You-Liang Zhu

List of Publications by Year
in descending order

69 papers	1,912 citations	346980 22 h-index	312153 41 g-index
70 all docs	70 docs citations	70 times ranked	2281 citing authors

#	Article	IF	Citations
1	Visualization of Macrophase Separation and Transformation in Immiscible Polymer Blends. CCS Chemistry, 2023, 5, 718-728.	4.6	4
2	The advantages of nanoparticle surfactants over Janus nanoparticles on structuring liquids. Nanoscale, 2022, 14, 3554-3560.	2.8	4
3	A chiral smectic phase induced by an alternating external field. Soft Matter, 2022, 18, 2569-2576.	1.2	2
4	Colloidal cubic diamond photonic crystals through cooperative self-assembly. Soft Matter, 2022, 18, 2654-2662.	1.2	2
5	Poly(Anthraquinonyl Sulfide)/CNT Composites as Highâ€Rateâ€Performance Cathodes for Nonaqueous Rechargeable Calciumâ€Ion Batteries. Advanced Science, 2022, 9, e2200397.	5.6	13
6	Coarse-grained Dynamics Simulation in Polymer Systems: from Structures to Material Properties. Chemical Research in Chinese Universities, 2022, 38, 653-670.	1.3	5
7	Mechanically Robust Skin-like Poly(urethane-urea) Elastomers Cross-Linked with Hydrogen-Bond Arrays and Their Application as High-Performance Ultrastretchable Conductors. Macromolecules, 2022, 55, 5816-5825.	2.2	35
8	Interactions on Proteins Arising from the Self-Assembly of a Polyelectrolyte Brush. Langmuir, 2022, 38, 7759-7765.	1.6	0
9	Healable and Recyclable Elastomers with Recordâ€High Mechanical Robustness, Unprecedented Crack Tolerance, and Superhigh Elastic Restorability. Advanced Materials, 2021, 33, e2101498.	11.1	227
10	Softness-Enhanced Self-Assembly of Pyrochlore- and Perovskite-like Colloidal Photonic Crystals from Triblock Janus Particles. Journal of Physical Chemistry Letters, 2021, 12, 7159-7165.	2.1	9
11	Self-Assembly Behaviors of Giant Amphiphiles Containing Cubic Cage-like â€œMonomersâ€• Macromolecules, 2021, 54, 8601-8611.	2.2	4
12	Intercluster Exchange-Stabilized Novel Complex Colloidal Ï‡c Phase. Journal of Physical Chemistry Letters, 2021, 12, 8872-8881.	2.1	2
13	Probing Intermittent Motion of Polymer Chains in Weakly Attractive Nanocomposites. Chinese Journal of Polymer Science (English Edition), 2020, 38, 620-628.	2.0	3
14	Building Block Design for Minimizing Defects in the Construction of Two-Dimensional Covalent Organic Frameworks. Journal of Physical Chemistry Letters, 2020, 11, 179-183.	2.1	13
15	A controlling parameter of topological defects in two-dimensional covalent organic frameworks. Nanoscale, 2020, 12, 22107-22115.	2.8	8
16	Brownian Diffusion of Individual Janus Nanoparticles at Water/Oil Interfaces. ACS Nano, 2020, 14, 10095-10103.	7.3	22
17	Mechanisms of Defect Correction by Reversible Chemistries in Covalent Organic Frameworks. Journal of Physical Chemistry Letters, 2020, 11, 9952-9956.	2.1	17
18	Inverse Design of Molecular Weight Distribution in Controlled Polymerization via a One-Pot Reaction Strategy. Macromolecules, 2020, 53, 6409-6419.	2.2	22

