X Chelsea Chen

List of Publications by Year
in descending order

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Version: 2024-02-01

48 papers	1,898 citations	257450 24 h-index	265206 42 g-index
49 all docs	49 docs citations	49 times ranked	2456 citing authors

#	Article	IF	Citations
1	A Bilayer Electrolyte Design to Enable High-Areal-Capacity Composite Cathodes in Polymer Electrolytes Based Solid-State Lithium Metal Batteries. ACS Applied Energy Materials, 2022, 5, 1409-1413.	5.1	12
2	Upcycling of semicrystalline polymers by compatibilization: mechanism and location of compatibilizers. RSC Advances, 2022, 12, 10886-10894.	3.6	10
3	Polyacrylonitrile-based electrolytes: How processing and residual solvent affect ion transport and stability. Journal of Power Sources, 2022, 527, 231165.	7.8	11
4	Ionic Conductivity Enhancement of Polymer Electrolytes by Directed Crystallization. ACS Macro Letters, 2022, 11, 595-602.	4.8	16
5	Effects of Plasticizer Content and Ceramic Addition on Electrochemical Properties of Cross-Linked Polymer Electrolyte. Journal of the Electrochemical Society, 2021, 168, 050549.	2.9	9
6	Practical Considerations for Testing Polymer Electrolytes for High-Energy Solid-State Batteries. ACS Energy Letters, 2021, 6, 2240-2247.	17.4	40
7	La₂Zr₂O₇ Nanoparticle-Mediated Synthesis of Porous Al-Doped Li₇La₃Zr₂O₁₂ Garnet. Inorganic Chemistry, 2021, 60, 10012-10021.	4.0	7
8	Multifunctional approaches for safe structural batteries. Journal of Energy Storage, 2021, 40, 102747.	8.1	33
9	Gel composite electrolyte â€“ an effective way to utilize ceramic fillers in lithium batteries. Journal of Materials Chemistry A, 2021, 9, 6555-6566.	10.3	14
10	Design of tough adhesive from commodity thermoplastics through dynamic crosslinking. Science Advances, 2021, 7, eabk2451.	10.3	66
11	Nanoscale Mapping of Extrinsic Interfaces in Hybrid Solid Electrolytes. Joule, 2020, 4, 207-221.	24.0	85
12	A three-dimensional interconnected polymer/ceramic composite as a thin film solid electrolyte. Energy Storage Materials, 2020, 26, 242-249.	18.0	70
13	Recent Developments and Challenges in Hybrid Solid Electrolytes for Lithium-Ion Batteries. Frontiers in Energy Research, 2020, 8, .	2.3	52
14	Polymerâ€“Ceramic Composite Electrolytes for Lithium Batteries: A Comparison between the Single-Ion-Conducting Polymer Matrix and Its Counterpart. ACS Applied Energy Materials, 2020, 3, 8871-8881.	5.1	30
15	A Nuclear Magnetic Resonance Study of Cation and Anion Dynamics in Polymerâ€“Ceramic Composite Solid Electrolytes. ACS Applied Polymer Materials, 2020, 2, 1180-1189.	4.4	25
16	Challenges in Lithium Metal Anodes for Solid-State Batteries. ACS Energy Letters, 2020, 5, 922-934.	17.4	322
17	Study of the Segmental Dynamics and Ion Transport of Solid Polymer Electrolytes in the Semi-crystalline State. Frontiers in Chemistry, 2020, 8, 592604.	3.6	8
18	An Evaluation of the Psychometric Properties of the Sheehan Disability Scale in a Chinese Psychotherapy-Seeking Sample. Journal of Cognitive Psychotherapy, 2020, 34, 58-69.	0.4	3

