

Xiao-Liang Wang

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Optical Imaging of the Molecular Mobility of Single Polystyrene Nanospheres. <i>Journal of the American Chemical Society</i> , 2022, 144, 1267-1273.	13.7	7
2	A “Two-in-One” Strategy for Flexible Aqueous Batteries Operated at ~80 °C. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	45
3	Probing the Dynamic Structural Evolution of End-Functionalized Polybutadiene/Organo-Clay Nanocomposite Gels before and after Yielding by Nonlinear Rheology and 1H Double-Quantum NMR. <i>Polymers</i> , 2022, 14, 1518.	4.5	2
4	Biocompatible <sc>Nanotube</sc>/polydopamine<sc>arginine</sc>glycine<sc>aspartic acid</sc> coating on <sc>Ti6Al4V</sc> enhances osteogenic properties for biomedical applications. <i>Microscopy Research and Technique</i> , 2022, 85, 1518-1526.	2.2	4
5	Unexpected Role of Short Chains in Entangled Polymer Networks. <i>ACS Macro Letters</i> , 2022, 11, 669-674.	4.8	8
6	Interplay of Crosslinking Structures and Segmental Dynamics in Solid-Liquid Elastomers. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2022, 40, 1297-1306.	3.8	3
7	Chain dynamics and crystalline network structure of poly[<i>R</i>-3-hydroxybutyrate-<i>co</i>-4-hydroxybutyrate] as revealed by solid-state NMR. <i>Soft Matter</i> , 2021, 17, 4195-4203.	2.7	5
8	A Superstrong and Reversible Ionic Crystal-Based Adhesive Inspired by Ice Adhesion. <i>Angewandte Chemie</i> , 2021, 133, 9030-9041.	2.0	15
9	A Superstrong and Reversible Ionic Crystal-Based Adhesive Inspired by Ice Adhesion. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8948-8959.	13.8	77
10	A Printable and Conductive Yield-Stress Fluid as an Ultrastretchable Transparent Conductor. <i>Research</i> , 2021, 2021, 9874939.	5.7	9
11	Hybrid Liquid-Crystalline Electrolytes with High-Temperature-Stable Channels for Anhydrous Proton Conduction. <i>Journal of the American Chemical Society</i> , 2021, 143, 21433-21442.	13.7	45
12	Sub-10 nm Feature Sizes of Disordered Polystyrene- <i>block</i> -poly(methyl methacrylate) Copolymer Films Achieved by Ionic Liquid Additives with Selectively Distributed Charge Interactions. <i>ACS Applied Polymer Materials</i> , 2020, 2, 427-436.	4.4	10
13	A Low-Temperature Solution-Processed CuSCN/Polymer Hole Transporting Layer Enables High Efficiency for Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46373-46380.	8.0	19
14	Open and Closed Layered Nanostructures with Sub-10 nm Periodicity Self-Assembled from Hydrophilic [60]Fullerene-Based Giant Surfactants. <i>Langmuir</i> , 2020, 36, 7289-7295.	3.5	3
15	Hierarchical Dynamics in a Transient Polymer Network Cross-Linked by Orthogonal Dynamic Bonds. <i>Macromolecules</i> , 2020, 53, 5937-5949.	4.8	29
16	Dual Cross-Linked Vinyl Vitriimer with Efficient Self-Catalysis Achieving Triple-Shape Memory Properties. <i>Macromolecular Rapid Communications</i> , 2019, 40, e1900313.	3.9	38
17	Mechanism of Nonmonotonic Increase in Polymer Size: Comparison between Linear and Ring Chains at High Shear Rates. <i>Macromolecules</i> , 2019, 52, 8144-8154.	4.8	12
18	Omnidirectional Printing of Soft Elastomer for Liquid-State Stretchable Electronics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 18590-18598.	8.0	29

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19	A high performance SnO ₂ /C nanocomposite cathode for aluminum-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7213-7220.	10.3	73
20	Observing different dynamic behaviors of weakly and strongly adsorbed polystyrene chains at interfaces. <i>Soft Matter</i> , 2018, 14, 2762-2766.	2.7	9
21	Dependences of Confining Size and Interfacial Curvature on the Glass Transition of Polydimethylsiloxane in Self-Assembled Block Copolymers. <i>Macromolecular Chemistry and Physics</i> , 2018, 219, 1700518.	2.2	1
22	Multiple-responsive shape memory polyacrylonitrile/graphene nanocomposites with rapid self-healing and recycling properties. <i>RSC Advances</i> , 2018, 8, 1225-1231.	3.6	25