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19	Cellulose-Based Superhydrophobic Surface Decorated with Functional Groups Showing Distinct Wetting Abilities to Manipulate Water Harvesting. ACS Applied Materials & Interfaces, 2020, 12, 40968-40978.	4.0	49
20	The <scp>ENUF</scp> methodâ€”Ewald summation based on <scp>nonuniform</scp> fast Fourier transform: Implementation, parallelization, and application. Journal of Computational Chemistry, 2020, 41, 2316-2335.	1.5	3
21	Self-Assembly of Single-Polymer-Tethered Nanoparticle Amphiphiles upon Varying Tail Length. Nanomaterials, 2020, 10, 2108.	1.9	1
22	Remalleable, Healable, and Highly Sustainable Supramolecular Polymeric Materials Combining Superhigh Strength and Ultrahigh Toughness. ACS Applied Materials & Interfaces, 2020, 12, 30805-30814.	4.0	111
23	The coarse-grained models of poly(ethylene oxide) and poly(propylene oxide) homopolymers and poloxamers in big multipole water (BMW) and MARTINI frameworks. Physical Chemistry Chemical Physics, 2020, 22, 15976-15985.	1.3	10
24	Anion Substitution in Porous Aromatic Frameworks: Boosting Molecular Permeability and Selectivity for Membrane Acetylene Separation. Advanced Materials, 2020, 32, e1907449.	11.1	34
25	Kinetics-controlled design principles for two-dimensional open lattices using atom-mimicking patchy particles. Nanoscale, 2020, 12, 4544-4551.	2.8	8
26	Unveiling the Role of Hydroxyl Architecture on Polysulfide Trapping for High-Performance Lithiumâ€“Sulfur Batteries. ACS Applied Energy Materials, 2020, 3, 4023-4032.	2.5	11
27	Influence of lamellar thickness on the transformation of isotactic polybutylene-1/carbon nanotube nanocomposites. CrystEngComm, 2020, 22, 2990-2997.	1.3	5
28	Heterogeneous dynamics of unentangled chains in polymer nanocomposites. Journal of Chemical Physics, 2019, 150, 184903.	1.2	6
29	Synergic Catalysts of Polyoxometalate@Cationic Porous Aromatic Frameworks: Reciprocal Modulation of Both Capture and Conversion Materials. Advanced Materials, 2019, 31, e1902444.	11.1	65
30	Enthalpy-driven self-assembly of amphiphilic Janus dendrimers into onion-like vesicles: a Janus particle model. Nanoscale, 2019, 11, 17350-17356.	2.8	18
31	Understanding the desulphurization process in an ionic porous aromatic framework. Chemical Science, 2019, 10, 606-613.	3.7	47
32	Effect of the Self-Assembled Structures of Hydrated Polyzwitterionic and Polyanionic Brushes on Their Self-Cleaning Capabilities. Langmuir, 2019, 35, 6669-6675.	1.6	6
33	Autonomous helical propagation of active toroids with mechanical action. Nature Communications, 2019, 10, 1080.	5.8	35
34	Coupling and decoupling between translational and rotational dynamics in supercooled monodisperse soft Janus particles. Soft Matter, 2019, 15, 3343-3352.	1.2	9
35	Associating behavior of one polyimide with high molecular weight in solution through a relatively weak interaction. Polymer, 2018, 141, 166-174.	1.8	9
36	Electrostatic interactions in soft particle systems: mesoscale simulations of ionic liquids. Soft Matter, 2018, 14, 4252-4267.	1.2	21

