Xiao-Liang Wang

List of Publications by Year
in descending order

87	1,881	236925 25	330143 37
papers	citations	h-index	g-index

88	88	88	2570
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Responsive Gel-like Supramolecular Network Based on Pillar[6]areneâ€“Ferrocenium Recognition Motifs in Polymeric Matrix. Macromolecules, 2015, 48, 4403-4409.	4.8	85
2	A Superstrong and Reversible Ionic Crystalâ€Based Adhesive Inspired by Ice Adhesion. Angewandte Chemie - International Edition, 2021, 60, 8948-8959.	13.8	77
3	A high performance SnO₂/C nanocomposite cathode for aluminum-ion batteries. Journal of Materials Chemistry A, 2019, 7, 7213-7220.	10.3	73
4	Various Types of Hydrogen Bonds, Their Temperature Dependence and Waterâ^'Polymer Interaction in Hydrated Poly(Acrylic Acid) as Revealed by ¹H Solid-State NMR Spectroscopy. Macromolecules, 2007, 40, 5776-5786.	4.8	66
5	Unusual Rheological Behavior of Liquid Polybutadiene Rubber/Clay Nanocomposite Gels:Â The Role of Polymerâ^'Clay Interaction, Clay Exfoliation, and Clay Orientation and Disorientation. Macromolecules, 2006, 39, 6653-6660.	4.8	64
6	Viscoelasticity and Structures in Chemically and Physically Dual-Cross-Linked Hydrogels: Insights from Rheology and Proton Multiple-Quantum NMR Spectroscopy. Macromolecules, 2017, 50, 9340-9352.	4.8	59
7	Reentanglement Kinetics of Freeze-Dried Polymers above the Glass Transition Temperature. Macromolecules, 2012, 45, 6648-6651.	4.8	51
8	Confinement-Induced Deviation of Chain Mobility and Glass Transition Temperature for Polystyrene/Au Nanoparticles. Macromolecules, 2013, 46, 2292-2297.	4.8	50
9	Ultra high permittivity and significantly enhanced electric field induced strain in PEDOT:PSSâ€“RGO@PU intelligent shape-changing electro-active polymers. RSC Advances, 2014, 4, 64061-64067.	3.6	50
10	Achieving High Performance Electric Field Induced Strain: A Rational Design of Hyperbranched Aromatic Polyamide Functionalized Grapheneâ€“Polyurethane Dielectric Elastomer Composites. Journal of Physical Chemistry B, 2015, 119, 4521-4530.	2.6	46
11	A â€œTwoâ€inâ€Oneâ€•Strategy for Flexible Aqueous Batteries Operated at â^'80 Â°C. Advanced Functional Materials, 2022, 32, .	14.9	45
12	Hybrid Liquid-Crystalline Electrolytes with High-Temperature-Stable Channels for Anhydrous Proton Conduction. Journal of the American Chemical Society, 2021, 143, 21433-21442.	13.7	45
13	In situ cross-linked and highly carboxylated poly(vinyl alcohol) nanofibrous membranes for efficient adsorption of proteins. Journal of Materials Chemistry B, 2015, 3, 7281-7290.	5.8	41
14	Room temperature spontaneous exfoliation of organo-clay in liquid polybutadiene: Effect of polymer end-groups and the alkyl tail number of organic modifier. Polymer, 2007, 48, 7590-7597.	3.8	39
15	New Insight into Intermediate Precursors of Brustâ€“Schiffrin Gold Nanoparticles Synthesis. Journal of Physical Chemistry C, 2013, 117, 11399-11404.	3.1	39
16	Dual Crossâ€linked Vinyl Vitrimer with Efficient Selfâ€Catalysis Achieving Tripleâ€Shapeâ€Memory Properties. Macromolecular Rapid Communications, 2019, 40, e1900313.	3.9	38
17	Unique Interphase and Cross-Linked Network Controlled by Different Miscible Blocks in Nanostructured Epoxy/Block Copolymer Blends Characterized by Solid-State NMR. Journal of Physical Chemistry C, 2014, 118, 13285-13299.	3.1	34
18	Critical Effect of Segmental Dynamics in Polybutadiene/Clay Nanocomposites Characterized by Solid State ¹H NMR Spectroscopy. Journal of Physical Chemistry C, 2014, 118, 5606-5614.	3.1	34

