-191.	4.0	46
12	Determination of the mechanical integrity of polyvinylidene difluoride in LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ electrodes for lithium ion batteries by use of the micro-indentation technique. <i>Journal of Power Sources</i> , 2018, 391, 80-85.	4.0	9
13	Comparative Performance Evaluation of Flame Retardant Additives for Lithium Ion Batteries – II. Full Cell Cycling and Postmortem Analyses. <i>Energy Technology</i> , 2018, 6, 2023-2035.	1.8	29
14	Truncated Octahedral High-Voltage Spinel LiNi _{0.5} Mn _{1.5} O ₄ Cathode Materials for Lithium Ion Batteries: Positive Influences of Ni/Mn Disorder and Oxygen Vacancies. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1886-A1896.	1.3	44
15	Investigation of nano-sized CuO as a high capacity conversion material for Li-metal cells and lithium-ion full cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6556-6568.	5.2	14
16	Al ₂ O ₃ coating on anode surface in lithium ion batteries: Impact on low temperature cycling and safety behavior. <i>Journal of Power Sources</i> , 2017, 363, 70-77.	4.0	50
17	Coexistence of conversion and intercalation mechanisms in lithium ion batteries: Consequences for microstructure and interaction between the active material and electrolyte. <i>International Journal of Materials Research</i> , 2017, 108, 971-983.	0.1	3
18	A 3D porous Li-rich cathode material with an in situ modified surface for high performance lithium ion batteries with reduced voltage decay. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7230-7237.	5.2	46

#	ARTICLE	IF	CITATIONS
19	Comparison of Different Synthesis Methods for $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Influence on Battery Cycling Performance, Degradation, and Aging. <i>Energy Technology</i> , 2016, 4, 1631-1640.	1.8	32
20	Investigations on the electrochemical decomposition of the electrolyte additive vinylene carbonate in Li metal half cells and lithium ion full cells. <i>Journal of Power Sources</i> , 2016, 332, 60-71.	4.0	80
21	Influence of electrolyte additives on the cathode electrolyte interphase (CEI) formation on $\text{LiNi}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$ in half cells with Li metal counter electrode. <i>Journal of Power Sources</i> , 2016, 329, 31-40.	4.0	202
22	Fluoroethylene Carbonate as Electrolyte Additive in Tetraethylene Glycol Dimethyl Ether Based Electrolytes for Application in Lithium Ion and Lithium Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1094-A1101.	1.3	211
23	Challenges of "Going Nano" Enhanced Electrochemical Performance of Cobalt Oxide Nanoparticles by Carbothermal Reduction and In Situ Carbon Coating. <i>ChemPhysChem</i> , 2014, 15, 2177-2185.	1.0	38
24	Investigations on the electrochemical performance and thermal stability of two new lithium electrolyte salts in comparison to LiPF_6 . <i>Electrochimica Acta</i> , 2013, 114, 658-666.	2.6	30
25	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. <i>Journal of Electroanalytical Chemistry</i> , 2013, 707, 110-116.	1.9	28
26	Composition and Growth Behavior of the Surface and Electrolyte Decomposition Layer of/on a Commercial Lithium Ion Battery $\text{Li}_x\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_2$ Cathode Determined by Sputter Depth Profile X-ray Photoelectron Spectroscopy. <i>Langmuir</i> , 2013, 29, 15813-15821.	1.6	83
27	Interface Investigations of a Commercial Lithium Ion Battery Graphite Anode Material by Sputter Depth Profile X-ray Photoelectron Spectroscopy. <i>Langmuir</i> , 2013, 29, 5806-5816.	1.6	127
28	Monolayer formation of octyltrimethoxysilane and 7-octenyltrimethoxysilane on silicon (100) covered with native oxide. <i>Applied Surface Science</i> , 2012, 258, 3191-3196.	3.1	5
29	SEI-forming mechanism of 1-Fluoropropane-2-one in lithium-ion batteries. <i>Electrochimica Acta</i> , 2012, 81, 161-165.	2.6	21
30	Aging of $\text{Li}_2\text{FeSiO}_4$ cathode material in fluorine containing organic electrolytes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2012, 85, 66-71.	2.6	32