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19	Determining and Minimizing Resistance for Ion Transport at the Polymer/Ceramic Electrolyte Interface. ACS Energy Letters, 2019, 4, 1080-1085.	17.4	52
20	Study of segmental dynamics and ion transport in polymerâ€“ceramic composite electrolytes by quasi-elastic neutron scattering. Molecular Systems Design and Engineering, 2019, 4, 379-385.	3.4	31
21	Correlations between Salt-Induced Crystallization, Morphology, Segmental Dynamics, and Conductivity in Amorphous Block Copolymer Electrolytes. Macromolecules, 2018, 51, 1733-1740.	4.8	27
22	Facile and scalable fabrication of polymer-ceramic composite electrolyte with high ceramic loadings. Journal of Power Sources, 2018, 390, 153-164.	7.8	68
23	Swelling of individual nanodomains in hydrated block copolymer electrolyte membranes. Journal of Chemical Physics, 2018, 149, 163325.	3.0	3
24	Nanostructured Single-Ion-Conducting Hybrid Electrolytes Based on Salty Nanoparticles and Block Copolymers. Macromolecules, 2017, 50, 1998-2005.	4.8	53
25	Influence of Miscibility on Poly(ethylene oxide) Crystallization from Disordered Melts of Block Copolymers with Lithium and Magnesium Counterions. Macromolecules, 2017, 50, 4827-4839.	4.8	13
26	Simulation of local ion transport in lamellar block copolymer electrolytes based on electron micrographs. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 266-274.	2.1	13
27	Crosslinked perfluoropolyether solid electrolytes for lithium ion transport. Solid State Ionics, 2017, 310, 71-80.	2.7	21
28	Effect of block copolymer morphology controlled by casting-solvent quality on pervaporation of butanol/water mixtures. Journal of Membrane Science, 2017, 523, 588-595.	8.2	15
29	Nanobeam Scanning Diffraction for Orientation Mapping of Polymers. Microscopy and Microanalysis, 2017, 23, 1782-1783.	0.4	7
30	Development of Diffraction Scanning Techniques for Beam Sensitive Polymers.. Microscopy and Microanalysis, 2016, 22, 492-493.	0.4	2
31	Conductivity of carbonate- and perfluoropolyether-based electrolytes in porous separators. Journal of Power Sources, 2016, 323, 158-165.	7.8	24
32	Block Copolymer Membranes for Efficient Capture of a Chemotherapy Drug. ACS Macro Letters, 2016, 5, 936-941.	4.8	19
33	Orientation mapping of semicrystalline polymers using scanning electron nanobeam diffraction. Micron, 2016, 88, 30-36.	2.2	54
34	Structure and Ionic Conductivity of Polystyrene-block-poly(ethylene oxide) Electrolytes in the High Salt Concentration Limit. Macromolecules, 2016, 49, 1770-1780.	4.8	129
35	Nanoparticle-Driven Assembly of Highly Conducting Hybrid Block Copolymer Electrolytes. Macromolecules, 2015, 48, 358-364.	4.8	71
36	Membranes with artificial free-volume for biofuel production. Nature Communications, 2015, 6, 7529.	12.8	38

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37	Block copolymer pervaporation membrane for in situ product removal during acetoneâ€“butanolâ€“ethanol fermentation. Journal of Membrane Science, 2015, 484, 57-63.	8.2	26
38	Water Uptake and Proton Conductivity in Porous Block Copolymer Electrolyte Membranes. Macromolecules, 2015, 48, 5648-5655.	4.8	26
39	Effect of Grain Size on the Ionic Conductivity of a Block Copolymer Electrolyte. Macromolecules, 2014, 47, 5424-5431.	4.8	119
40	Role of Domain Size and Phase Purity on Charge Carrier Density, Mobility, and Recombination in Poly(3-hexylthiophene):Phenyl-C61-butyric Acid Methyl Ester Devices. Journal of Physical Chemistry C, 2014, 118, 3968-3975.	3.1	20
41	Morphologyâ€“Conductivity Relationship of Single-Ion-Conducting Block Copolymer Electrolytes for Lithium Batteries. ACS Macro Letters, 2014, 3, 510-514.	4.8	148
42	Effect of Morphology of Nanoscale Hydrated Channels on Proton Conductivity in Block Copolymer Electrolyte Membranes. Nano Letters, 2014, 14, 4058-4064.	9.1	28
43	Nanoparticle encapsulation in thin film micellar structures: a physical method for functional materials design. Soft Matter, 2013, 9, 6128.	2.7	4
44	Segmental Dynamics of Chains Tethered at Interfaces of Varying Curvatures. Macromolecules, 2013, 46, 5036-5043.	4.8	9
45	An Alternative Processing Strategy for Organic Photovoltaic Devices Using a Supercritical Fluid. Journal of Physical Chemistry C, 2012, 116, 20708-20716.	3.1	17
46	Micellar Formation and Organization in Thin Film Polymer Blends. Macromolecules, 2012, 45, 3993-4000.	4.8	6
47	Tethered-Polymer Structures in Thin Film Polymer Melts. Macromolecules, 2011, 44, 5758-5763.	4.8	6
48	Structure of thin film polymer/nanoparticle systems: polystyrene (PS) coated-Au nanoparticle/tetramethyl bisphenol-A polycarbonate mixtures (TMPC). Soft Matter, 2011, 7, 1192-1198.	2.7	34