Tough adhesives for diverse wet surfaces

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Citation Report

#	Article	IF	CITATIONS
1	Mussel-mimetic hydrogels with defined cross-linkers achieved via controlled catechol dimerization exhibiting tough adhesion for wet biological tissues. Chemical Communications, 2017, 53, 12000-12003.	2.2	76
2	The use of soft robotics in cardiovascular therapy. Expert Review of Cardiovascular Therapy, 2017, 15, 767-774.	0.6	17
3	Stretchable bioelectronics—Current and future. MRS Bulletin, 2017, 42, 960-967.	1.7	14
4	A Slick and Stretchable Surgical Adhesive. New England Journal of Medicine, 2017, 377, 2092-2094.	13.9	12
5	Bio-inspired reversible underwater adhesive. Nature Communications, 2017, 8, 2218.	5.8	353
6	Soft robotic ventricular assist device with septal bracing for therapy of heart failure. Science Robotics, 2017, 2, .	9.9	46
7	Tough, Swelling-Resistant, Self-Healing, and Adhesive Dual-Cross-Linked Hydrogels Based on Polymer–Tannic Acid Multiple Hydrogen Bonds. Macromolecules, 2018, 51, 1696-1705.	2.2	291
8	Biomimetic approaches toward smart bio-hybrid systems. Nano Research, 2018, 11, 3009-3030.	5.8	26
9	It's Not a Bug, It's a Feature: Functional Materials in Insects. Advanced Materials, 2018, 30, e1705322.	11.1	120
10	Bonding dissimilar polymer networks in various manufacturing processes. Nature Communications, 2018, 9, 846.	5.8	209
11	Enhanced tendon-to-bone repair through adhesive films. Acta Biomaterialia, 2018, 70, 165-176.	4.1	26
12	Bringing Heteroâ€Polyacidâ€Based Underwater Adhesive as Printable Cathode Coating for Selfâ€Powered Electrochromic Aqueous Batteries. Advanced Functional Materials, 2018, 28, 1800599.	7.8	57
13	Paintable and Rapidly Bondable Conductive Hydrogels as Therapeutic Cardiac Patches. Advanced Materials, 2018, 30, e1704235.	11.1	329
14	Dynamic Interfacial Adhesion through Cucurbit[<i>n</i>]uril Molecular Recognition. Angewandte Chemie, 2018, 130, 8992-8996.	1.6	35
15	Cucurbit[<i>n</i>]uril Supramolecular Hydrogel Networks as Tough and Healable Adhesives. Advanced Functional Materials, 2018, 28, 1800848.	7.8	98
16	Fatigue fracture of nearly elastic hydrogels. Soft Matter, 2018, 14, 3563-3571.	1.2	105
17	Dynamic Interfacial Adhesion through Cucurbit[<i>n</i>]uril Molecular Recognition. Angewandte Chemie - International Edition, 2018, 57, 8854-8858.	7.2	83
18	Structure and Dynamics of Solvated Polymers near a Silica Surface: On the Different Roles Played by Solvent. Journal of Physical Chemistry B, 2018, 122, 4573-4582.	1.2	9

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ARTICLE IF CITATIONS # Tough hydrogel diodes with tunable interfacial adhesion for safe and durable wearable batteries. 19 8.2 63 Nano Energy, 2018, 48, 569-574. Super tough magnetic hydrogels for remotely triggered shape morphing. Journal of Materials Chemistry B, 2018, 6, 2713-2722. 21 Fatigue Fracture of Self-Recovery Hydrogels. ACS Macro Letters, 2018, 7, 312-317. 2.3 105 Rapid-Forming and Self-Healing Agarose-Based Hydrogels for Tissue Adhesives and Potential Wound 130 Dressings. Biomacromolecules, 2018, 19, 980-988. Gold Nanorod-Based Engineered Cardiac Patch for Suture-Free Engraftment by Near IR. Nano Letters, 23 4.5 75 2018, 18, 4069-4073. Structural and Functional Components of the Skate Sensory Organ Ampullae of Lorenzini. ACS 1.6 Chemical Biology, 2018, 13, 1677-1685. 25 Topological Adhesion of Wet Materials. Advanced Materials, 2018, 30, e1800671. 