

# Wolfgang G Zeier

## List of Publications by Year in descending order

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156  
papers

19,032  
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13068

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11899

134  
g-index

192  
all docs

192  
docs citations

192  
times ranked

9767  
citing authors

#	ARTICLE	IF	CITATIONS
1	A solid future for battery development. Nature Energy, 2016, 1, .	19.8	2,319
2	Benchmarking the performance of all-solid-state lithium batteries. Nature Energy, 2020, 5, 259-270.	19.8	662
3	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.	3.2	655
4	Thinking Like a Chemist: Intuition in Thermoelectric Materials. Angewandte Chemie - International Edition, 2016, 55, 6826-6841.	7.2	639
5	Direct Observation of the Interfacial Instability of the Fast Ionic Conductor $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ at the Lithium Metal Anode. Chemistry of Materials, 2016, 28, 2400-2407.	3.2	619
6	Chemo-mechanical expansion of lithium electrode materials "on the route to mechanically optimized all-solid-state batteries. Energy and Environmental Science, 2018, 11, 2142-2158.	15.6	512
7	Physicochemical Concepts of the Lithium Metal Anode in Solid-State Batteries. Chemical Reviews, 2020, 120, 7745-7794.	23.0	468
8	Toward a Fundamental Understanding of the Lithium Metal Anode in Solid-State Batteries" An Electrochemo-Mechanical Study on the Garnet-Type Solid Electrolyte $\text{Li}_{6.25}\text{Al}_{0.25}\text{La}_3\text{Zr}_2\text{O}_{12}$ . ACS Applied Materials & Interfaces, 2019, 11, 14463-14477.	4.0	461
9	Influence of Lattice Polarizability on the Ionic Conductivity in the Lithium Superionic Argyrodites $\text{Li}_6\text{PS}_5\text{X}$ (X = Cl, Br, I). Journal of the American Chemical Society, 2017, 139, 10909-10918.	6.6	446
10	Interfacial reactivity and interphase growth of argyrodite solid electrolytes at lithium metal electrodes. Solid State Ionics, 2018, 318, 102-112.	1.3	374
11	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.	4.0	353
12	Optimum Carrier Concentration in n-Type PbTe Thermoelectrics. Advanced Energy Materials, 2014, 4, 1400486.	10.2	348
13	Engineering half-Heusler thermoelectric materials using Zintl chemistry. Nature Reviews Materials, 2016, 1, .	23.3	340
14	Inducing High Ionic Conductivity in the Lithium Superionic Argyrodites $\text{Li}_{6+x}\text{P}_{1-x}\text{Ge}_x\text{S}_5\text{I}$ for All-Solid-State Batteries. Journal of the American Chemical Society, 2018, 140, 16330-16339.	6.6	331
15	Challenges in Lithium Metal Anodes for Solid-State Batteries. ACS Energy Letters, 2020, 5, 922-934.	8.8	322
16	Lithium-Metal Growth Kinetics on LLZO Garnet-Type Solid Electrolytes. Joule, 2019, 3, 2030-2049.	11.7	292
17	The Detrimental Effects of Carbon Additives in $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Based Solid-State Batteries. ACS Applied Materials & Interfaces, 2017, 9, 35888-35896.	4.0	257
18	Degradation Mechanisms at the $\text{Li}_{10}\text{GeP}_2\text{S}_{12}/\text{LiCoO}_2$ Cathode Interface in an All-Solid-State Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2018, 10, 22226-22236.	4.0	250

