

Jian Qin

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/608261/publications.pdf>

Version: 2024-02-01

83
papers

6,274
citations

76326

40
h-index

69250

77
g-index

84
all docs

84
docs citations

84
times ranked

5395
citing authors

#	ARTICLE	IF	CITATIONS
1	Liquid electrolyte: The nexus of practical lithium metal batteries. <i>Joule</i> , 2022, 6, 588-616.	24.0	191
2	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022, 7, 94-106.	39.5	336
3	Suspension electrolyte with modified Li ⁺ solvation environment for lithium metal batteries. <i>Nature Materials</i> , 2022, 21, 445-454.	27.5	155
4	Efficient Electronic Tunneling Governs Transport in Conducting Polymer-Insulator Blends. <i>Journal of the American Chemical Society</i> , 2022, 144, 10368-10376.	13.7	26
5	Distribution Cutoff for Clusters near the Gel Point. <i>ACS Polymers Au</i> , 2022, 2, 361-370.	4.1	4
6	Physical networks from entropy-driven non-covalent interactions. <i>Nature Communications</i> , 2021, 12, 746.	12.8	55
7	Atomistic Modeling of PEDOT:PSS Complexes I: DFT Benchmarking. <i>Macromolecules</i> , 2021, 54, 3634-3646.	4.8	14
8	Weakening of Solvation-Induced Ordering by Composition Fluctuation in Salt-Doped Block Polymers. <i>ACS Macro Letters</i> , 2021, 10, 545-550.	4.8	8
9	Dual Solvent Li ⁺ Solvation Enables High-Performance Metal Batteries. <i>Advanced Materials</i> , 2021, 33, e2008619.	21.0	123
10	Phase segregation mechanisms of small molecule-polymer blends unraveled by varying polymer chain architecture. <i>SmartMat</i> , 2021, 2, 367-377.	10.7	18
11	Potentiometric Measurement to Probe Solvation Energy and Its Correlation to Lithium Battery Cyclability. <i>Journal of the American Chemical Society</i> , 2021, 143, 10301-10308.	13.7	83
12	Atomistic Modeling of PEDOT:PSS Complexes II: Force Field Parameterization. <i>Macromolecules</i> , 2021, 54, 5354-5365.	4.8	9
13	Looping-in complexation and ion partitioning in nonstoichiometric polyelectrolyte mixtures. <i>Science Advances</i> , 2021, 7, .	10.3	25
14	Inside Front Cover: Volume 2 Issue 3. <i>SmartMat</i> , 2021, 2, iii.	10.7	0
15	A molecular design approach towards elastic and multifunctional polymer electronics. <i>Nature Communications</i> , 2021, 12, 5701.	12.8	75
16	Predictably Engineering the Viscoelastic Behavior of Dynamic Hydrogels via Correlation with Molecular Parameters. <i>Advanced Materials</i> , 2021, 33, e2104460.	21.0	24
17	Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery. <i>Journal of the American Chemical Society</i> , 2021, 143, 18703-18713.	13.7	205
18	Early-career investigator special issue. <i>Journal of Polymer Science</i> , 2021, 59, 2364-2364.	3.8	0

#	ARTICLE	IF	CITATIONS
19	TCRâ€™pMHC bond conformation controls TCR ligand discrimination. <i>Cellular and Molecular Immunology</i> , 2020, 17, 203-217.	10.5	25
20	Comparing Experimental Phase Behavior of Ion-Doped Block Copolymers with Theoretical Predictions Based on Selective Ion Solvation. <i>Macromolecules</i> , 2020, 53, 3956-3966.	4.8	20
21	Molecular design for electrolyte solvents enabling energy-dense and long-cycling lithium metal batteries. <i>Nature Energy</i> , 2020, 5, 526-533.	39.5	642
22	Chromatic neuronal jamming in a primitive brain. <i>Nature Physics</i> , 2020, 16, 553-557.	16.7	5
23	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. <i>Journal of the American Chemical Society</i> , 2020, 142, 7393-7403.	13.7	225
24	Dendrite Suppression by a Polymer Coating: A Coarseâ€Grained Molecular Study. <i>Advanced Functional Materials</i> , 2020, 30, 1910138.	14.9	49
25	Electrochemical generation of liquid and solid sulfur on two-dimensional layered materials with distinct areal capacities. <i>Nature Nanotechnology</i> , 2020, 15, 231-237.	31.5	65
26	Transient Voltammetry with Ultramicroelectrodes Reveals the Electron Transfer Kinetics of Lithium Metal Anodes. <i>ACS Energy Letters</i> , 2020, 5, 701-709.	17.4	91
27	Mechanically resolved imaging of bacteria using expansion microscopy. <i>PLoS Biology</i> , 2019, 17, e3000268.	5.6	43
28	Reversible Gelation of Entangled Ionomers. <i>Macromolecules</i> , 2019, 52, 8771-8780.	4.8	19
29	Molecular Architecture Directs Linearâ€Bottlebrushâ€Linear Triblock Copolymers to Self-Assemble to Soft Reprocessable Elastomers. <i>ACS Macro Letters</i> , 2019, 8, 1528-1534.	4.8	28
30	Nonpolar Alkanes Modify Lithiumâ€Ion Solvation for Improved Lithium Deposition and Stripping. <i>Advanced Energy Materials</i> , 2019, 9, 1902116.	19.5	86
31	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. <i>Joule</i> , 2019, 3, 2761-2776.	24.0	176
32	Ultrathin, flexible, solid polymer composite electrolyte enabled with aligned nanoporous host for lithium batteries. <i>Nature Nanotechnology</i> , 2019, 14, 705-711.	31.5	773
33	Tunable Coacervation of Well-Defined Homologous Polyanions and Polycations by Local Polarity. <i>ACS Central Science</i> , 2019, 5, 549-557.	11.3	76
34	Charge polarization near dielectric interfaces and the multiple-scattering formalism. <i>Soft Matter</i> , 2019, 15, 2125-2134.	2.7	12
35	Impact of Liquid-Crystalline Chain Alignment on Charge Transport in Conducting Polymers. <i>Macromolecules</i> , 2019, 52, 8932-8939.	4.8	9
36	Self-healing of electrical damage in polymers using superparamagnetic nanoparticles. <i>Nature Nanotechnology</i> , 2019, 14, 151-155.	31.5	169

