Wolfgang G Zeier

List of Publications by Year
in descending order

156 papers	19,032 citations	13068 68 h-index	11899 134 g-index
192 all docs	192 docs citations	192 times ranked	9767 citing authors

#	Article	IF	Citations
1	Synergistic Effects of Surface Coating and Bulk Doping in Niâ€Rich Lithium Nickel Cobalt Manganese Oxide Cathode Materials for Highâ€Energy Lithium Ion Batteries. ChemSusChem, 2022, 15, .	3.6	9
2	Opening Diffusion Pathways through Site Disorder: The Interplay of Local Structure and Ion Dynamics in the Solid Electrolyte Li_{6+<i>x</i>}P_{1â€“<i>x</i>}Ge_{<i>x</i>}S₅I as Probed by Neutron Diffraction and NMR. Journal of the American Chemical Society, 2022, 144, 1795-1812.	6.6	38
3	Synergistic Effects of Surface Coating and Bulk Doping in Niâ€Rich Lithium Nickel Cobalt Manganese Oxide Cathode Materials for Highâ€Energy Lithiumâ€Ion Batteries. ChemSusChem, 2022, , e202200078.	3.6	0
4	Can Substitutions Affect the Oxidative Stability of Lithium Argyrodite Solid Electrolytes?. ACS Applied Energy Materials, 2022, 5, 2045-2053.	2.5	11
5	Two-Dimensional Substitution Series Na₃P_{1â€“<i>x</i>}Sb_{<i>x</i>}S_{4â€“<i>y</i>}Se_{<i>y</i>}: Beyond Static Description of Structural Bottlenecks for Na⁺ Transport. Chemistry of Materials, 2022, 34, 2410-2421.	3.2	15
6	Considering the Role of Ion Transport in Diffusonâ€Dominated Thermal Conductivity. Advanced Energy Materials, 2022, 12, .	10.2	27
7	Strongly Anharmonic Phonons and Their Role in Superionic Diffusion and Ultralow Thermal Conductivity of Cu₇PSe₆. Advanced Energy Materials, 2022, 12, .	10.2	26
8	Anharmonic Lattice Dynamics in Sodium Ion Conductors. Journal of Physical Chemistry Letters, 2022, 13, 5938-5945.	2.1	9
9	Correlating Structural Disorder to Li⁺ Ion Transport in Li_{4â€“<i>x</i>}Ge_{1â€“<i>x</i>}Sb_{<i>x</i>}S₄ (0 â‰ <i>x</i> â‰.2Tj ETQq1 1 0.784		
10	On the Crystal Structure and Conductivity of Na₃P. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 28-33.	0.6	9
11	Pyridine Complexes as Tailored Precursors for Rapid Synthesis of Thiophosphate Superionic Conductors. Batteries and Supercaps, 2021, 4, 607-611.	2.4	7
12	Lithiumâ€Metal Anode Instability of the Superionic Halide Solid Electrolytes and the Implications for Solidâ€State Batteries. Angewandte Chemie - International Edition, 2021, 60, 6718-6723.	7.2	137
13	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
14	Analysis of Charge Carrier Transport Toward Optimized Cathode Composites for Allâ€Solidâ€State Liâˆ’S Batteries. Batteries and Supercaps, 2021, 4, 183-194.	2.4	53
15	A Rapid and Facile Approach for the Recycling of Highâ€Performance LiNi_{1âˆ’<i>x</i>âˆ’<i>y</i>}Co_{<i>x</i>}Mn_{<i>y</i>}O₂ Active Materials. ChemSusChem, 2021, 14, 441-448.	3.6	20
16	Impedance Analysis of NCM Cathode Materials: Electronic and Ionic Partial Conductivities and the Influence of Microstructure. ACS Applied Energy Materials, 2021, 4, 1335-1345.	2.5	33
17	Impact of Solvent Treatment of the Superionic Argyrodite Li₆PS₅Cl on Solidâ€State Battery Performance. Advanced Energy and Sustainability Research, 2021, 2, 2000077.	2.8	55
18	Two-Dimensional Substitution: Toward a Better Understanding of the Structureâ€“Transport Correlations in the Li-Superionic Thio-LISICONs. Chemistry of Materials, 2021, 33, 727-740.	3.2	17

