Tao Wang

List of Publications by Year
in descending order

48 papers	2,482 citations	236833 25 h-index	206029 48 g-index
50 all docs	50 docs citations	50 times ranked	3312 citing authors

#	ARTICLE	IF	CITATIONS
1	Phase separation of chemically crosslinked poly(n-butyl methacrylate-co-methacrylic acid) in mixtures of N,N-dimethyl formamide and water. Polymer, 2022, , 125009.	1.8	0
2	pH Responsive Strong Polyion Complex Shape Memory Hydrogel with Spontaneous Shape Changing and Information Encryption. Macromolecular Rapid Communications, 2021, 42, e2000747.	2.0	26
3	Unique Self-Reinforcing and Rapid Self-Healing Polyampholyte Hydrogels with a pH-Induced Shape Memory Effect. Macromolecules, 2021, 54, 5218-5228.	2.2	30
4	Dynamical heterogeneity in the gelation process of a polymer solution with a lower critical solution temperature. Soft Matter, 2021, 17, 3222-3233.	1.2	2
5	Ultrafast and Programmable Shape Memory Hydrogel of Gelatin Soaked in Tannic Acid Solution. ACS Applied Materials & Interfaces, 2020, 12, 46701-46709.	4.0	64
6	<scp>Highâ€efficient</scp> and synergetic antibacterial nanocomposite hydrogel with quaternized chitosan/Ag nanoparticles prepared by <scp>oneâ€pot UV</scp> photochemical synthesis. Biopolymers, 2020, 111, e23354.	1.2	19
7	Elastin-Based Thermoresponsive Shape-Memory Hydrogels. Biomacromolecules, 2020, 21, 1149-1156.	2.6	37
8	Combinational Hydrogel and Xerogel Actuators Showing NIR Manipulating Complex Actions. Macromolecular Rapid Communications, 2019, 40, 1900270.	2.0	4
9	Ultra-Strong and Fast Response Gel by Solvent Exchange and Its Shape Memory Applications. ACS Applied Polymer Materials, 2019, 1, 2703-2712.	2.0	20
10	Polyampholyte Hydrogels with pH Modulated Shape Memory and Spontaneous Actuation. Advanced Functional Materials, 2018, 28, 1707245.	7.8	144
11	Super strong dopamine hydrogels with shape memory and bioinspired actuating behaviours modulated by solvent exchange. Soft Matter, 2018, 14, 2500-2507.	1.2	48
12	Self-healable tough supramolecular hydrogels crosslinked by poly-cyclodextrin through host-guest interaction. Carbohydrate Polymers, 2018, 193, 54-61.	5.1	59
13	Colloidal probe dynamics in gelatin solution during the solâ€“gel transition. Soft Matter, 2018, 14, 3694-3703.	1.2	11
14	Programmable and Bidirectional Bending of Soft Actuators Based on Janus Structure with Sticky Tough PAA-Clay Hydrogel. ACS Applied Materials & Interfaces, 2017, 9, 11866-11873.	4.0	150
15	Effect of Salt Concentration on the Motion of Particles near the Substrate in Drying Sessile Colloidal Droplets. Langmuir, 2017, 33, 685-695.	1.6	11
16	Rapid shape memory and pH-modulated spontaneous actuation of dopamine containing hydrogels. Chinese Journal of Polymer Science (English Edition), 2017, 35, 1297-1306.	2.0	19
17	Multiple Shape Memory, Self-Healable, and Supertough PAA-GO-Fe³⁺Hydrogel. Macromolecular Materials and Engineering, 2017, 302, 1600359.	1.7	62
18	Low Chemically Cross-Linked PAM/C-Dot Hydrogel with Robustness and Superstretchability in Both As-Prepared and Swelling Equilibrium States. Macromolecules, 2016, 49, 3174-3183.	2.2	87

