Wolfgang G Zeier

List of Publications by Year in Descending Order

148 papers	11,856 citations	56 h-index	107 g-index
192 ext. papers	15,205 ext. citations	12.1 avg, IF	7.22 L-index

#	Paper	IF	Citations
148	Opening Diffusion Pathways through Site Disorder: The Interplay of Local Structure and Ion Dynamics in the Solid Electrolyte LiPGeSI as Probed by Neutron Diffraction and NMR.. *Journal of the American Chemical Society*, **2022**,	16.4	8
147	Synergistic Effects of Surface Coating and Bulk Doping in Ni-Rich Lithium Nickel Cobalt Manganese Oxide Cathode Materials for High-Energy Lithium-Ion Batteries.. *ChemSusChem*, **2022**, e202200078	8.3	
146	Two-Dimensional Substitution Series Na3P1−xSbxS4−ySey: Beyond Static Description of Structural Bottlenecks for Na+ Transport. *Chemistry of Materials*, **2022**, 34, 2410-2421	9.6	2
145	Toward Practical Solid-State Lithium−Sulfur Batteries: Challenges and Perspectives. *Accounts of Materials Research*, **2021**, 2, 869-880	7.5	8
144	Mechanochemical Synthesis and Structure of Lithium Tetrahaloaluminates, LiAlX (X = Cl, Br, I): A Family of Li-Ion Conducting Ternary Halides **2021**, 3, 652-657		5
143	Innovative Approaches to Li-Argyrodite Solid Electrolytes for All-Solid-State Lithium Batteries. *Accounts of Chemical Research*, **2021**, 54, 2717-2728	24.3	28
142	Enhancement of ion diffusion by targeted phonon excitation. *Cell Reports Physical Science*, **2021**, 2, 100431	8.1	7
141	Influence of Crystallinity of Lithium Thiophosphate Solid Electrolytes on the Performance of Solid-State Batteries. *Advanced Energy Materials*, **2021**, 11, 2100654	21.8	25
140	Energy Storage Materials for Solid-State Batteries: Design by Mechanochemistry. *Advanced Energy Materials*, **2021**, 11, 2101022	21.8	17
139	Exploring Aliovalent Substitutions in the Lithium Halide Superionic Conductor Li3−xIn1−xZrxCl6 (0 ≤ x ≤ 0.5). *Chemistry of Materials*, **2021**, 33, 4773-4782	9.6	10
138	Influence of Iron Sulfide Nanoparticle Sizes in Solid-State Batteries**. *Angewandte Chemie*, **2021**, 133, 18096-18100	3.6	0
137	On the Crystal Structure and Conductivity of Na3P. *Zeitschrift Fur Anorganische Und Allgemeine Chemie*, **2021**, 647, 28-33	1.3	2
136	Pyridine Complexes as Tailored Precursors for Rapid Synthesis of Thiophosphate Superionic Conductors. *Batteries and Supercaps*, **2021**, 4, 607-611	5.6	2
135	Lithium-Metal Anode Instability of the Superionic Halide Solid Electrolytes and the Implications for Solid-State Batteries. *Angewandte Chemie - International Edition*, **2021**, 60, 6718-6723	16.4	47
134	Lithium-Metal Anode Instability of the Superionic Halide Solid Electrolytes and the Implications for Solid-State Batteries. *Angewandte Chemie*, **2021**, 133, 6792-6797	3.6	13
133	Analysis of Charge Carrier Transport Toward Optimized Cathode Composites for All-Solid-State Li‐S Batteries. *Batteries and Supercaps*, **2021**, 4, 183-194	5.6	22
132	A Rapid and Facile Approach for the Recycling of High-Performance LiNi Co Mn O Active Materials. *ChemSusChem*, **2021**, 14, 441-448	8.3	4

131	Impedance Analysis of NCM Cathode Materials: Electronic and Ionic Partial Conductivities and the Influence of Microstructure. *ACS Applied Energy Materials*, **2021**, 4, 1335-1345	6.1	11