#	Article	IF	Citations
19	Tracking Ions the Direct Way: Long-Range Li⁺ Dynamics in the Thio-LISICON Family Li₄MCh₄ (M = Sn, Ge; Ch = S, Se) as Probed by ⁷Li NMR Relaxometry and ⁷Li Spin-Alignment Echo NMR. Journal of Physical Chemistry C, 2021, 125, 2306-2317.	1.5	22
20	Insights into the Lithium Sub-structure of Superionic Conductors Li₃YCl₆ and Li₃YBr₆. Chemistry of Materials, 2021, 33, 327-337.	3.2	62
21	Linking Solid Electrolyte Degradation to Charge Carrier Transport in the Thiophosphateâ€Based Composite Cathode toward Solidâ€State Lithiumâ€Sulfur Batteries. Advanced Functional Materials, 2021, 31, 2010620.	7.8	71
22	Mechanochemical Synthesis and Structure of Lithium Tetrahaloaluminates, LiAlX₄ (X = Cl,) Tj ETQq0 0 0 rgBT /Overlock 10		23
23	Innovative Approaches to Li-Argyrodite Solid Electrolytes for All-Solid-State Lithium Batteries. Accounts of Chemical Research, 2021, 54, 2717-2728.	7.6	121
24	Enhancement of ion diffusion by targeted phonon excitation. Cell Reports Physical Science, 2021, 2, 100431.	2.8	15
25	Influence of Crystallinity of Lithium Thiophosphate Solid Electrolytes on the Performance of Solidâ€State Batteries. Advanced Energy Materials, 2021, 11, 2100654.	10.2	64
26	Energy Storage Materials for Solidâ€State Batteries: Design by Mechanochemistry. Advanced Energy Materials, 2021, 11, 2101022.	10.2	61
27	Exploring Aliovalent Substitutions in the Lithium Halide Superionic Conductor Li_{3â€"<i>x</i>}In_{1â€"<i>x</i>}Zr_{<i>x</i>}Cl₆ (0 â‰ <i>x</i> â‰) Tj ETQq1 1 0.78 43	3.2	12
28	Influence of Iron Sulfide Nanoparticle Sizes in Solidâ€State Batteries**. Angewandte Chemie, 2021, 133, 18096-18100.	1.6	4
29	On the Lithium Distribution in Halide Superionic Argyrodites by Halide Incorporation in Li_{7â€"<i>x</i>}PS_{6â€"<i>x</i>}Cl_{<i>x</i>}. ACS Applied Energy Materials, 2021, 4, 7309-7315.	2.5	30
30	Influence of Reduced Na Vacancy Concentrations in the Sodium Superionic Conductors Na_{11+<i>x</i>}Sn₂P_{1â€"<i>x</i>}M_{<i>x</i>}S₁₂ (M = Sn, Ge). ACS Applied Energy Materials, 2021, 4, 7250-7258.	2.5	4
31	Influence of Iron Sulfide Nanoparticle Sizes in Solidâ€State Batteries**. Angewandte Chemie - International Edition, 2021, 60, 17952-17956.	7.2	21
32	On the underestimated influence of synthetic conditions in solid ionic conductors. Chemical Science, 2021, 12, 6238-6263.	3.7	37
33	Battery cost forecasting: a review of methods and results with an outlook to 2050. Energy and Environmental Science, 2021, 14, 4712-4739.	15.6	189
34	Phononâ€"Ion Interactions: Designing Ion Mobility Based on Lattice Dynamics. Advanced Energy Materials, 2021, 11, 2002787.	10.2	55
35	Engineering the Siteâ€Disorder and Lithium Distribution in the Lithium Superionic Argyrodite Li₆PS₅Br. Advanced Energy Materials, 2021, 11, 2003369.	10.2	57
36	Toward Practical Solid-State Lithiumâ€"Sulfur Batteries: Challenges and Perspectives. Accounts of Materials Research, 2021, 2, 869-880.	5.9	40

#	Article	IF	Citations
37	Sn Substitution in the Lithium Superionic Argyrodite Li₆PCh₅I (Ch = S and Se). Inorganic Chemistry, 2021, 60, 18975-18980.	1.9	7
