

Felix H Richter

List of Publications by Year in descending order

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Version: 2024-02-01

27
papers

3,192
citations

304743

22
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580821

25
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docs citations

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times ranked

2768
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Instability of the $\text{Li}_{7}\text{SiPS}_{8}$ Solid Electrolyte at the Lithium Metal Anode and Interphase Formation. <i>Chemistry of Materials</i> , 2022, 34, 3659-3669. | 6.7 | 12 |
| 2 | Increasing the Pressure-Free Stripping Capacity of the Lithium Metal Anode in Solid-State Batteries by Carbon Nanotubes. <i>Advanced Energy Materials</i> , 2022, 12, . | 19.5 | 21 |
| 3 | Sodium All-Solid-State Batteries and the Electrolyte Question. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 99-99. | 0.0 | 0 |
| 4 | Analysis of the Interphase Formation of Thiophosphate Solid Electrolytes and the Lithium Metal Anode in Solid-State Batteries. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 208-208. | 0.0 | 0 |
| 5 | Interfacial challenges for all-solid-state batteries based on sulfide solid electrolytes. <i>Journal of Materiomics</i> , 2021, 7, 209-218. | 5.7 | 82 |
| 6 | The role of polymers in lithium solid-state batteries with inorganic solid electrolytes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18701-18732. | 10.3 | 47 |
| 7 | On the Additive Microstructure in Composite Cathodes and Alumina-Coated Carbon Microwires for Improved All-Solid-State Batteries. <i>Chemistry of Materials</i> , 2021, 33, 1380-1393. | 6.7 | 38 |
| 8 | Synthesis and Postprocessing of Single-Crystalline $\text{LiNi}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_{2}$ for Solid-State Lithium-Ion Batteries with High Capacity and Long Cycling Stability. <i>Chemistry of Materials</i> , 2021, 33, 2624-2634. | 6.7 | 38 |
| 9 | Working Principle of an Ionic Liquid Interlayer During Pressureless Lithium Stripping on $\text{Li}_{6.25}\text{Al}_{0.25}\text{La}_{3}\text{Zr}_{2}\text{O}_{12}$ (LLZO) Garnet-Type Solid Electrolyte. <i>Batteries and Supercaps</i> , 2021, 4, 1145-1155. | 4.7 | 23 |
| 10 | Polycrystalline and Single Crystalline NCM Cathode Materials—Quantifying Particle Cracking, Active Surface Area, and Lithium Diffusion. <i>Advanced Energy Materials</i> , 2021, 11, 2003400. | 19.5 | 237 |
| 11 | Editors' Choice—Quantifying the Impact of Charge Transport Bottlenecks in Composite Cathodes of All-Solid-State Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 040537. | 2.9 | 97 |
| 12 | Influence of Crystallinity of Lithium Thiophosphate Solid Electrolytes on the Performance of Solid-State Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2100654. | 19.5 | 64 |
| 13 | Editors' Choice—Quantification of the Impact of Chemo-Mechanical Degradation on the Performance and Cycling Stability of NCM-Based Cathodes in Solid-State Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 070546. | 2.9 | 22 |
| 14 | Lithium Argyrodite as Solid Electrolyte and Cathode Precursor for Solid-State Batteries with Long Cycle Life. <i>Advanced Energy Materials</i> , 2021, 11, 2101370. | 19.5 | 56 |
| 15 | The Interface between $\text{Li}_{6.5}\text{La}_{3}\text{Zr}_{1.5}\text{Ta}_{0.5}\text{O}_{12}$ and Liquid Electrolyte. <i>Joule</i> , 2020, 4, 101-108. | 24.0 | 81 |
| 16 | Macroscopic Displacement Reaction of Copper Sulfide in Lithium Solid-State Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2002394. | 19.5 | 37 |
| 17 | Physicochemical Concepts of the Lithium Metal Anode in Solid-State Batteries. <i>Chemical Reviews</i> , 2020, 120, 7745-7794. | 47.7 | 468 |
| 18 | From Liquid- to Solid-State Batteries: Ion Transfer Kinetics of Heteroionic Interfaces. <i>Electrochemical Energy Reviews</i> , 2020, 3, 221-238. | 25.5 | 117 |

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|----|--|------|-----------|
| 19 | Benchmarking the performance of all-solid-state lithium batteries. <i>Nature Energy</i> , 2020, 5, 259-270. | 39.5 | 662 |
| 20 | Influence of Carbon Additives on the Decomposition Pathways in Cathodes of Lithium Thiophosphate-Based All-Solid-State Batteries. <i>Chemistry of Materials</i> , 2020, 32, 6123-6136. | 6.7 | 126 |
| 21 | Analysis of Interfacial Effects in All-Solid-State Batteries with Thiophosphate Solid Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9277-9291. | 8.0 | 73 |
| 22 | Interphase Formation of PEO ₂₀ :LiTFSI/Li ₆ PS ₅ Cl Composite Electrolytes with Lithium Metal. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 11713-11723. | 8.0 | 114 |
| 23 | Lithium-Metal Growth Kinetics on LLZO Garnet-Type Solid Electrolytes. <i>Joule</i> , 2019, 3, 2030-2049. | 24.0 | 292 |
| 24 | Properties of the Interphase Formed between Argyrodite-Type Li ₆ PS ₅ Cl and Polymer-Based PEO ₁₀ :LiTFSI. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 42186-42196. | 8.0 | 95 |
| 25 | Amorphous versus Crystalline Li ₃ PS ₄ : Local Structural Changes during Synthesis and Li Ion Mobility. <i>Journal of Physical Chemistry C</i> , 2019, 123, 10280-10290. | 3.1 | 62 |
| 26 | Hybrid electrolytes with 3D bicontinuous ordered ceramic and polymer microchannels for all-solid-state batteries. <i>Energy and Environmental Science</i> , 2018, 11, 185-201. | 30.8 | 252 |
| 27 | Li ⁺ -Ion Dynamics in ⁷ Li ₃ PS ₄ Observed by NMR: Local Hopping and Long-Range Transport. <i>Journal of Physical Chemistry C</i> , 2018, 122, 15954-15965. | 3.1 | 76 |