Nitash P Balsara

List of Publications by Year in descending order

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228 papers

11,534 citations

23500 58 h-index 97 g-index

232 all docs 232 docs citations

times ranked

232

8691 citing authors

#	Article	IF	Citations
1	Complete Electrochemical Characterization and Limiting Current of Polyacetal Electrolytes. Journal of the Electrochemical Society, 2022, 169, 020538.	1.3	3
2	Increased Donnan exclusion in charged polymer networks at high salt concentrations. Soft Matter, 2022, 18, 282-292.	1.2	10
3	Comparing measurement of limiting current in block copolymer electrolytes as a function of salt concentration with theoretical predictions. Electrochimica Acta, 2022, 409, 139911.	2.6	2
4	The Transference Number. Energy and Environmental Materials, 2022, 5, 366-369.	7.3	18
5	Comparing the Purity of Rolled versus Evaporated Lithium Metal Films Using X-ray Microtomography. ACS Energy Letters, 2022, 7, 1120-1124.	8.8	11
6	Nanostructured Ionic Separator Formed by Block Copolymer Self-Assembly: A Gateway for Alleviating Concentration Polarization in Batteries. Macromolecules, 2022, 55, 2787-2796.	2.2	3
7	Effect of Solvent Motion on Ion Transport in Electrolytes. Journal of the Electrochemical Society, 2022, 169, 040524.	1.3	19
8	Limiting Current Density in Single-Ion-Conducting and Conventional Block Copolymer Electrolytes. Journal of the Electrochemical Society, 2022, 169, 043502.	1.3	9
9	Effect of Yield Stress on Stability of Block Copolymer Electrolytes against Lithium Metal Electrodes. ACS Applied Energy Materials, 2022, 5, 852-861.	2.5	8
10	Beyond Local Solvation Structure: Nanometric Aggregates in Battery Electrolytes and Their Effect on Electrolyte Properties. ACS Energy Letters, 2022, 7, 461-470.	8.8	75
11	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	8.8	6
12	Electric-Field-Induced Spatially Dynamic Heterogeneity of Solvent Motion and Cation Transference in Electrolytes. Physical Review Letters, 2022, 128, .	2.9	17
13	Importance of the Positively Charged Ïf-Hole in Crystal Engineering of Halogenated Polypeptoids. Journal of Physical Chemistry B, 2022, 126, 4152-4159.	1.2	9
14	Toward Bottom-Up Understanding of Transport in Concentrated Battery Electrolytes. ACS Central Science, 2022, 8, 880-890.	5.3	14
15	Effect of hydration on morphology of thin phosphonate block copolymer electrolyte membranes studied by electron tomography. Polymer Engineering and Science, 2021, 61, 1104-1115.	1.5	0
16	Crystallization and self-assembly of shape-complementary sequence-defined peptoids. Polymer Chemistry, 2021, 12, 4770-4777.	1.9	7
17	A Review of Existing and Emerging Methods for Lithium Detection and Characterization in Liâ€lon and Liâ€Metal Batteries. Advanced Energy Materials, 2021, 11, 2100372.	10.2	114
18	Improved Li ⁺ Transport in Polyacetal Electrolytes: Conductivity and Current Fraction in a Series of Polymers. ACS Energy Letters, 2021, 6, 1886-1891.	8.8	36

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19	Limiting Current in Nanostructured Block Copolymer Electrolytes. Macromolecules, 2021, 54, 4010-4022.	2.2	15
20	Electrophoretic NMR of Concentrated Electrolytes for Li-Ion Batteries: Understanding the Role of Solvent Motion. ECS Meeting Abstracts, 2021, MA2021-01, 468-468.	0.0	0
21	3D Detection of Lithiation and Lithium Plating in Graphite Anodes during Fast Charging. ACS Nano, 2021, 15, 10480-10487.	7.3	43
22	High-Resolution Imaging of Unstained Polymer Materials. ACS Applied Polymer Materials, 2021, 3, 2849-2864.	2.0	5
23	Electrochemical properties of poly(ethylene oxide) electrolytes above the entanglement threshold. Solid State Ionics, 2021, 364, 115609.	1.3	16
24	Effect of crystallization of the polyhedral oligomeric silsesquioxane block on self-assembly in hybrid organic-inorganic block copolymers with salt. Giant, 2021, 6, 100055.	2.5	10
25	Modifying Li ⁺ and Anion Diffusivities in Polyacetal Electrolytes: A Pulsed-Field-Gradient NMR Study of Ion Self-Diffusion. Chemistry of Materials, 2021, 33, 4915-4926.	3.2	21
26	Evolution of Protrusions on Lithium Metal Anodes Stabilized by a Solid Block Copolymer Electrolyte Studied Using Time-Resolved X-ray Tomography. ACS Applied Materials & Samp; Interfaces, 2021, 13, 27006-27018.	4.0	11
27	Minimizing Crinkling of Soft Specimens Using Holey Gold Films on Molybdenum Grids for Cryogenic Electron Microscopy. Microscopy and Microanalysis, 2021, 27, 767-775.	0.2	5
28	Uncovering Local Correlations in Polymer Electrolytes by X-ray Scattering and Molecular Dynamics Simulations. Macromolecules, 2021, 54, 6639-6648.	2.2	17
29	Using cryo-TEM to study the effect of side-chain chemistry on the crystal motifs in polypeptoid nanosheets. Microscopy and Microanalysis, 2021, 27, 2894-2895.	0.2	1
30	Holey-Gold Films on Molybdenum Grids for Cryogenic Electron Microscopy Imaging of 2D Polymer Crystals. Microscopy and Microanalysis, 2021, 27, 2896-2898.	0.2	0
31	Orientation-Dependent Distortion of Lamellae in a Block Copolymer Electrolyte under DC Polarization. Macromolecules, 2021, 54, 7808-7821.	2.2	12
32	Propagation of Elliptically Polarized Light through Ordered Block Copolymers. Macromolecules, 2021, 54, 8372-8380.	2.2	1
33	Exploring the Ion Solvation Environments in Solid-State Polymer Electrolytes through Free-Energy Sampling. Macromolecules, 2021, 54, 8590-8600.	2.2	3
34	Effect of microphase separation on the limiting current density in hybrid organic-inorganic copolymer electrolytes. Solid State Ionics, 2021, 368, 115702.	1.3	5
35	Establishing a unified framework for ion solvation and transport in liquid and solid electrolytes. Trends in Chemistry, 2021, 3, 807-818.	4.4	27
36	Temperature and concentration dependence of the ionic transport properties of poly(ethylene oxide) electrolytes. Solid State Ionics, 2021, 370, 115751.	1.3	15

