Alexei P Sokolov

List of Publications by Year
in descending order

207 papers	11,810 citations	17405 63 h-index	34900 98 g-index
212 all docs	212 docs citations	212 times ranked	8543 citing authors

#	Article	IF	Citations
1	Surpassing the stiffness-extensibility trade-off of elastomers via mastering the hydrogen-bonding clusters. Matter, 2022, 5, 237-252.	5.0	40
2	Beyond Simple Dilution: Superior Conductivities from Cosolvation of Acetonitrile/LiTFSI Concentrated Solution with Acetone. Journal of Physical Chemistry C, 2022, 126, 2788-2796.	1.5	6
3	Fundamentals of Dielectric Spectroscopy in Polymer Nanocomposites. Advances in Dielectrics, 2022, , 35-61.	1.2	0
4	Unravelling the Mechanism of Viscoelasticity in Polymers with Phase-Separated Dynamic Bonds. ACS Nano, 2022, 16, 4746-4755.	7.3	23
5	Influence of Attractive Functional Groups on the Segmental Dynamics and Glass Transition in Associating Polymers. Macromolecules, 2022, 55, 2345-2357.	2.2	12
6	Tuning the Properties of Nanocomposites by Trapping Them in Deep Metastable States. ACS Applied Polymer Materials, 2022, 4, 3174-3182.	2.0	3
7	Elastic Forces and Molecular Transport through Polymer Matrices. Macromolecules, 2022, 55, 3762-3768.	2.2	2
8	Elastic vitrimers: Beyond thermoplastic and thermoset elastomers. Matter, 2022, 5, 1391-1422.	5.0	90
9	Controlling the Ion Transport Number in Solvent-in-Salt Solutions. Journal of Physical Chemistry B, 2022, 126, 4572-4583.	1.2	5
10	Anomalously high elastic modulus of a poly(ethylene oxide)-based composite electrolyte. Energy Storage Materials, 2021, 35, 431-442.	9.5	42
11	The puzzling role of symmetry: a tool for macromolecular engineering. , 2021, , 3-19.		0
12	Turning Rubber into a Glass: Mechanical Reinforcement by Microphase Separation. ACS Macro Letters, 2021, 10, 197-202.	2.3	12
13	Polymer Dynamics in Nanostructured Environments: Structure-Property Relations Unraveled by Dielectric Spectroscopy. ACS Symposium Series, 2021, , 223-238.	0.5	1
14	Critical Role of the Interfacial Layer in Associating Polymers with Microphase Separation. Macromolecules, 2021, 54, 4246-4256.	2.2	22
15	Reply to the â€œComment on â€˜Critical Role of Anionâ€“Solvent Interactions for Dynamics of Solvent-in-Salt Solutionsâ€™â€• Journal of Physical Chemistry C, 2021, 125, 9585-9586.	1.5	0
16	Improving Gas Selectivity in Membranes Using Polymer-Grafted Silica Nanoparticles. ACS Applied Nano Materials, 2021, 4, 5895-5903.	2.4	10
17	Collective Nanoparticle Dynamics Associated with Bridging Network Formation in Model Polymer Nanocomposites. ACS Nano, 2021, 15, 11501-11513.	7.3	34
18	Engineering the Interlayer Spacing by Preâ€Intercalation for High Performance Supercapacitor MXene Electrodes in Room Temperature Ionic Liquid. Advanced Functional Materials, 2021, 31, 2104007.	7.8	64

#	Article	IF	Citations
19	Investigation of Unusual Conductivity Behavior and Ion Dynamics in Hexamethylguanidinium Bis(fluorosulfonyl)imide-Based Electrolytes for Sodium Batteries. Journal of Physical Chemistry C, 2021, 125, 12518-12530.	1.5	15
20	Direct Structural Evidence for Interfacial Gradients in Asymmetric Polymer Nanocomposite Blends. ACS Applied Materials & Interfaces, 2021, 13, 36262-36274.	4.0	8
21	Polymers with Dynamic Bonds: Adaptive Functional Materials for a Sustainable Future. Journal of Physical Chemistry B, 2021, 125, 9389-9401.	1.2	66
22	Shape Persistent, Highly Conductive Ionogels from Ionic Liquids Reinforced with Cellulose Nanocrystal Network. Advanced Functional Materials, 2021, 31, 2103083.	7.8	42
23	The relationship between charge and molecular dynamics in viscous acid hydrates. Journal of Chemical Physics, 2021, 155, 014505.	1.2	5
24	Glass-fiber-reinforced polymeric film as an efficient protecting layer for stable Li metal electrodes. Cell Reports Physical Science, 2021, 2, 100534.	2.8	15
