Jun Fu

List of Publications by Year
in descending order

119 papers	6,649 citations	57758 44 h-index	66911 78 g-index
122 all docs	122 docs citations	122 times ranked	7283 citing authors

#	Article	IF	Citations
1	Stretchable and tough conductive hydrogels for flexible pressure and strain sensors. Journal of Materials Chemistry B, 2020, 8, 3437-3459.	5.8	372
2	Degradable natural polymer hydrogels for articular cartilage tissue engineering. Journal of Chemical Technology and Biotechnology, 2013, 88, 327-339.	3.2	326
3	Ultrastretchable Strain Sensors and Arrays with High Sensitivity and Linearity Based on Super Tough Conductive Hydrogels. Chemistry of Materials, 2018, 30, 8062-8069.	6.7	318
4	Tough, Adhesive, Self-Healable, and Transparent Ionically Conductive Zwitterionic Nanocomposite Hydrogels as Skin Strain Sensors. ACS Applied Materials & Interfaces, 2019, 11, 3506-3515.	8.0	309
5	Self-Healable, Tough, and Ultrastretchable Nanocomposite Hydrogels Based on Reversible Polyacrylamide/Montmorillonite Adsorption. ACS Applied Materials & Interfaces, 2015, 7, 5029-5037.	8.0	288
6	Stretchable, self-healing and tissue-adhesive zwitterionic hydrogels as strain sensors for wireless monitoring of organ motions. Materials Horizons, 2020, 7, 1872-1882.	12.2	273
7	Super-tough double-network hydrogels reinforced by covalently compositing with silica-nanoparticles. Soft Matter, 2012, 8, 6048.	2.7	197
8	Super Tough, Ultrastretchable, and Thermoresponsive Hydrogels with Functionalized Triblock Copolymer Micelles as Macro-Cross-Linkers. ACS Macro Letters, 2014, 3, 496-500.	4.8	176
9	Multifunctional conductive hydrogels and their applications as smart wearable devices. Journal of Materials Chemistry B, 2021, 9, 2561-2583.	5.8	166
10	Flexible and wearable strain sensors based on tough and self-adhesive ion conducting hydrogels. Journal of Materials Chemistry B, 2019, 7, 24-29.	5.8	165
11	From 3D to 4D printing: approaches and typical applications. Journal of Mechanical Science and Technology, 2015, 29, 4281-4288.	1.5	164
12	Tissue adhesive hydrogel bioelectronics. Journal of Materials Chemistry B, 2021, 9, 4423-4443.	5.8	129
13	Electric Field Actuation of Tough Electroactive Hydrogels Cross-Linked by Functional Triblock Copolymer Micelles. ACS Applied Materials & Interfaces, 2016, 8, 26326-26331.	8.0	102
14	Hydrogel properties and applications. Journal of Materials Chemistry B, 2019, 7, 1523-1525.	5.8	101
15	Super-tough and thermo-healable hydrogel â€“ promising for shape-memory absorbent fiber. Journal of Materials Chemistry B, 2014, 2, 7631-7638.	5.8	100
16	Direct 3D Printed Biomimetic Scaffolds Based on Hydrogel Microparticles for Cell Spheroid Growth. Advanced Functional Materials, 2020, 30, 1910573.	14.9	99
17	Mechano-Responsive, Tough, and Antibacterial Zwitterionic Hydrogels with Controllable Drug Release for Wound Healing Applications. ACS Applied Materials & Interfaces, 2020, 12, 52307-52318.	8.0	95
18	Formation and Photoluminescence of Silver Nanoparticles Stabilized by a Two-Armed Polymer with a Crown Ether Core. Langmuir, 2004, 20, 9775-9779.	3.5	94