23	Molecular weight and interfacial effect on the kinetic stabilization of ultrathin polystyrene films. <i>Polymer</i> , 2018, 134, 204-210.	3.8	6
24	A sensitive surface-enhanced Raman scattering method for chondroitin sulfate with Victoria blue 4R molecular probes in nanogold sol substrate. <i>Luminescence</i> , 2018, 33, 131-137.	2.9	5
25	Interplay between Free Surface and Solid Interface Nucleation on Two-Step Crystallization of Poly(ethylene terephthalate) Thin Films Studied by Fast Scanning Calorimetry. <i>Macromolecules</i> , 2018, 51, 5209-5218.	4.8	26
26	A simple gold nanoplasmonic SERS method for trace Hg ²⁺ based on aptamer-regulating graphene oxide catalysis. <i>Luminescence</i> , 2018, 33, 1113-1121.	2.9	15
27	Crystallization kinetics of syndiotactic polypropylene confined in nanoporous alumina. <i>Polymer</i> , 2017, 110, 273-283.	3.8	20
28	Cold flow of three-dimensional confined polymer systems. <i>Polymer</i> , 2017, 111, 67-72.	3.8	3
29	Supramolecular Gel-Templated In Situ Synthesis and Assembly of CdS Quantum Dots Gels. <i>Nanoscale Research Letters</i> , 2017, 12, 30.	5.7	6
30	Stabilization of Poly(methyl methacrylate) Nanofibers with Core-Shell Structures Confined in AAO Templates by the Balance between Geometric Curvature, Interfacial Interactions, and Cooling Rate. <i>Macromolecules</i> , 2017, 50, 1599-1609.	4.8	23
31	Self-assembly hydrogels as multifunctional drug delivery of paclitaxel for synergistic tumour-targeting and biocompatibility in vitro and in vivo. <i>Journal of Pharmacy and Pharmacology</i> , 2017, 69, 967-977.	2.4	18
32	How thermal stress alters the confinement of polymers vitrified in nanopores. <i>Journal of Chemical Physics</i> , 2017, 146, 203319.	3.0	12
33	Phase separation dynamics of a poly(vinyl methyl ether)/polystyrene (PVME/PS) blend studied by ultrafast differential scanning calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 1357-1364.	2.1	8
34	Rapid self-healing and recycling of multiple-responsive mechanically enhanced epoxy resin/graphene nanocomposites. <i>RSC Advances</i> , 2017, 7, 46336-46343.	3.6	23
35	Immunocontrolling Graphene Oxide Catalytic Nanogold Reaction and Its Application to SERS Quantitative Analysis. <i>ACS Omega</i> , 2017, 2, 7349-7358.	3.5	18
36	Associated inter- and intrachain conformational transitions in polystyrene solutions. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 1373-1379.	2.1	5

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37	Viscoelasticity and Structures in Chemically and Physically Dual-Cross-Linked Hydrogels: Insights from Rheology and Proton Multiple-Quantum NMR Spectroscopy. <i>Macromolecules</i> , 2017, 50, 9340-9352.	4.8	59
38	Nanostructures and Dynamics of Isochorically Confined Amorphous Drug Mediated by Cooling Rate, Interfacial, and Intermolecular Interactions. <i>Journal of Physical Chemistry B</i> , 2017, 121, 10704-10716.	2.6	16
39	A Cold-Flow Process for Fabricating a High-Volumetric-Energy-Density Anode for Lithium-Ion Batteries. <i>Advanced Materials Technologies</i> , 2017, 2, 1600156.	5.8	8
40	Synthesis of Site-Specific Dye-Labeled Polymer via Atom Transfer Radical Polymerization (ATRP) for Quantitative Characterization of the Well-Defined Interchain Distance. <i>Macromolecular Rapid Communications</i> , 2017, 38, 1600568.	3.9	8
41	Synthesis of polymer with defined fluorescent end groups via reversible addition fragmentation transfer polymerization for characterizing the conformations of polymer chains in solutions. <i>Journal of Polymer Science Part A</i> , 2016, 54, 2413-2420.	2.3	15
42	Low-temperature processing of polymer nanoparticles for bioactive composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 2514-2520.	2.1	8
43	Twisted Polymer Microfiber/Nanofiber Yarns Prepared via Direct Fabrication. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 7048-7051.	3.7	11