38	Changing the Static and Dynamic Lattice Effects for the Improvement of the Ionic Transport Properties within the Argyrodite Li₆PS_{5â€“<i>x</i>}Se_{<i>x</i>}I. ACS Applied Energy Materials, 2020, 3, 9-18.	2.5	52
39	Mechanochemical Synthesis: A Tool to Tune Cation Site Disorder and Ionic Transport Properties of Li₃MCl₆ (M = Y, Er) Superionic Conductors. Advanced Energy Materials, 2020, 10, 1903719.	10.2	173
40	Defect-Mediated Conductivity Enhancements in Na_{3â€“<i>x</i>}Pn_{1â€“<i>x</i>}W_{<i>x</i>}S₄ (Pn = P, Sb) Using Aliovalent Substitutions. ACS Energy Letters, 2020, 5, 146-151.	8.8	100
41	The polymorphs of the Na⁺ion conductor Na₃PS₄viewed from the perspective of a group-subgroup scheme. Zeitschrift Fur Kristallographie - Crystalline Materials, 2020, 235, 1-6.	0.4	11
42	Under Pressure: Mechanochemical Effects on Structure and Ion Conduction in the Sodium-Ion Solid Electrolyte Na₃PS₄. Journal of the American Chemical Society, 2020, 142, 18422-18436.	6.6	58
43	Local Charge Inhomogeneity and Lithium Distribution in the Superionic Argyrodites Li₆PS₅X (X = Cl, Br, I). Inorganic Chemistry, 2020, 59, 11009-11019.	1.9	56
44	Physicochemical Concepts of the Lithium Metal Anode in Solid-State Batteries. Chemical Reviews, 2020, 120, 7745-7794.	23.0	468
45	Na_{3â€“<i>x</i>}Er_{1â€“<i>x</i>}Zr_{<i>x</i>}Cl₆â€”A Halide-Based Fast Sodium-Ion Conductor with Vacancy-Driven Ionic Transport. ACS Applied Energy Materials, 2020, 3, 10164-10173.	2.5	68
46	Between Liquid and All Solid: A Prospect on Electrolyte Future in Lithiumâ€Ion Batteries for Electric Vehicles. Energy Technology, 2020, 8, 2000580.	1.8	48
47	Evidence for a Solid-Electrolyte Inductive Effect in the Superionic Conductor Li₁₀Ge_{1â€“<i>x</i>}Sn_{<i>x</i>}P₂S₁₂. Journal of the American Chemical Society, 2020, 142, 21210-21219.	6.6	43
48	The Fast Charge Transfer Kinetics of the Lithium Metal Anode on the Garnetâ€Type Solid Electrolyte Li_{6.25}Al_{0.25}La₃Zr₂O₁₂. Advanced Energy Materials, 2020, 10, 2000945.	10.2	110
49	Lattice Dynamical Approach for Finding the Lithium Superionic Conductor Li₃ErI₆. ACS Applied Energy Materials, 2020, 3, 3684-3691.	2.5	73
50	Benchmarking the performance of all-solid-state lithium batteries. Nature Energy, 2020, 5, 259-270.	19.8	662
51	Influence of Carbon Additives on the Decomposition Pathways in Cathodes of Lithium Thiophosphate-Based All-Solid-State Batteries. Chemistry of Materials, 2020, 32, 6123-6136.	3.2	126
52	Structure and Sodium Ion Transport in Na_{11+<i>x</i>}Sn_{2+<i>x</i>}(Sb_{1â€“<i>y</i>}P<i>_{<i>y</i>}</i>)<sub>1â€“<i>x</i></ Chemistry of Materials, 2020, 32, 6566-6576.	3.2	14
53	The effect of rare-earth substitution on the Debye temperature of inorganic phosphors. Applied Physics Letters, 2020, 116, .	1.5	11
54	Materials design of ionic conductors for solid state batteries. Progress in Energy, 2020, 2, 022001.	4.6	146

#	Article	IF	Citations
55	Solid State Fluorination on the Minute Scale: Synthesis of WO_{3âˆ’}<i>_x</i>F<i>_x</i> with Photocatalytic Activity. Advanced Functional Materials, 2020, 30, 1909051.	7.8	15
56	Challenges in Lithium Metal Anodes for Solid-State Batteries. ACS Energy Letters, 2020, 5, 922-934.	8.8	322
57	How Certain Are the Reported Ionic Conductivities of Thiophosphate-Based Solid Electrolytes? An Interlaboratory Study. ACS Energy Letters, 2020, 5, 910-915.	8.8	98