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19	Visualization of the Interfacial Decomposition of Composite Cathodes in Argyrodite-Based All-Solid-State Batteries Using Time-of-Flight Secondary-Ion Mass Spectrometry. <i>Chemistry of Materials</i> , 2019, 31, 3745-3755.	3.2	246
20	Diffusion Limitation of Lithium Metal and Li-Mg Alloy Anodes on LLZO Type Solid Electrolytes as a Function of Temperature and Pressure. <i>Advanced Energy Materials</i> , 2019, 9, 1902568.	10.2	240
21	Lithium ion conductivity in $\text{Li}_2\text{P}_2\text{S}_5$ glasses – building units and local structure evolution during the crystallization of superionic conductors $\text{Li}_3\text{PS}_4$ , $\text{Li}_7\text{P}_3\text{S}_{11}$ and $\text{Li}_4\text{P}_2\text{S}_7$ . <i>Journal of Materials Chemistry A</i> , 2017, 5, 18111-18119.	5.2	233
22	(Electro)chemical expansion during cycling: monitoring the pressure changes in operating solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9929-9936.	5.2	222
23	On the Functionality of Coatings for Cathode Active Materials in Thiophosphate-Based All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1900626.	10.2	221
24	Redox-active cathode interphases in solid-state batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22750-22760.	5.2	206
25	$\text{Ca}_3\text{AlSb}_3$ : an inexpensive, non-toxic thermoelectric material for waste heat recovery. <i>Energy and Environmental Science</i> , 2011, 4, 510-518.	15.6	202
26	Interfacial Reactivity Benchmarking of the Sodium Ion Conductors $\text{Na}_3\text{PS}_4$ and Sodium $\text{I}^2$ -Alumina for Protected Sodium Metal Anodes and Sodium All-Solid-State Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 28216-28224.	4.0	195
27	High Thermoelectric Performance $\text{SnTe}$ - $\text{In}_2\text{Te}_3$ Solid Solutions Enabled by Resonant Levels and Strong Vacancy Phonon Scattering. <i>Chemistry of Materials</i> , 2015, 27, 7801-7811.	3.2	191
28	Battery cost forecasting: a review of methods and results with an outlook to 2050. <i>Energy and Environmental Science</i> , 2021, 14, 4712-4739.	15.6	189
29	Structural Insights and 3D Diffusion Pathways within the Lithium Superionic Conductor $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ . <i>Chemistry of Materials</i> , 2016, 28, 5905-5915.	3.2	176
30	Mechanochemical Synthesis: A Tool to Tune Cation Site Disorder and Ionic Transport Properties of $\text{Li}_3\text{MCl}_6$ (M = Y, Er) Superionic Conductors. <i>Advanced Energy Materials</i> , 2020, 10, 1903719.	10.2	173
31	Thermoelectric Transport in $\text{Cu}_7\text{PSe}_6$ with High Copper Ionic Mobility. <i>Journal of the American Chemical Society</i> , 2014, 136, 12035-12040.	6.6	154
32	Suppression of atom motion and metal deposition in mixed ionic electronic conductors. <i>Nature Communications</i> , 2018, 9, 2910.	5.8	148
33	Materials design of ionic conductors for solid state batteries. <i>Progress in Energy</i> , 2020, 2, 022001.	4.6	146
34	High-Throughput Screening of Solid-State Li-Ion Conductors Using Lattice-Dynamics Descriptors. <i>IScience</i> , 2019, 16, 270-282.	1.9	142
35	Experimental Assessment of the Practical Oxidative Stability of Lithium Thiophosphate Solid Electrolytes. <i>Chemistry of Materials</i> , 2019, 31, 8328-8337.	3.2	138
36	Lithium-Metal Anode Instability of the Superionic Halide Solid Electrolytes and the Implications for Solid-State Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 6718-6723.	7.2	137