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37	Effect of Added Salt on Disordered Poly(ethylene oxide)- <i>Block</i> Poly(methyl methacrylate) Copolymer Electrolytes. Macromolecules, 2021, 54, 1414-1424.	2.2	11
38	Multiâ€physics modeling of doxorubicine binding to ionâ€exchange resin in blood filtration devices. AICHE Journal, 2021, 67, e17119.	1.8	1
39	Temperature Dependent Anion Rotational Dynamics Correlated to Cation Transport in Cluster Ion Anti-Perovskites. ECS Meeting Abstracts, 2021, MA2021-02, 1-1.	0.0	0
40	Examining Solvent Motion in Polarized Concentrated Electrolytes. ECS Meeting Abstracts, 2021, MA2021-02, 177-177.	0.0	0
41	Interplay between Mechanical and Electrochemical Properties of Block Copolymer Electrolytes and its Effect on Stability against Lithium Metal Electrodes. Journal of the Electrochemical Society, 2021, 168, 120546.	1.3	1
42	Optimizing the monomer structure of polyhedral oligomeric silsesquioxane for ion transport in hybrid organic–inorganic block copolymers. Journal of Polymer Science, 2020, 58, 363-371.	2.0	8
43	Effect of salt concentration profiles on protrusion growth in lithium-polymerâ€'lithium cells. Solid State Ionics, 2020, 358, 115517.	1.3	13
44	Uncovering the Relationship between Diameter and Height of Electrodeposited Lithium Protrusions in a Rigid Electrolyte. ACS Applied Energy Materials, 2020, 3, 9645-9655.	2.5	13
45	Dynamic Structure and Phase Behavior of a Block Copolymer Electrolyte under dc Polarization. ACS Applied Materials & Samp; Interfaces, 2020, 12, 57421-57430.	4.0	13
46	Comparing Experimental Phase Behavior of Ion-Doped Block Copolymers with Theoretical Predictions Based on Selective Ion Solvation. Macromolecules, 2020, 53, 3956-3966.	2.2	20
47	Energy storage emerging: A perspective from the Joint Center for Energy Storage Research. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 12550-12557.	3.3	218
48	Segmental Dynamics Measured by Quasi-Elastic Neutron Scattering and Ion Transport in Chemically Distinct Polymer Electrolytes. Macromolecules, 2020, 53, 2406-2411.	2.2	20
49	Reversible Changes in the Grain Structure and Conductivity in a Block Copolymer Electrolyte. Macromolecules, 2020, 53, 5455-5464.	2.2	11
50	Miscible Polyether/Poly(ether–acetal) Electrolyte Blends. Macromolecules, 2020, 53, 5728-5739.	2.2	18
51	Lithium Salt Distribution and Thermodynamics in Electrolytes Based on Short Perfluoropolyether- <i>block</i> -Poly(ethylene oxide) Copolymers. Macromolecules, 2020, 53, 1142-1153.	2.2	12
52	Measurement of Three Transport Coefficients and the Thermodynamic Factor in Block Copolymer Electrolytes with Different Morphologies. Journal of Physical Chemistry B, 2020, 124, 921-935.	1.2	39
53	Diffusion and migration in polymer electrolytes. Progress in Polymer Science, 2020, 103, 101220.	11.8	100
54	Lithium-Sulfur Batteries with a Block Copolymer Electrolyte Analyzed by X-ray Microtomography. Journal of the Electrochemical Society, 2020, 167, 060506.	1.3	5