11.1 276 Highly Adaptable and Biocompatible Octopusâ€Like Adhesive Patches with Meniscusâ€Controlled 26 5.6 Unfoldable 3D Microtips for Underwater Surface and Hairy Skin. Advanced Science, 2018, 5, 1800100. Adhesive gland transcriptomics uncovers a diversity of genes involved in glue formation in marine 27 4.1 21 tube-building polychaetes. Acta Biomaterialia, 2018, 72, 316-328. Fatigue of double-network hydrogels. Engineering Fracture Mechanics, 2018, 187, 74-93. Tissue adhesive innovations derived from the natural world. Journal of Thoracic and Cardiovascular 29 0.4 1 Surgery, 2018, 155, 278-279. Musselâ€Inspired Adhesive and Conductive Hydrogel with Longâ€Lasting Moisture and Extreme 788 Temperature Tolerance. Advanced Functional Materials, 2018, 28, 1704195. Design and Anchorage Dependence of Shape Memory Alloy Actuators on Enhanced Voiding of a $\mathbf{31}$ 3.0 19 Bladder. Advanced Materials Technologies, 2018, 3, 1700184. Multimodal underwater adhesion using self-assembled Dopa-bearing ABA triblock copolymer networks. Journal of Materials Chemistry B, 2018, 6, 545-549. 33 Suction effects of craters under water. Soft Matter, 2018, 14, 8509-8520. 1.2 7 Hemodynamic shear flow regulates biophysical characteristics and functions of circulating breast tumor cells reminiscent of brain metastasis. Soft Matter, 2018, 14, 9528-9533. Bioinspired reversible hydrogel adhesives for wet and underwater surfaces. Journal of Materials 35 2.9 81 Chemistry B, 2018, 6, 8064-8070. Microbially Synthesized Repeats of Mussel Foot Protein Display Enhanced Underwater Adhesion. ACS Applied Materials & amp; Interfaces, 2018, 10, 43003-43012.

#	Article	IF	CITATIONS
37	Adhesion Control of Branched Catecholic Polymers by Acid Stimulation. ACS Omega, 2018, 3, 16626-16632.	1.6	13
38	Highly Compressible Cross-Linked Polyacrylamide Hydrogel-Enabled Compressible Zn–MnO ₂ Battery and a Flexible Battery–Sensor System. ACS Applied Materials & Interfaces, 2018, 10, 44527-44534.	4.0	105
39	A Selfâ€Pumping Dressing for Draining Excessive Biofluid around Wounds. Advanced Materials, 2019, 31, e1804187.	11.1	220
40	Concentration-independent mechanics and structure of hagfish slime. Acta Biomaterialia, 2018, 79, 123-134.	4.1	13
41	Programmable Medicine: Autonomous, Ingestible, Deployable Hydrogel Patch and Plug for Stomach Ulcer Therapy. , 2018, , .		12
42	Tough Particleâ€Based Double Network Hydrogels for Functional Solid Surface Coatings. Advanced Materials Interfaces, 2018, 5, 1801018.	1.9	78
43	Hydrogel Electrolytes for Flexible Aqueous Energy Storage Devices. Advanced Functional Materials, 2018, 28, 1804560.	7.8	433
44	High-Performance Double-Network Ion Gels with Fast Thermal Healing Capability via Dynamic Covalent Bonds. Chemistry of Materials, 2018, 30, 7752-7759.	3.2	78
45	Tunable Adhesion for Bio-Integrated Devices. Micromachines, 2018, 9, 529.	1.4	15
46	Composite Double-Network Hydrogels To Improve Adhesion on Biological Surfaces. ACS Applied Materials & Interfaces, 2018, 10, 38692-38699.	4.0	81
47	Self-assembled biomaterials using host-guest interactions. , 2018, , 205-231.		6
48	Equilibrium and Out-of-Equilibrium Adherence of Hydrogels against Polymer Brushes. Macromolecules, 2018, 51, 7556-7566.	2.2	18
49	Self-Healing and Adhesive Artificial Tissue Implant for Voice Recovery. ACS Applied Bio Materials, 2018, 1, 1134-1146.	2.3	19
50	Tough and Self-Healable Nanocomposite Hydrogels for Repeatable Water Treatment. Polymers, 2018, 10, 880.	2.0	22
51	Morphology of soft and rough contact <i>via</i> fluid drainage. Soft Matter, 2018, 14, 7605-7614.	1.2	8
52	Effects of temperature on the fracture and fatigue damage of temperature sensitive hydrogels. RSC Advances, 2018, 8, 31048-31054.	1.7	10
53	Properties of temporary adhesion systems of marine and freshwater organisms. Journal of Experimental Biology, 2018, 221, .	0.8	21
54	A Recent Perspective on Noncovalently Formed Polymeric Hydrogels. Chemical Record, 2018, 18, 1517-1529.	2.9	30

