

Huan Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

40
papers

2,648
citations

236612

25
h-index

264894

42
g-index

42
all docs

42
docs citations

42
times ranked

2480
citing authors

#	ARTICLE	IF	CITATIONS
1	Understanding the cavitation and crazing behavior in the polymer nanocomposite by tuning shape and size of nanofiller. <i>Polymer</i> , 2020, 188, 122103.	1.8	11
2	A Polymer with Mechanochemically Active Hidden Length. <i>Journal of the American Chemical Society</i> , 2020, 142, 18687-18697.	6.6	46
3	A Mechanochemical Reaction Cascade for Controlling Loadâ€”Strengthening of a Mechanochromic Polymer. <i>Angewandte Chemie</i> , 2020, 132, 22164-22169.	1.6	9
4	A Mechanochemical Reaction Cascade for Controlling Loadâ€”Strengthening of a Mechanochromic Polymer. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 21980-21985.	7.2	43
5	Dynamic Polymer Network System Mediated by Radically Exchangeable Covalent Bond and Carbolong Complex. <i>ACS Macro Letters</i> , 2020, 9, 344-349.	2.3	30
6	Mechanochromism and optical remodeling of multi-network elastomers containing anthracene dimers. <i>Chemical Science</i> , 2019, 10, 8367-8373.	3.7	62
7	â€œCarbolongâ€”polymers with near infrared triggered, spatially resolved and rapid self-healing properties. <i>Polymer Chemistry</i> , 2019, 10, 386-394.	1.9	27
8	A cyclic cinnamate dimer mechanophore for multimodal stress responsive and mechanically adaptable polymeric materials. <i>Polymer Chemistry</i> , 2019, 10, 905-910.	1.9	19
9	Cavitation, crazing and bond scission in chemically cross-linked polymer nanocomposites. <i>Soft Matter</i> , 2019, 15, 9195-9204.	1.2	8
10	A rapid and scalable integrated membrane separation process for purification of polysaccharides from <i>Enteromorpha prolifera</i> . <i>Natural Product Research</i> , 2019, 33, 3109-3119.	1.0	8
11	Multi-modal mechanophores based on cinnamate dimers. <i>Nature Communications</i> , 2017, 8, 1147.	5.8	106
12	Mechanochromism and Mechanicalâ€”Forceâ€”Triggered Crossâ€”Linking from a Single Reactive Moiety Incorporated into Polymer Chains. <i>Angewandte Chemie</i> , 2016, 128, 3092-3096.	1.6	35
13	Mechanochromism and Mechanicalâ€”Forceâ€”Triggered Crossâ€”Linking from a Single Reactive Moiety Incorporated into Polymer Chains. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3040-3044.	7.2	202
14	Titelbild: Mechanochromism and Mechanicalâ€”Forceâ€”Triggered Crossâ€”Linking from a Single Reactive Moiety Incorporated into Polymer Chains (<i>Angew. Chem.</i> 9/2016). <i>Angewandte Chemie</i> , 2016, 128, 2999-2999.	1.6	2
15	Nanocavitation around a crack tip in a soft nanocomposite: A scanning microbeam small angle X-ray scattering study. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2015, 53, 422-429.	2.4	33
16	A simple and versatile approach to self-healing polymers and electrically conductive composites. <i>RSC Advances</i> , 2015, 5, 13261-13269.	1.7	17
17	Hostâ€”guest interaction between fluoro-substituted azobenzene derivative and cyclodextrins. <i>RSC Advances</i> , 2015, 5, 12007-12014.	1.7	27
18	Compositional- and time-dependent dissipation, recovery and fracture toughness in hydrophobically reinforced hybrid hydrogels. <i>Polymer</i> , 2015, 80, 130-137.	1.8	20