130	Impact of Solvent Treatment of the Superionic Argyrodite Li6PS5Cl on Solid-State Battery Performance. *Advanced Energy and Sustainability Research*, **2021**, 2, 2000077	1.6	17
129	Two-Dimensional Substitution: Toward a Better Understanding of the Structure□Transport Correlations in the Li-Superionic Thio-LISICONs. *Chemistry of Materials*, **2021**, 33, 727-740	9.6	8
128	Tracking Ions the Direct Way: Long-Range Li Dynamics in the Thio-LISICON Family LiMCh (M = Sn, Ge; Ch = S, Se) as Probed by Li NMR Relaxometry and Li Spin-Alignment Echo NMR. *Journal of Physical Chemistry C*, **2021**, 125, 2306-2317	3.8	8
127	Insights into the Lithium Sub-structure of Superionic Conductors Li3YCl6 and Li3YBr6. *Chemistry of Materials*, **2021**, 33, 327-337	9.6	21
126	Linking Solid Electrolyte Degradation to Charge Carrier Transport in the Thiophosphate-Based Composite Cathode toward Solid-State Lithium-Sulfur Batteries. *Advanced Functional Materials*, **2021**, 31, 2010620	15.6	24
125	On the Lithium Distribution in Halide Superionic Argyrodites by Halide Incorporation in Li7□PS6□Clx. *ACS Applied Energy Materials*, **2021**, 4, 7309-7315	6.1	5
124	Influence of Reduced Na Vacancy Concentrations in the Sodium Superionic Conductors Na11+xSn2P1□MxS12 (M = Sn, Ge). *ACS Applied Energy Materials*, **2021**, 4, 7250-7258	6.1	0
123	Influence of Iron Sulfide Nanoparticle Sizes in Solid-State Batteries*. *Angewandte Chemie - International Edition*, **2021**, 60, 17952-17956	16.4	6
122	On the underestimated influence of synthetic conditions in solid ionic conductors. *Chemical Science*, **2021**, 12, 6238-6263	9.4	12
121	Battery cost forecasting: a review of methods and results with an outlook to 2050. *Energy and Environmental Science*, **2021**, 14, 4712-4739	35.4	28
120	Phonon□bn Interactions: Designing Ion Mobility Based on Lattice Dynamics. *Advanced Energy Materials*, **2021**, 11, 2002787	21.8	16
119	Engineering the Site-Disorder and Lithium Distribution in the Lithium Superionic Argyrodite Li6PS5Br. *Advanced Energy Materials*, **2021**, 11, 2003369	21.8	21
118	Evidence for a Solid-Electrolyte Inductive Effect in the Superionic Conductor LiGeSnPS. *Journal of the American Chemical Society*, **2020**, 142, 21210-21219	16.4	23
117	The Fast Charge Transfer Kinetics of the Lithium Metal Anode on the Garnet-Type Solid Electrolyte Li6.25Al0.25La3Zr2O12. *Advanced Energy Materials*, **2020**, 10, 2000945	21.8	44
116	Lattice Dynamical Approach for Finding the Lithium Superionic Conductor Li3ErI6. *ACS Applied Energy Materials*, **2020**, 3, 3684-3691	6.1	34
115	Benchmarking the performance of all-solid-state lithium batteries. *Nature Energy*, **2020**, 5, 259-270	62.3	342
114	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	9.6	51

113	Structure and Sodium Ion Transport in Na11+xSn2+x(Sb1−yPy)1−xS12. *Chemistry of Materials*, **2020**, 32, 6566-6576	9.6	7
112	The effect of rare-earth substitution on the Debye temperature of inorganic phosphors. *Applied Physics Letters*, **2020**, 116, 051901	3.4	7
111	Materials design of ionic conductors for solid state batteries. *Progress in Energy*, **2020**, 2, 022001	7.7	82
110	Solid State Fluorination on the Minute Scale: Synthesis of WO3−xFx with Photocatalytic Activity. *Advanced Functional Materials*, **2020**, 30, 1909051	15.6	8