25	Engineering the Interlayer Spacing by Preâ€Intercalation for High Performance Supercapacitor MXene Electrodes in Room Temperature Ionic Liquid (Adv. Funct. Mater. 33/2021). Advanced Functional Materials, 2021, 31, 2170246.	7.8	2
26	Distilling nanoscale heterogeneity of amorphous silicon using tip-enhanced Raman spectroscopy (TERS) via multiresolution manifold learning. Nature Communications, 2021, 12, 578.	5.8	25
27	Tuning proton conductivity and energy barriers for proton transfer. Journal of Chemical Physics, 2021, 154, 014503.	1.2	1
28	Quantitative Evidence of Mobile Ion Hopping in Polymerized Ionic Liquids. Journal of Physical Chemistry B, 2021, 125, 372-381.	1.2	15
29	Rational Polymer Design of Stretchable Poly(ionic liquid) Membranes for Dual Applications. Macromolecules, 2021, 54, 896-905.	2.2	19
30	Design of tough adhesive from commodity thermoplastics through dynamic crosslinking. Science Advances, 2021, 7, eabk2451.	4.7	66
31	Unraveling the Role of Neutral Units for Single-Ion Conducting Polymer Electrolytes. ACS Applied Materials & Interfaces, 2021, 13, 51525-51534.	4.0	18
32	Single-Ion Conducting Polymer Nanoparticles as Functional Fillers for Solid Electrolytes in Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 54354-54362.	4.0	38
33	Viscoelasticity in associating oligomers and polymers: experimental test of the bond lifetime renormalization model. Soft Matter, 2020, 16, 390-401.	1.2	40
34	Addition of Chloroform in a Solvent-in-Salt Electrolyte: Outcomes in the Microscopic Dynamics in Bulk and Confinement. Journal of Physical Chemistry C, 2020, 124, 22366-22375.	1.5	7
35	Tuning the dynamics of imidazolium-based ionic liquids via hydrogen bonding. I. The viscous regime. Journal of Chemical Physics, 2020, 153, 194501.	1.2	14
36	Role of Fast Dynamics in Conductivity of Polymerized Ionic Liquids. Journal of Physical Chemistry B, 2020, 124, 10539-10545.	1.2	2

#	Article	IF	Citations
37	Strongly Correlated Ion Dynamics in Plastic Ionic Crystals and Polymerized Ionic Liquids. Journal of Physical Chemistry C, 2020, 124, 17889-17896.	1.5	22
38	Bridging-Controlled Network Microstructure and Long-Wavelength Fluctuations in Silicaâ€“Poly(2-vinylpyridine) Nanocomposites: Experimental Results and Theoretical Analysis. Macromolecules, 2020, 53, 6984-6994.	2.2	20
39	Recent Developments and Challenges in Hybrid Solid Electrolytes for Lithium-Ion Batteries. Frontiers in Energy Research, 2020, 8, .	1.2	52
40	Improved Single-Ion Conductivity of Polymer Electrolyte via Accelerated Segmental Dynamics. ACS Applied Energy Materials, 2020, 3, 12540-12548.	2.5	31
41	Strong Reduction in Amplitude of the Interfacial Segmental Dynamics in Polymer Nanocomposites. Macromolecules, 2020, 53, 4126-4135.	2.2	46
42	Ionic Liquidâ€Directed Nanoporous TiNb₂O₇ Anodes with Superior Performance for Fastâ€Rechargeable Lithiumâ€Ion Batteries. Small, 2020, 16, e2001884.	5.2	69
43	Adhesive Polymers as Efficient Binders for High-Capacity Silicon Electrodes. ACS Applied Energy Materials, 2020, 3, 3387-3396.	2.5	34
44	Addition of Short Polymer Chains Mechanically Reinforces Glassy Poly(2-vinylpyridine)â€“Silica Nanoparticle Nanocomposites. ACS Applied Nano Materials, 2020, 3, 3427-3438.	2.4	21
45	Correlation between the temperature evolution of the interfacial region and the growing dynamic cooperativity length scale. Journal of Chemical Physics, 2020, 152, 094904.	1.2	19
46	Capacitance of thin films containing polymerized ionic liquids. Science Advances, 2020, 6, eaba7952.	4.7	12
47	Critical Role of Anionâ€“Solvent Interactions for Dynamics of Solvent-in-Salt Solutions. Journal of Physical Chemistry C, 2020, 124, 8457-8466.	1.5	32
48	Perspectives for Polymer Electrolytes: A View from Fundamentals of Ionic Conductivity. Macromolecules, 2020, 53, 4141-4157.	2.2	221