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55	Polymer Dynamics in Block Copolymer Electrolytes Detected by Neutron Spin Echo. ACS Macro Letters, 2020, 9, 639-645.	2.3	10
56	Continuum Description of the Role of Negative Transference Numbers on Ion Motion in Polymer Electrolytes. Journal of the Electrochemical Society, 2020, 167, 110559.	1.3	12
57	Impact of Frictional Interactions on Conductivity, Diffusion, and Transference Number in Ether- and Perfluoroether-Based Electrolytes. Journal of the Electrochemical Society, 2020, 167, 120540.	1.3	16
58	Preferential Stripping of a Lithium Protrusion Resulting in Recovery of a Planar Electrode. Journal of the Electrochemical Society, 2020, 167, 100553.	1.3	5
59	Miscible Polyether/Poly(ether-acetal) Electrolyte Blends. Macromolecules, 2020, 53, .	2.2	1
60	X-Ray Microtomography Analysis of Li-Sulfur Batteries with a Block Copolymer Electrolyte. ECS Meeting Abstracts, 2020, MA2020-02, 166-166.	0.0	0
61	Predicting Electrolyte Performance in Lithium Metal Batteries at Low and High Current Densities. ECS Meeting Abstracts, 2020, MA2020-02, 798-798.	0.0	0
62	Continuum Description of the Role of Negative Transference Numbers on Ion Motion in Polymer Electrolytes. ECS Meeting Abstracts, 2020, MA2020-02, 895-895.	0.0	0
63	Tuning Ionic Conductivity in Sodium Anti-Perovskite Ionic Conductors. ECS Meeting Abstracts, 2020, MA2020-02, 945-945.	0.0	0
64	Temperature-Dependent Atomistic Dynamics Correlated to Cation Transport in Cluster-Ion Anti-Perovskites. ECS Meeting Abstracts, 2020, MA2020-02, 966-966.	0.0	0
65	Uncovering the Relationship between Diameter and Height of Electrodeposited Lithium Protrusions in a Rigid Electrolyte. ECS Meeting Abstracts, 2020, MA2020-02, 590-590.	0.0	0
66	Composition Dependence of the Flory–Huggins Interaction Parameters of Block Copolymer Electrolytes and the Isotaksis Point. Macromolecules, 2019, 52, 5590-5601.	2.2	17
67	Ohm's law for ion conduction in lithium and beyond-lithium battery electrolytes. Journal of Chemical Physics, 2019, 151, 020901.	1.2	67
68	Structure-dependent Conducting Properties of Phosphonated Polypeptoid Electrolyte Membranes Revealed by Cryogenic Electron Tomography. Microscopy and Microanalysis, 2019, 25, 1822-1823.	0.2	0
69	Factors That Control the Formation of Dendrites and Other Morphologies on Lithium Metal Anodes. Frontiers in Energy Research, 2019, 7, .	1.2	103
70	Investigating the Effect of Added Salt on the Chain Dimensions of Poly(ethylene oxide) through Small-Angle Neutron Scattering. Macromolecules, 2019, 52, 8724-8732.	2.2	32
71	Extended Cycling through Rigid Block Copolymer Electrolytes Enabled by Reducing Impurities in Lithium Metal Electrodes. ACS Applied Energy Materials, 2019, 2, 8197-8206.	2.5	28
72	3D Printed Absorber for Capturing Chemotherapy Drugs before They Spread through the Body. ACS Central Science, 2019, 5, 419-427.	5.3	38

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73	Imaging of Polypeptoid Nanosheets with Atomic Scale Precision (In Honor of Ken Downing). Microscopy and Microanalysis, 2019, 25, 1356-1357.	0.2	1
74	Comparing Measurements of Limiting Current of Electrolytes with Theoretical Predictions up to the Solubility Limit. Journal of Physical Chemistry C, 2019, 123, 23872-23881.	1.5	15
7 5	Comparing Experimental Measurements of Limiting Current in Polymer Electrolytes with Theoretical Predictions. Journal of the Electrochemical Society, 2019, 166, A3228-A3234.	1.3	33
76	Confined versus Unconfined Crystallization in Block Copolymer/Salt Mixtures Studied by Depolarized Light Scattering. Macromolecules, 2019, 52, 982-991.	2.2	6
77	Effect of processing and end groups on the crystal structure of polypeptoids studied by cryogenic electron microscopy at atomic length scales. Soft Matter, 2019, 15, 4723-4736.	1.2	18
78	Diffraction imaging of nanocrystalline structures in organic semiconductor molecular thin films. Nature Materials, 2019, 18, 860-865.	13.3	99
79	Structure and Thermodynamics of Hybrid Organic–Inorganic Diblock Copolymers with Salt. Macromolecules, 2019, 52, 3165-3175.	2.2	18
80	Dissolution of Lithium Metal in Poly(ethylene oxide). ACS Energy Letters, 2019, 4, 903-907.	8.8	28
81	Difference between approximate and rigorously measured transference numbers in fluorinated electrolytes. Physical Chemistry Chemical Physics, 2019, 21, 7857-7866.	1.3	42
82	Charge transporting nanostructured polymers for electrochemical systems – a themed collection. Molecular Systems Design and Engineering, 2019, 4, 221-222.	1.7	3
83	Organizing thermodynamic data obtained from multicomponent polymer electrolytes: Saltâ€containing polymer blends and block copolymers. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1177-1187.	2.4	23
84	Ion diffusion across a disorder-to-order phase transition in a poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Engineering, 2019, 4, 357-364.	307 Td (o:	xide)- <i>b</i> 6
85	Atomic-level engineering and imaging of polypeptoid crystal lattices. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 22491-22499.	3.3	48
86	Impact of Salt Concentration on Nonuniform Lithium Electrodeposition through Rigid Block Copolymer Electrolytes. ACS Applied Materials & Interfaces, 2019, 11, 47878-47885.	4.0	18
87	Resolving the Morphology of Peptoid Vesicles at the 1 nm Length Scale Using Cryogenic Electron Microscopy. Journal of Physical Chemistry B, 2019, 123, 1195-1205.	1.2	15
88	Detection of the Order-to-Disorder Transition in Block Copolymer Electrolytes Using Quadrupolar 7Li NMR Splitting. ACS Macro Letters, 2019, 8, 107-112.	2.3	1
89	Theoretical Interpretation of Ion Velocities in Concentrated Electrolytes Measured by Electrophoretic NMR. Journal of the Electrochemical Society, 2019, 166, A264-A267.	1.3	19
90	Impact of Salt Concentration on Lithium Dendritic Growth in a Rigid SEO Polymer Electrolyte. ECS Meeting Abstracts, 2019, , .	0.0	0