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37	Employing multi-GPU power for molecular dynamics simulation: an extension of GALAMOST. Molecular Physics, 2018, 116, 1065-1077.	0.8	38
38	Kinetic step-growth polymerization: A dissipative particle dynamics simulation study. Journal of Chemical Physics, 2018, 148, 024901.	1.2	11
39	Improving Performance of Allâ€Polymer Solar Cells Through Backbone Engineering of Both Donors and Acceptors. Solar Rrl, 2018, 2, 1800247.	3.1	17
40	A Crystalline Polyimide Porous Organic Framework for Selective Adsorption of Acetylene over Ethylene. Journal of the American Chemical Society, 2018, 140, 15724-15730.	6.6	207
41	Construction of Porous Aromatic Frameworks with Exceptional Porosity via Building Unit Engineering. Advanced Materials, 2018, 30, e1804169.	11.1	66
42	Hybrid Particle-Field Molecular Dynamics Simulations of Charged Amphiphiles in an Aqueous Environment. Journal of Chemical Theory and Computation, 2018, 14, 4928-4937.	2.3	23
43	General patchy ellipsoidal particle model for the aggregation behaviors of shape- and/or surface-anisotropic building blocks. Soft Matter, 2018, 14, 7625-7633.	1.2	32
44	Molecular dynamics simulation of antipolyelectrolyte effect and solubility of polyzwitterions. Chemical Research in Chinese Universities, 2017, 33, 261-267.	1.3	7
45	Enhancement of surface nonwettability by grafting loops. Physical Chemistry Chemical Physics, 2017, 19, 4710-4718.	1.3	6
46	Chiral Assemblies from an Achiral Pyridiniumâ€Tailored Anthracene. Chemistry - A European Journal, 2017, 23, 1422-1426.	1.7	12
47	GPU-Accelerated Molecular Dynamics Simulation to Study Liquid Crystal Phase Transition Using Coarse-Grained Gay-Berne Anisotropic Potential. PLoS ONE, 2016, 11, e0151704.	1.1	9
48	The mechanism of the emergence of distinct overstretched DNA states. Journal of Chemical Physics, 2016, 144, 024901.	1.2	6
49	Probing heterogeneous dynamics from spatial density correlation in glass-forming liquids. Physical Review E, 2016, 94, 062601.	0.8	4
50	A kinetic chain growth algorithm in coarse-grained simulations. Journal of Computational Chemistry, 2016, 37, 2634-2646.	1.5	51
51	Supracolloidal fullerene-like cages: design principles and formation mechanisms. Physical Chemistry Chemical Physics, 2016, 18, 32534-32540.	1.3	4
52	Understanding the wettability of a hairy surface: effect of hair rigidity and topology. Physical Chemistry Chemical Physics, 2016, 18, 18767-18775.	1.3	8
53	Three-dimensional inverse design of nanopatterns with block copolymers and homopolymers. Nanoscale, 2016, 8, 5235-5244.	2.8	9
54	Hybrid particleâ€“field molecular dynamics simulation for polyelectrolyte systems. Physical Chemistry Chemical Physics, 2016, 18, 9799-9808.	1.3	34

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55	A versatile model for soft patchy particles with various patch arrangements. Soft Matter, 2016, 12, 741-749.	1.2	37
56	Decoupling of relaxation and diffusion in random pinning glass-forming liquids. Journal of Chemical Physics, 2015, 142, 124507.	1.2	22
57	Development of phenylboronic acid-functionalized nanoparticles for emodin delivery. Journal of Materials Chemistry B, 2015, 3, 3840-3847.	2.9	25
58	Tuning surface wettability by designing hairy structures. Physical Review E, 2015, 91, 020401.	0.8	12
59	Structure and Dynamics Properties at Interphase Region in the Composite of Polystyrene and Cross-Linked Polystyrene Soft Nanoparticle. Macromolecules, 2015, 48, 2751-2760.	2.2	59
60	Self-assembly of two-patch particles in solution: a Brownian dynamics simulation study. Molecular Simulation, 2014, 40, 449-457.	0.9	8
61	A simulation model for soft triblock Janus particles and their ordered packing. RSC Advances, 2013, 3, 813-822.	1.7	33
62	GALAMOST: GPU-accelerated large-scale molecular simulation toolkit. Journal of Computational Chemistry, 2013, 34, 2197-2211.	1.5	201
63	Polymer-grafted nanoparticles prepared by surface-initiated polymerization: the characterization of polymer chain conformation, grafting density and polydispersity correlated to the grafting surface curvature. Physical Chemistry Chemical Physics, 2013, 15, 15356.	1.3	20
64	Synthesize Multiblock Copolymers via Complex Formations between Î²-Cyclodextrin and Adamantane Groups Terminated at Diblock Copolymer Ends: A Brownian Dynamics Simulation Study. Journal of Physical Chemistry B, 2013, 117, 16283-16291.	1.2	5
65	Note: Different micellization behavior of miktoarm star-like and diblock copolymers. Journal of Chemical Physics, 2012, 137, 246102.	1.2	4
66	A highly coarse-grained model to simulate entangled polymer melts. Journal of Chemical Physics, 2012, 136, 144903.	1.2	16
67	Influence of Grafting Surface Curvature on Chain Polydispersity and Molecular Weight in Concave Surface-Initiated Polymerization. ACS Macro Letters, 2012, 1, 1249-1253.	2.3	38
68	Brownian dynamics simulation study on the self-assembly of incompatible star-like block copolymers in dilute solution. Physical Chemistry Chemical Physics, 2012, 14, 4964.	1.3	25
69	Phase diagram of spherical particles interacted with harmonic repulsions. Journal of Chemical Physics, 2011, 134, 044903.	1.2	22