#	ARTICLE	IF	CITATIONS
37	Ion Distribution in Microphase-Separated Copolymers with Periodic Dielectric Permittivity. <i>Macromolecules</i> , 2018, 51, 1986-1991.	4.8	31
38	Tuning Precursor Reactivity toward Nanometer-Size Control in Palladium Nanoparticles Studied by in Situ Small Angle X-ray Scattering. <i>Chemistry of Materials</i> , 2018, 30, 1127-1135.	6.7	43
39	Polarization energy of two charged dielectric spheres in close contact. <i>Molecular Systems Design and Engineering</i> , 2018, 3, 197-203.	3.4	4
40	Role of electrostatic correlations in polyelectrolyte charge association. <i>Journal of Chemical Physics</i> , 2018, 149, 163335.	3.0	51
41	Solvation and Entropic Regimes in Ion-Containing Block Copolymers. <i>Macromolecules</i> , 2018, 51, 7463-7475.	4.8	41
42	Crosslinked Poly(tetrahydrofuran) as a Loosely Coordinating Polymer Electrolyte. <i>Advanced Energy Materials</i> , 2018, 8, 1800703.	19.5	177
43	Dielectric virial expansion of polarizable dipolar spheres. <i>Journal of Chemical Physics</i> , 2018, 149, 163332.	3.0	3
44	Field-theoretic simulations of random copolymers with structural rigidity. <i>Soft Matter</i> , 2017, 13, 2760-2772.	2.7	19
45	High-temperature crystallization of nanocrystals into three-dimensional superlattices. <i>Nature</i> , 2017, 548, 197-201.	27.8	101
46	Image method for electrostatic energy of polarizable dipolar spheres. <i>Journal of Chemical Physics</i> , 2017, 147, 064908.	3.0	8
47	An $O(N^2)$ and parallel approach to integral problems by a kernel-independent fast multipole method: Application to polarization and magnetization of interacting particles. <i>Journal of Chemical Physics</i> , 2016, 145, .	3.0	13
48	Ordering Transition in Salt-Doped Diblock Copolymers. <i>Macromolecules</i> , 2016, 49, 3630-3638.	4.8	31
49	Blending Education and Polymer Science: Semiautomated Creation of a Thermodynamic Property Database. <i>Journal of Chemical Education</i> , 2016, 93, 1561-1568.	2.3	17
50	A Hybrid Human-computer Approach to the Extraction of Scientific Facts from the Literature. <i>Procedia Computer Science</i> , 2016, 80, 386-397.	2.0	18
51	Singular electrostatic energy of nanoparticle clusters. <i>Physical Review E</i> , 2016, 93, 022603.	2.1	5
52	Criticality and Connectivity in Macromolecular Charge Complexation. <i>Macromolecules</i> , 2016, 49, 8789-8800.	4.8	96
53	Image method for induced surface charge from many-body system of dielectric spheres. <i>Journal of Chemical Physics</i> , 2016, 145, 124903.	3.0	25
54	Broadly Accessible Self-Consistent Field Theory for Block Polymer Materials Discovery. <i>Macromolecules</i> , 2016, 49, 4675-4690.	4.8	150