44	Crosslinked P(VDF-CTFE)/PS-COOH nanocomposites for high-energy-density capacitor application. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 1160-1169.	2.1	23
45	Probing the two-stage transition upon crossing the glass transition of polystyrene by solid-state NMR. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2016, 34, 446-456.	3.8	8
46	Temperature dependent intercalation and self-exfoliation of clay/polymer nanocomposite. <i>Polymer</i> , 2016, 93, 204-212.	3.8	16
47	Effect of geometric curvature on vitrification behavior for polymer nanotubes confined in anodic aluminum oxide templates. <i>Physical Review E</i> , 2015, 92, 032306.	2.1	31
48	Effect of PEO molecular weight on the miscibility and dynamics in epoxy/PEO blends. <i>European Physical Journal E</i> , 2015, 38, 118.	1.6	7
49	Encapsulation of 10-Hydroxy Camptothecin in Supramolecular Hydrogel as an Injectable Drug Delivery System. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 2266-2275.	3.3	20
50	Achieving High Performance Electric Field Induced Strain: A Rational Design of Hyperbranched Aromatic Polyamide Functionalized Graphene-Polyurethane Dielectric Elastomer Composites. <i>Journal of Physical Chemistry B</i> , 2015, 119, 4521-4530.	2.6	46
51	Hydrogenation induced deviation of temperature and concentration dependences of polymer-solvent interactions in poly(vinyl chloride) and a new eco-friendly plasticizer. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	2
52	Responsive Gel-like Supramolecular Network Based on Pillar[6]arene-Ferrocenium Recognition Motifs in Polymeric Matrix. <i>Macromolecules</i> , 2015, 48, 4403-4409.	4.8	85
53	Facile synthesis of tin dioxide-based high performance anodes for lithium ion batteries assisted by graphene gel. <i>Journal of Power Sources</i> , 2015, 295, 41-46.	7.8	21
54	Confined Nucleation and Crystallization Kinetics in Lamellar Crystalline-Amorphous Diblock Copolymer Poly(μ -caprolactone)-b-poly(4-vinylpyridine). <i>Macromolecules</i> , 2015, 48, 1804-1812.	4.8	25

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55	The Optimized Tin Dioxide-Carbon Nanocomposites as High-performance Anode for Lithium ion Battery with a long cycle life. <i>Electrochimica Acta</i> , 2015, 167, 69-74.	5.2	14
56	Effects of residual surfactant on the glass transition behavior of polystyrene/gold nanocomposites. <i>Polymer</i> , 2015, 77, 14-20.	3.8	7
57	In situ cross-linked and highly carboxylated poly(vinyl alcohol) nanofibrous membranes for efficient adsorption of proteins. <i>Journal of Materials Chemistry B</i> , 2015, 3, 7281-7290.	5.8	41
58	Growth of Polymer Nanorods with Different Core-Shell Dynamics via Capillary Force in Nanopores. <i>Macromolecules</i> , 2014, 47, 8722-8728.	4.8	22
59	Ultra high permittivity and significantly enhanced electric field induced strain in PEDOT:PSS-RGO@PU intelligent shape-changing electro-active polymers. <i>RSC Advances</i> , 2014, 4, 64061-64067.	3.6	50
60	Gamma ray irradiated silicon nanowires: An effective model to investigate defects at the interface of Si/SiO _x . <i>Applied Physics Letters</i> , 2014, 104, .	3.3	3
61	Rheological study of the gelation of cross-linking polyhedral oligomeric silsesquioxanes (POSS)/PU composites. <i>Polymer</i> , 2014, 55, 1282-1291.	3.8	29
62	Investigation on the Mechanism of the Synthesis of Gold(I) Thiolate Complexes by NMR. <i>Journal of Physical Chemistry C</i> , 2014, 118, 10434-10440.	3.1	22
63	Diffusion Behavior of Polystyrene/Poly(2,6-dimethyl-1,4-phenylene oxide) (PS/PPO) Nanoparticles Mixture: Diffusion Mechanism for Liquid PS and Glassy PPO. <i>Macromolecules</i> , 2014, 47, 2131-2139.	4.8	6
64	Complex microstructures of ABC triblock copolymer thin films directed by polymer brushes based on self-consistent field theory. <i>Nanoscale Research Letters</i> , 2014, 9, 359.	5.7	5
65	Unique Interphase and Cross-Linked Network Controlled by Different Miscible Blocks in Nanostructured Epoxy/Block Copolymer Blends Characterized by Solid-State NMR. <i>Journal of Physical Chemistry C</i> , 2014, 118, 13285-13299.	3.1	34