#	Article	IF	CITATIONS
55	Bioglass Activated Albumin Hydrogels for Wound Healing. Advanced Healthcare Materials, 2018, 7, e1800144.	3.9	77
56	Hydrogel ionotronics. Nature Reviews Materials, 2018, 3, 125-142.	23.3	1,119
57	Instant Strong Adhesive Behavior of Nanocomposite Gels toward Hydrophilic Porous Materials. Langmuir, 2018, 34, 8480-8488.	1.6	11
58	Folding artificial mucosa with cell-laden hydrogels guided by mechanics models. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7503-7508.	3.3	60
59	Bioinspired Mineral–Organic Bioresorbable Bone Adhesive. Advanced Healthcare Materials, 2018, 7, e1800467.	3.9	46
60	Tough Hydrogels with Fast, Strong, and Reversible Underwater Adhesion Based on a Multiscale Design. Advanced Materials, 2018, 30, e1801884.	11.1	235
61	Ionic Gels and Their Applications in Stretchable Electronics. Macromolecular Rapid Communications, 2018, 39, e1800246.	2.0	112
62	A Phenomenological Model for Shakedown of Tough Hydrogels Under Cyclic Loads. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	1.1	21
63	The quest for mechanically and biologically functional soft biomaterials via soft network composites. Advanced Drug Delivery Reviews, 2018, 132, 214-234.	6.6	35
64	Recent Developments in Tough Hydrogels for Biomedical Applications. Cels, 2018, 4, 46.	2.1	85
65	Interplay between Silk Fibroin's Structure and Its Adhesive Properties. ACS Biomaterials Science and Engineering, 2018, 4, 2815-2824.	2.6	44
66	Three-dimensional integrated stretchable electronics. Nature Electronics, 2018, 1, 473-480.	13.1	345
67	Sustained release of targeted cardiac therapy with a replenishable implanted epicardial reservoir. Nature Biomedical Engineering, 2018, 2, 416-428.	11.6	70
68	Stretchable Ionics – A Promising Candidate for Upcoming Wearable Devices. Advanced Materials, 2018, 30, e1704403.	11.1	234
69	Recent Advances in Biointegrated Optoelectronic Devices. Advanced Materials, 2018, 30, e1800156.	11.1	76
70	Biomechanoâ€Interactive Materials and Interfaces. Advanced Materials, 2018, 30, e1800572.	11.1	93
71	Stretchable, Conductive, and Self-Healing Hydrogel with Super Metal Adhesion. Chemistry of Materials, 2018, 30, 4289-4297.	3.2	82
72	Bioadhesives. , 2018, , 1597-1640.		3

#	Article	IF	CITATIONS
73	In Situ Fabrication of Double-Layered Hydrogels via Spray Processes to Prevent Postoperative Peritoneal Adhesion. ACS Biomaterials Science and Engineering, 2019, 5, 4790-4798.	2.6	17
74	Probing the Interaction Forces of Phenol/Amine Deposition in Wet Adhesion: Impact of Phenol/Amine Mass Ratio and Surface Properties. Langmuir, 2019, 35, 15639-15650.	1.6	12
75	Bioinspired mechanically active adhesive dressings to accelerate wound closure. Science Advances, 2019, 5, eaaw3963.	4.7	337
76	Molecular Staples for Tough and Stretchable Adhesion in Integrated Soft Materials. Advanced Healthcare Materials, 2019, 8, e1900810.	3.9	20
77	Capillarity-Enhanced Organ-Attachable Adhesive with Highly Drainable Wrinkled Octopus-Inspired Architectures. ACS Applied Materials & Interfaces, 2019, 11, 25674-25681.	4.0	47
78	A silk-based sealant with tough adhesion for instant hemostasis of bleeding tissues. Nanoscale Horizons, 2019, 4, 1333-1341.	4.1	104
79	Adaptive control in lubrication, adhesion, and hemostasis by Chitosan–Catechol–pNIPAM. Biomaterials Science, 2019, 7, 3599-3608.	2.6	32
80	Tough Bonding, Onâ€Demand Debonding, and Facile Rebonding between Hydrogels and Diverse Metal Surfaces. Advanced Materials, 2019, 31, e1904732.	11.1	98
81	Waterâ€Triggered Hyperbranched Polymer Universal Adhesives: From Strong Underwater Adhesion to Rapid Sealing Hemostasis. Advanced Materials, 2019, 31, e1905761.	11.1	352
