Johannes Kasnatscheew

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/6647485/johannes-kasnatscheew-publications-by-year.pdf
Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

51 papers	2,275 citations	26 h-index	47 g-index
57 ext. papers	3,034 ext. citations	8.3 avg, IF	5.48 L-index

#	Paper	IF	Citations
51	Demonstrating Apparently Inconspicuous but Sensitive Impacts on the Rollover Failure of Lithium-Ion Batteries at a High Voltage. *ACS Applied Materials & Interfaces*, **2021**, 13, 57241-57251	9.5	1
50	Graphite Lithium-Ion Cells: On the Beneficial Impact of Li2CO3 as Electrolyte Additive in NCM523 || Graphite Lithium Ion Cells Under High-Voltage Conditions (Adv. Energy Mater. 10/2021). *Advanced Energy Materials*, **2021**, 11, 2170039	21.8	
49	Area Oversizing of Lithium Metal Electrodes in Solid-State Batteries: Relevance for Overvoltage and thus Performance?. *ChemSusChem*, **2021**, 14, 2144	8.3	1
48	The Sand equation and its enormous practical relevance for solid-state lithium metal batteries. *Materials Today*, **2021**, 44, 9-14	21.8	16
47	Area Oversizing of Lithium Metal Electrodes in Solid-State Batteries: Relevance for Overvoltage and thus Performance?. *ChemSusChem*, **2021**, 14, 2163-2169	8.3	5
46	Enabling Mg-Based Ionic Liquid Electrolytes for Hybrid Dual-Ion Capacitors. *Batteries and Supercaps*, **2021**, 4, 504-512	5.6	5
45	Exploiting the Degradation Mechanism of NCM523 Graphite Lithium-Ion Full Cells Operated at High Voltage. *ChemSusChem*, **2021**, 14, 595-613	8.3	21
44	Understanding the Outstanding High-Voltage Performance of NCM523||Graphite Lithium Ion Cells after Elimination of Ethylene Carbonate Solvent from Conventional Electrolyte. *Advanced Energy Materials*, **2021**, 11, 2003738	21.8	39
43	On the Beneficial Impact of Li2CO3 as Electrolyte Additive in NCM523 || Graphite Lithium Ion Cells Under High-Voltage Conditions. *Advanced Energy Materials*, **2021**, 11, 2003756	21.8	21
42	Kinetical threshold limits in solid-state lithium batteries: Data on practical relevance of sand equation. *Data in Brief*, **2021**, 34, 106688	1.2	9
41	Fast Charging of Lithium-Ion Batteries: A Review of Materials Aspects. *Advanced Energy Materials*, **2021**, 11, 2101126	21.8	65
40	Evaluating the Passivation Layer of Freshly Cleaved Silicon Surfaces by Binary Silane-Based Electrolytes. *Batteries and Supercaps*, **2021**, 4, 1611	5.6	1
39	Pragmatic Approaches to Correlate between the Physicochemical Properties of a Linear Poly(ethylene oxide)-Based Solid Polymer Electrolyte and the Performance in a High-Voltage Li-Metal Battery. *Journal of Physical Chemistry C*, **2021**, 125, 18089-18097	3.8	7
38	Re-evaluating common electrolyte additives for high-voltage lithium ion batteries. *Cell Reports Physical Science*, **2021**, 2, 100521	6.1	7
37	Prospects and limitations of single-crystal cathode materials to overcome cross-talk phenomena in high-voltage lithium ion cells. *Journal of Materials Chemistry A*, **2021**, 9, 7546-7555	13	26
36	Elimination of "Voltage Noise" of Poly (Ethylene Oxide)-Based Solid Electrolytes in High-Voltage Lithium Batteries: Linear versus Network Polymers. *IScience*, **2020**, 23, 101225	6.1	32
35	Poly(Ethylene Oxide)-based Electrolyte for Solid-State-Lithium-Batteries with High Voltage Positive Electrodes: Evaluating the Role of Electrolyte Oxidation in Rapid Cell Failure. *Scientific Reports*, **2020**, 10, 4390	4.9	84