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19	Characterization of the Mobility and Reactivity of Water Molecules on TiO₂ Nanoparticles by ¹H Solid-State Nuclear Magnetic Resonance. ACS Applied Materials & Interfaces, 2013, 5, 10352-10356.	8.0	31
20	Effect of geometric curvature on vitrification behavior for polymer nanotubes confined in anodic aluminum oxide templates. Physical Review E, 2015, 92, 032306.	2.1	31
21	Rheological study of the gelation of cross-linking polyhedral oligomeric silsesquioxanes (POSS)/PU composites. Polymer, 2014, 55, 1282-1291.	3.8	29
22	Omnidirectional Printing of Soft Elastomer for Liquid-State Stretchable Electronics. ACS Applied Materials & Interfaces, 2019, 11, 18590-18598.	8.0	29
23	Hierarchical Dynamics in a Transient Polymer Network Cross-Linked by Orthogonal Dynamic Bonds. Macromolecules, 2020, 53, 5937-5949.	4.8	29
24	Probing Chain Interpenetration in Polymer Glasses by1H Dipolar Filter Solid-State NMR under Fast Magic Angle Spinning. Macromolecules, 2007, 40, 4736-4739.	4.8	28
25	Interplay between Free Surface and Solid Interface Nucleation on Two-Step Crystallization of Poly(ethylene terephthalate) Thin Films Studied by Fast Scanning Calorimetry. Macromolecules, 2018, 51, 5209-5218.	4.8	26
26	Confined Nucleation and Crystallization Kinetics in Lamellar Crystallineâ€“Amorphous Diblock Copolymer Poly(Îµ-caprolactone)-b-poly(4-vinylpyridine). Macromolecules, 2015, 48, 1804-1812.	4.8	25
27	Multiple-responsive shape memory polyacrylonitrile/graphene nanocomposites with rapid self-healing and recycling properties. RSC Advances, 2018, 8, 1225-1231.	3.6	25
28	Crystallization and Relaxation Behavior of Partially Disentangled Poly(vinyl chloride) Prepared from Large Molecule Solvent Dioctyl Phthalate. Macromolecules, 2002, 35, 7089-7092.	4.8	24
29	Characterization of Polymer Compatibility by ¹H Dipolar Filter Solid-State NMR under Fast Magic Angle Spinning. Macromolecules, 2007, 40, 9018-9025.	4.8	24
30	Late-State Ripening Dynamics of a Polymer/Clay Nanocomposite. Macromolecules, 2010, 43, 1901-1906.	4.8	23
31	Crosslinked P(VDF-CTFE)/PS-COOH nanocomposites for high-energy-density capacitor application. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1160-1169.	2.1	23
32	Stabilization of Poly(methyl methacrylate) Nanofibers with Coreâ€“Shell Structures Confined in AAO Templates by the Balance between Geometric Curvature, Interfacial Interactions, and Cooling Rate. Macromolecules, 2017, 50, 1599-1609.	4.8	23
33	Rapid self-healing and recycling of multiple-responsive mechanically enhanced epoxy resin/graphene nanocomposites. RSC Advances, 2017, 7, 46336-46343.	3.6	23
34	Growth of Polymer Nanorods with Different Coreâ€“Shell Dynamics via Capillary Force in Nanopores. Macromolecules, 2014, 47, 8722-8728.	4.8	22
35	Investigation on the Mechanism of the Synthesis of Gold(I) Thiolate Complexes by NMR. Journal of Physical Chemistry C, 2014, 118, 10434-10440.	3.1	22
36	Detection of Interchain Proximity and Segmental Motion of Polymer Glass. Macromolecules, 2011, 44, 7445-7450.	4.8	21