109	Challenges in Lithium Metal Anodes for Solid-State Batteries. *ACS Energy Letters*, **2020**, 5, 922-934	20.1	171
108	How Certain Are the Reported Ionic Conductivities of Thiophosphate-Based Solid Electrolytes? An Interlaboratory Study. *ACS Energy Letters*, **2020**, 5, 910-915	20.1	60
107	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	21.8	88
106	Defect-Mediated Conductivity Enhancements in Na3−xPn1−xWxS4 (Pn = P, Sb) Using Aliovalent Substitutions. *ACS Energy Letters*, **2020**, 5, 146-151	20.1	52
105	The polymorphs of the Na+ ion conductor Na3PS4 viewed from the perspective of a group-subgroup scheme. *Zeitschrift Fur Kristallographie - Crystalline Materials*, **2020**, 235, 1-6	1	8
104	Under Pressure: Mechanochemical Effects on Structure and Ion Conduction in the Sodium-Ion Solid Electrolyte NaPS. *Journal of the American Chemical Society*, **2020**, 142, 18422-18436	16.4	29
103	Local Charge Inhomogeneity and Lithium Distribution in the Superionic Argyrodites LiPSX (X = Cl, Br, I). *Inorganic Chemistry*, **2020**, 59, 11009-11019	5.1	27
102	Physicochemical Concepts of the Lithium Metal Anode in Solid-State Batteries. *Chemical Reviews*, **2020**, 120, 7745-7794	68.1	196
101	Na3−xEr1−xZrxCl6 – A Halide-Based Fast Sodium-Ion Conductor with Vacancy-Driven Ionic Transport. *ACS Applied Energy Materials*, **2020**, 3, 10164-10173	6.1	19
100	Between Liquid and All Solid: A Prospect on Electrolyte Future in Lithium-Ion Batteries for Electric Vehicles. *Energy Technology*, **2020**, 8, 2000580	3.5	13
99	Changing the Static and Dynamic Lattice Effects for the Improvement of the Ionic Transport Properties within the Argyrodite Li6PS5−xSexI. *ACS Applied Energy Materials*, **2020**, 3, 9-18	6.1	35
98	LATP and LiCoPO4 thin film preparation – Illustrating interfacial issues on the way to all-phosphate SSBs. *Solid State Ionics*, **2019**, 342, 115054	3.3	13
97	Experimental Assessment of the Practical Oxidative Stability of Lithium Thiophosphate Solid Electrolytes. *Chemistry of Materials*, **2019**, 31, 8328-8337	9.6	86
96	Ionic Conductivity of the NASICON-Related Thiophosphate Na Ti Ga (PS). *Chemistry - A European Journal*, **2019**, 25, 4143-4148	4.8	6

95	High-Throughput Screening of Solid-State Li-Ion Conductors Using Lattice-Dynamics Descriptors. *IScience*, **2019**, 16, 270-282	6.1	86
94	Local Structure and Influence of Sb Substitution on the Structure-Transport Properties in AgBiSe. *Inorganic Chemistry*, **2019**, 58, 9236-9245	5.1	13
93	Further Evidence for Energy Landscape Flattening in the Superionic Argyrodites Li6+xP1−xMxS5I (M = Si, Ge, Sn). *Chemistry of Materials*, **2019**, 31, 4936-4944	9.6	63
92	Interfacial Stability of Phosphate-NASICON Solid Electrolytes in Ni-Rich NCM Cathode-Based Solid-State Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 23244-23253	9.5	38
91	On the Functionality of Coatings for Cathode Active Materials in Thiophosphate-Based All-Solid-State Batteries. *Advanced Energy Materials*, **2019**, 9, 1900626	21.8	125
90	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	9.5	52
89	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	9.6	138
88	Influence of the Lithium Substructure on the Diffusion Pathways and Transport Properties of the Thio-LISICON Li4Ge1−xSnxS4. *Chemistry of Materials*, **2019**, 31, 3794-3802	9.6	25
