Mingxue Tang

List of Publications by Year
in descending order

65 papers	4,904 citations	147801 31 h-index	114465 63 g-index
67 all docs	67 docs citations	67 times ranked	5593 citing authors

#	Article	IF	Citations
1	Origin of additional capacities in metal oxide lithium-ion battery electrodes. Nature Materials, 2013, 12, 1130-1136.	27.5	635
2	Lithium Ion Pathway within Li₇La₃Zr₂O₁₂â€Polyethylene Oxide Composite Electrolytes. Angewandte Chemie - International Edition, 2016, 55, 12538-12542.	13.8	438
3	New Insights into the Compositional Dependence of Li-Ion Transport in Polymerâ€"Ceramic Composite Electrolytes. ACS Applied Materials & Interfaces, 2018, 10, 4113-4120.	8.0	341
4	Composite Polymer Electrolytes with Li₇La₃Zr₂O₁₂ Garnet-Type Nanowires as Ceramic Fillers: Mechanism of Conductivity Enhancement and Role of Doping and Morphology. ACS Applied Materials & Interfaces, 2017, 9, 21773-21780.	8.0	316
5	Copper-coordinated cellulose ion conductors for solid-state batteries. Nature, 2021, 598, 590-596.	27.8	262
6	Enhanced Surface Interactions Enable Fast Li⁺ Conduction in Oxide/Polymer Composite Electrolyte. Angewandte Chemie - International Edition, 2020, 59, 4131-4137.	13.8	242
7	High-performance all-solid-state batteries enabled by salt bonding to perovskite in poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlock 18815-18821.	7.1	213
8	Fast Li⁺ Conduction Mechanism and Interfacial Chemistry of a NASICON/Polymer Composite Electrolyte. Journal of the American Chemical Society, 2020, 142, 2497-2505.	13.7	199
9	Lithium-Doping Stabilized High-Performance P2â€"Na_{0.66}Li_{0.18}Fe_{0.12}Mn_{0.7}O₂ Cathode for Sodium Ion Batteries. Journal of the American Chemical Society, 2019, 141, 6680-6689.	13.7	187
10	Role of Electrolyte Anions in the Naâ€"O₂ Battery: Implications for NaO₂ Solvation and the Stability of the Sodium Solid Electrolyte Interphase in Glyme Ethers. Chemistry of Materials, 2017, 29, 6066-6075.	6.7	141
11	Lithium Ion Pathway within Li₇La₃Zr₂O₁₂â€Polyethylene Oxide Composite Electrolytes. Angewandte Chemie, 2016, 128, 12726-12730.	2.0	114
12	Understanding the Low-Voltage Hysteresis of Anionic Redox in Na₂Mn₃O₇. Chemistry of Materials, 2019, 31, 3756-3765.	6.7	112
13	Li-ion transport in a representative ceramicâ€"polymerâ€"plasticizer composite electrolyte: Li₇La₃Zr₂O₁₂â€"polyethylene oxideâ€"tetraethylene glycol dimethyl ether. Journal of Materials Chemistry A, 2017, 5, 18457-18463.	10.3	109
14	A Perovskite Electrolyte That Is Stable in Moist Air for Lithiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 8587-8591.	13.8	103
15	Interface-Enabled Ion Conduction in Li₁₀GeP₂S₁₂â€"Poly(ethylene) Tj ETQq1 1 0.784314 rgBT	5.1	90
16	Measuring Nano- to Microstructures from Relayed Dynamic Nuclear Polarization NMR. Journal of Physical Chemistry C, 2017, 121, 15993-16005.	3.1	88
17	Elucidation of the Local and Long-Range Structural Changes that Occur in Germanium Anodes in Lithium-Ion Batteries. Chemistry of Materials, 2015, 27, 1031-1041.	6.7	86
18	Li Distribution Heterogeneity in Solid Electrolyte Li₁₀GeP₂S₁₂ upon Electrochemical Cycling Probed by ⁷Li MRI. Journal of Physical Chemistry Letters, 2018, 9, 1990-1998.	4.6	80