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19	Ordered Honeycomb-Structured Gold Nanoparticle Films with Changeable Pore Morphology:â€‰ From Circle to Ellipse. Langmuir, 2005, 21, 2017-2021.	3.5	94
20	Magnetic nanohydroxyapatite/PVA composite hydrogels for promoted osteoblast adhesion and proliferation. Colloids and Surfaces B: Biointerfaces, 2013, 103, 318-325.	5.0	93
21	Tough nanocomposite double network hydrogels reinforced with clay nanorods through covalent bonding and reversible chain adsorption. Journal of Materials Chemistry B, 2014, 2, 1539.	5.8	90
22	Snap-Buckling Motivated Controllable Jumping of Thermo-Responsive Hydrogel Bilayers. ACS Applied Materials & Interfaces, 2018, 10, 41724-41731.	8.0	90
23	Macroporous fluoropolymeric films templated by silica colloidal assembly: A possible route to super-hydrophobic surfaces. Applied Surface Science, 2006, 252, 2229-2234.	6.1	87
24	Multi-responsive and tough hydrogels based on triblock copolymer micelles as multi-functional macro-crosslinkers. Chemical Communications, 2015, 51, 8512-8515.	4.1	87
25	Self-Assembly of Crystallineâ^'Coil Diblock Copolymer in Solvents with Varying Selectivity:Â From Spinodal-like Aggregates to Spheres, Cylinders, and Lamellae. Macromolecules, 2004, 37, 976-986.	4.8	80
26	Tough and responsive oppositely charged nanocomposite hydrogels for use as bilayer actuators assembled through interfacial electrostatic attraction. Journal of Materials Chemistry B, 2016, 4, 3239-3246.	5.8	80
27	Highly Sensitive Pressure and Strain Sensors Based on Stretchable and Recoverable Ion-Conductive Physically Cross-Linked Double-Network Hydrogels. ACS Applied Materials & Interfaces, 2020, 12, 51969-51977.	8.0	79
28	Tough biodegradable chitosanâ€“gelatin hydrogels via in situ precipitation for potential cartilage tissue engineering. RSC Advances, 2015, 5, 55640-55647.	3.6	78
29	Antibacterial Zwitterionic Polyelectrolyte Hydrogel Adhesives with Adhesion Strength Mediated by Electrostatic Mismatch. ACS Applied Materials & Interfaces, 2020, 12, 46816-46826.	8.0	77
30	Recent progress in polymer hydrogel bioadhesives. Journal of Polymer Science, 2021, 59, 1312-1337.	3.8	77
31	Three-Dimensional-Printable Thermo/Photo-Cross-Linked Methacrylated Chitosanâ€“Gelatin Hydrogel Composites for Tissue Engineering. ACS Applied Materials & Interfaces, 2021, 13, 22902-22913.	8.0	72
32	Stiff micelle-crosslinked hyaluronate hydrogels with low swelling for potential cartilage repair. Journal of Materials Chemistry B, 2019, 7, 5490-5501.	5.8	69
33	Tough and Fatigue Resistant Biomimetic Hydrogels of Interlaced Self-Assembled Conjugated Polymer Belts with a Polyelectrolyte Network. Chemistry of Materials, 2014, 26, 3522-3529.	6.7	68
34	Ultra high molecular weight polyethylene with improved plasticity and toughness by high temperature melting. Polymer, 2010, 51, 2721-2731.	3.8	67
35	Formation of Regular Hole Pattern in Polymer Films. Macromolecular Chemistry and Physics, 2003, 204, 125-130.	2.2	65
36	Tough and Biocompatible Hydrogels Based on in Situ Interpenetrating Networks of Dithiol-Connected Graphene Oxide and Poly(vinyl alcohol). ACS Applied Materials & Interfaces, 2015, 7, 3003-3008.	8.0	61

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37	Strong and tough hydrogels crosslinked by multiâ€functional polymer colloids. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1336-1350.	2.1	60
38	Super-hydrophobicity of silica nanoparticles modified with vinyl groups. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 338, 15-19.	4.7	59
39	Ordered droplet formation by thin polymer film dewetting on a stripe-patterned substrate. Journal of Colloid and Interface Science, 2004, 269, 158-163.	9.4	58
40	Macroporous biphasic calcium phosphate scaffolds reinforced by poly-L-lactic acid/hydroxyapatite nanocomposite coatings for bone regeneration. Biochemical Engineering Journal, 2015, 98, 29-37.	3.6	56
41	Biomimetic hydrogel for rapid and scar-free healing of skin wounds inspired by the healing process of oral mucosa. Acta Biomaterialia, 2019, 100, 255-269.	8.3	56
42	Conductive graphene oxide hydrogels reduced and bridged by <scp>l</scp>-cysteine to support cell adhesion and growth. Journal of Materials Chemistry B, 2017, 5, 511-516.	5.8	52
43	Natural polysaccharides promote chondrocyte adhesion and proliferation on magnetic nanoparticle/PVA composite hydrogels. Colloids and Surfaces B: Biointerfaces, 2015, 132, 146-154.	5.0	49
44	High temperature melted, radiation cross-linked, vitamin E stabilized oxidation resistant UHMWPE with low wear and high impact strength. Polymer, 2013, 54, 199-209.	3.8	47
45	Super tough bilayer actuators based on multi-responsive hydrogels crosslinked by functional triblock copolymer micelle macro-crosslinkers. Journal of Materials Chemistry B, 2019, 7, 2619-2625.	5.8	45
46	Shape memory/change effect in a double network nanocomposite tough hydrogel. European Polymer Journal, 2014, 58, 41-51.	5.4	44
47	Macroscopic assembly of oppositely charged polyelectrolyte hydrogels. Journal of Materials Chemistry B, 2018, 6, 257-264.	5.8	43
48	Multi-responsive nanocomposite hydrogels with high strength and toughness. Journal of Materials Chemistry B, 2016, 4, 1733-1739.	5.8	42
49	Instability/collapse of polymeric materials and their structures in stimulus-induced shape/surface morphology switching. Materials & Design, 2014, 59, 176-192.	5.1	41
50	Tough and selfâ€recoverable hydrogels crosslinked by triblock copolymer micelles and Fe³⁺ coordination. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 865-876.	2.1	41
51	Programmable and Reversible 3D-/4D-Shape-Morphing Hydrogels with Precisely Defined Ion Coordination. ACS Applied Materials & Interfaces, 2020, 12, 26476-26484.	8.0	41
52	Versatile controlled ion release for synthesis of recoverable hybrid hydrogels with high stretchability and notch-insensitivity. Chemical Communications, 2015, 51, 15534-15537.	4.1	40
53	Water-induced morphology evolution of block copolymer micellar thin films. Polymer, 2005, 46, 5377-5384.	3.8	37
54	Natural polyphenol-stabilised highly crosslinked UHMWPE with high mechanical properties and low wear for joint implants. Journal of Materials Chemistry B, 2013, 1, 4727.	5.8	36