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37	Facile synthesis of tin dioxide-based high performance anodes for lithium ion batteries assisted by graphene gel. Journal of Power Sources, 2015, 295, 41-46.	7.8	21
38	Encapsulation of 10-Hydroxy Camptothecin in Supramolecular Hydrogel as an Injectable Drug Delivery System. Journal of Pharmaceutical Sciences, 2015, 104, 2266-2275.	3.3	20
39	Crystallization kinetics of syndiotactic polypropylene confined in nanoporous alumina. Polymer, 2017, 110, 273-283.	3.8	20
40	A Low-Temperature Solution-Processed CuSCN/Polymer Hole Transporting Layer Enables High Efficiency for Organic Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 46373-46380.	8.0	19
41	Thickness Dependence of Glass Transitions Measured by AC-Chip Calorimetry in Films with Controlled Interface. Macromolecules, 2013, 46, 7006-7011.	4.8	18
42	Self-assembly hydrogels as multifunctional drug delivery of paclitaxel for synergistic tumour-targeting and biocompatibility in vitro and in vivo. Journal of Pharmacy and Pharmacology, 2017, 69, 967-977.	2.4	18
43	Immunocontrolling Graphene Oxide Catalytic Nanogold Reaction and Its Application to SERS Quantitative Analysis. ACS Omega, 2017, 2, 7349-7358.	3.5	18
44	Temperature dependent intercalation and selfâ€“exfoliation of clay/polymer nanocomposite. Polymer, 2016, 93, 204-212.	3.8	16
45	Nanostructures and Dynamics of Isochorically Confined Amorphous Drug Mediated by Cooling Rate, Interfacial, and Intermolecular Interactions. Journal of Physical Chemistry B, 2017, 121, 10704-10716.	2.6	16
46	Enhanced Exfoliation of Organoclay in Partially Endâ€Functionalized Nonâ€Polar Polymer. Macromolecular Materials and Engineering, 2009, 294, 190-195.	3.6	15
47	Synthesis of polymer with defined fluorescent end groups via reversible addition fragmentation transfer polymerization for characterizing the conformations of polymer chains in solutions. Journal of Polymer Science Part A, 2016, 54, 2413-2420.	2.3	15
48	A simple gold nanoplasmonic SERS method for trace Hg²⁺ based on aptamerâ€regulating graphene oxide catalysis. Luminescence, 2018, 33, 1113-1121.	2.9	15
49	A Superstrong and Reversible Ionic Crystalâ€Based Adhesive Inspired by Ice Adhesion. Angewandte Chemie, 2021, 133, 9030-9041.	2.0	15
50	The Optimized Tin Dioxide-Carbon Nanocomposites as High-performance Anode for Lithium ion Battery with a long cycle life. Electrochimica Acta, 2015, 167, 69-74.	5.2	14
51	Steric effects on the rheology of nanocomposite gels of organoclay in dicarboxyl-terminated polybutadiene. Soft Matter, 2010, 6, 2442.	2.7	13
52	Tracking the interdiffusion of polymers at a molecular level by¹H dipolar filter solid-state NMR under fast magic angle spinning. Soft Matter, 2011, 7, 691-697.	2.7	13
53	The strong interaction between poly(vinyl chloride) and a new eco-friendly plasticizer: A combined experiment and calculation study. Polymer, 2014, 55, 2831-2840.	3.8	13
54	How thermal stress alters the confinement of polymers vitrificated in nanopores. Journal of Chemical Physics, 2017, 146, 203319.	3.0	12

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55	Mechanism of Nonmonotonic Increase in Polymer Size: Comparison between Linear and Ring Chains at High Shear Rates. Macromolecules, 2019, 52, 8144-8154.	4.8	12
56	Twisted Polymer Microfiber/Nanofiber Yarns Prepared via Direct Fabrication. Industrial & Engineering Chemistry Research, 2016, 55, 7048-7051.	3.7	11
57	Sub-10 nm Feature Sizes of Disordered Polystyrene-block-poly(methyl methacrylate) Copolymer Films Achieved by Ionic Liquid Additives with Selectively Distributed Charge Interactions. ACS Applied Polymer Materials, 2020, 2, 427-436.	4.4	10
58	Observing different dynamic behaviors of weakly and strongly adsorbed polystyrene chains at interfaces. Soft Matter, 2018, 14, 2762-2766.	2.7	9
59	A Printable and Conductive Yield-Stress Fluid as an Ultrastretchable Transparent Conductor. Research, 2021, 2021, 9874939.	5.7	9
60	Observation of silane coupling agents adsorbed on silica by solid state 1H NMR under fast magic angle spinning. Applied Surface Science, 2008, 255, 2316-2321.	6.1	8
61	Lowâ€temperature processing of polymer nanoparticles for bioactive composites. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2514-2520.	2.1	8
62	Probing the two-stage transition upon crossing the glass transition of polystyrene by solid-state NMR. Chinese Journal of Polymer Science (English Edition), 2016, 34, 446-456.	3.8	8
63	Phase separation dynamics of a poly(vinyl methyl ether)/polystyrene (<scp>PVME/PS</scp>) blend studied by ultrafast differential scanning calorimetry. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1357-1364.	2.1	8
64	A Coldâ€Flow Process for Fabricating a Highâ€Volumetricâ€Energyâ€Density Anode for Lithiumâ€Ion Batteries. Advanced Materials Technologies, 2017, 2, 1600156.	5.8	8
65	Synthesis of Siteâ€Specific Dyeâ€Labeled Polymer via Atom Transfer Radical Polymerization (ATRP) for Quantitative Characterization of the Wellâ€Defined Interchain Distance. Macromolecular Rapid Communications, 2017, 38, 1600568.	3.9	8
66	Unexpected Role of Short Chains in Entangled Polymer Networks. ACS Macro Letters, 2022, 11, 669-674.	4.8	8
67	Effect of PEO molecular weight on the miscibility and dynamics in epoxy/PEO blends. European Physical Journal E, 2015, 38, 118.	1.6	7
68	Effects of residual surfactant on the glass transition behavior of polystyrene/gold nanocomposites. Polymer, 2015, 77, 14-20.	3.8	7
69	Optical Imaging of the Molecular Mobility of Single Polystyrene Nanospheres. Journal of the American Chemical Society, 2022, 144, 1267-1273.	13.7	7
70	Diffusion Behavior of Polystyrene/Poly(2,6-dimethyl-1,4-phenylene oxide) (PS/PPO) Nanoparticles Mixture: Diffusion Mechanism for Liquid PS and Glassy PPO. Macromolecules, 2014, 47, 2131-2139.	4.8	6
71	Supramolecular Gel-Templated In Situ Synthesis and Assembly of CdS Quantum Dots Gels. Nanoscale Research Letters, 2017, 12, 30.	5.7	6
72	Molecular weight and interfacial effect on the kinetic stabilization of ultrathin polystyrene films. Polymer, 2018, 134, 204-210.	3.8	6