58	Comparative Microstructural Analysis of Nongraphitic Carbons by Wide-Angle X-ray and Neutron Scattering. Journal of Physical Chemistry C, 2019, 123, 20532-20546.	1.5	16
59	Solution-based synthesis of lithium thiophosphate superionic conductors for solid-state batteries: a chemistry perspective. Journal of Materials Chemistry A, 2019, 7, 17735-17753.	5.2	82
60	Lithium-Metal Growth Kinetics on LLZO Garnet-Type Solid Electrolytes. Joule, 2019, 3, 2030-2049.	11.7	292
61	Diffusion Limitation of Lithium Metal and Liâ€“Mg Alloy Anodes on LLZO Type Solid Electrolytes as a Function of Temperature and Pressure. Advanced Energy Materials, 2019, 9, 1902568.	10.2	240
62	LATP and LiCoPO4 thin film preparation â€“ Illustrating interfacial issues on the way to all-phosphate SSBs. Solid State Ionics, 2019, 342, 115054.	1.3	19
63	Experimental Assessment of the Practical Oxidative Stability of Lithium Thiophosphate Solid Electrolytes. Chemistry of Materials, 2019, 31, 8328-8337.	3.2	138
64	Ionic Conductivity of the NASICONâ€Related Thiophosphate Na_{1+<i>x</i>}Ti_{2âˆ’<i>x</i>}Ga_{<i>x</i>}(PS₄)₃. Chemistry - A European Journal, 2019, 25, 4143-4148.	1.7	14
65	High-Throughput Screening of Solid-State Li-Ion Conductors Using Lattice-Dynamics Descriptors. IScience, 2019, 16, 270-282.	1.9	142
66	Local Structure and Influence of Sb Substitution on the Structureâ€“Transport Properties in AgBiSe₂. Inorganic Chemistry, 2019, 58, 9236-9245.	1.9	18
67	Further Evidence for Energy Landscape Flattening in the Superionic Argyrodites Li_{6+<i>x</i>}P_{1â€“<i>x</i>}M_{<i>x</i>}S₅I (M = Si, Ge, Sn). Chemistry of Materials, 2019, 31, 4936-4944.	3.2	109
68	Interfacial Stability of Phosphate-NASICON Solid Electrolytes in Ni-Rich NCM Cathode-Based Solid-State Batteries. ACS Applied Materials & Interfaces, 2019, 11, 23244-23253.	4.0	73
69	On the Functionality of Coatings for Cathode Active Materials in Thiophosphateâ€Based Allâ€Solidâ€State Batteries. Advanced Energy Materials, 2019, 9, 1900626.	10.2	221
70	Guidelines for All-Solid-State Battery Design and Electrode Buffer Layers Based on Chemical Potential Profile Calculation. ACS Applied Materials & Interfaces, 2019, 11, 19968-19976.	4.0	77
71	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.	3.2	246
72	Influence of the Lithium Substructure on the Diffusion Pathways and Transport Properties of the Thio-LISICON Li₄Ge_{1â€“<i>x</i>}Sn_{<i>x</i>}S₄. Chemistry of Materials, 2019, 31, 3794-3802.	3.2	39

#	Article	IF	Citations
73	Toward a Fundamental Understanding of the Lithium Metal Anode in Solid-State Batteriesâ€"An Electrochemo-Mechanical Study on the Garnet-Type Solid Electrolyte Li_{6.25}Al_{0.25}La₃Zr₂O₁₂. ACS Applied Materials & Interfaces, 2019, 11, 14463-14477.	4.0	461
74	Observation of Chemomechanical Failure and the Influence of Cutoff Potentials in All-Solid-State Liâ€"S Batteries. Chemistry of Materials, 2019, 31, 2930-2940.	3.2	112
75	Unraveling the Formation Mechanism of Solidâ€"Liquid Electrolyte Interphases on LiPON Thin Films. ACS Applied Materials & Interfaces, 2019, 11, 9539-9547.	4.0	29
