

# Soft Materials by Design: Unconventional Polymer Networks

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Soft Wearable Healthcare Materials and Devices. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100577.	3.9	71
2	Binary Biocompatible CNCâ€“Gelatin Hydrogel as 3D Scaffolds Suitable for Cell Culture Adhesion and Growth. <i>Applied Nano</i> , 2021, 2, 118-127.	0.9	3
3	Microneedle-Based Potentiometric Sensing System for Continuous Monitoring of Multiple Electrolytes in Skin Interstitial Fluids. <i>ACS Sensors</i> , 2021, 6, 2181-2190.	4.0	45
4	Soft-fiber-reinforced tough and fatigue resistant hydrogels. <i>Matter</i> , 2021, 4, 1755-1757.	5.0	13
5	Plastic-Like Supramolecular Hydrogels with Polyelectrolyte/Surfactant Complexes as Physical Cross-links. <i>Macromolecules</i> , 2021, 54, 8052-8066.	2.2	25
6	Fabrication of Anisotropic Silk Fibroin-Cellulose Nanocrystals Cryogels with Tunable Mechanical Properties, Rapid Swelling, and Structural Recoverability via a Directional-Freezing Strategy. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 12274-12285.	3.2	16
7	Wearable Biofuel Cells: Advances from Fabrication to Application. <i>Advanced Functional Materials</i> , 2021, 31, 2103976.	7.8	38
8	Skin-like hydrogel devices for wearable sensing, soft robotics and beyond. <i>IScience</i> , 2021, 24, 103174.	1.9	103
9	Engineering Tough Metallosupramolecular Hydrogel Films with Kirigami Structures for Compliant Soft Electronics. <i>Small</i> , 2021, 17, e2103836.	5.2	75
10	Mechanically Robust Elastomers Enabled by a Facile Interfacial Interactionsâ€“Driven Sacrificial Network. <i>Macromolecular Rapid Communications</i> , 2021, 42, e2100509.	2.0	9
11	Freezing of meat and aquatic food: Underlying mechanisms and implications on protein oxidation. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2021, 20, 5548-5569.	5.9	55
12	Integration of sensing and shape-deforming capabilities for a bioinspired soft robot. <i>Composites Part B: Engineering</i> , 2021, 223, 109116.	5.9	31
13	Preparation and property evaluation of biodegradable elastomeric PTMC/PLCL networks used as ureteral stents. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 630, 127550.	2.3	7
14	Flexible, self-healable, adhesive and wearable hydrogel patch for colorimetric sweat detection. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14938-14945.	2.7	65
15	Magnetocaloric actuation of soft polymer robots. <i>Journal of Materials Chemistry C</i> , 0, , .	2.7	7
16	Mussel-inspired dual-crosslinked polyamidoxime photothermal hydrogel with enhanced mechanical strength for highly efficient and selective uranium extraction from seawater. <i>Chemical Engineering Journal</i> , 2022, 430, 133182.	6.6	30
17	Molecularly Engineered Zwitterionic Hydrogels with High Toughness and Self-Healing Capacity for Soft Electronics Applications. <i>Chemistry of Materials</i> , 2021, 33, 8418-8429.	3.2	85
18	A Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXene-Based Energy-Harvesting Soft Actuator with Self-Powered Humidity Sensing and Real-Time Motion Tracking Capability. <i>ACS Nano</i> , 2021, 15, 16811-16818.	7.3	74