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19	Chemical Insights into PbSeâ€“<i>x</i>%HgSe: High Power Factor and Improved Thermoelectric Performance by Alloying with Discordant Atoms. Journal of the American Chemical Society, 2018, 140, 18115-18123.	13.7	80
20	Tunable Lithium-Ion Transport in Mixed-Halide Argyrodites Li_{6â€“<i>x</i>}PS_{5â€“<i>x</i>}ClBr_{<i>x</i>}: An Unusual Compositional Space. Chemistry of Materials, 2021, 33, 1435-1443.	6.7	78
21	Fast Ion Conduction and Its Origin in Li_{6â€“<i>x</i>}PS_{5â€“<i>x</i>}Br_{1+<i>x</i>}. Chemistry of Materials, 2020, 32, 3833-3840.	6.7	75
22	Operando EPR for Simultaneous Monitoring of Anionic and Cationic Redox Processes in Li-Rich Metal Oxide Cathodes. Journal of Physical Chemistry Letters, 2017, 8, 4009-4016.	4.6	70
23	Solid-State NMR of the Family of Positive Electrode Materials Li₂Ru_{1â€“<i>y</i>}Sn_{<i>y</i>}O₃ for Lithium-Ion Batteries. Chemistry of Materials, 2014, 26, 7009-7019.	6.7	59
24	Discordant nature of Cd in PbSe: off-centering and coreâ€“shell nanoscale CdSe precipitates lead to high thermoelectric performance. Energy and Environmental Science, 2020, 13, 200-211.	30.8	57
25	Studies of Functional Defects for Fast Naâ€Ion Conduction in Na_{3âˆ’}<i>_y</i>PS_{4âˆ’}<i>_x</i>Cl<i>_x</i> with a Combined Experimental and Computational Approach. Advanced Functional Materials, 2019, 29, 1807951.	14.9	51
26	Hydrogen bonds enhanced composite polymer electrolyte for high-voltage cathode of solid-state lithium battery. Nano Energy, 2022, 96, 107105.	16.0	44
27	NASICON Li_{1.2}Mg_{0.1}Zr_{1.9}(PO₄)₃ Solid Electrolyte for an Allâ€Solidâ€State Liâ€Metal Battery. Small Methods, 2020, 4, 2000764.	8.6	42
28	Lithiation and Delithiation Dynamics of Different Li Sites in Li-Rich Battery Cathodes Studied by <i>Operando</i> Nuclear Magnetic Resonance. Chemistry of Materials, 2017, 29, 8282-8291.	6.7	41
29	Coaxial Carbon Nanotube Supported TiO₂@MoO₂@Carbon Coreâ€“Shell Anode for Ultrafast and High-Capacity Sodium Ion Storage. ACS Nano, 2019, 13, 671-680.	14.6	41
30	Polymer-based hybrid battery electrolytes: theoretical insights, recent advances and challenges. Journal of Materials Chemistry A, 2021, 9, 6050-6069.	10.3	40
31	Following lithiation fronts in paramagnetic electrodes with in situ magnetic resonance spectroscopic imaging. Nature Communications, 2016, 7, 13284.	12.8	38
32	Radical Dimerization in a Plastic Organic Crystal Leads to Structural and Magnetic Bistability with Wide Thermal Hysteresis. Journal of the American Chemical Society, 2019, 141, 17989-17994.	13.7	31
33	Experimental and theoretical evidence for hydrogen doping in polymer solution-processed indium gallium oxide. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18231-18239.	7.1	31
34	Enhanced Surface Interactions Enable Fast Li⁺ Conduction in Oxide/Polymer Composite Electrolyte. Angewandte Chemie, 2020, 132, 4160-4166.	2.0	27
35	Frequency-Agile Low-Temperature Solution-Processed Alumina Dielectrics for Inorganic and Organic Electronics Enhanced by Fluoride Doping. Journal of the American Chemical Society, 2020, 142, 12440-12452.	13.7	27
36	Synthesis and characterizations of highly conductive and stable electrolyte Li10P3S12I. Energy Storage Materials, 2019, 22, 397-401.	18.0	24