82	Mussel-Inspired Tough Double Network Hydrogel As Transparent Adhesive. ACS Applied Polymer Materials, 2019, 1, 2998-3007.	2.0	31
83	Rate dependent shear debonding between a highly stretchable elastomer and a rigid substrate: Delayed debonding and pre-stretch effect. Engineering Fracture Mechanics, 2019, 222, 106743.	2.0	18
84	Applications of Highly Stretchable and Tough Hydrogels. Polymers, 2019, 11, 1773.	2.0	24
85	Dry double-sided tape for adhesion of wet tissues and devices. Nature, 2019, 575, 169-174.	13.7	798
86	Adjacent cationic–aromatic sequences yield strong electrostatic adhesion of hydrogels in seawater. Nature Communications, 2019, 10, 5127.	5.8	202
87	Recent Advances in Hemostasis at the Nanoscale. Advanced Healthcare Materials, 2019, 8, e1900823.	3.9	60
88	Snailâ€Inspired Dry Adhesive with Embedded Microstructures for Enhancement of Energy Dissipation. Advanced Materials Technologies, 2019, 4, 1900316.	3.0	26
90	Fundamentals and Advances in the Adhesion of Polymer Surfaces and Thin Films. Langmuir, 2019, 35, 15914-15936.	1.6	66
91	Instant, Tough, Noncovalent Adhesion. ACS Applied Materials & Interfaces, 2019, 11, 40749-40757.	4.0	60

#	Article	IF	CITATIONS
92	Asymmetric Janus adhesive tape prepared by interfacial hydrosilylation for wet/dry amphibious adhesion. NPG Asia Materials, 2019, 11, .	3.8	33
93	Entanglement-Driven Adhesion, Self-Healing, and High Stretchability of Double-Network PEG-Based Hydrogels. ACS Applied Materials & Interfaces, 2019, 11, 36458-36468.	4.0	67
94	Elasticity and energy dissipation in the double network hydrogel adhesive of the slug <i>Arion subfuscus</i> . Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20190201.	1.8	15
95	DNA-Inspired Adhesive Hydrogels Based on the Biodegradable Polyphosphoesters Tackified by a Nucleobase. Biomacromolecules, 2019, 20, 3672-3683.	2.6	27
96	Mechanistic Insights into Silk Fibroin's Adhesive Properties via Chemical Functionalization of Serine Side Chains. ACS Biomaterials Science and Engineering, 2019, 5, 5960-5967.	2.6	24
97	Animal-Related Materials and Topics. , 2019, , 117-130.		0
98	Highly Permeable Skin Patch with Conductive Hierarchical Architectures Inspired by Amphibians and Octopi for Omnidirectionally Enhanced Wet Adhesion. Advanced Functional Materials, 2019, 29, 1807614.	7.8	129
99	A Robust Salty Water Adhesive by Counterion Exchange Induced Coacervate. Macromolecular Rapid Communications, 2019, 40, e1800758.	2.0	14
100	Tearing a hydrogel of complex rheology. Journal of the Mechanics and Physics of Solids, 2019, 125, 749-761.	2.3	39
101	Ultra-stretchable wearable strain sensors based on skin-inspired adhesive, tough and conductive hydrogels. Chemical Engineering Journal, 2019, 365, 10-19.	6.6	223
102	Engineered Bacillus subtilis biofilms as living glues. Materials Today, 2019, 28, 40-48.	8.3	72
103	Hydrogel bioelectronics. Chemical Society Reviews, 2019, 48, 1642-1667.	18.7	1,267
104	Progress in self-healing hydrogels assembled by host–guest interactions: preparation and biomedical applications. Journal of Materials Chemistry B, 2019, 7, 1637-1651.	2.9	93
105	Gluing Interfaces with Soft Nanoparticles. Langmuir, 2019, 35, 7277-7284.	1.6	2
106	Cytocompatible, Injectable, and Electroconductive Soft Adhesives with Hybrid Covalent/Noncovalent Dynamic Network. Advanced Science, 2019, 6, 1802077.	5.6	84
107	Intrinsically reversible superglues via shape adaptation inspired by snail epiphragm. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13774-13779.	3.3	102
108	Creating an Interface: Rendering a Double-Network Hydrogel Lubricious via Spontaneous Delamination. ACS Applied Materials & amp; Interfaces, 2019, 11, 25427-25435.	4.0	25