87	Toward a Fundamental Understanding of the Lithium Metal Anode in Solid-State Batteries-An Electrochemo-Mechanical Study on the Garnet-Type Solid Electrolyte LiAlLaZrO. *ACS Applied Materials & Interfaces*, **2019**, 11, 14463-14477	9.5	265
86	Observation of Chemomechanical Failure and the Influence of Cutoff Potentials in All-Solid-State Li−S Batteries. *Chemistry of Materials*, **2019**, 31, 2930-2940	9.6	69
85	Unraveling the Formation Mechanism of Solid-Liquid Electrolyte Interphases on LiPON Thin Films. *ACS Applied Materials & Interfaces*, **2019**, 11, 9539-9547	9.5	18
84	Comparative Microstructural Analysis of Nongraphitic Carbons by Wide-Angle X-ray and Neutron Scattering. *Journal of Physical Chemistry C*, **2019**, 123, 20532-20546	3.8	10
83	Solution-based synthesis of lithium thiophosphate superionic conductors for solid-state batteries: a chemistry perspective. *Journal of Materials Chemistry A*, **2019**, 7, 17735-17753	13	52
82	Lithium-Metal Growth Kinetics on LLZO Garnet-Type Solid Electrolytes. *Joule*, **2019**, 3, 2030-2049	27.8	180
81	Diffusion Limitation of Lithium Metal and Li−Mg Alloy Anodes on LLZO Type Solid Electrolytes as a Function of Temperature and Pressure. *Advanced Energy Materials*, **2019**, 9, 1902568	21.8	124
80	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	9.6	44
79	Rapid Crystallization and Kinetic Freezing of Site-Disorder in the Lithium Superionic Argyrodite Li6PS5Br. *Chemistry of Materials*, **2019**, 31, 10178-10185	9.6	38
78	Structural analysis and electrical characterization of cation-substituted lithium ion conductors Li1−xTi1−xMxOPO4 (M = Nb, Ta, Sb). *Solid State Ionics*, **2018**, 319, 170-179	3.3	2

77	Correlating Transport and Structural Properties in LiAl Ge(PO) (LAGP) Prepared from Aqueous Solution. *ACS Applied Materials & Interfaces*, **2018**, 10, 10935-10944	9.5	52
76	Trendbericht Festk perchemie 2017. *Nachrichten Aus Der Chemie*, **2018**, 66, 240-248	0.1	
75	Local Tetragonal Structure of the Cubic Superionic Conductor NaPS. *Inorganic Chemistry*, **2018**, 57, 4739-4744	5.1	70
74	Crystal Structure Induced Ultralow Lattice Thermal Conductivity in Thermoelectric Ag9AlSe6. *Advanced Energy Materials*, **2018**, 8, 1800030	21.8	64
73	Bottleneck of Diffusion and Inductive Effects in Li10Ge1 SnxP2S12. *Chemistry of Materials*, **2018**, 30, 1791-1798	9.6	78
72	Spark Plasma Sintering (SPS)-Assisted Synthesis and Thermoelectric Characterization of Magn Phase VO. *Inorganic Chemistry*, **2018**, 57, 1259-1268	5.1	6
71	Interfacial reactivity and interphase growth of argyrodite solid electrolytes at lithium metal electrodes. *Solid State Ionics*, **2018**, 318, 102-112	3.3	227
70	Suppression of atom motion and metal deposition in mixed ionic electronic conductors. *Nature Communications*, **2018**, 9, 2910	17.4	97
69	Lithium Conductivity and Meyer-Neldel Rule in Li3PO4 i3VO4 i4GeO4 Lithium Superionic Conductors. *Chemistry of Materials*, **2018**, 30, 5573-5582	9.6	48
68	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	3.6	51
67	Designing Ionic Conductors: The Interplay between Structural Phenomena and Interfaces in Thiophosphate-Based Solid-State Batteries. *Chemistry of Materials*, **2018**, 30, 4179-4192	9.6	95