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37	Designing Ionic Conductors: The Interplay between Structural Phenomena and Interfaces in Thiophosphate-Based Solid-State Batteries. <i>Chemistry of Materials</i> , 2018, 30, 4179-4192.	3.2	131
38	Influence of a Nano Phase Segregation on the Thermoelectric Properties of the p-Type Doped Stannite Compound $\text{Cu}_{2+x}\text{Zn}_{1-x}\text{GeSe}_4$ . <i>Journal of the American Chemical Society</i> , 2012, 134, 7147-7154.	6.6	129
39	Effect of Si substitution on the structural and transport properties of superionic Li-argyrodites. <i>Journal of Materials Chemistry A</i> , 2018, 6, 645-651.	5.2	128
40	Thermoelectric properties of $\text{Sr}_3\text{GaSb}_3$ – a chain-forming Zintl compound. <i>Energy and Environmental Science</i> , 2012, 5, 9121.	15.6	127
41	Rapid Microwave Preparation of Thermoelectric $\text{TiNiSn}$ and $\text{TiCoSb}$ Half-Heusler Compounds. <i>Chemistry of Materials</i> , 2012, 24, 2558-2565.	3.2	126
42	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.	3.2	126
43	Comparing the Descriptors for Investigating the Influence of Lattice Dynamics on Ionic Transport Using the Superionic Conductor $\text{Na}_3\text{PS}_4\text{Se}$ . <i>Journal of the American Chemical Society</i> , 2018, 140, 14464-14473.	6.6	122
44	Influence of Lattice Dynamics on $\text{Na}^+$ Transport in the Solid Electrolyte $\text{Na}_3\text{PS}_4\text{Se}$ . <i>Chemistry of Materials</i> , 2017, 29, 8859-8869.	3.2	121
45	Innovative Approaches to Li-Argyrodite Solid Electrolytes for All-Solid-State Lithium Batteries. <i>Accounts of Chemical Research</i> , 2021, 54, 2717-2728.	7.6	121
46	Bottleneck of Diffusion and Inductive Effects in $\text{Li}_{10}\text{Ge}_1\text{Sn}_x\text{P}_2\text{S}_{12}$ . <i>Chemistry of Materials</i> , 2018, 30, 1791-1798.	3.2	114
47	Defect-Controlled Electronic Properties in $\text{Zn}_2\text{Sb}_2$ Zintl Phases. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3422-3426.	7.2	112
48	Observation of Chemomechanical Failure and the Influence of Cutoff Potentials in All-Solid-State $\text{Li}_x\text{S}$ Batteries. <i>Chemistry of Materials</i> , 2019, 31, 2930-2940.	3.2	112
49	Local Structural Investigations, Defect Formation, and Ionic Conductivity of the Lithium Ionic Conductor $\text{Li}_4\text{P}_2\text{S}_6$ . <i>Chemistry of Materials</i> , 2016, 28, 8764-8773.	3.2	111
50	The Fast Charge Transfer Kinetics of the Lithium Metal Anode on the Garnet-Type Solid Electrolyte $\text{Li}_{6.25}\text{Al}_{0.25}\text{La}_3\text{Zr}_2\text{O}_{12}$ . <i>Advanced Energy Materials</i> , 2020, 10, 2000945.	10.2	110
51	Further Evidence for Energy Landscape Flattening in the Superionic Argyrodites $\text{Li}_6\text{P}_1\text{M}_x\text{S}_5\text{I}$ (M = Si, Ge, Sn). <i>Chemistry of Materials</i> , 2019, 31, 4936-4944.	3.2	109
52	Local Tetragonal Structure of the Cubic Superionic Conductor $\text{Na}_3\text{PS}_4$ . <i>Inorganic Chemistry</i> , 2018, 57, 4739-4744.	1.9	104
53	Phonon Scattering through a Local Anisotropic Structural Disorder in the Thermoelectric Solid Solution $\text{Cu}_2\text{Zn}_1\text{Fe}_x\text{GeSe}_4$ . <i>Journal of the American Chemical Society</i> , 2013, 135, 726-732.	6.6	100
54	Defect-Mediated Conductivity Enhancements in $\text{Na}_3\text{Pn}_1\text{W}_x\text{S}_4$ (Pn = P, Sb) Using Aliovalent Substitutions. <i>ACS Energy Letters</i> , 2020, 5, 146-151.	8.8	100