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55	Wear resistant UHMWPE with high toughness by high temperature melting and subsequent radiation cross-linking. Polymer, 2011, 52, 1155-1162.	3.8	35
56	Micro-contact printing of graphene oxide nanosheets for fabricating patterned polymer brushes. Chemical Communications, 2014, 50, 7103.	4.1	34
57	Thermo-responsive hydrogels with tunable transition temperature crosslinked by multifunctional graphene oxide nanosheets. Composites Science and Technology, 2017, 151, 139-146.	7.8	34
58	White-light-emitting flexible display devices based on double network hydrogels crosslinked by YAG:Ce phosphors. Journal of Materials Chemistry C, 2020, 8, 247-252.	5.5	32
59	Fabrication of hollow porous PLGA microspheres for controlled protein release and promotion of cell compatibility. Chinese Chemical Letters, 2013, 24, 710-714.	9.0	31
60	Effects of simulated oxidation on the in vitro wear and mechanical properties of irradiated and melted highly crosslinked UHMWPE. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 316-322.	3.4	31
61	Biomimetic epidermal sensors assembled from polydopamine-modified reduced graphene oxide/polyvinyl alcohol hydrogels for the real-time monitoring of human motions. Journal of Materials Chemistry B, 2020, 8, 10549-10558.	5.8	31
62	Super tough, ultra-stretchable, and fast recoverable double network hydrogels physically crosslinked by triple non-covalent interactions. Polymer, 2020, 192, 122319.	3.8	30
63	Reversibly strain-tunable elastomeric photonic crystals. Chemical Physics Letters, 2004, 390, 285-289.	2.6	29
64	Controllable promotion of chondrocyte adhesion and growth on PVA hydrogels by controlled release of TGF-Î²1 from porous PLGA microspheres. Colloids and Surfaces B: Biointerfaces, 2015, 125, 51-57.	5.0	29
65	Surface functionalized barium sulfate nanoparticles: controlled in situ synthesis and application in bone cement. Journal of Materials Chemistry B, 2014, 2, 1264-1274.	5.8	28
66	Self-organization and luminescent properties of nanostructured europium (III)-block copolymer complex thin films. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2181-2189.	2.1	27
67	Versatile fabrication of arbitrarily shaped multi-membrane hydrogels suitable for biomedical applications. Journal of Materials Chemistry B, 2013, 1, 485-492.	5.8	27
68	Risk factors and clinical characteristics of deep knee infection in patients with intra-articular injections: A matched retrospective cohort analysis. Seminars in Arthritis and Rheumatism, 2018, 47, 911-916.	3.4	26
69	Meta-analysis of sonication prosthetic fluid PCR for diagnosing periprosthetic joint infection. PLoS ONE, 2018, 13, e0196418.	2.5	26
70	Stabilization of highly crosslinked ultra high molecular weight polyethylene with natural polyphenols. Polymer Degradation and Stability, 2014, 105, 197-205.	5.8	22
71	Synergistic toughening of nanocomposite double network hydrogels by physical adsorption and chemical bonding of polymer chains to inorganic nanospheres and nanorods: a comparative study. RSC Advances, 2016, 6, 37974-37981.	3.6	22
72	Synergistic pH and Temperature-Driven Actuation of Poly(NIPAM-co-DMAPMA)/Clay Nanocomposite Hydrogel Bilayers. ACS Omega, 2018, 3, 17914-17921.	3.5	21