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19	NIR-Triggered Rapid Shape Memory PAMâ€“GOâ€“Gelatin Hydrogels with High Mechanical Strength. ACS Applied Materials & Interfaces, 2016, 8, 12384-12392.	4.0	130
20	Dual Physically Cross-Linked Hydrogels with High Stretchability, Toughness, and Good Self-Recoverability. Macromolecules, 2016, 49, 5660-5668.	2.2	191
21	Rheological inversion of the universal aging dynamics of hectorite clay suspensions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 490, 300-306.	2.3	3
22	A facile method for reinforcing poly(<scp><i>N</i></scp>â€isopropylacrylamide)â€hectorite clay nanocomposite hydrogels by heat treatment. Polymer Composites, 2016, 37, 1557-1563.	2.3	11
23	Infrared radiation triggered detachable bio-adhesive hybrid hydrogels. Journal of Controlled Release, 2015, 213, e102-e103.	4.8	4
24	Thermoâ€Moldable Nanocomposite Hydrogels. Macromolecular Materials and Engineering, 2015, 300, 57-63.	1.7	7
25	Bioinspired Smart Actuator Based on Graphene Oxide-Polymer Hybrid Hydrogels. ACS Applied Materials & Interfaces, 2015, 7, 23423-23430.	4.0	87
26	Binding Interaction and Gelation in Aqueous Mixtures of Poly(<i>N</i>-isopropylacrylamide) and Hectorite Clay. Journal of Physical Chemistry B, 2015, 119, 612-619.	1.2	11
27	Infrared-driving actuation based on bilayer graphene oxide-poly(N-isopropylacrylamide) nanocomposite hydrogels. Journal of Materials Chemistry A, 2014, 2, 15633.	5.2	139
28	Cell proliferation and cell sheet detachment from the positively and negatively charged nanocomposite hydrogels. Biopolymers, 2014, 101, 58-65.	1.2	20
29	Fast Self-Healing of Graphene Oxide-Hectorite Clay-Poly(<i>N,N</i>-dimethylacrylamide) Hybrid Hydrogels Realized by Near-Infrared Irradiation. ACS Applied Materials & Interfaces, 2014, 6, 22855-22861.	4.0	97
30	Notch insensitive and self-healing PNIPAmâ€“PAMâ€“clay nanocomposite hydrogels. Soft Matter, 2014, 10, 3506.	1.2	68
31	Scaling of the dynamic response of hectorite clay suspensions containing poly(ethylene glycol) along the universal route of aging. Soft Matter, 2013, 9, 6263.	1.2	7
32	Linear and nonlinear viscoelasticity of water-in-oil emulsions: Effect of droplet elasticity. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 434, 220-228.	2.3	24
33	The jamming and unjamming transition in poly(N-isopropylacrylamide) microgel suspensions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 436, 912-921.	2.3	8
34	Promoted cell proliferation and mechanical relaxation of nanocomposite hydrogels prepared in cell culture medium. Reactive and Functional Polymers, 2013, 73, 683-689.	2.0	20
35	Fast deswelling and highly extensible poly(N-isopropylacrylamide)-hectorite clay nanocomposite cryogels prepared by freezing polymerization. Polymer, 2013, 54, 1846-1852.	1.8	50
36	Robust and thermo-response grapheneâ€“PNIPAm hybrid hydrogels reinforced by hectorite clay. Carbon, 2013, 62, 117-126.	5.4	88

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37	Adsorption of fluorophores and N-isopropylacrylamide on Laponite. Applied Clay Science, 2012, 58, 102-107.	2.6	7
38	Large deformation behavior and effective network chain density of swollen poly(N-isopropylacrylamide)â€"Laponite nanocomposite hydrogels. Soft Matter, 2012, 8, 774-783.	1.2	92
39	Accelerated cell sheet detachment by copolymerizing hydrophilic PEG side chains into PNIPAm nanocomposite hydrogels. Biomedical Materials (Bristol), 2012, 7, 055008.	1.7	24
40	Self-Reinforcement of PNIPAmâ€"Laponite Nanocomposite Gels Investigated by Atom Force Microscopy Nanoindentation. Macromolecules, 2012, 45, 7220-7227.	2.2	45
41	Hydrogel sheets of chitosan, honey and gelatin as burn wound dressings. Carbohydrate Polymers, 2012, 88, 75-83.	5.1	271
42	Effect of adsorbed poly(ethylene glycol) on the gelation evolution of Laponite suspensions: Aging time-polymer concentration superposition. Journal of Colloid and Interface Science, 2012, 376, 76-82.	5.0	30
43	Rapid cell sheet detachment from alginate semi-interpenetrating nanocomposite hydrogels of PNIPAm and hectorite clay. Reactive and Functional Polymers, 2011, 71, 447-454.	2.0	52
44	Large amplitude oscillatory shear rheology for nonlinear viscoelasticity in hectorite suspensions containing poly(ethylene glycol). Polymer, 2011, 52, 1402-1409.	1.8	43
45	Ultrahigh Tensibility and Stimuliâ€Response of Polymerâ€Hectorite Nanocomposite Hydrogels. Macromolecular Symposia, 2011, 306-307, 49-58.	0.4	9
46	High tensibility and pH-responsive swelling of nanocomposite hydrogels containing the positively chargeable 2-(dimethylamino)ethyl methacrylate monomer. Reactive and Functional Polymers, 2010, 70, 267-271.	2.0	57
47	Preferential Adsorption of Poly(ethylene glycol) on Hectorite Clay and Effects on Poly(N-isopropylacrylamide)/Hectorite Nanocomposite Hydrogels. Langmuir, 2010, 26, 4233-4238.	1.6	29
48	Synthesis and dual response of ionic nanocomposite hydrogels with ultrahigh tensibility and transparence. Polymer, 2009, 50, 1933-1938.	1.8	62