109	Tunable Hybrid Biopolymeric Hydrogel Scaffolds Based on Atomic Force Microscopy Characterizations for Tissue Engineering. IEEE Transactions on Nanobioscience, 2019, 18, 597-610.	2.2	9

#	Article	IF	CITATIONS
110	Ultrastretchable Wearable Strain and Pressure Sensors Based on Adhesive, Tough, and Self-healing Hydrogels for Human Motion Monitoring. ACS Applied Materials & Interfaces, 2019, 11, 25613-25623.	4.0	161
111	Viscosity Attunes the Adhesion of Bioinspired Low Modulus Polyester Adhesive Sealants to Wet Tissues. Biomacromolecules, 2019, 20, 2577-2586.	2.6	35
112	Covalent Topological Adhesion. ACS Macro Letters, 2019, 8, 754-758.	2.3	65
113	Functional Supramolecular Gels Based on the Hierarchical Assembly of Porphyrins and Phthalocyanines. Frontiers in Chemistry, 2019, 7, 336.	1.8	24
114	Thin Hydrogel–Elastomer Multilayer Encapsulation for Soft Electronics. Advanced Materials Technologies, 2019, 4, 1900331.	3.0	28
115	Design Molecular Topology for Wet–Dry Adhesion. ACS Applied Materials & Interfaces, 2019, 11, 24802-24811.	4.0	76
116	Injectable biomaterials for translational medicine. Materials Today, 2019, 28, 81-97.	8.3	82
117	Control instability and enhance performance of a dielectric elastomer balloon with a passive layer. Journal Physics D: Applied Physics, 2019, 52, 195301.	1.3	5
118	Tunable "soft and stiffâ€; self-healing, recyclable, thermadapt shape memory biomass polymers based on multiple hydrogen bonds and dynamic imine bonds. Journal of Materials Chemistry A, 2019, 7, 13400-13410.	5.2	163
119	Hydrophobic Hydrogels with Fruitâ€Like Structure and Functions. Advanced Materials, 2019, 31, e1900702.	11.1	64
120	Interfacial Engineering of Thermoresponsive Microgel Capsules: Polymeric Wetting vs Colloidal Adhesion. Macromolecules, 2019, 52, 3869-3880.	2.2	16
121	A strongly adhesive hemostatic hydrogel for the repair of arterial and heart bleeds. Nature Communications, 2019, 10, 2060.	5.8	517
122	From Molecular Electrostatic Interactions and Hydrogel Architecture to Macroscopic Underwater Adherence. Macromolecules, 2019, 52, 3852-3862.	2.2	13
123	Polymer Chemistries Underpinning Materials for Skin-Inspired Electronics. Macromolecules, 2019, 52, 3965-3974.	2.2	67
124	Real time rheological study of first network effects on the in situ polymerized semi-interpenetrating hydrogels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 575, 111-117.	2.3	2
125	Strong and Degradable Adhesion of Hydrogels. ACS Applied Bio Materials, 2019, 2, 1781-1786.	2.3	43
126	Adhesive defence mucus secretions in the red triangle slug (<i>Triboniophorus graeffei</i>) can incapacitate adult frogs. Ethology, 2019, 125, 587-591.	0.5	13
127	Engineering Hydrogels beyond a Hydrated Network. Advanced Healthcare Materials, 2019, 8, e1900038.	3.9	8

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#	Article	IF	CITATIONS
128	A viscoelastic adhesive epicardial patch for treating myocardial infarction. Nature Biomedical Engineering, 2019, 3, 632-643.	11.6	156
129	Composite Nanostructures and Adhesion Analysis of Natural Plant Hydrogels Investigated by Atomic Force Microscopy. IEEE Transactions on Nanobioscience, 2019, 18, 448-455.	2.2	5
130	Hydrogel 3D printing with the capacitor edge effect. Science Advances, 2019, 5, eaau8769.	4.7	43
131	Biomaterials to Mimic and Heal Connective Tissues. Advanced Materials, 2019, 31, e1806695.	11.1	131
132	Investigation of surgical adhesives for vocal fold wound closure. Laryngoscope, 2019, 129, 2139-2146.	1.1	7
133	Engineering a naturally-derived adhesive and conductive cardiopatch. Biomaterials, 2019, 207, 89-101.	5.7	93
134	A super-stretchable and tough functionalized boron nitride/PEDOT:PSS/poly(<i>N</i> -isopropylacrylamide) hydrogel with self-healing, adhesion, conductive and photothermal activity. Journal of Materials Chemistry A, 2019, 7, 8204-8209.	5.2	101