76	Origin of Ultralow Thermal Conductivity in n-Type Cubic Bulk AgBiS₂: Soft Ag Vibrations and Local Structural Distortion Induced by the Bi 6s² Lone Pair. Chemistry of Materials, 2019, 31, 2106-2113.	3.2	70
77	Rapid Crystallization and Kinetic Freezing of Site-Disorder in the Lithium Superionic Argyrodite Li₆PS₅Br. Chemistry of Materials, 2019, 31, 10178-10185.	3.2	72
78	Characterization of Battery Material Interfaces By Time-of-Flight Secondary Ion Mass Spectrometry. ECS Meeting Abstracts, 2019, , .	0.0	3
79	Structural analysis and electrical characterization of cation-substituted lithium ion conductors Li1âˆ'Ti1âˆ'MOPO4 (Mâ€¯=â€¯Nb, Ta, Sb). Solid State Ionics, 2018, 319, 170-179.	1.3	4
80	Correlating Transport and Structural Properties in Li_{1+<i>x</i>}Al_{<i>x</i>}Ge_{2â€"<i>x</i>}(PO₄)₃ (LAGP) Prepared from Aqueous Solution. ACS Applied Materials & Interfaces, 2018, 10, 10935-10944.	4.0	75
81	Trendbericht FestkÃ¶rperchemie 2017. Nachrichten Aus Der Chemie, 2018, 66, 240-248.	0.0	0
82	Local Tetragonal Structure of the Cubic Superionic Conductor Na₃PS₄. Inorganic Chemistry, 2018, 57, 4739-4744.	1.9	104
83	Crystal Structure Induced Ultralow Lattice Thermal Conductivity in Thermoelectric Ag₉AlSe₆. Advanced Energy Materials, 2018, 8, 1800030.	10.2	88
84	Bottleneck of Diffusion and Inductive Effects in Li₁₀Ge_{1â€"<i>x</i>}Sn_{<i>x</i>}P₂S₁₂. Chemistry of Materials, 2018, 30, 1791-1798.	3.2	114
85	Spark Plasma Sintering (SPS)-Assisted Synthesis and Thermoelectric Characterization of MagnÃ©li Phase V₆O₁₁. Inorganic Chemistry, 2018, 57, 1259-1268.	1.9	11
86	Interfacial reactivity and interphase growth of argyrodite solid electrolytes at lithium metal electrodes. Solid State Ionics, 2018, 318, 102-112.	1.3	374
87	Effect of Si substitution on the structural and transport properties of superionic Li-argyrodites. Journal of Materials Chemistry A, 2018, 6, 645-651.	5.2	128
88	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
89	Comparing the Descriptors for Investigating the Influence of Lattice Dynamics on Ionic Transport Using the Superionic Conductor Na₃PS_{4â€"<i>x</i>}Se_{<i>x</i>}. Journal of the American Chemical Society, 2018, 140, 14464-14473.	6.6	122
90	Structural and Computational Assessment of the Influence of Wet-Chemical Post-Processing of the Al-Substituted Cubic Li₇La₃Zr₂O₁₂. ACS Applied Materials & Interfaces, 2018, 10, 37188-37197.	4.0	30

#	Article	IF	Citations
91	Competing Structural Influences in the Li Superionic Conducting Argyrodites Li₆PS_{5â€“<i>x</i>}Se<i>_{<i>x</i>}</i>Br (0 â‰ <i>x</i> â‰ 1) upon Se Substitution. Inorganic Chemistry, 2018, 57, 13920-13928.	1.9	82
92	Inducing High Ionic Conductivity in the Lithium Superionic Argyrodites Li_{6+<i>x</i>}P_{1â€“<i>x</i>}Ge_{<i>x</i>}S₅I for All-Solid-State Batteries. Journal of the American Chemical Society, 2018, 140, 16330-16339.	6.6	331
93	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.	15.6	512
94	Superion Conductor Na_{11.1}Sn_{2.1}P_{0.9}Se₁₂: Lowering the Activation Barrier of Na⁺ Conduction in Quaternary 1â€“4â€“5â€“6 Electrolytes. Chemistry of Materials, 2018, 30, 4134-4139.	3.2	73
95	Suppression of atom motion and metal deposition in mixed ionic electronic conductors. Nature Communications, 2018, 9, 2910.	5.8	148