66	The strong interaction between poly(vinyl chloride) and a new eco-friendly plasticizer: A combined experiment and calculation study. <i>Polymer</i> , 2014, 55, 2831-2840.	3.8	13
67	Critical Effect of Segmental Dynamics in Polybutadiene/Clay Nanocomposites Characterized by Solid State ¹ H NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5606-5614.	3.1	34
68	Thermo-reversible gelation of atactic poly(methyl methacrylate) in poly(ethylene glycol) oligomers. <i>European Physical Journal E</i> , 2013, 36, 9851.	1.6	2
69	Confinement-Induced Deviation of Chain Mobility and Glass Transition Temperature for Polystyrene/Au Nanoparticles. <i>Macromolecules</i> , 2013, 46, 2292-2297.	4.8	50
70	New Insight into Intermediate Precursors of Brust-Schiffrin Gold Nanoparticles Synthesis. <i>Journal of Physical Chemistry C</i> , 2013, 117, 11399-11404.	3.1	39
71	Thickness Dependence of Glass Transitions Measured by AC-Chip Calorimetry in Films with Controlled Interface. <i>Macromolecules</i> , 2013, 46, 7006-7011.	4.8	18
72	Characterization of the Mobility and Reactivity of Water Molecules on TiO ₂ Nanoparticles by ¹ H Solid-State Nuclear Magnetic Resonance. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10352-10356.	8.0	31

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73	Crowding-Induced Crystallization of Poly(Ethylene Terephthalate). <i>Journal of Macromolecular Science - Physics</i> , 2012, 51, 1893-1903.	1.0	3
74	Reentanglement Kinetics of Freeze-Dried Polymers above the Glass Transition Temperature. <i>Macromolecules</i> , 2012, 45, 6648-6651.	4.8	51
75	Tracking the interdiffusion of polymers at a molecular level by ^1H dipolar filter solid-state NMR under fast magic angle spinning. <i>Soft Matter</i> , 2011, 7, 691-697.	2.7	13
76	Detection of Interchain Proximity and Segmental Motion of Polymer Glass. <i>Macromolecules</i> , 2011, 44, 7445-7450.	4.8	21
77	Late-State Ripening Dynamics of a Polymer/Clay Nanocomposite. <i>Macromolecules</i> , 2010, 43, 1901-1906.	4.8	23
78	Steric effects on the rheology of nanocomposite gels of organoclay in dicarboxyl-terminated polybutadiene. <i>Soft Matter</i> , 2010, 6, 2442.	2.7	13
79	Enhanced Exfoliation of Organoclay in Partially End-Functionalized Non-Polar Polymer. <i>Macromolecular Materials and Engineering</i> , 2009, 294, 190-195.	3.6	15
80	Observation of silane coupling agents adsorbed on silica by solid state ^1H NMR under fast magic angle spinning. <i>Applied Surface Science</i> , 2008, 255, 2316-2321.	6.1	8
81	Probing the Contraction and Association of Polystyrene Chains in Semidilute Solution by Non-Radiative Energy Transfer. <i>Macromolecular Rapid Communications</i> , 2008, 29, 160-164.	3.9	4
82	Probing Chain Interpenetration in Polymer Glasses by ^1H Dipolar Filter Solid-State NMR under Fast Magic Angle Spinning. <i>Macromolecules</i> , 2007, 40, 4736-4739.	4.8	28
83	Characterization of Polymer Compatibility by ^1H Dipolar Filter Solid-State NMR under Fast Magic Angle Spinning. <i>Macromolecules</i> , 2007, 40, 9018-9025.	4.8	24
84	Various Types of Hydrogen Bonds, Their Temperature Dependence and Water-Polymer Interaction in Hydrated Poly(Acrylic Acid) as Revealed by ^1H Solid-State NMR Spectroscopy. <i>Macromolecules</i> , 2007, 40, 5776-5786.	4.8	66
85	Room temperature spontaneous exfoliation of organo-clay in liquid polybutadiene: Effect of polymer end-groups and the alkyl tail number of organic modifier. <i>Polymer</i> , 2007, 48, 7590-7597.	3.8	39
86	Unusual Rheological Behavior of Liquid Polybutadiene Rubber/Clay Nanocomposite Gels: The Role of Polymer-Clay Interaction, Clay Exfoliation, and Clay Orientation and Disorientation. <i>Macromolecules</i> , 2006, 39, 6653-6660.	4.8	64
87	Crystallization and Relaxation Behavior of Partially Disentangled Poly(vinyl chloride) Prepared from Large Molecule Solvent Dioctyl Phthalate. <i>Macromolecules</i> , 2002, 35, 7089-7092.	4.8	24