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55	Synthesis, Structural Characterization, and Lithium Ion Conductivity of the Lithium Thiophosphate $\text{Li}_2\text{P}_2\text{S}_6$ . <i>Inorganic Chemistry</i> , 2017, 56, 6681-6687.	1.9	98
56	How Certain Are the Reported Ionic Conductivities of Thiophosphate-Based Solid Electrolytes? An Interlaboratory Study. <i>ACS Energy Letters</i> , 2020, 5, 910-915.	8.8	98
57	Effect of Isovalent Substitution on the Thermoelectric Properties of the $\text{Cu}_2\text{ZnGeSe}_4$ Series of Solid Solutions. <i>Journal of the American Chemical Society</i> , 2014, 136, 442-448.	6.6	95
58	Nonstoichiometry in the Zintl Phase $\text{Yb}_{1-x}\text{Zn}_2\text{Sb}_2$ as a Route to Thermoelectric Optimization. <i>Chemistry of Materials</i> , 2014, 26, 5710-5717.	3.2	95
59	Using the 18-Electron Rule To Understand the Nominal 19-Electron Half-Heusler $\text{NbCoSb}$ with Nb Vacancies. <i>Chemistry of Materials</i> , 2017, 29, 1210-1217.	3.2	93
60	Crystal Structure Induced Ultralow Lattice Thermal Conductivity in Thermoelectric $\text{Ag}_9\text{AlSe}_6$ . <i>Advanced Energy Materials</i> , 2018, 8, 1800030.	10.2	88
61	Competing Structural Influences in the Li Superionic Conducting Argyrodites $\text{Li}_6\text{PS}_5\text{Se}_x\text{Br}_{(1-x)}$ upon Se Substitution. <i>Inorganic Chemistry</i> , 2018, 57, 13920-13928.	1.9	82
62	Solution-based synthesis of lithium thiophosphate superionic conductors for solid-state batteries: a chemistry perspective. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17735-17753.	5.2	82
63	Guidelines for All-Solid-State Battery Design and Electrode Buffer Layers Based on Chemical Potential Profile Calculation. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 19968-19976.	4.0	77
64	Correlating Transport and Structural Properties in $\text{Li}_x\text{Al}_x\text{Ge}_2(\text{PO}_4)_3$ (LAGP) Prepared from Aqueous Solution. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10935-10944.	4.0	75
65	Lithium Conductivity and Meyer-Neldel Rule in $\text{Li}_3\text{PO}_4$ - $\text{Li}_3\text{VO}_4$ - $\text{Li}_4\text{GeO}_4$ Lithium Superionic Conductors. <i>Chemistry of Materials</i> , 2018, 30, 5573-5582.	3.2	74
66	Superion Conductor $\text{Na}_{11.1}\text{Sn}_{2.1}\text{P}_{0.9}\text{Se}_{12}$ : Lowering the Activation Barrier of $\text{Na}^+$ Conduction in Quaternary $\text{Li}_4\text{Se}_6$ Electrolytes. <i>Chemistry of Materials</i> , 2018, 30, 4134-4139.	3.2	73
67	Interfacial Stability of Phosphate-NASICON Solid Electrolytes in Ni-Rich NCM Cathode-Based Solid-State Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 23244-23253.	4.0	73
68	Lattice Dynamical Approach for Finding the Lithium Superionic Conductor $\text{Li}_3\text{Er}_6$ . <i>ACS Applied Energy Materials</i> , 2020, 3, 3684-3691.	2.5	73
69	Rapid Crystallization and Kinetic Freezing of Site-Disorder in the Lithium Superionic Argyrodite $\text{Li}_6\text{PS}_5\text{Br}$ . <i>Chemistry of Materials</i> , 2019, 31, 10178-10185.	3.2	72
70	Linking Solid Electrolyte Degradation to Charge Carrier Transport in the Thiophosphate-Based Composite Cathode toward Solid-State Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 21010620.	7.8	71
71	Origin of Ultralow Thermal Conductivity in n-Type Cubic Bulk $\text{AgBiS}_2$ : Soft Ag Vibrations and Local Structural Distortion Induced by the $\text{Bi}_6^{\text{Lone Pair}}$ . <i>Chemistry of Materials</i> , 2019, 31, 2106-2113.	3.2	70
72	Dependence of the Li-Ion Conductivity and Activation Energies on the Crystal Structure and Ionic Radii in $\text{Li}_6\text{MLa}_2\text{Ta}_2\text{O}_{12}$ . <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 10900-10907.	4.0	68