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73	Molecular motions of different scales at thin polystyrene film surface by lateral force microscopy. Journal of Chemical Physics, 2005, 123, 064713.	3.0	19
74	Single cell migration dynamics mediated by geometric confinement. Colloids and Surfaces B: Biointerfaces, 2016, 145, 72-78.	5.0	18
75	AFM Study of the Self-Assembly Behavior of Hexa-Armed Star Polymers with a Discotic Triphenylene Core. Macromolecular Rapid Communications, 2003, 24, 742-747.	3.9	16
76	Hole Nucleation and Growth Induced by Crystallization and Microphase Separation of Thin Semicrystalline Diblock Copolymer Films. Macromolecules, 2004, 37, 6918-6925.	4.8	16
77	Early Stage Interplay of Microphase Separation and Crystallization in Crystallineâ^'Coil Poly(l-lactic) Tj ETQq1 1 0.784314 rgBT /Overlock	4.8	16
78	Does serum interleukin-6 guide the diagnosis of persistent infection in two-stage hip revision for periprosthetic joint infection?. Journal of Orthopaedic Surgery and Research, 2019, 14, 354.	2.3	16
79	Fabrication of a Metal Particle Array Based on a Self-Assembled Template from a Two-Armed Polymer. Macromolecular Rapid Communications, 2003, 24, 487-491.	3.9	15
80	Natural Polyphenols Enhance Stability of Crosslinked UHMWPE for Joint Implants. Clinical Orthopaedics and Related Research, 2015, 473, 760-766.	1.5	15
81	Colour-tunable quantum dots/poly(NIPAM-co-AAc) hybrid microgels based on electrostatic interactions. RSC Advances, 2016, 6, 98147-98152.	3.6	14
82	Shape memory effect and rapid reversible actuation of nanocomposite hydrogels with electrochemically controlled local metal ion coordination and crosslinking. Journal of Materials Chemistry B, 2020, 8, 9679-9685.	5.8	14
83	Patterned self-adaptive polymer brushes by â€œgrafting toâ€•approach and microcontact printing. Surface Science, 2004, 572, 490-496.	1.9	13
84	Fabrication of arrays of silver nanoparticle aggregates by microcontact printing and block copolymer nanoreactors. Journal of Applied Polymer Science, 2006, 100, 2737-2743.	2.6	13
85	Effect of squalene absorption on oxidative stability of highly crosslinked UHMWPE stabilized with natural polyphenols. Polymer Degradation and Stability, 2014, 110, 113-120.	5.8	13
86	C60-Decorated Melanin Nanoparticles Conjugated with Hyaluronic Acid for Synergistic Theranostic and Immunotherapy of Tumors under near-Infrared Excitation. ACS Applied Nano Materials, 2020, 3, 8817-8828.	5.0	13
87	Dewetting behavior of polystyrene film filled with (C6H5C2H4NH3)2PbI4. Journal of Chemical Physics, 2008, 129, 054905.	3.0	12
88	3D Hierarchically Ordered Composite Block Copolymer Hollow Sphere Arrays by Solution Wetting. Langmuir, 2010, 26, 12336-12341.	3.5	12
89	Tough and multi-responsive hydrogels based on core-shell structured macro-crosslinkers. Chinese Journal of Polymer Science (English Edition), 2017, 35, 1286-1296.	3.8	12
90	Preoperatively elevated serum inflammatory markers increase the risk of periprosthetic joint infection following total knee arthroplasty in patients with osteoarthritis. Therapeutics and Clinical Risk Management, 2018, Volume 14, 1719-1724.	2.0	12