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91	(Invited) Predicting the Performance of Lithium Metal Electrodes Stabilized By Polymer Electrolytes. ECS Meeting Abstracts, 2019, , .	0.0	0
92	Experimental Measurement of the Local Current Density in the Vicinity of a Lithium Protrusion: Plating and Stripping. ECS Meeting Abstracts, 2019, , .	0.0	0
93	Lithium Cycling, Limiting Current, and Electrochemical Characterization in Solid Polymer Electrolytes. ECS Meeting Abstracts, 2019, , .	0.0	0
94	Lithium-Ion Transport and Cycling Characteristics of Fluorinated Electrolytes. ECS Meeting Abstracts, 2019, , .	0.0	0
95	Correlations between Salt-Induced Crystallization, Morphology, Segmental Dynamics, and Conductivity in Amorphous Block Copolymer Electrolytes. Macromolecules, 2018, 51, 1733-1740.	2.2	27
96	Reentrant phase behavior and coexistence in asymmetric block copolymer electrolytes. Soft Matter, 2018, 14, 2789-2795.	1.2	28
97	Optimizing Ion Transport in Polyether-Based Electrolytes for Lithium Batteries. Macromolecules, 2018, 51, 2847-2858.	2.2	86
98	Relationship between Segmental Dynamics Measured by Quasi-Elastic Neutron Scattering and Conductivity in Polymer Electrolytes. ACS Macro Letters, 2018, 7, 504-508.	2.3	79
99	Anisotropic Ion Diffusion and Electrochemically Driven Transport in Nanostructured Block Copolymer Electrolytes. Journal of Physical Chemistry B, 2018, 122, 1537-1544.	1.2	39
100	Universal Relationship between Molecular Structure and Crystal Structure in Peptoid Polymers and Prevalence of the <i>cis</i> Backbone Conformation. Journal of the American Chemical Society, 2018, 140, 827-833.	6.6	52
101	Liquid-Crystalline Phase Behavior in Polypeptoid Diblock Copolymers. Macromolecules, 2018, 51, 9519-9525.	2.2	27
102	Rate Constants of Electrochemical Reactions in a Lithium-Sulfur Cell Determined by Operando X-ray Absorption Spectroscopy. Journal of the Electrochemical Society, 2018, 165, A3487-A3495.	1.3	20
103	Growth of Lithium Dendrites and Globules through a Solid Block Copolymer Electrolyte as a Function of Current Density. Journal of Physical Chemistry C, 2018, 122, 26797-26804.	1.5	49
104	Comparing Cycling Characteristics of Symmetric Lithium-Polymer-Lithium Cells with Theoretical Predictions. Journal of the Electrochemical Society, 2018, 165, A3186-A3194.	1.3	51
105	Imaging Unstained Synthetic Polymer Crystals and Defects on Atomic Length Scales Using Cryogenic Electron Microscopy. Macromolecules, 2018, 51, 7794-7799.	2.2	36
106	Polymer and composite electrolytes. MRS Bulletin, 2018, 43, 759-767.	1.7	60
107	Comparing Two Electrochemical Approaches for Measuring Transference Numbers in Concentrated Electrolytes. Journal of the Electrochemical Society, 2018, 165, A3014-A3021.	1.3	32
108	Negative Stefan-Maxwell Diffusion Coefficients and Complete Electrochemical Transport Characterization of Homopolymer and Block Copolymer Electrolytes. Journal of the Electrochemical Society, 2018, 165, A2766-A2773.	1.3	81