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73	Na <sub>3</sub> ErZrCl <sub>6</sub> Halide-Based Fast Sodium-Ion Conductor with Vacancy-Driven Ionic Transport. ACS Applied Energy Materials, 2020, 3, 10164-10173.	2.5	68
74	Influence of Compensating Defect Formation on the Doping Efficiency and Thermoelectric Properties of Cu <sub>2</sub> SeBr. Chemistry of Materials, 2015, 27, 7018-7027.	3.2	67
75	High Electron Mobility and Disorder Induced by Silver Ion Migration Lead to Good Thermoelectric Performance in the Argyrodite Ag <sub>8</sub> SiSe <sub>6</sub> . Chemistry of Materials, 2017, 29, 4833-4839.	3.2	65
76	Spectroscopic characterization of lithium thiophosphates by XPS and XAS – a model to help monitor interfacial reactions in all-solid-state batteries. Physical Chemistry Chemical Physics, 2018, 20, 20088-20095.	1.3	65
77	Influence of Crystallinity of Lithium Thiophosphate Solid Electrolytes on the Performance of Solid-State Batteries. Advanced Energy Materials, 2021, 11, 2100654.	10.2	64
78	Investigation of Fluorine and Nitrogen as Anionic Dopants in Nickel-Rich Cathode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 44452-44462.	4.0	63
79	Insights into the Lithium Sub-structure of Superionic Conductors Li <sub>3</sub> YCl <sub>6</sub> and Li <sub>3</sub> YBr <sub>6</sub> . Chemistry of Materials, 2021, 33, 327-337.	3.2	62
80	Exploring Aliovalent Substitutions in the Lithium Halide Superionic Conductor Li <sub>3</sub> InZrCl <sub>6</sub> (0.2Tj EQq 0 rgBT	3.2	62
81	Energy Storage Materials for Solid-State Batteries: Design by Mechanochemistry. Advanced Energy Materials, 2021, 11, 2101022.	10.2	61
82	Structural limitations for optimizing garnet-type solid electrolytes: a perspective. Dalton Transactions, 2014, 43, 16133-16138.	1.6	58
83	Under Pressure: Mechanochemical Effects on Structure and Ion Conduction in the Sodium-Ion Solid Electrolyte Na <sub>3</sub> PS <sub>4</sub> . Journal of the American Chemical Society, 2020, 142, 18422-18436.	6.6	58
84	Band convergence in the non-cubic chalcopyrite compounds Cu <sub>2</sub> MGeSe <sub>4</sub> . Journal of Materials Chemistry C, 2014, 2, 10189-10194.	2.7	57
85	Engineering the Site Disorder and Lithium Distribution in the Lithium Superionic Argyrodite Li <sub>6</sub> PS <sub>5</sub> Br. Advanced Energy Materials, 2021, 11, 2003369.	10.2	57
86	Local Charge Inhomogeneity and Lithium Distribution in the Superionic Argyrodites Li <sub>6</sub> PS <sub>5</sub> X (X = Cl, Br, I). Inorganic Chemistry, 2020, 59, 11009-11019.	1.9	56
87	Impact of Solvent Treatment of the Superionic Argyrodite Li <sub>6</sub> PS <sub>5</sub> Cl on Solid-State Battery Performance. Advanced Energy and Sustainability Research, 2021, 2, 2000077.	2.8	55
88	Phonon-Ion Interactions: Designing Ion Mobility Based on Lattice Dynamics. Advanced Energy Materials, 2021, 11, 2002787.	10.2	55
89	Analysis of Charge Carrier Transport Toward Optimized Cathode Composites for All-Solid-State Li-S Batteries. Batteries and Supercaps, 2021, 4, 183-194.	2.4	53
90	Changing the Static and Dynamic Lattice Effects for the Improvement of the Ionic Transport Properties within the Argyrodite Li <sub>6</sub> PS <sub>5</sub> SeI. ACS Applied Energy Materials, 2020, 3, 9-18.	2.5	52