66	Refinement of the crystal structure of LiPS using NMR crystallography. *Dalton Transactions*, **2018**, 47, 11691-11695	4.3	13
65	Lithium Phosphidogermanates and Li8GeP4 A Novel Compound Class with Mixed Li+ Ionic and Electronic Conductivity. *Chemistry of Materials*, **2018**, 30, 6440-6448	9.6	23
64	Critical Role of the Crystallite Size in Nanostructured LiTiO Anodes for Lithium-Ion Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 22580-22590	9.5	19
63	Degradation Mechanisms at the LiGePS/LiCoO Cathode Interface in an All-Solid-State Lithium-Ion Battery. *ACS Applied Materials & Interfaces*, **2018**, 10, 22226-22236	9.5	158
62	Effect of Si substitution on the structural and transport properties of superionic Li-argyrodites. *Journal of Materials Chemistry A*, **2018**, 6, 645-651	13	83
61	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	9.5	35
60	Comparing the Descriptors for Investigating the Influence of Lattice Dynamics on Ionic Transport Using the Superionic Conductor NaPSSe. *Journal of the American Chemical Society*, **2018**, 140, 14464-14473	16.4	86

59	Structural and Computational Assessment of the Influence of Wet-Chemical Post-Processing of the Al-Substituted Cubic LiLaZrO. *ACS Applied Materials & Interfaces*, **2018**, 10, 37188-37197	9.5	19
58	Competing Structural Influences in the Li Superionic Conducting Argyrodites LiPSSe Br (0 x 1) upon Se Substitution. *Inorganic Chemistry*, **2018**, 57, 13920-13928	5.1	61
57	Inducing High Ionic Conductivity in the Lithium Superionic Argyrodites LiPGe SI for All-Solid-State Batteries. *Journal of the American Chemical Society*, **2018**, 140, 16330-16339	16.4	205
56	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	35.4	308
55	Superion Conductor Na11.1Sn2.1P0.9Se12: Lowering the Activation Barrier of Na+ Conduction in Quaternary 14 Electrolytes. *Chemistry of Materials*, **2018**, 30, 4134-4139	9.6	53
54	Using the 18-Electron Rule To Understand the Nominal 19-Electron Half-Heusler NbCoSb with Nb Vacancies. *Chemistry of Materials*, **2017**, 29, 1210-1217	9.6	59
53	Vacancy and anti-site disorder scattering in AgBiSe thermoelectrics. *Dalton Transactions*, **2017**, 46, 3906-3914	4.3	29
52	New tricks for optimizing thermoelectric materials. *Current Opinion in Green and Sustainable Chemistry*, **2017**, 4, 23-28	7.9	16
51	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	9.6	43
50	Synthesis, Structural Characterization, and Lithium Ion Conductivity of the Lithium Thiophosphate LiPS. *Inorganic Chemistry*, **2017**, 56, 6681-6687	5.1	67
49	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	9.5	232
48	(Electro)chemical expansion during cycling: monitoring the pressure changes in operating solid-state lithium batteries. *Journal of Materials Chemistry A*, **2017**, 5, 9929-9936	13	161
47	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	9.6	413
46	Local Bonding Influence on the Band Edge and Band Gap Formation in Quaternary Chalcopyrites. *Advanced Science*, **2017**, 4, 1700080	13.6	24
45	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	9.6	38
44	Redox-active cathode interphases in solid-state batteries. *Journal of Materials Chemistry A*, **2017**, 5, 22750-22760	10.7	132
43	Influence of Lattice Dynamics on Na+ Transport in the Solid Electrolyte Na3PS4 Sex. *Chemistry of Materials*, **2017**, 29, 8859-8869	9.6	87