135	Active Modulation of States of Prestress in Self-Assembled Short Peptide Gels. Biomacromolecules, 2019, 20, 1719-1730.	2.6	11
136	Damage cross-effect and anisotropy in tough double network hydrogels revealed by biaxial stretching. Soft Matter, 2019, 15, 3719-3732.	1.2	17
137	Diffusive Adhesives for Waterâ€Rich Materials: Strong and Tunable Adhesion Beyond the Interface. Chemistry - A European Journal, 2019, 25, 8085-8091.	1.7	2
138	Stretchable and Bioadhesive Supramolecular Hydrogels Activated by a One-Stone–Two-Bird Postgelation Functionalization Method. ACS Applied Materials & Interfaces, 2019, 11, 16328-16335.	4.0	25
139	A (Macro)Molecular-Level Understanding of Polymer Network Topology. Trends in Chemistry, 2019, 1, 318-334.	4.4	127
140	Tough and Alkaline-Resistant Mussel-Inspired Wet Adhesion with Surface Salt Displacement via Polydopamine/Amine Synergy. Langmuir, 2019, 35, 5257-5263.	1.6	35
141	Strong Wet Adhesion of Tough Transparent Nanocomposite Hydrogels for Fast Tunable Focus Lenses. ACS Applied Materials & Interfaces, 2019, 11, 15071-15078.	4.0	22
142	Plant-inspired adhesive and tough hydrogel based on Ag-Lignin nanoparticles-triggered dynamic redox catechol chemistry. Nature Communications, 2019, 10, 1487.	5.8	675
143	Multifunctional Biomedical Adhesives. Advanced Healthcare Materials, 2019, 8, e1801568.	3.9	123
144	Marine-inspired polymers in medical adhesion. European Polymer Journal, 2019, 116, 134-143.	2.6	98
145	Cohesive and adhesive properties of crosslinked semiflexible biopolymer networks. Soft Matter, 2019, 15, 3807-3816.	1.2	16

# 146	ARTICLE Improving the adhesion, flexibility, and hemostatic efficacy of a sprayable polymer blend surgical sealant by incorporating silica particles. Acta Biomaterialia, 2019, 90, 205-216.	IF 4.1	Citations 36
147	Bioinspired Adhesive Architectures: From Skin Patch to Integrated Bioelectronics. Advanced Materials, 2019, 31, e1803309.	11.1	203
148	Effect of Partition on the Mechanical Behaviors of Soft Adhesive Layers. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	1.1	11
149	Extreme enhancement of interfacial adhesion by bulk patterning of sacrificial cuts. Extreme Mechanics Letters, 2019, 28, 22-30.	2.0	9
150	Wearable and Implantable Triboelectric Nanogenerators. Advanced Functional Materials, 2019, 29, 1808820.	7.8	296
151	Tough Adhesion of Nucleobaseâ€∓ackifed Gels in Diverse Solvents. Advanced Functional Materials, 2019, 29, 1900450.	7.8	81
152	Multiple Physical Cross-Linker Strategy To Achieve Mechanically Tough and Reversible Properties of Double-Network Hydrogels in Bulk and on Surfaces. ACS Applied Polymer Materials, 2019, 1, 701-713.	2.0	39
153	A mechanism for temporary bioadhesion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4297-4306.	3.3	42
154	A smart bottom-up strategy for fabrication of complex hydrogel constructs with 3D controllable geometric shapes through dynamic interfacial adhesion. Journal of Materials Chemistry B, 2019, 7, 1996-2000.	2.9	8
155	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384.	5.8	249
156	Mussel-Inspired Injectable Hydrogel Adhesive Formed under Mild Conditions Features Near-Native Tissue Properties. ACS Applied Materials & Interfaces, 2019, 11, 47707-47719.	4.0	49
157	Ionic–Covalent Hybrid Tough Hydrogels Enabled by the in Situ Release of Metal Ions from Insoluble Salts or Alkalis. ACS Applied Polymer Materials, 2019, 1, 3222-3226.	2.0	10
158	A stretchable, conformable, and biocompatible graphene strain sensor based on a structured hydrogel for clinical application. Journal of Materials Chemistry A, 2019, 7, 27099-27109.	5.2	61