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91	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A1310-A1314.	1.3	50
92	A Chemical Understanding of the Band Convergence in Thermoelectric $\text{CoSb}_3$ Skutterudites: Influence of Electron Population, Local Thermal Expansion, and Bonding Interactions. <i>Chemistry of Materials</i> , 2017, 29, 1156-1164.	3.2	50
93	Thermoelectric properties of Zn-doped $\text{Ca}_3\text{AlSb}_3$ . <i>Journal of Materials Chemistry</i> , 2012, 22, 9826.	6.7	48
94	Between Liquid and All Solid: A Prospect on Electrolyte Future in Lithium-Ion Batteries for Electric Vehicles. <i>Energy Technology</i> , 2020, 8, 2000580.	1.8	48
95	Evidence for a Solid-Electrolyte Inductive Effect in the Superionic Conductor $\text{Li}_{10}\text{Ge}_4\text{Sn}_2\text{P}_2\text{S}_{12}$ . <i>Journal of the American Chemical Society</i> , 2020, 142, 21210-21219.	6.6	43
96	Toward Practical Solid-State Lithium-Sulfur Batteries: Challenges and Perspectives. <i>Accounts of Materials Research</i> , 2021, 2, 869-880.	5.9	40
97	Vacancy and anti-site disorder scattering in $\text{AgBiSe}_2$ thermoelectrics. <i>Dalton Transactions</i> , 2017, 46, 3906-3914.	1.6	39
98	Influence of the Lithium Substructure on the Diffusion Pathways and Transport Properties of the Thio-LISICON $\text{Li}_4\text{Ge}_4\text{Sn}_4\text{S}_4$ . <i>Chemistry of Materials</i> , 2019, 31, 3794-3802.	3.2	39
99	Opening Diffusion Pathways through Site Disorder: The Interplay of Local Structure and Ion Dynamics in the Solid Electrolyte $\text{Li}_6\text{P}_4\text{Ge}_5\text{I}$ as Probed by Neutron Diffraction and NMR. <i>Journal of the American Chemical Society</i> , 2022, 144, 1795-1812.	6.6	38
100	On the underestimated influence of synthetic conditions in solid ionic conductors. <i>Chemical Science</i> , 2021, 12, 6238-6263.	3.7	37
101	Crystal Growth of a New Series of Complex Niobates, $\text{LnKNaNbO}_5$ (Ln = La, Pr, Nd, Sm, Eu, Gd, and Tb): Structural Properties and Photoluminescence. <i>Chemistry of Materials</i> , 2009, 21, 1955-1961.	3.2	35
102	Local Bonding Influence on the Band Edge and Band Gap Formation in Quaternary Chalcopyrites. <i>Advanced Science</i> , 2017, 4, 1700080.	5.6	35
103	Bond strength dependent superionic phase transformation in the solid solution series $\text{Cu}_2\text{ZnGeSe}_4$ . <i>Journal of Materials Chemistry A</i> , 2014, 2, 1790-1794.	5.2	33
104	Denken wie ein Chemiker: Thermoelektrika intuitiv. <i>Angewandte Chemie</i> , 2016, 128, 6938-6954.	1.6	33
105	Impedance Analysis of NCM Cathode Materials: Electronic and Ionic Partial Conductivities and the Influence of Microstructure. <i>ACS Applied Energy Materials</i> , 2021, 4, 1335-1345.	2.5	33
106	Structural and Computational Assessment of the Influence of Wet-Chemical Post-Processing of the Al-Substituted Cubic $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ . <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 37188-37197.	4.0	30
107	Lithium Phosphidogermanates $\text{Li}_8\text{GeP}_4$ : A Novel Compound Class with Mixed Ionic and Electronic Conductivity. <i>Chemistry of Materials</i> , 2018, 30, 6440-6448.	3.2	30
108	On the Lithium Distribution in Halide Superionic Argyrodites by Halide Incorporation in $\text{Li}_7\text{PS}_6\text{Cl}$ . <i>ACS Applied Energy Materials</i> , 2021, 4, 7309-7315.	2.5	30