96	Lithium Conductivity and Meyer-Neldel Rule in Li₃PO₄â€“Li₃VO₄â€“Li₄GeO₄ Lithium Superionic Conductors. Chemistry of Materials, 2018, 30, 5573-5582.	3.2	74
97	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.	1.3	65
98	Designing Ionic Conductors: The Interplay between Structural Phenomena and Interfaces in Thiophosphate-Based Solid-State Batteries. Chemistry of Materials, 2018, 30, 4179-4192.	3.2	131
99	Refinement of the crystal structure of Li4P2S6 using NMR crystallography. Dalton Transactions, 2018, 47, 11691-11695.	1.6	26
100	Lithium Phosphidogermanates Î±- and Î²-Li₈GeP₄â€”A Novel Compound Class with Mixed Li⁺ Ionic and Electronic Conductivity. Chemistry of Materials, 2018, 30, 6440-6448.	3.2	30
101	Critical Role of the Crystallite Size in Nanostructured Li₄Ti₅O₁₂ Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 22580-22590.	4.0	23
102	Degradation Mechanisms at the Li₁₀GeP₂S₁₂/LiCoO₂ Cathode Interface in an All-Solid-State Lithium-Ion Battery. ACS Applied Materials & Interfaces, 2018, 10, 22226-22236.	4.0	250
103	Using the 18-Electron Rule To Understand the Nominal 19-Electron Half-Heusler NbCoSb with Nb Vacancies. Chemistry of Materials, 2017, 29, 1210-1217.	3.2	93
104	Vacancy and anti-site disorder scattering in AgBiSe₂ thermoelectrics. Dalton Transactions, 2017, 46, 3906-3914.	1.6	39
105	New tricks for optimizing thermoelectric materials. Current Opinion in Green and Sustainable Chemistry, 2017, 4, 23-28.	3.2	20
106	High Electron Mobility and Disorder Induced by Silver Ion Migration Lead to Good Thermoelectric Performance in the Argyrodite Ag₈SiSe₆. Chemistry of Materials, 2017, 29, 4833-4839.	3.2	65
107	Synthesis, Structural Characterization, and Lithium Ion Conductivity of the Lithium Thiophosphate Li₂P₂S₆. Inorganic Chemistry, 2017, 56, 6681-6687.	1.9	98
108	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

#	ARTICLE	IF	CITATIONS
109	(Electro)chemical expansion during cycling: monitoring the pressure changes in operating solid-state lithium batteries. Journal of Materials Chemistry A, 2017, 5, 9929-9936.	5.2	222
110	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
111	Local Bonding Influence on the Band Edge and Band Gap Formation in Quaternary Chalcopyrites. Advanced Science, 2017, 4, 1700080.	5.6	35
112	A Chemical Understanding of the Band Convergence in Thermoelectric CoSb₃ Skutterudites: Influence of Electron Population, Local Thermal Expansion, and Bonding Interactions. Chemistry of Materials, 2017, 29, 1156-1164.	3.2	50
113	Redox-active cathode interphases in solid-state batteries. Journal of Materials Chemistry A, 2017, 5, 22750-22760.	5.2	206
114	Influence of Lattice Dynamics on Na⁺ Transport in the Solid Electrolyte Na₃PS_{4â€“<i>x</i>}Se_{<i>x</i>}. Chemistry of Materials, 2017, 29, 8859-8869.	3.2	121
115	The Detrimental Effects of Carbon Additives in Li₁₀GeP₂S₁₂-Based Solid-State Batteries. ACS Applied Materials & Interfaces, 2017, 9, 35888-35896.	4.0	257
116	Influence of Lattice Polarizability on the Ionic Conductivity in the Lithium Superionic Argyrodites Li₆PS₅X (X = Cl, Br, I). Journal of the American Chemical Society, 2017, 139, 10909-10918.	6.6	446
