Raimund Koerver

List of Publications by Year
in descending order

20 papers	4,582 citations	361413 20 h-index	752698 20 g-index
20 all docs	20 docs citations	20 times ranked	3189 citing authors

#	Article	IF	Citations
1	Influence of Crystallinity of Lithium Thiophosphate Solid Electrolytes on the Performance of Solidâ€State Batteries. Advanced Energy Materials, 2021, 11, 2100654.	19.5	64
2	Macroscopic Displacement Reaction of Copper Sulfide in Lithium Solidâ€State Batteries. Advanced Energy Materials, 2020, 10, 2002394.	19.5	37
3	Benchmarking the performance of all-solid-state lithium batteries. Nature Energy, 2020, 5, 259-270.	39.5	662
4	Experimental Assessment of the Practical Oxidative Stability of Lithium Thiophosphate Solid Electrolytes. Chemistry of Materials, 2019, 31, 8328-8337.	6.7	138
5	High-Throughput Screening of Solid-State Li-Ion Conductors Using Lattice-Dynamics Descriptors. IScience, 2019, 16, 270-282.	4.1	142
6	Interfacial Stability of Phosphate-NASICON Solid Electrolytes in Ni-Rich NCM Cathode-Based Solid-State Batteries. ACS Applied Materials & Interfaces, 2019, 11, 23244-23253.	8.0	73
7	On the Functionality of Coatings for Cathode Active Materials in Thiophosphateâ€Based Allâ€Solidâ€State Batteries. Advanced Energy Materials, 2019, 9, 1900626.	19.5	221
8	Visualization of the Interfacial Decomposition of Composite Cathodes in Argyrodite-Based All-Solid-State Batteries Using Time-of-Flight Secondary-Ion Mass Spectrometry. Chemistry of Materials, 2019, 31, 3745-3755.	6.7	246
9	Observation of Chemomechanical Failure and the Influence of Cutoff Potentials in All-Solid-State Liâ€“S Batteries. Chemistry of Materials, 2019, 31, 2930-2940.	6.7	112
10	Competing Structural Influences in the Li Superionic Conducting Argyrodites Li₆PS_{5â€“x}Se_xBr (0 â‰¤ x â‰¤ 1) upon Se Substitution. Inorganic Chemistry, 2018, 57, 13920-13928.	4.0	82
11	Inducing High Ionic Conductivity in the Lithium Superionic Argyrodites Li_{6+x}P_{1â€“x}Ge_xS₅I for All-Solid-State Batteries. Journal of the American Chemical Society, 2018, 140, 16330-16339.	13.7	331
12	Chemo-mechanical expansion of lithium electrode materials â€“ on the route to mechanically optimized all-solid-state batteries. Energy and Environmental Science, 2018, 11, 2142-2158.	30.8	512
13	Spectroscopic characterization of lithium thiophosphates by XPS and XAS â€“ a model to help monitor interfacial reactions in all-solid-state batteries. Physical Chemistry Chemical Physics, 2018, 20, 20088-20095.	2.8	65
14	Designing Ionic Conductors: The Interplay between Structural Phenomena and Interfaces in Thiophosphate-Based Solid-State Batteries. Chemistry of Materials, 2018, 30, 4179-4192.	6.7	131
15	High electrical conductivity and high porosity in a Guest@MOF material: evidence of TCNQ ordering within Cu₃BTC₂ micropores. Chemical Science, 2018, 9, 7405-7412.	7.4	73
16	Interfacial Processes and Influence of Composite Cathode Microstructure Controlling the Performance of All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2017, 9, 17835-17845.	8.0	353
17	(Electro)chemical expansion during cycling: monitoring the pressure changes in operating solid-state lithium batteries. Journal of Materials Chemistry A, 2017, 5, 9929-9936.	10.3	222
18	Capacity Fade in Solid-State Batteries: Interphase Formation and Chemomechanical Processes in Nickel-Rich Layered Oxide Cathodes and Lithium Thiophosphate Solid Electrolytes. Chemistry of Materials, 2017, 29, 5574-5582.	6.7	655

#	Article	IF	Citations
19	Redox-active cathode interphases in solid-state batteries. Journal of Materials Chemistry A, 2017, 5, 22750-22760.	10.3	206
20	The Detrimental Effects of Carbon Additives in Li₁₀GeP₂S₁₂-Based Solid-State Batteries. ACS Applied Materials & Interfaces, 2017, 9, 35888-35896.	8.0	257