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109	Unraveling the Formation Mechanism of Solidâ€“Liquid Electrolyte Interphases on LiPON Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 9539-9547.	4.0	29
110	Considering the Role of Ion Transport in Diffusionâ€“Dominated Thermal Conductivity. Advanced Energy Materials, 2022, 12, .	10.2	27
111	Refinement of the crystal structure of Li <sub>4</sub> P <sub>2</sub> S <sub>6</sub> using NMR crystallography. Dalton Transactions, 2018, 47, 11691-11695.	1.6	26
112	Strongly Anharmonic Phonons and Their Role in Superionic Diffusion and Ultralow Thermal Conductivity of Cu <sub>7</sub> PSe <sub>6</sub> . Advanced Energy Materials, 2022, 12, .	10.2	26
113	Lithiumâ€“Metal Anode Instability of the Superionic Halide Solid Electrolytes and the Implications for Solidâ€“State Batteries. Angewandte Chemie, 2021, 133, 6792-6797.	1.6	25
114	Using crystallographic shear to reduce lattice thermal conductivity: high temperature thermoelectric characterization of the spark plasma sintered Magnâ€“li phases WO <sub>2.90</sub> and WO <sub>2.722</sub> . Physical Chemistry Chemical Physics, 2013, 15, 15399.	1.3	24
115	Determining conductivity and mobility values of individual components in multiphase composite Cu <sub>1.97</sub> Ag <sub>0.03</sub> Se. Applied Physics Letters, 2014, 105, .	1.5	23
116	Critical Role of the Crystallite Size in Nanostructured Li <sub>4</sub> Ti <sub>5</sub> O <sub>12</sub> Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 22580-22590.	4.0	23
117	Mechanochemical Synthesis and Structure of Lithium Tetrahaloaluminates, LiAlX <sub>4</sub> (X = Cl, F). Journal of Solid State Chemistry, 2017, 167, 1-10.	1.0	23
118	Tracking Ions the Direct Way: Long-Range Li <sup>+</sup> Dynamics in the Thio-LISICON Family Li <sub>4</sub> MCh <sub>4</sub> (M = Sn, Ge; Ch = S, Se) as Probed by <sup>7</sup> Li NMR Relaxometry and <sup>7</sup> Li Spin-Alignment Echo NMR. Journal of Physical Chemistry C, 2021, 125, 2306-2317.	1.5	22
119	Influence of Iron Sulfide Nanoparticle Sizes in Solidâ€“State Batteries**. Angewandte Chemie - International Edition, 2021, 60, 17952-17956.	7.2	21
120	Increasing Seebeck Coefficients and Thermoelectric Performance of Sn/Sb/Te and Ge/Sb/Te Materials by Cd Doping. Advanced Electronic Materials, 2015, 1, 1500266.	2.6	20
121	New tricks for optimizing thermoelectric materials. Current Opinion in Green and Sustainable Chemistry, 2017, 4, 23-28.	3.2	20
122	A Rapid and Facile Approach for the Recycling of Highâ€“Performance LiNi <sub>1-x</sub> Co <sub>x</sub> Mn <sub>y</sub> O <sub>2</sub> Active Materials. ChemSusChem, 2021, 14, 441-448.	3.6	20
123	Mechanochemical synthesis and high temperature thermoelectric properties of calcium-doped lanthanum telluride La <sub>3-x</sub> Ca <sub>x</sub> Te <sub>4</sub> . Journal of Materials Chemistry C, 2015, 3, 10459-10466.	2.7	19
124	LATP and LiCoPO <sub>4</sub> thin film preparation â€“ Illustrating interfacial issues on the way to all-phosphate SSBs. Solid State Ionics, 2019, 342, 115054.	1.3	19
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