42	The Detrimental Effects of Carbon Additives in LiGePS-Based Solid-State Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 35888-35896	9.5	169

41	Influence of Lattice Polarizability on the Ionic Conductivity in the Lithium Superionic Argyrodites LiPSX (X = Cl, Br, I). *Journal of the American Chemical Society*, **2017**, 139, 10909-10918	16.4	304
40	Lithium ion conductivity in Li2SP2S5 glasses 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	13	159
39	Local Structural Investigations, Defect Formation, and Ionic Conductivity of the Lithium Ionic Conductor Li4P2S6. *Chemistry of Materials*, **2016**, 28, 8764-8773	9.6	74
38	Engineering half-Heusler thermoelectric materials using Zintl chemistry. *Nature Reviews Materials*, **2016**, 1,	73.3	248
37	Thinking Like a Chemist: Intuition in Thermoelectric Materials. *Angewandte Chemie - International Edition*, **2016**, 55, 6826-41	16.4	478
36	Denken wie ein Chemiker: Thermoelektrika intuitiv. *Angewandte Chemie*, **2016**, 128, 6938-6954	3.6	21
35	Lithium-ion conductivity in Li6Y(BO3)3: a thermally and electrochemically robust solid electrolyte. *Journal of Materials Chemistry A*, **2016**, 4, 6972-6979	13	9
34	Direct Observation of the Interfacial Instability of the Fast Ionic Conductor Li10GeP2S12 at the Lithium Metal Anode. *Chemistry of Materials*, **2016**, 28, 2400-2407	9.6	463
33	ZnSb Polymorphs with Improved Thermoelectric Properties. *Chemistry of Materials*, **2016**, 28, 2912-2920	9.6	13
32	Interfacial Reactivity Benchmarking of the Sodium Ion Conductors NaPS and Sodium Alumina for Protected Sodium Metal Anodes and Sodium All-Solid-State Batteries. *ACS Applied Materials & Interfaces*, **2016**, 8, 28216-28224	9.5	138
31	Structural Insights and 3D Diffusion Pathways within the Lithium Superionic Conductor Li10GeP2S12. *Chemistry of Materials*, **2016**, 28, 5905-5915	9.6	136
30	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. *Journal of the Electrochemical Society*, **2015**, 162, A1310-A1314	3.9	39
29	Influence of Compensating Defect Formation on the Doping Efficiency and Thermoelectric Properties of Cu2-ySe1BrxBrx. *Chemistry of Materials*, **2015**, 27, 7018-7027	9.6	49
28	Mechanochemical Synthesis and High Temperature Thermoelectric Properties of Calcium-Doped Lanthanum Telluride LaCaTe. *Journal of Materials Chemistry C*, **2015**, 3, 10459-10466	7.1	16
27	High Thermoelectric Performance SnTeIn2Te3 Solid Solutions Enabled by Resonant Levels and Strong Vacancy Phonon Scattering. *Chemistry of Materials*, **2015**, 27, 7801-7811	9.6	155
26	Increasing Seebeck Coefficients and Thermoelectric Performance of Sn/Sb/Te and Ge/Sb/Te Materials by Cd Doping. *Advanced Electronic Materials*, **2015**, 1, 1500266	6.4	15
25	Defect-Controlled Electronic Properties in AZn2Sb2 Zintl Phases. *Angewandte Chemie*, **2014**, 126, 3490-3494	3.6	19
24	Optimum Carrier Concentration in n-Type PbTe Thermoelectrics. *Advanced Energy Materials*, **2014**, 4, 1400486	21.8	284

23	Effect of isovalent substitution on the thermoelectric properties of the Cu2ZnGeSe(4-x)S(x) series of solid solutions. *Journal of the American Chemical Society*, **2014**, 136, 442-8	16.4	80
22	Band convergence in the non-cubic chalcopyrite compounds Cu2MGeSe4. *Journal of Materials Chemistry C*, **2014**, 2, 10189-10194	7.1	47