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109	Continuous pervaporation-assisted furfural production catalyzed by CrCl ₃ . Green Chemistry, 2018, 20, 2903-2912.	4.6	22
110	Phase Behavior of Mixtures of Block Copolymers and a Lithium Salt. Journal of Physical Chemistry B, 2018, 122, 8065-8074.	1.2	57
111	Anomalous Self-Assembly and Ion Transport in Nanostructured Organic–Inorganic Solid Electrolytes. ACS Macro Letters, 2018, 7, 1056-1061.	2.3	27
112	Nanostructured Single-Ion-Conducting Hybrid Electrolytes Based on Salty Nanoparticles and Block Copolymers. Macromolecules, 2017, 50, 1998-2005.	2.2	53
113	Hydroxide-ion transport and stability of diblock copolymers with a polydiallyldimethyl ammonium hydroxide block. Journal of Polymer Science Part A, 2017, 55, 2243-2248.	2.5	8
114	Thermodynamic origins of the solvent-dependent stability of lithium polysulfides from first principles. Physical Chemistry Chemical Physics, 2017, 19, 1441-1448.	1.3	41
115	Influence of Miscibility on Poly(ethylene oxide) Crystallization from Disordered Melts of Block Copolymers with Lithium and Magnesium Counterions. Macromolecules, 2017, 50, 4827-4839.	2.2	13
116	Incipient microphase separation in short chain perfluoropolyether-block-poly(ethylene oxide) copolymers. Soft Matter, 2017, 13, 4047-4056.	1.2	7
117	<i>50th Anniversary Perspective</i> : Phase Behavior of Polymer Solutions and Blends. Macromolecules, 2017, 50, 3051-3065.	2.2	78
118	Liquid Sulfur Impregnation of Microporous Carbon Accelerated by Nanoscale Interfacial Effects. Nano Letters, 2017, 17, 2517-2523.	4.5	16
119	Designing Polymer Electrolytes for Safe and High Capacity Rechargeable Lithium Batteries. Accounts of Chemical Research, 2017, 50, 590-593.	7.6	149
120	In Situ X-ray Absorption Spectroscopy Studies of Discharge Reactions in a Thick Cathode of a Lithium Sulfur Battery. Journal of the Electrochemical Society, 2017, 164, A18-A27.	1.3	31
121	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.	2.4	13
122	Dependence of Morphology, Shear Modulus, and Conductivity on the Composition of Lithiated and Magnesiated Single-Ion-Conducting Block Copolymer Electrolytes. Macromolecules, 2017, 50, 8765-8776.	2.2	19
123	Negative Transference Numbers in Poly(ethylene oxide)-Based Electrolytes. Journal of the Electrochemical Society, 2017, 164, E3569-E3575.	1.3	178
124	Accurate Cryo-EM Characterizations of Polypeptoid Vesicles. Microscopy and Microanalysis, 2017, 23, 836-837.	0.2	1
125	TEM Investigations of Peptoid Structures. Microscopy and Microanalysis, 2017, 23, 1778-1779.	0.2	0
126	Effect of Anion Size on Conductivity and Transference Number of Perfluoroether Electrolytes with Lithium Salts. Journal of the Electrochemical Society, 2017, 164, A3511-A3517.	1.3	47

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127	Mechanism of ion transport in perfluoropolyether electrolytes with a lithium salt. Soft Matter, 2017, 13, 5389-5396.	1.2	23
128	Depolarized Scattering from Block Copolymer Grains Using Circularly Polarized Light. Macromolecules, 2017, 50, 5122-5131.	2.2	5
129	Nanobeam Scanning Diffraction for Orientation Mapping of Polymers. Microscopy and Microanalysis, 2017, 23, 1782-1783.	0.2	7
130	Morphology Study of Phosphonated Peptoid Block Copolymer. Microscopy and Microanalysis, 2016, 22, 1926-1927.	0.2	2
131	Development of Diffraction Scanning Techniques for Beam Sensitive Polymers Microscopy and Microanalysis, 2016, 22, 492-493.	0.2	2
132	Morphology and Proton Transport in Humidified Phosphonated Peptoid Block Copolymers. Macromolecules, 2016, 49, 3083-3090.	2.2	36
133	Conductivity of carbonate- and perfluoropolyether-based electrolytes in porous separators. Journal of Power Sources, 2016, 323, 158-165.	4.0	24
134	Relationship between Conductivity, Ion Diffusion, and Transference Number in Perfluoropolyether Electrolytes. Macromolecules, 2016, 49, 3508-3515.	2.2	114
135	Pervaporation-assisted catalytic conversion of xylose to furfural. Green Chemistry, 2016, 18, 4073-4085.	4.6	28
136	Influence of Electrolyte Modulus on the Local Current Density at a Dendrite Tip on a Lithium Metal Electrode. Journal of the Electrochemical Society, 2016, 163, A2216-A2224.	1.3	98
137	Liquid perfluoropolyether electrolytes with enhanced ionic conductivity for lithium battery applications. Polymer, 2016, 100, 126-133.	1.8	26
138	Lithium Polysulfide Radical Anions in Ether-Based Solvents. Journal of Physical Chemistry C, 2016, 120, 18403-18410.	1.5	65
139	Block Copolymer Membranes for Efficient Capture of a Chemotherapy Drug. ACS Macro Letters, 2016, 5, 936-941.	2.3	19
140	Universal Relationship between Conductivity and Solvation-Site Connectivity in Ether-Based Polymer Electrolytes. Macromolecules, 2016, 49, 5244-5255.	2.2	66
141	Relationship between Ion Dissociation, Melt Morphology, and Electrochemical Performance of Lithium and Magnesium Single-Ion Conducting Block Copolymers. Macromolecules, 2016, 49, 9139-9147.	2.2	66
142	Lithium Metal-Copper Vanadium Oxide Battery with a Block Copolymer Electrolyte. Journal of the Electrochemical Society, 2016, 163, A2447-A2455.	1.3	11
143	Characterization of a Block Copolymer with a Wide Distribution of Grain Sizes. Macromolecules, 2016, 49, 8198-8208.	2.2	10
144	Effect of monomer structure on ionic conductivity in a systematic set of polyester electrolytes. Solid State Ionics, 2016, 289, 118-124.	1.3	62