49	Proton Transfer in Phosphoric Acid-Based Protic Ionic Liquids: Effects of the Base. Journal of Physical Chemistry A, 2020, 124, 4141-4149.	1.1	6
50	Elastic Single-Ion Conducting Polymer Electrolytes: Toward a Versatile Approach for Intrinsically Stretchable Functional Polymers. Macromolecules, 2020, 53, 3591-3601.	2.2	41
51	Reviewâ€”Polymer/Ceramic Interface Barriers: The Fundamental Challenge for Advancing Composite Solid Electrolytes for Li-Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 160514.	1.3	45
52	Structure and dynamics of short-chain polymerized ionic liquids. Journal of Chemical Physics, 2019, 151, 034903.	1.2	18
53	Tailored CO₂-philic Gas Separation Membranes via One-Pot Thiolâ€“ene Chemistry. Macromolecules, 2019, 52, 5819-5828.	2.2	20
54	Unraveling the Nanoscale Heterogeneity of Solid Electrolyte Interphase Using Tip-Enhanced Raman Spectroscopy. Joule, 2019, 3, 2001-2019.	11.7	99

#	Article	IF	Citations
55	What dielectric spectroscopy can tell us about supramolecular networksâ‹†. European Physical Journal E, 2019, 42, 133.	0.7	30
56	Noncontact tip-enhanced Raman spectroscopy for nanomaterials and biomedical applications. Nanoscale Advances, 2019, 1, 3392-3399.	2.2	7
57	Tailored crosslinking of Poly(ethylene oxide) enables mechanical robustness and improved sodium-ion conductivity. Energy Storage Materials, 2019, 21, 85-96.	9.5	43
58	Understanding the Static Interfacial Polymer Layer by Exploring the Dispersion States of Nanocomposites. ACS Applied Materials & Interfaces, 2019, 11, 17863-17872.	4.0	35
59	Rational Design of a Multifunctional Binder for High-Capacity Silicon-Based Anodes. ACS Energy Letters, 2019, 4, 1171-1180.	8.8	108
60	Fundamental parameters governing ion conductivity in polymer electrolytes. Electrochimica Acta, 2019, 299, 191-196.	2.6	56
61	Elastic Single-Ion Conducting Polymer Electrolyte. ECS Meeting Abstracts, 2019, , .	0.0	0
62	(Invited) Solid-Electrolyte Interface and Interphase Depicted By Plasmon-Enhanced Raman Spectroscopy. ECS Meeting Abstracts, 2019, , .	0.0	0
63	Dual-Functional Polymer Binders for Silicon Based Electrodes. ECS Meeting Abstracts, 2019, , .	0.0	0
64	Theory and Simulation of Attractive Nanoparticle Transport in Polymer Melts. Macromolecules, 2018, 51, 2258-2267.	2.2	38
65	Diffusion of Sticky Nanoparticles in a Polymer Melt: Crossover from Suppressed to Enhanced Transport. Macromolecules, 2018, 51, 2268-2275.	2.2	52
66	Superstretchable, Selfâ€Healing Polymeric Elastomers with Tunable Properties. Advanced Functional Materials, 2018, 28, 1800741.	7.8	162
67	Carbon Dioxide Separation: Highly Permeable Oligo(ethylene oxide)-co -poly(dimethylsiloxane) Membranes for Carbon Dioxide Separation (Adv. Sustainable Syst. 4/2018). Advanced Sustainable Systems, 2018, 2, 1870030.	2.7	1
68	Hydrogen-bond strength changes network dynamics in associating telechelic PDMS. Soft Matter, 2018, 14, 1235-1246.	1.2	43
69	Highly Permeable Oligo(ethylene oxide)â€co â€poly(dimethylsiloxane) Membranes for Carbon Dioxide Separation. Advanced Sustainable Systems, 2018, 2, 1700113.	2.7	6
70	Effect of Binder Architecture on the Performance of Silicon/Graphite Composite Anodes for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2018, 10, 3470-3478.	4.0	77
71	Impact of hydration and temperature history on the structure and dynamics of lignin. Green Chemistry, 2018, 20, 1602-1611.	4.6	30
72	Neutron scattering in the biological sciences: progress and prospects. Acta Crystallographica Section D: Structural Biology, 2018, 74, 1129-1168.	1.1	47

#	Article	IF	Citations
73	Viscoelastic properties and ion dynamics in star-shaped polymerized ionic liquids. European Polymer Journal, 2018, 109, 326-335.	2.6	16