34	High-Voltage All-Solid-State Lithium Battery with Sulfide-Based Electrolyte: Challenges for the Construction of a Bipolar Multicell Stack and How to Overcome Them. *ACS Applied Energy Materials*, **2020**, 3, 3162-3168	6.1	22
33	Conventional Electrolyte and Inactive Electrode Materials in Lithium-Ion Batteries: Determining Cumulative Impact of Oxidative Decomposition at High Voltage. *ChemSusChem*, **2020**, 13, 5301-5307	8.3	15
32	Identical Materials but Different Effects of Film-Forming Electrolyte Additives in Li Ion Batteries: Performance of a Benchmark System as the Key. *Chemistry of Materials*, **2020**, 32, 6279-6284	9.6	14
31	Effective Optimization of High Voltage Solid-State Lithium Batteries by Using Poly(ethylene oxide)-Based Polymer Electrolyte with Semi-Interpenetrating Network. *Advanced Functional Materials*, **2020**, 30, 2006289	15.6	40
30	A reality check and tutorial on electrochemical characterization of battery cell materials: How to choose the appropriate cell setup. *Materials Today*, **2020**, 32, 131-146	21.8	122
29	Disiloxane with nitrile end groups as Co-solvent for electrolytes in lithiumsulfur batteries A feasible approach to replace $LiNO_3$. *Electrochimica Acta*, **2019**, 307, 76-82	6.7	9
28	Study of the Formation of a Solid Electrolyte Interphase (SEI) on a Silicon Nanowire Anode in Liquid Disiloxane Electrolyte with Nitrile End Groups for Lithium-Ion Batteries. *Batteries and Supercaps*, **2019**, 2, 213-222	5.6	19
27	Do Increased Ni Contents in $LiNi_xMn_yCo_zO_2$ (NMC) Electrodes Decrease Structural and Thermal Stability of Li Ion Batteries? A Thorough Look by Consideration of the Li^+ Extraction Ratio. *ACS Applied Energy Materials*, **2019**, 2, 7733-7737	6.1	39
26	Investigation of various layered lithium ion battery cathode materials by plasma- and X-ray-based element analytical techniques. *Analytical and Bioanalytical Chemistry*, **2019**, 411, 277-285	4.4	20
25	Interfaces and Materials in Lithium Ion Batteries: Challenges for Theoretical Electrochemistry. *Topics in Current Chemistry*, **2018**, 376, 16	7.2	58
24	Fluorinated Electrolyte Compound as a Bi-Functional Interphase Additive for Both, Anodes and Cathodes in Lithium-Ion Batteries. *Journal of the Electrochemical Society*, **2018**, 165, A3525-A3530	3.9	23
23	Performance tuning of lithium ion battery cells with area-oversized graphite based negative electrodes. *Journal of Power Sources*, **2018**, 396, 519-526	8.9	24
22	Sodium-Based vs. Lithium-Based Dual-Ion Cells: Electrochemical Study of Anion Intercalation/De-Intercalation into/from Graphite and Metal Plating/Dissolution Behavior. *Electrochimica Acta*, **2017**, 228, 18-27	6.7	61
21	Magnesium-based additives for the cathode slurry to enable high voltage application of lithium-ion batteries. *Electrochimica Acta*, **2017**, 228, 9-17	6.7	14
20	Learning from Electrochemical Data: Simple Evaluation and Classification of $LiMO_2$-type-based Positive Electrodes for Li-Ion Batteries. *Energy Technology*, **2017**, 5, 1670-1679	3.5	70
19	Influence of $LiPF_6$on the Aluminum Current Collector Dissolution in High Voltage Lithium Ion Batteries after Long-Term Charge/Discharge Experiments. *Journal of the Electrochemical Society*, **2017**, 164, A1474-A1479	3.9	30
18	Determining oxidative stability of battery electrolytes: validity of common electrochemical stability window (ESW) data and alternative strategies. *Physical Chemistry Chemical Physics*, **2017**, 19, 16078-16086	3.6	84
17	Changing Established Belief on Capacity Fade Mechanisms: Thorough Investigation of $LiNi_{1/3}Co_{1/3}Mn_{1/3}O_2$ (NCM111) under High Voltage Conditions. *Journal of Physical Chemistry C*, **2017**, 121, 1521-1529	3.8	89