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145	Orientation mapping of semicrystalline polymers using scanning electron nanobeam diffraction. Micron, 2016, 88, 30-36.	1.1	54
146	Self-assembly of crystalline nanotubes from monodisperse amphiphilic diblock copolypeptoid tiles. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3954-3959.	3.3	114
147	Structure and Ionic Conductivity of Polystyrene- <i>block</i> -poly(ethylene oxide) Electrolytes in the High Salt Concentration Limit. Macromolecules, 2016, 49, 1770-1780.	2.2	129
148	Compliant glass–polymer hybrid single ion-conducting electrolytes for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 52-57.	3.3	108
149	Electrochemical Deposition and Stripping Behavior of Lithium Metal across a Rigid Block Copolymer Electrolyte Membrane. Journal of the Electrochemical Society, 2015, 162, A2699-A2706.	1.3	81
150	Relationship between Steady-State Current in Symmetric Cells and Transference Number of Electrolytes Comprising Univalent and Multivalent Ions. Journal of the Electrochemical Society, 2015, 162, A2720-A2722.	1.3	93
151	Failure Analysis of Batteries Using Synchrotron-based Hard X-ray Microtomography. Journal of Visualized Experiments, 2015, , e53021.	0.2	5
152	Pervaporation of organic compounds from aqueous mixtures using polydimethylsiloxaneâ€containing block copolymer membranes. AICHE Journal, 2015, 61, 2789-2794.	1.8	14
153	Characterization of Polysulfide Radicals Present in an Etherâ€Based Electrolyte of a Lithium–Sulfur Battery During Initial Discharge Using In Situ Xâ€Ray Absorption Spectroscopy Experiments and Firstâ€Principles Calculations. Advanced Energy Materials, 2015, 5, 1500285.	10.2	107
154	Effect of Molecular Weight and Salt Concentration on Ion Transport and the Transference Number in Polymer Electrolytes. Macromolecules, 2015, 48, 7882-7888.	2.2	153
155	Phase Behavior and Electrochemical Characterization of Blends of Perfluoropolyether, Poly(ethylene) Tj ETQq $1\ 1$	0. <u>7</u> 84314	rgBT Overlo
156	Nanoparticle-Driven Assembly of Highly Conducting Hybrid Block Copolymer Electrolytes. Macromolecules, 2015, 48, 358-364.	2.2	71
157	The evolution of cyclopropenium ions into functional polyelectrolytes. Nature Communications, 2015, 6, 5950.	5.8	54
158	Lithium Dendrite Growth in Glassy and Rubbery Nanostructured Block Copolymer Electrolytes. Journal of the Electrochemical Society, 2015, 162, A398-A405.	1.3	76
159	Conductivity of Block Copolymer Electrolytes Containing Lithium Polysulfides. Macromolecules, 2015, 48, 4863-4873.	2.2	14
160	Membranes with artificial free-volume for biofuel production. Nature Communications, 2015, 6, 7529.	5.8	38
161	Systematic Computational and Experimental Investigation of Lithium-Ion Transport Mechanisms in Polyester-Based Polymer Electrolytes. ACS Central Science, 2015, 1, 198-205.	5.3	162
162	Water Uptake and Proton Conductivity in Porous Block Copolymer Electrolyte Membranes. Macromolecules, 2015, 48, 5648-5655.	2.2	26