74	The Role of Chain-End Association Lifetime in Segmental and Chain Dynamics of Telechelic Polymers. Macromolecules, 2018, 51, 8561-8573.	2.2	42
75	Fundamental Limitations of Ionic Conductivity in Polymerized Ionic Liquids. Macromolecules, 2018, 51, 8637-8645.	2.2	103
76	Anti-soiling and highly transparent coatings with multi-scale features. Solar Energy Materials and Solar Cells, 2018, 188, 255-262.	3.0	30
77	Enhancing the Mechanical Properties of Glassy Nanocomposites by Tuning Polymer Molecular Weight. ACS Applied Materials & Interfaces, 2018, 10, 33601-33610.	4.0	58
78	Surprising Temperature Scaling of Viscoelastic Properties in Polymers. Macromolecules, 2018, 51, 4874-4881.	2.2	13
79	Transient Nonlinear Response of Dynamically Decoupled Ionic Conductors. Physical Review Letters, 2018, 121, 064503.	2.9	13
80	(Invited) Investigation of Solid Electrolyte Interphase on Amorphous Siox/Si Films Using Tip Enhanced Raman Spectroscopy. ECS Meeting Abstracts, 2018, , .	0.0	0
81	Probing the Nanoscale Heterogeneity of SEI on Silicon Anode Using Tip Enhanced Raman Spectroscopy (TERS). ECS Meeting Abstracts, 2018, , .	0.0	0
82	Atomistic details of protein dynamics and the role of hydration water. Biochimica Et Biophysica Acta - General Subjects, 2017, 1861, 3546-3552.	1.1	37
83	Unraveling the Molecular Weight Dependence of Interfacial Interactions in Poly(2-vinylpyridine)/Silica Nanocomposites. ACS Macro Letters, 2017, 6, 68-72.	2.3	65
84	Impact of tuning CO2-philicity in polydimethylsiloxane-based membranes for carbon dioxide separation. Journal of Membrane Science, 2017, 530, 213-219.	4.1	31
85	Gas separation mechanism of CO₂ selective amidoxime-poly(1-trimethylsilyl-1-propyne) membranes. Polymer Chemistry, 2017, 8, 3341-3350.	1.9	25
86	Quantum effects in dynamics of water and other liquids of light molecules. European Physical Journal E, 2017, 40, 57.	0.7	11
87	A Rayleighian approach for modeling kinetics of ionic transport in polymeric media. Journal of Chemical Physics, 2017, 146, 064902.	1.2	12
88	Focus: Structure and dynamics of the interfacial layer in polymer nanocomposites with attractive interactions. Journal of Chemical Physics, 2017, 146, 203201.	1.2	114
89	Decoupling of ion conductivity from segmental dynamics in oligomeric ethylene oxide functionalized oxanorbornene dicarboximide homopolymers. Polymer, 2017, 116, 218-225.	1.8	13
90	Interfacial Properties of Polymer Nanocomposites: Role of Chain Rigidity and Dynamic Heterogeneity Length Scale. Macromolecules, 2017, 50, 2397-2406.	2.2	115

#	Article	IF	Citations
91	Big Effect of Small Nanoparticles: A Shift in Paradigm for Polymer Nanocomposites. ACS Nano, 2017, 11, 752-759.	7.3	177
92	Effect of Chain Rigidity on the Decoupling of Ion Motion from Segmental Relaxation in Polymerized Ionic Liquids: Ambient and Elevated Pressure Studies. Macromolecules, 2017, 50, 6710-6721.	2.2	78
93	Polymer-Grafted Nanoparticle Membranes with Controllable Free Volume. Macromolecules, 2017, 50, 7111-7120.	2.2	88
94	Effects of counterion size and backbone rigidity on the dynamics of ionic polymer melts and glasses. Physical Chemistry Chemical Physics, 2017, 19, 27442-27451.	1.3	22
95	Revealing the Charge Transport Mechanism in Polymerized Ionic Liquids: Insight from High Pressure Conductivity Studies. Chemistry of Materials, 2017, 29, 8082-8092.	3.2	32
96	Robust and Elastic Polymer Membranes with Tunable Properties for Gas Separation. ACS Applied Materials & Interfaces, 2017, 9, 26483-26491.	4.0	32
97	A star-shaped single lithium-ion conducting copolymer by grafting a POSS nanoparticle. Polymer, 2017, 124, 117-127.	1.8	45
98	Analyzing the Interfacial Layer Properties in Polymer Nanocomposites by Broadband Dielectric Spectroscopy. Macromolecules, 2017, 50, 6149-6163.	2.2	86
99	Simple-liquid dynamics emerging in the mechanical shear spectra of poly(propylene glycol). Colloid and Polymer Science, 2017, 295, 2433.	1.0	2