16	Evaluation of Allylboronic Acid Pinacol Ester as Effective Shutdown Overcharge Additive for Lithium Ion Cells. *Journal of the Electrochemical Society*, **2017**, 164, A168-A172	3.9	12
15	Improving cycle life of layered lithium transition metal oxide (Li M O 2) based positive electrodes for Li ion batteries by smart selection of the electrochemical charge conditions. *Journal of Power Sources*, **2017**, 359, 458-467	8.9	53
14	A Tutorial into Practical Capacity and Mass Balancing of Lithium Ion Batteries. *Journal of the Electrochemical Society*, **2017**, 164, A2479-A2486	3.9	101
13	Highly Effective Solid Electrolyte Interphase-Forming Electrolyte Additive Enabling High Voltage Lithium-Ion Batteries. *Chemistry of Materials*, **2017**, 29, 7733-7739	9.6	30
12	Lithium ion battery cells under abusive discharge conditions: Electrode potential development and interactions between positive and negative electrode. *Journal of Power Sources*, **2017**, 362, 278-282	8.9	40
11	Unraveling transition metal dissolution of Li1.04Ni1/3Co1/3Mn1/3O2 (NCM 111) in lithium ion full cells by using the total reflection X-ray fluorescence technique. *Journal of Power Sources*, **2016**, 329, 364-371	8.9	121
10	Graphite Recycling from Spent Lithium-Ion Batteries. *ChemSusChem*, **2016**, 9, 3473-3484	8.3	98
9	Impact of Selected LiPF Hydrolysis Products on the High Voltage Stability of Lithium-Ion Battery Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 30871-30878	9.5	58
8	Learning from Overpotentials in Lithium Ion Batteries: A Case Study on the LiNi1/3Co1/3Mn1/3O2(NCM) Cathode. *Journal of the Electrochemical Society*, **2016**, 163, A2943-A2950	3.9	76
7	The truth about the 1st cycle Coulombic efficiency of LiNi1/3Co1/3Mn1/3O2 (NCM) cathodes. *Physical Chemistry Chemical Physics*, **2016**, 18, 3956-65	3.6	233
6	Counterintuitive Role of Magnesium Salts as Effective Electrolyte Additives for High Voltage Lithium-Ion Batteries. *Advanced Materials Interfaces*, **2016**, 3, 1600096	4.6	53
5	Investigations on novel electrolytes, solvents and SEI additives for use in lithium-ion batteries: Systematic electrochemical characterization and detailed analysis by spectroscopic methods. *Progress in Solid State Chemistry*, **2014**, 42, 65-84	8	159
4	Vinyl sulfones as SEI-forming additives in propylene carbonate based electrolytes for lithium-ion batteries. *Electrochemistry Communications*, **2014**, 40, 80-83	5.1	62
3	Fluoroethylene Carbonate as an Additive for □Butyrolactone Based Electrolytes. *Journal of the Electrochemical Society*, **2013**, 160, A1369-A1374	3.9	63
2	Understanding the Role of Commercial Separators and Their Reactivity toward LiPF6 on the Failure Mechanism of High-Voltage NCM523 || Graphite Lithium Ion Cells. *Advanced Energy Materials*,2102599	21.8	3
1	Realizing poly(ethylene oxide) as a polymer for solid electrolytes in high voltage lithium batteries via simple modification of the cell setup. *Materials Advances*,	3.3	13