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163	Effect of Lithium-Ion Concentration on Morphology and Ion Transport in Single-Ion-Conducting Block Copolymer Electrolytes. Macromolecules, 2015, 48, 6589-6595.	2.2	125
164	Relationship between Mobility and Lattice Strain in Electrochemically Doped Poly(3-hexylthiophene). ACS Macro Letters, 2015, 4, 1386-1391.	2.3	33
165	Failure Mode of Lithium Metal Batteries with a Block Copolymer Electrolyte Analyzed by X-Ray Microtomography. Journal of the Electrochemical Society, 2015, 162, A1301-A1309.	1.3	59
166	Nonflammable perfluoropolyether-based electrolytes for lithium batteries. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3327-3331.	3.3	182
167	Development and Validation of Endovascular Chemotherapy Filter Device for Removing High-Dose Doxorubicin: Preclinical Study. Journal of Medical Devices, Transactions of the ASME, 2014, 8, 0410081-410088.	0.4	18
168	Crystallization in Sequence-Defined Peptoid Diblock Copolymers Induced by Microphase Separation. Journal of the American Chemical Society, 2014, 136, 2070-2077.	6.6	70
169	Detection of subsurface structures underneath dendrites formed on cycled lithium metal electrodes. Nature Materials, 2014, 13, 69-73.	13.3	740
170	High Anion Conductivity and Low Water Uptake of Phosphonium Containing Diblock Copolymer Membranes. Macromolecules, 2014, 47, 7540-7547.	2.2	44
171	Phase Behavior of a Block Copolymer/Salt Mixture through the Order-to-Disorder Transition. Macromolecules, 2014, 47, 2666-2673.	2.2	50
172	Effect of Grain Size on the Ionic Conductivity of a Block Copolymer Electrolyte. Macromolecules, 2014, 47, 5424-5431.	2.2	119
173	X-ray Absorption Spectra of Dissolved Polysulfides in Lithium–Sulfur Batteries from First-Principles. Journal of Physical Chemistry Letters, 2014, 5, 1547-1551.	2.1	134
174	Evolution of Grain Structure during Disorder-to-Order Transitions in a Block Copolymer/Salt Mixture Studied by Depolarized Light Scattering. Macromolecules, 2014, 47, 5784-5792.	2.2	12
175	Morphology–Conductivity Relationship of Single-Ion-Conducting Block Copolymer Electrolytes for Lithium Batteries. ACS Macro Letters, 2014, 3, 510-514.	2.3	148
176	Fermentation of hydrolysate detoxified by pervaporation through block copolymer membranes. Green Chemistry, 2014, 16, 4206-4213.	4.6	22
177	Synthesis of Well-Defined Polyethylene–Polydimethylsiloxane–Polyethylene Triblock Copolymers by Diimide-Based Hydrogenation of Polybutadiene Blocks. Macromolecules, 2014, 47, 4151-4159.	2.2	23
178	Effect of Crystallization on Proton Transport in Model Polymer Electrolyte Membranes. Macromolecules, 2014, 47, 4330-4336.	2.2	11
179	Thermodynamics of Block Copolymers with and without Salt. Journal of Physical Chemistry B, 2014, 118, 4-17.	1.2	157
180	Discharge Characteristics of Lithium Battery Electrodes with a Semiconducting Polymer Studied by Continuum Modeling and Experiment. Journal of the Electrochemical Society, 2014, 161, A1836-A1843.	1.3	33

#	Article	IF	Citations
181	Fingerprinting Lithium-Sulfur Battery Reaction Products by X-ray Absorption Spectroscopy. Journal of the Electrochemical Society, 2014, 161, A1100-A1106.	1.3	76
182	Polymer Electrolytes. Annual Review of Materials Research, 2013, 43, 503-525.	4.3	668
183	Effect of Supercritical Carbon Dioxide on the Thermodynamics of Model Blends of Styrene-Acrylonitrile Copolymer and Poly(methyl methacrylate) Studied by Small-Angle Neutron Scattering. Macromolecules, 2013, 46, 6345-6356.	2.2	8
184	Study of gas permeabilities through polystyrene-block-poly(ethylene oxide) copolymers. Journal of Membrane Science, 2013, 432, 83-89.	4.1	35
185	lonic Conductivity of Low Molecular Weight Block Copolymer Electrolytes. Macromolecules, 2013, 46, 914-921.	2.2	154
186	Lithium Metal Stability in Batteries with Block Copolymer Electrolytes. Journal of the Electrochemical Society, 2013, 160, A464-A470.	1.3	121
187	Comparing the Energy Content of Batteries, Fuels, and Materials. Journal of Chemical Education, 2013, 90, 446-452.	1.1	35
188	First-Order Disordered-to-Lamellar Phase Transition in Lithium Salt-Doped Block Copolymers. ACS Macro Letters, 2013, 2, 478-481.	2.3	57
189	Effect of Nonsolvent Exposure on Morphology of Mesoporous Semicrystalline Block Copolymer Films. Macromolecules, 2013, 46, 4411-4417.	2.2	12
190	Effect of thermal history on the ionic conductivity of block copolymer electrolytes. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 927-934.	2.4	18
191	Simultaneous Conduction of Electronic Charge and Lithium Ions in Block Copolymers. ACS Nano, 2012, 6, 1589-1600.	7.3	105
192	Discontinuous Changes in Ionic Conductivity of a Block Copolymer Electrolyte through an Order–Disorder Transition. ACS Macro Letters, 2012, 1, 305-309.	2.3	60
193	Mesoporous Block Copolymer Morphology Studied by Contrast-Matched Resonant Soft X-ray Scattering. Macromolecules, 2012, 45, 9188-9195.	2.2	25
194	Current-Induced Formation of Gradient Crystals in Block Copolymer Electrolytes. Nano Letters, 2012, 12, 464-468.	4.5	9
195	Structure–Conductivity Relationship for Peptoid-Based PEO–Mimetic Polymer Electrolytes. Macromolecules, 2012, 45, 5151-5156.	2.2	137
196	Relationship between morphology and conductivity of block-copolymer based battery separators. Journal of Membrane Science, 2012, 394-395, 175-183.	4.1	28
197	Phase Diagrams of Blends of Polyisobutylene and Deuterated Polybutadiene as a Function of Chain Length. Macromolecules, 2011, 44, 3077-3084.	2.2	8
198	Salt Diffusion Coefficients in Block Copolymer Electrolytes. Journal of the Electrochemical Society, 2011, 158, A619.	1.3	72