100	Influence of Chain Rigidity and Dielectric Constant on the Glass Transition Temperature in Polymerized Ionic Liquids. Journal of Physical Chemistry B, 2017, 121, 11511-11519.	1.2	82
101	Interplay between local dynamics and mechanical reinforcement in glassy polymer nanocomposites. Physical Review Materials, 2017, 1, .	0.9	29
102	Accessing Siloxane Functionalized Polynorbornenes via Vinyl-Addition Polymerization for CO₂ Separation Membranes. ACS Macro Letters, 2016, 5, 879-883.	2.3	46
103	Role of quantum fluctuations in structural dynamics of liquids of light molecules. Journal of Chemical Physics, 2016, 145, 234507.	1.2	2
104	Correlation between temperature variations of static and dynamic properties in glass-forming liquids. Physical Review E, 2016, 94, 060603.	0.8	18
105	Communication: Influence of nanophase segregation on ion transport in room temperature ionic liquids. Journal of Chemical Physics, 2016, 144, 151104.	1.2	16
106	Why many polymers are so fragile: A new perspective. Journal of Chemical Physics, 2016, 145, 154901.	1.2	40
107	Unraveling the Mechanism of Nanoscale Mechanical Reinforcement in Glassy Polymer Nanocomposites. Nano Letters, 2016, 16, 3630-3637.	4.5	142
108	Impact of Hydrogen Bonding on Dynamics of Hydroxyl-Terminated Polydimethylsiloxane. Macromolecules, 2016, 49, 3138-3147.	2.2	55

#	Article	IF	Citations
109	Mechanism of Conductivity Relaxation in Liquid and Polymeric Electrolytes: Direct Link between Conductivity and Diffusivity. Journal of Physical Chemistry B, 2016, 120, 11074-11083.	1.2	101
110	Proton Conductivity in Phosphoric Acid: The Role of Quantum Effects. Physical Review Letters, 2016, 117, 156001.	2.9	16
111	Oscillatory behaviour of the surface reduction process of multilayer graphene oxide at room temperature. RSC Advances, 2016, 6, 78194-78201.	1.7	4
112	Unexpected Molecular Weight Effect in Polymer Nanocomposites. Physical Review Letters, 2016, 116, 038302.	2.9	134
113	Identification of Structural Relaxation in the Dielectric Response of Water. Physical Review Letters, 2016, 116, 237601.	2.9	48
114	Effect of Molecular Weight on the Ion Transport Mechanism in Polymerized Ionic Liquids. Macromolecules, 2016, 49, 4557-4570.	2.2	121
115	Controlling Interfacial Dynamics: Covalent Bonding versus Physical Adsorption in Polymer Nanocomposites. ACS Nano, 2016, 10, 6843-6852.	7.3	152
116	Graphene Oxide as a Radical Initiator: Free Radical and Controlled Radical Polymerization of Sodium 4-Vinylbenzenesulfonate with Graphene Oxide. ACS Macro Letters, 2016, 5, 199-202.	2.3	24
117	Nanoscale imaging and identification of a four-component carbon sample. Carbon, 2016, 96, 588-593.	5.4	14
118	Effect of Cross-Link Density on Carbon Dioxide Separation in Polydimethylsiloxane-Norbornene Membranes. ChemSusChem, 2015, 8, 3524-3524.	3.6	2
119	Qualitative change in structural dynamics of some glass-forming systems. Physical Review E, 2015, 92, 062304.	0.8	27
120	Revealing spatially heterogeneous relaxation in a model nanocomposite. Journal of Chemical Physics, 2015, 143, 194704.	1.2	57
121	Identification of individual isotopes in a polymer blend using tip enhanced Raman spectroscopy. Journal of Raman Spectroscopy, 2015, 46, 447-450.	1.2	9
122	Effect of Crossâ€Link Density on Carbon Dioxide Separation in Polydimethylsiloxaneâ€Norbornene Membranes. ChemSusChem, 2015, 8, 3595-3604.	3.6	21
123	Controlled Nanopatterning of a Polymerized Ionic Liquid in a Strong Electric Field. Advanced Functional Materials, 2015, 25, 805-811.	7.8	13
124	Rapid and Facile Formation of P3HT Organogels via Spin Coating: Tuning Functional Properties of Organic Electronic Thin Films. Advanced Functional Materials, 2015, 25, 5848-5857.	7.8	15