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91	Ordered macroporous films from self-assembly of two-armed polymer with a crown ether core. Polymer, 2004, 45, 7389-7394.	3.8	11
92	Aqueous Networks and Toroids of Amphiphilic Block Copolymer with Nonâ€ionic Surfactants. ChemPhysChem, 2009, 10, 1190-1194.	2.1	11
93	Controlled in situ synthesis of surface functionalized BaSO4 nanoparticles for improved bone cement reinforcement. Journal of Materials Chemistry B, 2013, 1, 4043.	5.8	11
94	Hydration and Thermal Response Kinetics of a Cross-Linked Thermoresponsive Copolymer Film on a Hydrophobic PAN Substrate Coating Probed by In Situ Neutron Reflectivity. Langmuir, 2021, 37, 6819-6829.	3.5	11
95	Application of a novel thermoâ€sensitive injectable hydrogel in therapy in situ for drug accurate controlled release. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 3200-3216.	3.4	9
96	Lamella reorientation in thin films of a symmetric poly(l-lactic acid)-block-polystyrene upon crystallization at different temperatures. Polymer, 2009, 50, 1588-1595.	3.8	8
97	Generalized Synthesis of Mesoporous Rare Earth Oxide Thin Films through Amphiphilic Ionic Block Copolymer Templating. European Journal of Inorganic Chemistry, 2013, 2013, 1251-1257.	2.0	8
98	Tough responsive hydrogels and applications as smart devices. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1279-1280.	2.1	8
99	Effect of solventâ€“matrix interactions on structures and mechanical properties of micelleâ€crosslinked gels. Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 473-483.	2.1	8
100	Dynamic and structural studies on synergetic energy dissipation mechanisms of single-, double-, and triple-network hydrogels sequentially crosslinked by multiple non-covalent interactions. Polymer, 2022, 250, 124868.	3.8	8
101	Controlled Evaporative Self-Assembly of Poly(acrylic acid) in a Confined Geometry for Fabricating Patterned Polymer Brushes. Langmuir, 2014, 30, 4863-4867.	3.5	7
102	Vitamin E can be used to hinder scissioning in radiation crossâ€linked UHMWPE during highâ€temperature melting. Journal of Applied Polymer Science, 2015, 132, .	2.6	6
103	Title is missing!. Journal of Materials Science Letters, 2002, 21, 1453-1455.	0.5	5
104	Surface morphology evolution of poly(styrene-block-4-vinylpyridine) (PS-b-P4VP)(H+) and poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 T 2007, 48, 2425-2433.	3.8	5
105	Tough Responsive Polymer Hydrogels and Devices Crosslinked by Block Copolymer Micelles. Macromolecular Symposia, 2019, 385, 1800188.	0.7	3
106	Triblock Copolymer Micelle-Crosslinked Hydrogels. Advances in Polymer Science, 2020, , 211-241.	0.8	3
107	Ion-Excited Mechanically Active Self-Assembling Membranes for Rapid Wound Healing. ACS Applied Bio Materials, 2021, 4, 605-619.	4.6	3
108	Morphological transformations of nonequilibrium assemblies of amphiphilic diblock copolymer. Colloid Journal, 2014, 76, 774-781.	1.3	2

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109	Correction: Multi-responsive nanocomposite hydrogels with high strength and toughness. Journal of Materials Chemistry B, 2016, 4, 6609-6609.	5.8	2
110	Natural Polyphenol-Stabilized Highly Cross-Linked UHMWPE for Joint Implants. Springer Series in Biomaterials Science and Engineering, 2019, , 93-114.	1.0	2
111	Highly Crosslinked UHMWPE for Joint Implants. Springer Series in Biomaterials Science and Engineering, 2019, , 21-68.	1.0	2
112	Shear-induced slippage of the self-assembly of crown ether-centered two-armed copolymers. Applied Surface Science, 2005, 252, 1132-1138.	6.1	1
113	Acid-induced morphological transition of block copolymer brush adsorbed on mica surface. Polymer International, 2005, 54, 1021-1026.	3.1	1
114	Photoluminescent nanoparticles of organicâ€“inorganic hybrids prepared by phase transfer complexation at the organicâ€“aqueous solution interface. Nanotechnology, 2007, 18, 025704.	2.6	1
115	Non-covalent Tough Hydrogels for Functional Actuators. MRS Advances, 2016, 1, 501-507.	0.9	1
116	Clinical Applications of UHMWPE in Joint Implants. Springer Series in Biomaterials Science and Engineering, 2019, , 1-20.	1.0	1
117	High-Temperature Melted, Cross-Linked, and Stabilized Ultrahigh Molecular Weight Polyethylene. Springer Series in Biomaterials Science and Engineering, 2019, , 115-150.	1.0	1
118	3D Bioprinting Microgels: Direct 3D Printed Biomimetic Scaffolds Based on Hydrogel Microparticles for Cell Spheroid Growth (Adv. Funct. Mater. 13/2020). Advanced Functional Materials, 2020, 30, 2070085.	14.9	1
119	Responsive Bilayered Hydrogel Actuators Assembled by Supramolecular Recognition. MRS Advances, 2018, 3, 1583-1588.	0.9	0