159	Heterogeneous Strain Distribution of Elastomer Substrates To Enhance the Sensitivity of Stretchable Strain Sensors. Accounts of Chemical Research, 2019, 52, 82-90.	7.6	52
160	Bioinspired and Microgel-Tackified Adhesive Hydrogel with Rapid Self-Healing and High Stretchability. Macromolecules, 2019, 52, 72-80.	2.2	76
161	Immunomodulatory application of engineered hydrogels in regenerative medicine. Applied Materials Today, 2019, 14, 126-136.	2.3	34
162	Tough, Adhesive, Self-Healable, and Transparent Ionically Conductive Zwitterionic Nanocomposite Hydrogels as Skin Strain Sensors. ACS Applied Materials & Interfaces, 2019, 11, 3506-3515.	4.0	309
163	Interfacial fluid transport is a key to hydrogel bioadhesion. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 738-743.	3.3	52

#	Article	IF	CITATIONS
164	Enhanced mechanical properties of polyacrylamide/chitosan hydrogels by tuning the molecular structure of hyperbranched polysiloxane. Materials and Design, 2019, 162, 162-170.	3.3	41
165	Mechanics of electrophoresis-induced reversible hydrogel adhesion. Journal of the Mechanics and Physics of Solids, 2019, 125, 1-21.	2.3	26
166	Hydroxypropylcellulose enhanced high viscosity endoscopic mucosal dissection intraoperative chitosan thermosensitive hydrogel. Carbohydrate Polymers, 2019, 209, 198-206.	5.1	29
167	Proteinâ€based bioadhesives and bioglues. Polymers for Advanced Technologies, 2019, 30, 217-234.	1.6	37
168	Fatigue of hydrogels. European Journal of Mechanics, A/Solids, 2019, 74, 337-370.	2.1	206
169	General Principle for Fabricating Natural Globular Protein-Based Double-Network Hydrogels with Integrated Highly Mechanical Properties and Surface Adhesion on Solid Surfaces. Chemistry of Materials, 2019, 31, 179-189.	3.2	102
170	Gelatinâ€polysaccharide composite scaffolds for 3D cell culture and tissue engineering: Towards natural therapeutics. Bioengineering and Translational Medicine, 2019, 4, 96-115.	3.9	249
171	Hydrogels as Emerging Materials for Translational Biomedicine. Advanced Therapeutics, 2019, 2, 1800088.	1.6	72
172	Adhesives to empower a manipulator inspired by the chameleon tongue. Chinese Chemical Letters, 2020, 31, 821-825.	4.8	4
173	Hydrogel Adhesion: A Supramolecular Synergy of Chemistry, Topology, and Mechanics. Advanced Functional Materials, 2020, 30, 1901693.	7.8	507
174	Stretchable and fatigue-resistant materials. Materials Today, 2020, 34, 7-16.	8.3	146
175	Spatially modulated stiffness on hydrogels for soft and stretchable integrated electronics. Materials Horizons, 2020, 7, 203-213.	6.4	70
176	Enhancement of Interfacial Adhesion Using Micro/Nanoscale Hierarchical Cilia for Randomly Accessible Membrane-Type Electronic Devices. ACS Nano, 2020, 14, 118-128.	7.3	10
177	A reversible underwater glue based on photo- and thermo-responsive dynamic covalent bonds. Materials Horizons, 2020, 7, 282-288.	6.4	113
178	A Novel Doubleâ€Crosslinkingâ€Doubleâ€Network Design for Injectable Hydrogels with Enhanced Tissue Adhesion and Antibacterial Capability for Wound Treatment. Advanced Functional Materials, 2020, 30, 1904156.	7.8	256
179	Bioinspired Multiscale Wet Adhesive Surfaces: Structures and Controlled Adhesion. Advanced Functional Materials, 2020, 30, 1905287.	7.8	137
180	Hydration and swelling of dry polymers for wet adhesion. Journal of the Mechanics and Physics of Solids, 2020, 137, 103863.	2.3	50
181	Transfer Printing of Electronic Functions on Arbitrary Complex Surfaces. ACS Nano, 2020, 14, 12-20.	7.3	47

#	Article	IF	CITATIONS
182	Tough polyacrylamide-tannic acid-kaolin adhesive hydrogels for quick hemostatic application. Materials Science and Engineering C, 2020, 109, 110649.	3.8	75
183	Photoâ€Crosslinking Strategy Constructs Adhesive, Superabsorbent, and Tough PVAâ€Based Hydrogel through Controlling the Balance of Cohesion and Adhesion. Macromolecular Materials and Engineering, 2020, 305, 1900623.	1.7	27