#	ARTICLE	IF	CITATIONS
19	Construction and Properties of Double-Network Crosslinked Hydrogels Based on Host-Guest Interactions/UV Polymerization. <i>Macromolecular Materials and Engineering</i> , 2021, 306, 2100588.	1.7	5
20	The shape-morphing performance of magnetoactive soft materials. <i>Materials and Design</i> , 2021, 211, 110172.	3.3	94
21	Revisiting the Origins of the Fracture Energy of Tough Double-Network Hydrogels with Quantitative Mechanochemical Characterization of the Damage Zone. <i>Macromolecules</i> , 2021, 54, 10331-10339.	2.2	22
22	Bio-inspired 3D printing of self-growing multinetwork elastomer composites. <i>Composite Structures</i> , 2022, 279, 114777.	3.1	2
23	Solid-Liquid Vapor Triphase Gel. <i>Langmuir</i> , 2021, 37, 13501-13511.	1.6	4
24	High-tough hydrogels formed via Schiff base reaction between PAMAM dendrimer and Tetra-PEG and their potential as dual-function delivery systems. <i>Materials Today Communications</i> , 2022, 30, 103019.	0.9	7
25	Review of Flexible Actuators Based on Intelligent Materials. <i>Advances in Astronautics Science and Technology</i> , 2021, 4, 157-171.	0.5	2
26	Shaping the future of robotics through materials innovation. <i>Nature Materials</i> , 2021, 20, 1582-1587.	13.3	65
27	Injectable, Pore-Forming, Perfusable Double-Network Hydrogels Resilient to Extreme Biomechanical Stimulations. <i>Advanced Science</i> , 2022, 9, e2102627.	5.6	28
28	A highly resilient and ultra-sensitive hydrogel for wearable sensors. <i>Journal of Applied Polymer Science</i> , 2022, 139, 51925.	1.3	11
29	Adhesive anastomosis for organ transplantation. <i>Bioactive Materials</i> , 2022, 13, 260-268.	8.6	16
30	Skin-Inspired Healable Conductive Elastomers with Exceptional Strain-Adaptive Stiffening and Damage Tolerance. <i>Macromolecules</i> , 2021, 54, 10767-10775.	2.2	42
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33	Rate-Dependent Damage Mechanics of Polymer Networks with Reversible Bonds. <i>Macromolecules</i> , 2021, 54, 10801-10813.	2.2	20
34	Strong and tough cellulose-graphene oxide composite hydrogels by multi-modulus components strategy as photothermal antibacterial platform. <i>Chemical Engineering Journal</i> , 2022, 431, 133964.	6.6	24
35	Preparation of Tris-Tetrazole-Based Metallogels and Stabilization of Silver Nanoparticles: Studies on Reduction Catalysis and Self-Healing Property. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 59567-59579.	4.0	15
36	Tough, Transparent, 3D-Printable, and Self-Healing Poly(ethylene glycol) Gel (PEGgel). <i>Advanced Materials</i> , 2022, 34, e2107791.	11.1	55

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37	Injectable Double-Crosslinked Adhesive Hydrogels with High Mechanical Resilience and Effective Energy Dissipation for Joint Wound Treatment. <i>Advanced Functional Materials</i> , 2022, 32, 2109687.	7.8	81
38	Design principles for creating synthetic underwater adhesives. <i>Chemical Society Reviews</i> , 2021, 50, 13321-13345.	18.7	57
39	Application of Nanomaterial in Hydrogels Related to Wound Healing. <i>Journal of Nanomaterials</i> , 2022, 2022, 1-11.	1.5	15
40	Highly Durable and Tough Liquid Crystal Elastomers. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 2006-2014.	4.0	13
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42	Synergic influences of network topologies and associative interactions on the microstructures and bulk performances of hydrogels. <i>Journal of Materials Chemistry B</i> , 2021, 9, 9863-9873.	2.9	10
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49	Magnetic soft continuum robots with contact forces. <i>Extreme Mechanics Letters</i> , 2022, 51, 101604.	2.0	22
50	3D Printing Tannic Acid-Based Gels via Digital Light Processing. <i>Macromolecular Bioscience</i> , 2022, 22, e2100455.	2.1	10
52	An Overview on Recent Progress of the Hydrogels: From Material Resources, Properties, to Functional Applications. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2100785.	2.0	36
53	Interpenetrating polymer network hydrogels using natural based dyes initiating systems: Antibacterial activity and 3D/4D performance. <i>European Polymer Journal</i> , 2022, 166, 111042.	2.6	29
54	Ratiometric Flapping Force Probe That Works in Polymer Gels. <i>Journal of the American Chemical Society</i> , 2022, 144, 2804-2815.	6.6	48
55	Magnetic Soft Materials and Robots. <i>Chemical Reviews</i> , 2022, 122, 5317-5364.	23.0	249