117	Lithium ion conductivity in Li₂Sâ€“P₂S₅ glasses â€“ building units and local structure evolution during the crystallization of superionic conductors Li₃PS₄, Li₇P₃S₁₁ and Li₄P₂S₇. Journal of Materials Chemistry A, 2017, 5, 18111-18119.	5.2	233
118	Interfacial Reactivity Benchmarking of the Sodium Ion Conductors Na₃PS₄ and Sodium Î2-Alumina for Protected Sodium Metal Anodes and Sodium All-Solid-State Batteries. ACS Applied Materials & Interfaces, 2016, 8, 28216-28224.	4.0	195
119	Structural Insights and 3D Diffusion Pathways within the Lithium Superionic Conductor Li₁₀GeP₂S₁₂. Chemistry of Materials, 2016, 28, 5905-5915.	3.2	176
120	Local Structural Investigations, Defect Formation, and Ionic Conductivity of the Lithium Ionic Conductor Li₄P₂S₆. Chemistry of Materials, 2016, 28, 8764-8773.	3.2	111
121	Engineering half-Heusler thermoelectric materials using Zintl chemistry. Nature Reviews Materials, 2016, 1, .	23.3	340
122	A solid future for battery development. Nature Energy, 2016, 1, .	19.8	2,319
123	Thinking Like a Chemist: Intuition in Thermoelectric Materials. Angewandte Chemie - International Edition, 2016, 55, 6826-6841.	7.2	639
124	Denken wie ein Chemiker: Thermoelektrika intuitiv. Angewandte Chemie, 2016, 128, 6938-6954.	1.6	33
125	Lithium-ion conductivity in Li₆Y(BO₃)₃: a thermally and electrochemically robust solid electrolyte. Journal of Materials Chemistry A, 2016, 4, 6972-6979.	5.2	13
126	Direct Observation of the Interfacial Instability of the Fast Ionic Conductor Li₁₀GeP₂S₁₂ at the Lithium Metal Anode. Chemistry of Materials, 2016, 28, 2400-2407.	3.2	619

#	Article	IF	Citations
127	ZnSb Polymorphs with Improved Thermoelectric Properties. Chemistry of Materials, 2016, 28, 2912-2920.	3.2	16
128	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
129	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. Journal of the Electrochemical Society, 2015, 162, A1310-A1314.	1.3	50
130	Influence of Compensating Defect Formation on the Doping Efficiency and Thermoelectric Properties of Cu_{2-y}Se_{1â€“<i>x</i>}Br_{<i>x</i>}. Chemistry of Materials, 2015, 27, 7018-7027.	3.2	67
131	Mechanochemical synthesis and high temperature thermoelectric properties of calcium-doped lanthanum telluride La_{3â^’x}Ca_xTe₄. Journal of Materials Chemistry C, 2015, 3, 10459-10466.	2.7	19
132	High Thermoelectric Performance SnTeâ€“In₂Te₃ Solid Solutions Enabled by Resonant Levels and Strong Vacancy Phonon Scattering. Chemistry of Materials, 2015, 27, 7801-7811.	3.2	191
133	Determining conductivity and mobility values of individual components in multiphase composite Cu1.97Ag0.03Se. Applied Physics Letters, 2014, 105, .	1.5	23
134	Defectâ€Controlled Electronic Properties in <i>A</i>Zn₂Sb₂ Zintl Phases. Angewandte Chemie - International Edition, 2014, 53, 3422-3426.	7.2	112
135	Hydrothermal Preparation and Magnetic Properties of NaFeSi₂O₆: Nanowires vs Bulk Samples. Inorganic Chemistry, 2014, 53, 12396-12401.	1.9	9
136	Optimum Carrier Concentration in nâ€Type PbTe Thermoelectrics. Advanced Energy Materials, 2014, 4, 1400486.	10.2	348
137	Effect of Isovalent Substitution on the Thermoelectric Properties of the Cu₂ZnGeSe_{4â€“<i>x</i>}S_{<i>x</i>} Series of Solid Solutions. Journal of the American Chemical Society, 2014, 136, 442-448.	6.6	95