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37	Deep Eutectic Solvent with Prussian Blue and Tungsten Oxide for Green and Low-Cost Electrochromic Devices. ACS Applied Electronic Materials, 2019, 1, 1038-1045.	4.3	24
38	On the origin of high ionic conductivity in Na-doped SrSiO₃. Chemical Science, 2016, 7, 3667-3675.	7.4	23
39	Distance-Selected Topochemical Dehydro-Dielsâ€“Alder Reaction of 1,4-Diphenylbutadiyne toward Crystalline Graphitic Nanoribbons. Journal of the American Chemical Society, 2020, 142, 17662-17669.	13.7	23
40	Structure, defects and thermal stability of delithiated olivine phosphates. Journal of Materials Chemistry, 2012, 22, 20482.	6.7	18
41	<i>In situ</i> synthesis and <i>in operando</i> NMR studies of a high-performance Ni₅P₄-nanosheet anode. Journal of Materials Chemistry A, 2018, 6, 22240-22247.	10.3	18
42	Recent Advances in Solid-State Nuclear Magnetic Resonance Techniques for Materials Research. Annual Review of Materials Research, 2020, 50, 493-520.	9.3	18
43	Real-time monitoring of the lithiation process in organic electrode 7,7,8,8-tetracyanoquinodimethane by in situ EPR. Journal of Energy Chemistry, 2021, 60, 9-15.	12.9	17
44	Stackingâ€Fault Enhanced Oxygen Redox in Li₂MnO₃. Advanced Energy Materials, 2022, 12, .	19.5	17
45	Multiple transition metals modulated hierarchical networks for high performance of metal-ion batteries. Journal of Energy Chemistry, 2022, 70, 604-613.	12.9	11
46	Electrochemical behavior of Bi₄B₂O₉towards lithium-reversible conversion reactions without nanosizing. Physical Chemistry Chemical Physics, 2018, 20, 2330-2338.	2.8	9
47	Structure and Properties of Cs₇(H₄PO₄)(H₂PO₄)₈: A New Superprotonic Solid Acid Featuring the Unusual Polycation (H₄PO₄)⁺. Journal of the American Chemical Society, 2020, 142, 19992-20001.	13.7	9
48	Enhanced Ion Conduction in Li_{2.5}Zn_{0.25}PS₄ via Anion Doping. Chemistry of Materials, 2020, 32, 3036-3042.	6.7	9
49	Regulating Hybrid Anodes for Efficient Li⁺/Na⁺ Storage. , 2022, 4, 1411-1421.		9
50	Dual-enhancement of chromaticity and thermal stability: In-situ synthesis of coreâ€“shell Î³-Ce2S3@CePO4 configuration. Journal of Rare Earths, 2022, 40, 800-806.	4.8	8
51	Sodium-Ion Battery Anode Construction with SnP <i> _x </i> Crystal Domain in Amorphous Phosphorus Matrix. Energy Material Advances, 2021, 2021, .	11.0	8
52	A Perovskite Electrolyte That Is Stable in Moist Air for Lithiumâ€Ion Batteries. Angewandte Chemie, 2018, 130, 8723-8727.	2.0	7
53	Crystalline Fully Carboxylated Polyacetylene Obtained under High Pressure as a Li-Ion Battery Anode Material. Journal of Physical Chemistry Letters, 2021, 12, 12055-12061.	4.6	7
54	Lithium Thiostannate Spinels: Air-Stable Cubic Semiconductors. Chemistry of Materials, 2021, 33, 2080-2089.	6.7	6

#	ARTICLE	IF	CITATIONS
55	Combustion Synthesis and Polymer Doping of Metal Oxides for High-Performance Electronic Circuitry. Accounts of Chemical Research, 2022, 55, 429-441.	15.6	6
56	Interrupted anion-network enhanced Li+-ion conduction in Li3+yPO4Iy. Energy Storage Materials, 2022, 51, 88-96.	18.0	6
57	Scalable High-Pressure Synthesis of sp²â€“sp³ Carbon Nanoribbon via [4 + 2] Polymerization of 1,3,5-Triethynylbenzene. Journal of Physical Chemistry Letters, 2021, 12, 7140-7145.	4.6	5
58	Microscopic Insights into the Reconstructive Phase Transition of KNaNbOF₅ with ¹⁹F NMR Spectroscopy. Chemistry of Materials, 2020, 32, 5715-5722.	6.7	5
59	Experimental and Theoretical Solid-State ²⁹Si NMR Studies on Defect Structures in La_{9.33+<i>x</i>}(SiO₄)₆O_{2+1.5<i>x</i>} Apatite Oxide Ion Conductors. Inorganic Chemistry, 2021, 60, 16817-16825.	4.0	5
60	Phase Behavior and Superprotonic Conductivity in the System (1â€“<i>x</i>)CsH₂PO₄ â€“ <i>x</i>H₃PO₄: Discovery of Off-Stoichiometric Î±-[Cs_{1â€“<i>x</i>}H<i>_x</i>]H₂PO₄. Chemistry of Materials, 2022, 34, 1809-1820.	6.7	5
61	Tailoring the Luminescent Properties of SrS:Ce³⁺ by Sr-Deficiency and Na⁺ Doping. Inorganic Chemistry, 2022, 61, 3746-3753.	4.0	5
62	Nanoscale Encapsulation of Hybrid Perovskites Using Hybrid Atomic Layer Deposition. Journal of Physical Chemistry Letters, 2022, 13, 4082-4089.	4.6	5
63	Phase transitions and potential ferroelectricity in noncentrosymmetric KNaNbOF5. Physical Review Materials, 2021, 5, .	2.4	1
64	Fluoride Doping in Crystalline and Amorphous Indium Oxide Semiconductors. Chemistry of Materials, 0, , .	6.7	1
65	Source of Additional Capacities Seen in Metal Oxide/Fluoride Electrodes. ECS Meeting Abstracts, 2013, , .	0.0	0