125	Polymer composites prepared by low-temperature post-irradiation polymerization of C₂F₄ in the presence of graphene-like material: synthesis and characterization. RSC Advances, 2015, 5, 9865-9874.	1.7	20
126	The puzzling first-order phase transition in waterâ€“glycerol mixtures. Physical Chemistry Chemical Physics, 2015, 17, 18063-18071.	1.3	47

#	Article	IF	Citations
127	Ion transport and structural dynamics in homologous ammonium and phosphonium-based room temperature ionic liquids. Journal of Chemical Physics, 2015, 142, 084501.	1.2	40
128	Protein dynamics: from rattling in a cage to structural relaxation. Soft Matter, 2015, 11, 4984-4998.	1.2	104
129	Design of superionic polymer electrolytes. Current Opinion in Chemical Engineering, 2015, 7, 113-119.	3.8	46
130	Quantum effects in the dynamics of deeply supercooled water. Physical Review E, 2015, 91, 022312.	0.8	21
131	Untangling the Effects of Chain Rigidity on the Structure and Dynamics of Strongly Adsorbed Polymer Melts. Macromolecules, 2015, 48, 4207-4219.	2.2	109
132	Ion Conduction in Polymerized Ionic Liquids with Different Pendant Groups. Macromolecules, 2015, 48, 4461-4470.	2.2	158
133	Enzyme Induced Formation of Monodisperse Hydrogel Nanoparticles Tunable in Size. Chemistry of Materials, 2015, 27, 2557-2565.	3.2	10
134	Heterogeneous Nature of Relaxation Dynamics of Room-Temperature Ionic Liquids (EMIm)₂[Co(NCS)₄] and (BMIm)₂[Co(NCS)₄]. Journal of Physical Chemistry C, 2015, 119, 20363-20368.	1.5	24
135	Protein dynamics in a broad frequency range: Dielectric spectroscopy studies. Journal of Non-Crystalline Solids, 2015, 407, 478-485.	1.5	63
136	Anomalously large isotope effect in the glass transition of water. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17402-17407.	3.3	57
137	Resolving the Grain Boundary and Lattice Impedance of Hotâ€Pressed Li₇La₃Zr₂O₁₂ Garnet Electrolytes. ChemElectroChem, 2014, 1, 375-378.	1.7	112
138	Macroscopic Properties of Restacked, Redoxâ€Liquid Exfoliated Graphite and Graphite Mimics Produced in Bulk Quantities. Advanced Functional Materials, 2014, 24, 4969-4977.	7.8	4
139	Observation of the slow, Debye-like relaxation in hydrogen-bonded liquids by dynamic light scattering. Journal of Chemical Physics, 2014, 140, 104510.	1.2	35
140	Design of superionic polymersâ€"New insights from Walden plot analysis. Solid State Ionics, 2014, 262, 782-784.	1.3	54
141	Carbon nanomaterial produced by microwave exfoliation of graphite oxide: new insights. RSC Advances, 2014, 4, 587-592.	1.7	70
142	Decoupling of ionic conductivity from structural dynamics in polymerized ionic liquids. Soft Matter, 2014, 10, 3536-3540.	1.2	120
143	Examination of the fundamental relation between ionic transport and segmental relaxation in polymer electrolytes. Polymer, 2014, 55, 4067-4076.	1.8	136
144	Dynamics at the Polymer/Nanoparticle Interface in Poly(2-vinylpyridine)/Silica Nanocomposites. Macromolecules, 2014, 47, 1837-1843.	2.2	248

#	Article	IF	Citations
145	Rigidity, Secondary Structure, and the Universality of the Boson Peak in Proteins. Biophysical Journal, 2014, 106, 2667-2674.	0.2	66
146	Observation of highly decoupled conductivity in protic ionic conductors. Physical Chemistry Chemical Physics, 2014, 16, 9123-9127.	1.3	37
147	Dynamics and Rigidity in an Intrinsically Disordered Protein, Î²-Casein. Journal of Physical Chemistry B, 2014, 118, 7317-7326.	1.2	44
148	Secondary structure and rigidity in model proteins. Soft Matter, 2013, 9, 9548.	1.2	65
149	Examination of methods to determine free-ion diffusivity and number density from analysis of electrode polarization. Physical Review E, 2013, 87, 042308.	0.8	84
150	Coherent Neutron Scattering and Collective Dynamics in the Protein, GFP. Biophysical Journal, 2013, 105, 2182-2187.	0.2	24