138	Band convergence in the non-cubic chalcopyrite compounds Cu₂MGeSe₄. Journal of Materials Chemistry C, 2014, 2, 10189-10194.	2.7	57
139	Bond strength dependent superionic phase transformation in the solid solution series Cu₂ZnGeSe_{4â^’x}S_x. Journal of Materials Chemistry A, 2014, 2, 1790-1794.	5.2	33
140	Structural limitations for optimizing garnet-type solid electrolytes: a perspective. Dalton Transactions, 2014, 43, 16133-16138.	1.6	58
141	Dependence of the Li-Ion Conductivity and Activation Energies on the Crystal Structure and Ionic Radii in Li₆MLa₂Ta₂O₁₂. ACS Applied Materials & Interfaces, 2014, 6, 10900-10907.	4.0	68
142	Thermoelectric Transport in Cu₇PSe₆ with High Copper Ionic Mobility. Journal of the American Chemical Society, 2014, 136, 12035-12040.	6.6	154
143	Nonstoichiometry in the Zintl Phase Yb_{1â^'Î´}Zn₂Sb₂ as a Route to Thermoelectric Optimization. Chemistry of Materials, 2014, 26, 5710-5717.	3.2	95
144	Using crystallographic shear to reduce lattice thermal conductivity: high temperature thermoelectric characterization of the spark plasma sintered MagnÃ©li phases WO2.90 and WO2.722. Physical Chemistry Chemical Physics, 2013, 15, 15399.	1.3	24

#	Article	IF	Citations
145	Phonon Scattering through a Local Anisotropic Structural Disorder in the Thermoelectric Solid Solution Cu₂Zn_{1â€“<i>x</i>}Fe_{<i>x</i>}GeSe₄. Journal of the American Chemical Society, 2013, 135, 726-732.	6.6	100
146	INFLUENCE OF THE CHEMICAL POTENTIAL ON THE CARRIER EFFECTIVE MASS IN THE THERMOELECTRIC SOLID SOLUTION Cu2Zn1-xFexGeSe4. Functional Materials Letters, 2013, 06, 1340010.	0.7	7
147	Rapid Microwave Preparation of Thermoelectric TiNiSn and TiCoSb Half-Heusler Compounds. Chemistry of Materials, 2012, 24, 2558-2565.	3.2	126
148	Thermoelectric properties of Zn-doped Ca3AlSb3. Journal of Materials Chemistry, 2012, 22, 9826.	6.7	48
149	Influence of a Nano Phase Segregation on the Thermoelectric Properties of the p-Type Doped Stannite Compound Cu_{2+<i>x</i>}Zn_{1â€“<i>x</i>}GeSe₄. Journal of the American Chemical Society, 2012, 134, 7147-7154.	6.6	129
150	Thermoelectric properties of Sr3GaSb3 â€“ a chain-forming Zintl compound. Energy and Environmental Science, 2012, 5, 9121.	15.6	127
151	Ca₃AlSb₃: an inexpensive, non-toxic thermoelectric material for waste heat recovery. Energy and Environmental Science, 2011, 4, 510-518.	15.6	202
152	Thermoâ€elektrische Verbindungen. Strom aus AbwÃrme. Chemie in Unserer Zeit, 2011, 45, 188-200.	0.1	7
153	Crystal growth of Ln3GaO6 (Ln=Nd, Sm, Eu and Gd): Structural and optical properties. Solid State Sciences, 2009, 11, 1965-1970.	1.5	13
154	Crystal Growth of a New Series of Complex Niobates, LnKNaNbO5 (Ln = La, Pr, Nd, Sm, Eu, Gd, and Tb): Structural Properties and Photoluminescence. Chemistry of Materials, 2009, 21, 1955-1961.	3.2	35
155	Lithium Metal Growth Kinetics on LLZO Garnet Type Solid Electrolytes â€“ <i>Operando</i> Study of Lithium Deposition and Dendrite Growth. SSRN Electronic Journal, 0, , .	0.4	0
156	Understanding the effect of lattice polarisability on the electrochemical properties of lithium tetrahaloaluminates, LiAl<i>X</i>₄ (<i>X</i> = Cl, Br, I). Journal of Materials Chemistry A, 0, , .	5.2	3