Tao Wang

List of Publications by Year in descending order

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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	Hydrogel sheets of chitosan, honey and gelatin as burn wound dressings. Carbohydrate Polymers, 2012, 88, 75-83.	5.1	271
2	Dual Physically Cross-Linked Hydrogels with High Stretchability, Toughness, and Good Self-Recoverability. Macromolecules, 2016, 49, 5660-5668.	2.2	191
3	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
4	Polyampholyte Hydrogels with pH Modulated Shape Memory and Spontaneous Actuation. Advanced Functional Materials, 2018, 28, 1707245.	7.8	144
5	Infrared-driving actuation based on bilayer graphene oxide-poly(N-isopropylacrylamide) nanocomposite hydrogels. Journal of Materials Chemistry A, 2014, 2, 15633.	5.2	139
6	NIR-Triggered Rapid Shape Memory PAMâ€“GOâ€“Gelatin Hydrogels with High Mechanical Strength. ACS Applied Materials & Interfaces, 2016, 8, 12384-12392.	4.0	130
7	Fast Self-Healing of Graphene Oxide-Hectorite Clay-Poly(N,N-dimethylacrylamide) Hybrid Hydrogels Realized by Near-Infrared Irradiation. ACS Applied Materials & Interfaces, 2014, 6, 22855-22861.	4.0	97
8	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
9	Robust and thermo-response grapheneâ€“PNIPAm hybrid hydrogels reinforced by hectorite clay. Carbon, 2013, 62, 117-126.	5.4	88
10	Bioinspired Smart Actuator Based on Graphene Oxide-Polymer Hybrid Hydrogels. ACS Applied Materials & Interfaces, 2015, 7, 23423-23430.	4.0	87
11	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
12	Notch insensitive and self-healing PNIPAmâ€“PAMâ€“clay nanocomposite hydrogels. Soft Matter, 2014, 10, 3506.	1.2	68
13	Ultrafast and Programmable Shape Memory Hydrogel of Gelatin Soaked in Tannic Acid Solution. ACS Applied Materials & Interfaces, 2020, 12, 46701-46709.	4.0	64
14	Synthesis and dual response of ionic nanocomposite hydrogels with ultrahigh tensibility and transparence. Polymer, 2009, 50, 1933-1938.	1.8	62
15	Multiple Shape Memory, Self-Healable, and Supertough PAA-GO-Fe³⁺Hydrogel. Macromolecular Materials and Engineering, 2017, 302, 1600359.	1.7	62
16	Self-healable tough supramolecular hydrogels crosslinked by poly-cyclodextrin through host-guest interaction. Carbohydrate Polymers, 2018, 193, 54-61.	5.1	59
17	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
18	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

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19	Fast deswelling and highly extensible poly(N-isopropylacrylamide)-hectorite clay nanocomposite cryogels prepared by freezing polymerization. Polymer, 2013, 54, 1846-1852.	1.8	50
20	Super strong dopamine hydrogels with shape memory and bioinspired actuating behaviours modulated by solvent exchange. Soft Matter, 2018, 14, 2500-2507.	1.2	48
21	Self-Reinforcement of PNIPAmâ€“Laponite Nanocomposite Gels Investigated by Atom Force Microscopy Nanoindentation. Macromolecules, 2012, 45, 7220-7227.	2.2	45
22	Large amplitude oscillatory shear rheology for nonlinear viscoelasticity in hectorite suspensions containing poly(ethylene glycol). Polymer, 2011, 52, 1402-1409.	1.8	43
23	Elastin-Based Thermoresponsive Shape-Memory Hydrogels. Biomacromolecules, 2020, 21, 1149-1156.	2.6	37
24	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
25	Unique Self-Reinforcing and Rapid Self-Healing Polyampholyte Hydrogels with a pH-Induced Shape Memory Effect. Macromolecules, 2021, 54, 5218-5228.	2.2	30
26	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
27	pH Responsive Strong Polyion Complex Shape Memory Hydrogel with Spontaneous Shape Changing and Information Encryption. Macromolecular Rapid Communications, 2021, 42, e2000747.	2.0	26
28	Accelerated cell sheet detachment by copolymerizing hydrophilic PEG side chains into PNIPAm nanocomposite hydrogels. Biomedical Materials (Bristol), 2012, 7, 055008.	1.7	24
29	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
30	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
31	Cell proliferation and cell sheet detachment from the positively and negatively charged nanocomposite hydrogels. Biopolymers, 2014, 101, 58-65.	1.2	20
32	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
33	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
34	<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
35	Binding Interaction and Gelation in Aqueous Mixtures of Poly(N-isopropylacrylamide) and Hectorite Clay. Journal of Physical Chemistry B, 2015, 119, 612-619.	1.2	11
36	A facile method for reinforcing poly(<scp>N</scp>â€isopropylacrylamide)â€hectorite clay nanocomposite hydrogels by heat treatment. Polymer Composites, 2016, 37, 1557-1563.	2.3	11

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37	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
38	Colloidal probe dynamics in gelatin solution during the solâ€“gel transition. Soft Matter, 2018, 14, 3694-3703.	1.2	11
39	Ultrahigh Tensibility and Stimuliâ€Response of Polymerâ€Hectorite Nanocomposite Hydrogels. Macromolecular Symposia, 2011, 306-307, 49-58.	0.4	9
40	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
41	Adsorption of fluorophores and N-isopropylacrylamide on Laponite. Applied Clay Science, 2012, 58, 102-107.	2.6	7
42	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
43	Thermoâ€Moldable Nanocomposite Hydrogels. Macromolecular Materials and Engineering, 2015, 300, 57-63.	1.7	7
44	Infrared radiation triggered detachable bio-adhesive hybrid hydrogels. Journal of Controlled Release, 2015, 213, e102-e103.	4.8	4
45	Combinational Hydrogel and Xerogel Actuators Showing NIR Manipulating Complex Actions. Macromolecular Rapid Communications, 2019, 40, 1900270.	2.0	4
46	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
47	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
48	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