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73	Complex microstructures of ABC triblock copolymer thin films directed by polymer brushes based on self-consistent field theory. Nanoscale Research Letters, 2014, 9, 359.	5.7	5
74	Associated interâ€•and intrachain conformational transitions in polystyrene solutions. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 1373-1379.	2.1	5
75	A sensitive surfaceâ€enhanced Raman scattering method for chondroitin sulfate with Victoria blue 4R molecular probes in nanogold sol substrate. Luminescence, 2018, 33, 131-137.	2.9	5
76	Chain dynamics and crystalline network structure of poly[R-3-hydroxybutyrate-co-4-hydroxybutyrate] as revealed by solid-state NMR. Soft Matter, 2021, 17, 4195-4203.	2.7	5
77	Probing the Contraction and Association of Polystyrene Chains in Semidilute Solution by Nonâ€Radiative Energy Transfer. Macromolecular Rapid Communications, 2008, 29, 160-164.	3.9	4
78	Biocompatible <scp>Nanotubeâ€Strontium</scp>/polydopamineâ€arginineâ€“glycineâ€“aspartic acid coating on <scp>Ti6Al4V</scp> enhances osteogenic properties for biomedical applications. Microscopy Research and Technique, 2022, 85, 1518-1526.	2.2	4
79	Crowding-Induced Crystallization of Poly(Ethylene Terephthalate). Journal of Macromolecular Science - Physics, 2012, 51, 1893-1903.	1.0	3
80	Gamma ray irradiated silicon nanowires: An effective model to investigate defects at the interface of Si/SiOx. Applied Physics Letters, 2014, 104, .	3.3	3
81	Cold flow of three-dimensional confined polymer systems. Polymer, 2017, 111, 67-72.	3.8	3
82	Open and Closed Layered Nanostructures with Sub-10 nm Periodicity Self-Assembled from Hydrophilic [60]Fullerene-Based Giant Surfactants. Langmuir, 2020, 36, 7289-7295.	3.5	3
83	Interplay of Crosslinking Structures and Segmental Dynamics in Solid-Liquid Elastomers. Chinese Journal of Polymer Science (English Edition), 2022, 40, 1297-1306.	3.8	3
84	Thermo-reversible gelation of atactic poly(methyl methacrylate) in poly(ethylene glycol) oligomers. European Physical Journal E, 2013, 36, 9851.	1.6	2
85	Hydrogenation induced deviation of temperature and concentration dependences of polymer-solvent interactions in poly(vinyl chloride) and a new eco-friendly plasticizer. European Physical Journal Plus, 2015, 130, 1.	2.6	2
86	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. Polymers, 2022, 14, 1518.	4.5	2
87	Dependences of Confining Size and Interfacial Curvature on the Glass Transition of Polydimethylsiloxane in Selfâ€Assembled Block Copolymers. Macromolecular Chemistry and Physics, 2018, 219, 1700518.	2.2	1