21	Bond strength dependent superionic phase transformation in the solid solution series Cu2ZnGeSe4−xSx. *Journal of Materials Chemistry A*, **2014**, 2, 1790-1794	13	29
20	Structural limitations for optimizing garnet-type solid electrolytes: a perspective. *Dalton Transactions*, **2014**, 43, 16133-8	4.3	49
19	Dependence of the Li-ion conductivity and activation energies on the crystal structure and ionic radii in Li7−xMLa3Ta2O12. *ACS Applied Materials & Interfaces*, **2014**, 6, 10900-7	9.5	59
18	Thermoelectric transport in Cu7PSe6 with high copper ionic mobility. *Journal of the American Chemical Society*, **2014**, 136, 12035-40	16.4	118
17	Nonstoichiometry in the Zintl Phase Yb1−xZn2Sb2 as a Route to Thermoelectric Optimization. *Chemistry of Materials*, **2014**, 26, 5710-5717	9.6	81
16	Determining conductivity and mobility values of individual components in multiphase composite Cu1.97Ag0.03Se. *Applied Physics Letters*, **2014**, 105, 172103	3.4	20
15	Defect-controlled electronic properties in AZnSb Zintl phases. *Angewandte Chemie - International Edition*, **2014**, 53, 3422-6	16.4	91
14	Hydrothermal preparation and magnetic properties of NaFeSi2O6: nanowires vs bulk samples. *Inorganic Chemistry*, **2014**, 53, 12396-401	5.1	7
13	Using crystallographic shear to reduce lattice thermal conductivity: high temperature thermoelectric characterization of the spark plasma sintered Magnéli phases WO2.90 and WO2.722. *Physical Chemistry Chemical Physics*, **2013**, 15, 15399-403	3.6	17
12	Phonon scattering through a local anisotropic structural disorder in the thermoelectric solid solution Cu2Zn(1-x)Fe(x)GeSe4. *Journal of the American Chemical Society*, **2013**, 135, 726-32	16.4	94
11	INFLUENCE OF THE CHEMICAL POTENTIAL ON THE CARRIER EFFECTIVE MASS IN THE THERMOELECTRIC SOLID SOLUTION Cu2Zn1-xFexGeSe4. *Functional Materials Letters*, **2013**, 06, 1340010	1.2	7
10	Rapid Microwave Preparation of Thermoelectric TiNiSn and TiCoSb Half-Heusler Compounds. *Chemistry of Materials*, **2012**, 24, 2558-2565	9.6	109
9	Thermoelectric properties of Zn-doped Ca3AlSb3. *Journal of Materials Chemistry*, **2012**, 22, 9826		44
8	Influence of a nano phase segregation on the thermoelectric properties of the p-type doped stannite compound Cu(2+x)Zn(1-x)GeSe4. *Journal of the American Chemical Society*, **2012**, 134, 7147-54	16.4	118
7	Thermoelectric properties of Sr3GaSb3 − a chain-forming Zintl compound. *Energy and Environmental Science*, **2012**, 5, 9121	35.4	110
6	Ca3AlSb3: an inexpensive, non-toxic thermoelectric material for waste heat recovery. *Energy and Environmental Science*, **2011**, 4, 510-518	35.4	178

5	Thermo-elektrische Verbindungen. Strom aus Abwärme. *Chemie in Unserer Zeit*, **2011**, 45, 188-200	0.2	7
4	Crystal growth of Ln3GaO6 (Ln=Nd, Sm, Eu and Gd): Structural and optical properties. *Solid State Sciences*, **2009**, 11, 1965-1970	3.4	9
3	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	9.6	32
2	Considering the Role of Ion Transport in Diffuson-Dominated Thermal Conductivity. *Advanced Energy Materials*,2200717	21.8	5
1	Strongly Anharmonic Phonons and Their Role in Superionic Diffusion and Ultralow Thermal Conductivity of Cu 7 PSe 6. *Advanced Energy Materials*,2200596	21.8	1