151	Dynamics in Protein Powders on the Nanosecondâ€“Picosecond Time Scale Are Dominated by Localized Motions. Journal of Physical Chemistry B, 2013, 117, 11548-11555.	1.2	23
152	Dynamic crossover and the Debyeâ€“Stokesâ€“Einstein relation in liquid N,N-diethyl-3-methylbenzamide (DEET). Soft Matter, 2013, 9, 10373.	1.2	17
153	High Pressure as a Key Factor to Identify the Conductivity Mechanism in Protic Ionic Liquids. Physical Review Letters, 2013, 111, 225703.	2.9	65
154	Effects of backbone rigidity on the local structure and dynamics in polymer melts and glasses. Physical Chemistry Chemical Physics, 2013, 15, 4604.	1.3	51
155	Role of Quantum Effects in the Glass Transition. Physical Review Letters, 2013, 110, 065701.	2.9	42
156	Protecting TERS probes from degradation: extending mechanical and chemical stability. Journal of Raman Spectroscopy, 2013, 44, 710-716.	1.2	24
157	Solvent effects on protein fast dynamics: implications for biopreservation. Soft Matter, 2013, 9, 5336.	1.2	26
158	Cooperativity and heterogeneity in dynamics of glass-forming systems. , 2013, , .		4
159	Chain and Segmental Dynamics of Poly(2-vinylpyridine) Nanocomposites. Macromolecules, 2013, 46, 4168-4173.	2.2	92
160	Ionic Transport, Microphase Separation, and Polymer Relaxation in Poly(propylene glycol) and Lithium Perchlorate Mixtures. Macromolecules, 2013, 46, 9380-9389.	2.2	31
161	Ionic Conductivity and Glass Transition of Phosphoric Acids. Journal of Physical Chemistry B, 2013, 117, 8003-8009.	1.2	34
162	No fragile-to-strong crossover in LiCl-H2O solution. Journal of Chemical Physics, 2012, 136, 124512.	1.2	38

#	Article	IF	Citations
163	Temperatureâ€“Volume Entropic Model for Viscosities and Structural Relaxation Times of Glass Formers. Journal of Physical Chemistry Letters, 2012, 3, 2643-2648.	2.1	18
164	Dynamics of Protein and its Hydration Water: Neutron Scattering Studies on Fully Deuterated GFP. Biophysical Journal, 2012, 103, 1566-1575.	0.2	121
165	Decoupling of Ionic Transport from Segmental Relaxation in Polymer Electrolytes. Physical Review Letters, 2012, 108, 088303.	2.9	139
166	Role of methyl groups in dynamics and evolution of biomolecules. Journal of Biological Physics, 2012, 38, 497-505.	0.7	26
167	Nanosecond Relaxation Dynamics of Hydrated Proteins: Water versus Protein Contributions. Journal of Physical Chemistry B, 2011, 115, 6222-6226.	1.2	46
168	Decoupling Ionic Conductivity from Structural Relaxation: A Way to Solid Polymer Electrolytes?. Macromolecules, 2011, 44, 4410-4414.	2.2	104
169	The Dynamics of Unfolded versus Folded tRNA: The Role of Electrostatic Interactions. Journal of the American Chemical Society, 2011, 133, 16406-16409.	6.6	25
170	Three Classes of Motion in the Dynamic Neutron-Scattering Susceptibility of a Globular Protein. Physical Review Letters, 2011, 107, 148102.	2.9	76
171	Appearance of a Debye process at the conductivity relaxation frequency of a viscous liquid. Journal of Chemical Physics, 2011, 134, 104508.	1.2	79
172	A broad glass transition in hydrated proteins. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 15-19.	1.1	76
173	Dynamics of Biological Macromolecules: Not a Simple Slaving by Hydration Water. Biophysical Journal, 2010, 98, 1321-1326.	0.2	103
174	Resolving the Mystery of the Chain Friction Mechanism in Polymer Liquids. Physical Review Letters, 2009, 102, 248301.	2.9	92
175	Molecular cooperativity in the dynamics of glass-forming systems: A new insight. Journal of Chemical Physics, 2009, 131, 194511.	1.2	72
176	Highly Stable, Protected Plasmonic Nanostructures for Tip Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2009, 113, 8158-8161.	1.5	70
177	Dynamics of tRNA at Different Levels of Hydration. Biophysical Journal, 2009, 96, 2755-2762.	0.2	81
178	Dielectric Spectroscopy Investigation of Relaxation in C₆₀â^'Polyisoprene Nanocomposites. Macromolecules, 2009, 42, 3201-3206.	2.2	60