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19	Mechanochemistry of Topological Complex Polymer Systems. <i>Topics in Current Chemistry</i> , 2014, 369, 135-207.	4.0	19
20	Mechanical Activation of Mechanophore Enhanced by Strong Hydrogen Bonding Interactions. <i>ACS Macro Letters</i> , 2014, 3, 141-145.	2.3	101
21	Self-healing metallo-supramolecular polymers from a ligand macromolecule synthesized via copper-catalyzed azide-alkyne cycloaddition and thiol-ene double click-reactions. <i>Polymer Chemistry</i> , 2014, 5, 1945-1953.	1.9	61
22	Spiropyran as a Mechanochromic Probe in Dual Cross-Linked Elastomers. <i>Macromolecules</i> , 2014, 47, 6783-6790.	2.2	119
23	Mechanoresponsive PS-PnBA-PS Triblock Copolymers via Covalently Embedding Mechanophore. <i>ACS Macro Letters</i> , 2013, 2, 705-709.	2.3	81
24	Biomimetic Modular Polymer with Tough and Stress Sensing Properties. <i>Macromolecules</i> , 2013, 46, 6566-6574.	2.2	96
25	Mechanoresponsive Healable Metallosupramolecular Polymers. <i>Macromolecules</i> , 2013, 46, 8649-8656.	2.2	156
26	Using metal-ligand interactions to access biomimetic supramolecular polymers with adaptive and superb mechanical properties. <i>Journal of Materials Chemistry B</i> , 2013, 1, 4809.	2.9	26
27	Multiresponsive supramolecular gels constructed by orthogonal metal-ligand coordination and hydrogen bonding. <i>European Polymer Journal</i> , 2013, 49, 4062-4071.	2.6	19
28	Opening and Closing of Nanocavities under Cyclic Loading in a Soft Nanocomposite Probed by Real-Time Small-Angle X-ray Scattering. <i>Macromolecules</i> , 2013, 46, 900-913.	2.2	34
29	Strain induced nanocavitation and crystallization in natural rubber probed by real time small and wide angle X-ray scattering. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2013, 51, 1125-1138.	2.4	33
30	Synthesis of Silver Nanoparticles with Tunable Morphologies via a Reverse Nano-Emulsion Route. <i>Materials Transactions</i> , 2013, 54, 1145-1148.	0.4	7
31	Nanocavitation in Carbon Black Filled Styrene-Butadiene Rubber under Tension Detected by Real Time Small Angle X-ray Scattering. <i>Macromolecules</i> , 2012, 45, 1529-1543.	2.2	109
32	Volume changes in a filled elastomer studied via digital image correlation. <i>Polymer Testing</i> , 2012, 31, 663-670.	2.3	33
33	Effects of precipitate agents on temperature-responsive sol-gel transitions of PLGA-PEG-PLGA copolymers in water. <i>Colloid and Polymer Science</i> , 2010, 288, 1151-1159.	1.0	21
34	Frequency- and Temperature-Dependent Rheological Properties of an Amphiphilic Block Co-polymer in Water and Including Cell-Culture Media. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2010, 21, 253-269.	1.9	20
35	Biodegradability and Biocompatibility of Thermoreversible Hydrogels Formed from Mixing a Sol and a Precipitate of Block Copolymers in Water. <i>Biomacromolecules</i> , 2010, 11, 2169-2178.	2.6	157
36	Mixing a Sol and a Precipitate of Block Copolymers with Different Block Ratios Leads to an Injectable Hydrogel. <i>Biomacromolecules</i> , 2009, 10, 1547-1553.	2.6	123

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37	Injectable block copolymer hydrogels for sustained release of a PEGylated drug. <i>International Journal of Pharmaceutics</i> , 2008, 348, 95-106.	2.6	183
38	Roles of Hydrophilic Homopolymers on the Hydrophobic-Association-Induced Physical Gelling of Amphiphilic Block Copolymers in Water. <i>Macromolecules</i> , 2008, 41, 6493-6499.	2.2	120
39	Temperature-induced spontaneous sol-gel transitions of poly(D,L-lactic acid-co-glycolic) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 end-capped derivatives in water. <i>Journal of Polymer Science Part A</i> , 2007, 45, 1122-1133.	2.5	168
40	A Subtle End-Group Effect on Macroscopic Physical Gelation of Triblock Copolymer Aqueous Solutions. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2232-2235.	7.2	249