#	ARTICLE	IF	CITATIONS
55	A theory of interactions between polarizable dielectric spheres. <i>Journal of Colloid and Interface Science</i> , 2016, 469, 237-241.	9.4	33
56	Tube Dynamics Works for Randomly Entangled Rings. <i>Physical Review Letters</i> , 2016, 116, 068307.	7.8	17
57	Sculpting bespoke mountains: Determining free energies with basis expansions. <i>Journal of Chemical Physics</i> , 2015, 143, 044101.	3.0	11
58	Chirality-selected phase behaviour in ionic polypeptide complexes. <i>Nature Communications</i> , 2015, 6, 6052.	12.8	208
59	Finding Entanglement Points in Simulated Polymer Melts. <i>Macromolecules</i> , 2015, 48, 99-110.	4.8	17
60	Simulating Constraint Release by Watching a Ring Cross Itself. <i>Macromolecules</i> , 2014, 47, 2479-2486.	4.8	10
61	Ternary, Tunable Polyelectrolyte Complex Fluids Driven by Complex Coacervation. <i>Macromolecules</i> , 2014, 47, 3076-3085.	4.8	127
62	Interfacial Tension of Polyelectrolyte Complex Coacervate Phases. <i>ACS Macro Letters</i> , 2014, 3, 565-568.	4.8	135
63	Evolutionary Optimization of Directed Self-Assembly of Triblock Copolymers on Chemically Patterned Substrates. <i>ACS Macro Letters</i> , 2014, 3, 747-752.	4.8	64
64	Collective and Single-Chain Correlations in Disordered Melts of Symmetric Diblock Copolymers: Quantitative Comparison of Simulations and Theory. <i>Macromolecules</i> , 2014, 47, 851-869.	4.8	56
65	Tubes, Topology, and Polymer Entanglement. <i>Macromolecules</i> , 2014, 47, 6077-6085.	4.8	44
66	Evolutionary pattern design for copolymer directed self-assembly. <i>Soft Matter</i> , 2013, 9, 11467.	2.7	57
67	Tube Diameter of Oriented and Stretched Polymer Melts. <i>Macromolecules</i> , 2013, 46, 1659-1672.	4.8	29
68	Fluctuations in Symmetric Diblock Copolymers: Testing Theories Old and New. <i>Physical Review Letters</i> , 2012, 108, 238301.	7.8	50
69	Tube Diameter of Stretched and Compressed Permanently Entangled Polymers. <i>Macromolecules</i> , 2012, 45, 9816-9822.	4.8	9
70	Test of a scaling hypothesis for the structure factor of disordered diblock copolymer melts. <i>Soft Matter</i> , 2012, 8, 11310.	2.7	34
71	Effects of tube persistence length on dynamics of mildly entangled polymers. <i>Journal of Rheology</i> , 2012, 56, 707-723.	2.6	21
72	Finding the Tube with Isoconfigurational Averaging. <i>Macromolecules</i> , 2011, 44, 8972-8980.	4.8	58

#	ARTICLE	IF	CITATIONS
73	Counting polymer knots to find the entanglement length. <i>Soft Matter</i> , 2011, 7, 10676.	2.7	41
74	Relationships among coarse-grained field theories of fluctuations in polymer liquids. <i>Journal of Chemical Physics</i> , 2011, 134, 084902.	3.0	15
75	Renormalized one-loop theory of correlations in disordered diblock copolymers. <i>Journal of Chemical Physics</i> , 2011, 135, 084902.	3.0	38
76	Phase Behavior of Nonfrustrated ABC Triblock Copolymers: Weak and Intermediate Segregation. <i>Macromolecules</i> , 2010, 43, 5128-5136.	4.8	83
77	Renormalized one-loop theory of correlations in polymer blends. <i>Journal of Chemical Physics</i> , 2009, 130, 224902.	3.0	49
78	Polydispersity effects in poly(isoprene-b-styrene-b-ethylene oxide) triblock terpolymers. <i>Journal of Chemical Physics</i> , 2009, 130, 234903.	3.0	30
79	Bicontinuous Polymeric Microemulsions from Polydisperse Diblock Copolymers. <i>Journal of Physical Chemistry B</i> , 2009, 113, 3726-3737.	2.6	33
80	Linear Response and Stability of Ordered Phases of Block Copolymer Melts. <i>Macromolecules</i> , 2008, 41, 942-954.	4.8	62
81	Renormalization of the one-loop theory of fluctuations in polymer blends and diblock copolymer melts. <i>Physical Review E</i> , 2007, 76, 061802.	2.1	75
82	SCFT Study of Nonfrustrated ABC Triblock Copolymer Melts. <i>Macromolecules</i> , 2007, 40, 4654-4668.	4.8	163
83	Reversible ion binding for polyelectrolytes with adaptive conformations. <i>AIChE Journal</i> , 0, , e17426.	3.6	6