179	Pressure and density dependence of the boson peak in polymers. Physical Review B, 2008, 78, .	1.1	75
180	Role of Chemical Structure in Fragility of Polymers: A Qualitative Picture. Macromolecules, 2008, 41, 7232-7238.	2.2	294

#	Article	IF	Citations
181	Influence of Hydration on Protein Dynamics: Combining Dielectric and Neutron Scattering Spectroscopy Data. Journal of Physical Chemistry B, 2008, 112, 14273-14280.	1.2	165
182	Conductivity in Hydrated Proteins: No Signs of the Fragile-to-Strong Crossover. Physical Review Letters, 2008, 100, 108103.	2.9	89
183	The origin of the dynamic transition in proteins. Journal of Chemical Physics, 2008, 128, 195106.	1.2	149
184	Why many polymers are so fragile. Journal of Physics Condensed Matter, 2007, 19, 205116.	0.7	79
185	Breakdown of Timeâ^'Temperature Superposition Principle and Universality of Chain Dynamics in Polymers. Macromolecules, 2006, 39, 3322-3326.	2.2	132
186	Influence of Hydration on the Dynamics of Lysozyme. Biophysical Journal, 2006, 91, 2573-2588.	0.2	200
187	Dynamic Transition in tRNA is Solvent Induced. Journal of the American Chemical Society, 2006, 128, 32-33.	6.6	105
188	Coupling between lysozyme and trehalose dynamics: Microscopic insights from molecular-dynamics simulations. Journal of Chemical Physics, 2006, 124, 034901.	1.2	36
189	Onsets of Anharmonicity in Protein Dynamics. Physical Review Letters, 2005, 95, 038101.	2.9	223
190	Coupling between lysozyme and glycerol dynamics: Microscopic insights from molecular-dynamics simulations. Journal of Chemical Physics, 2005, 122, 244910.	1.2	41
191	Poisson's ratio and the fragility of glass-forming liquids. Nature, 2004, 431, 961-963.	13.7	435
192	Protein and solvent dynamics: How strongly are they coupled?. Journal of Chemical Physics, 2004, 121, 1978-1983.	1.2	138
193	Comment on the dynamic bead size and Kuhn segment length in polymers: Example of polystyrene. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 3505-3511.	2.4	32
194	Fast relaxation in disordered systems: from a double well to a cage. Philosophical Magazine, 2004, 84, 1355-1360.	0.7	5
195	Influence of Molecular Weight on Fast Dynamics and Fragility of Polymers. Macromolecules, 2004, 37, 9264-9272.	2.2	90
196	When Does a Molecule Become a Polymer?. Macromolecules, 2004, 37, 161-166.	2.2	98
197	Protein dynamics in viscous solvents. Journal of Chemical Physics, 2003, 118, 4230-4236.	1.2	64
198	Slow relaxation process in DNA. Journal of Biological Physics, 2001, 27, 313-327.	0.7	33

#	Article	IF	Citations
199	Observation of constant loss in fast relaxation spectra of polymers. Physical Review B, 2001, 63, .	1.1	61
200	Spectrum of fast dynamics in glass forming liquids: Does the â€œkneeâ€•exist?. Journal of Chemical Physics, 1999, 110, 2312-2315.	1.2	70
201	Glassy dynamics in DNA: Ruled by water of hydration?. Journal of Chemical Physics, 1999, 110, 7053-7057.	1.2	74
202	Light-scattering spectra of fast relaxation in glasses. Physical Review B, 1998, 58, 14888-14891.	1.1	104
203	Low-Temperature Anomalies in Strong and Fragile Glass Formers. Physical Review Letters, 1997, 78, 2405-2408.	2.9	144
204	Connection between quasielastic Raman scattering and free volume in polymeric glasses and supercooled liquids. Journal of Chemical Physics, 1997, 107, 1057-1065.	1.2	82
205	Dynamics of strong and fragile glass formers: Differences and correlation with low-temperature properties. Physical Review Letters, 1993, 71, 2062-2065.	2.9	361
206	Universal Form of the Low-Energy (2 to 10 meV) Vibrational Spectrum of Glasses. Europhysics Letters, 1990, 11, 43-47.	0.7	238
207	Surpassing the Stiffness-Extensibility Trade-Off of Elastomers via Mastering the Hydrogen-Bonding Clusters. SSRN Electronic Journal, 0, , .	0.4	0