#	Article	IF	CITATIONS
199	Direct Imaging of Nanoscale Acidic Clusters in a Polymer Electrolyte Membrane. Journal of the American Chemical Society, 2011, 133, 20700-20703.	6.6	15
200	Effect of molecular weight on conductivity of polymer electrolytes. Solid State Ionics, 2011, 203, 18-21.	1.3	155
201	Thermodynamics of Ion-Containing Polymer Blends and Block Copolymers. Physical Review Letters, 2011, 107, 198301.	2.9	129
202	Conductivity and water uptake in block copolymers containing protonated polystyrene sulfonate and their imidazolium salts. Soft Matter, 2011, 7, 4446.	1.2	14
203	Ionic Liquid Distribution in Ordered Block Copolymer Solutions. Macromolecules, 2010, 43, 3750-3756.	2.2	45
204	Thermodynamic Properties of Block Copolymer Electrolytes Containing Imidazolium and Lithium Salts. Macromolecules, 2010, 43, 8282-8289.	2.2	131
205	Anisotropic Proton Conduction in Aligned Block Copolymer Electrolyte Membranes at Equilibrium with Humid Air. Macromolecules, 2010, 43, 292-298.	2.2	152
206	Phase Behavior of Polystyrene- <i>block</i> poly(2-vinylpyridine) Copolymers in a Selective Ionic Liquid Solvent. Macromolecules, 2009, 42, 4604-4613.	2.2	77
207	lonic Conductivity of Block Copolymer Electrolytes in the Vicinity of Orderâ^'Disorder and Orderâ^'Order Transitions. Macromolecules, 2009, 42, 5642-5651.	2.2	161
208	Effect of Ion Distribution on Conductivity of Block Copolymer Electrolytes. Nano Letters, 2009, 9, 1212-1216.	4.5	228
209	Effect of Molecular Weight and Salt Concentration on Conductivity of Block Copolymer Electrolytes. Macromolecules, 2009, 42, 4632-4637.	2.2	309
210	Minimizing the Concentration of Diblock Copolymer Needed To Organize Blends of Weakly Segregated Polymers by Tuning Attractive and Repulsive Interactions. Macromolecules, 2007, 40, 1207-1217.	2.2	14
211	Effect of Pressure on a Multicomponent A/B/Aâ^'C Polymer Blend with Attractive and Repulsive Interactions. Macromolecules, 2007, 40, 355-365.	2.2	8
212	Effect of Molecular Weight on the Mechanical and Electrical Properties of Block Copolymer Electrolytes. Macromolecules, 2007, 40, 4578-4585.	2.2	449
213	Thermodynamics of Polymer Blends. , 2007, , 339-356.		71
214	Bending Soft Block Copolymer Nanostructures by Lithographically Directed Assembly. Macromolecules, 2006, 39, 2435-2437.	2.2	65
215	Effect of Cross-Linking on the Structure and Thermodynamics of Lamellar Block Copolymers. Macromolecules, 2006, 39, 4848-4859.	2.2	27
216	Block copolymers and nanotechnology. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3429-3430.	2.4	4

#	Article	IF	CITATIONS
217	Does coarsening begin during the initial stages of spinodal decomposition?. Journal of Chemical Physics, 2005, 122, 214903.	1.2	14
218	Platelet Self-Assembly of an Amphiphilic Aâ^'Bâ^'Câ^'A Tetrablock Copolymer in Pure Water. Macromolecules, 2005, 38, 3567-3570.	2.2	48
219	Orderâ^'Disorder Transitions in Cross-Linked Block Copolymer Solids. Macromolecules, 2005, 38, 1277-1285.	2.2	21
220	Does conventional nucleation occur during phase separation in polymer blends?. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 1793-1809.	2.4	27
221	Birefringence and Depolarized Light Scattering from Ordered Block Copolymers with Anisotropic Distributions of Grain Orientations Produced by Shear Flow. Macromolecules, 2004, 37, 4185-4195.	2.2	13
222	Effect of Chemical Oxidation on the Self-Assembly of Organometallic Block Copolymers. Journal of the American Chemical Society, 2004, 126, 7446-7447.	6.6	65
223	Responsive Solids from Cross-Linked Block Copolymers. Physical Review Letters, 2003, 90, 155505.	2.9	18
224	BLOCK COPOLYMERS IN NANOTECHNOLOGY., 2003, , 317-327.		6
225	Microphase segregation in molten randomly grafted copolymers. Journal of Chemical Physics, 2001, 115, 3387-3400.	1.2	15
226	Neutron Scattering from Pressurized Polyolefin Blends near the Limits of Metastability. Macromolecules, 2000, 33, 7977-7989.	2.2	31
227	Regular and Irregular Mixing in Blends of Saturated Hydrocarbon Polymers. Macromolecules, 1995, 28, 1260-1270.	2.2	130
228	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. ACS Energy Letters, 0, , 1399-1404.	8.8	228