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57	3D-printed high-toughness double network hydrogels via digital light processing. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 639, 128329.	2.3	6
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61	Protein Oxidation in Muscle Foods: A Comprehensive Review. <i>Antioxidants</i> , 2022, 11, 60.	2.2	97
62	Mechanical reinforcement of granular hydrogels. <i>Chemical Science</i> , 2022, 13, 3082-3093.	3.7	27
63	Deformable, sensible, and reconfigurable microgels with structural color: potential as camouflage soft microrobots. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5070-5078.	2.7	2
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72	Ultrastretchable Luminescent Nanocomposite Hydrogel with Self-Healing Behavior. <i>ACS Applied Polymer Materials</i> , 2022, 4, 2329-2336.	2.0	9
73	Multifunctional Hydrogel Hybridâ€‘Gated Organic Photoelectrochemical Transistor for Biosensing. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	40

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75	Polymer Structure Predictor (PSP): A Python Toolkit for Predicting Atomic-Level Structural Models for a Range of Polymer Geometries. <i>Journal of Chemical Theory and Computation</i> , 2022, 18, 2737-2748.	2.3	7
77	3D-Printed Hydrogels in Orthopedics: Developments, Limitations, and Perspectives. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 845342.	2.0	9
78	ECM-inspired peptide dendrimer microgels with human MSCs encapsulation for systemic lupus erythematosus treatment. <i>Nano Today</i> , 2022, 43, 101454.	6.2	4
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81	Natural extracts-mediated efficient and electrically responsive bioglues. <i>Extreme Mechanics Letters</i> , 2022, 53, 101687.	2.0	1
82	Biodegradable carboxymethyl chitin-based hemostatic sponges with high strength and shape memory for non-compressible hemorrhage. <i>Carbohydrate Polymers</i> , 2022, 288, 119369.	5.1	22
83	Responsive and self-healing structural color supramolecular hydrogel patch for diabetic wound treatment. <i>Bioactive Materials</i> , 2022, 15, 194-202.	8.6	24
84	Hierarchical Multiscale Hydrogels with Identical Compositions Yet Disparate Properties via Tunable Phase Separation. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	17
85	Multifunctional Single-Component Polypeptide Hydrogels: The Gelation Mechanism, Superior Biocompatibility, High Performance Hemostasis, and Scarless Wound Healing. <i>Advanced Healthcare Materials</i> , 2022, 11, e2101809.	3.9	19
86	High-Performance Gel Polymer Electrolyte with Self-Healing Capability for Lithium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 5267-5276.	2.5	14
87	Plant-inspired conductive adhesive organohydrogel with extreme environmental tolerance as a wearable dressing for multifunctional sensors. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 215, 112509.	2.5	22
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89	Recent Advances in Design Strategies of Tough Hydrogels. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2200075.	2.0	24
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91	Recent advances in 3D printing of tough hydrogels: A review. <i>Composites Part B: Engineering</i> , 2022, 238, 109895.	5.9	69
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#	ARTICLE	IF	CITATIONS
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94	Adhesive and Hydrophobic Bilayer Hydrogel Enabled On-Skin Biosensors for High-Fidelity Classification of Human Emotion. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	58
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98	Advances in Regenerative Sports Medicine Research. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, .	2.0	3
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#	ARTICLE	IF	CITATIONS
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112	Shrinking rates of polymer gels composed of star-shaped polymers of <i>N</i> -isopropylacrylamide and dimethylacrylamide copolymers: the effect of dimethylacrylamide on the crosslinking network. <i>Soft Matter</i> , 2022, 18, 5204-5217.	1.2	3
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117	Magneto-Orientation of Magnetic Double Stacks for Patterned Anisotropic Hydrogels with Multiple Responses and Modulable Motions. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	38
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127	Digital Light Processing 3D Printing of Tough Supramolecular Hydrogels with Sophisticated Architectures as Impact-Absorption Elements. <i>Advanced Materials</i> , 2022, 34, .	11.1	46
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#	ARTICLE	IF	CITATIONS
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