184	Magnesium oxide-crosslinked low-swelling citrate-based mussel-inspired tissue adhesives. Biomaterials, 2020, 232, 119719.	5.7	66
185	A pseudo-elasticity theory to model the strain-softening behavior of tough hydrogels. Journal of the Mechanics and Physics of Solids, 2020, 137, 103832.	2.3	38
186	Fast and High Strength Soft Tissue Bioadhesives Based on a Peptide Dendrimer with Antimicrobial Properties and Hemostatic Ability. ACS Applied Materials & Interfaces, 2020, 12, 4241-4253.	4.0	63
187	Selfâ€Hydrophobization in a Dynamic Hydrogel for Creating Nonspecific Repeatable Underwater Adhesion. Advanced Functional Materials, 2020, 30, 1907064.	7.8	159
188	Interfacial fatigue fracture of tissue adhesive hydrogels. Extreme Mechanics Letters, 2020, 34, 100601.	2.0	29
189	Reversible Bioadhesives Using Tannic Acid Primed Thermallyâ€Responsive Polymers. Advanced Functional Materials, 2020, 30, 1907478.	7.8	42
190	Bioinspired Mineral–Organic Bone Adhesives for Stable Fracture Fixation and Accelerated Bone Regeneration. Advanced Functional Materials, 2020, 30, 1908381.	7.8	130
191	Fabrication of strong hydrogen-bonding induced coacervate adhesive hydrogels with antibacterial and hemostatic activities. Biomaterials Science, 2020, 8, 1455-1463.	2.6	71
192	Toughening anti-overswelling semicrystalline polymer hydrogels with ultra-small hydrophobic nanoparticles. Polymer, 2020, 186, 122080.	1.8	5
193	Specialty Tough Hydrogels and Their Biomedical Applications. Advanced Healthcare Materials, 2020, 9, e1901396.	3.9	120
194	A hydrogel adhesive fabricated from poly(ethylene glycol) diacrylate and poly(allylamine) Tj ETQq0 0 0 rgBT /Over 186, 122082.	lock 10 Tf 1.8	50 267 Td (l 8
195	Protein and Hydrophobic Associationâ€Regulated Hydrogels with Adhesive Adjustability in Different Materials. Advanced Materials Interfaces, 2020, 7, 1901541.	1.9	14
196	Composite Tissue Adhesive Containing Catechol-Modified Hyaluronic Acid and Poly- <scp>l</scp> -lysine. ACS Applied Bio Materials, 2020, 3, 628-638.	2.3	20
197	Omnipotent tissue adhesive. Science Bulletin, 2020, 65, 428-430.	4.3	1
198	Wrinkled double network hydrogel <i>via</i> simple stretch-recovery. Chemical Communications, 2020, 56, 13587-13590.	2.2	12
199	Skin-Inspired Hydrogel-Elastomer Hybrid Forms a Seamless Interface by Autonomous Hetero-Self-Healing. ACS Applied Polymer Materials, 2020, 2, 5352-5357.	2.0	25

	Сітатіс	on Report	
#	Article	IF	CITATIONS
200	Biocompatible hydrogel ostomy adhesive. Medical Devices & Sensors, 2020, 3, e10132.	2.7	4
201	Programming Living Glue Systems to Perform Autonomous Mechanical Repairs. Matter, 2020, 3, 2080-2092.	5.0	41
202	Antiswelling and Durable Adhesion Biodegradable Hydrogels for Tissue Repairs and Strain Sensors. Langmuir, 2020, 36, 10448-10459.	1.6	37
203	A chemo-mechanical fracture model for the welding interface of vitrimers. Mechanics of Materials, 2020, 148, 103516.	1.7	5
204	Mussel-Inspired Biocompatible PAADOPA/PAAm Hydrogel Adhesive for Amoxicillin Delivery. Industrial & Engineering Chemistry Research, 2020, 59, 13556-13563.	1.8	14
205	A Universal Strategy for Tough Adhesion of Wet Soft Material. Advanced Functional Materials, 2020, 30, 2003207.	7.8	113
206	Engineering an Injectable Tough Tissue Adhesive through Nanocellulose Reinforcement. ACS Applied Bio Materials, 2020, 3, 9093-9100.	2.3	8
207	Photocurable Hyperbranched Polymer Medical Glue for Water-Resistant Bonding. Biomacromolecules, 2020, 21, 5222-5232.	2.6	16
208	Mussel-Inspired Adhesive Double-Network Hydrogel for Intraoral Ultrasound Imaging. ACS Applied Bio Materials, 2020, 3, 8943-8952.	2.3	17
209	A self-adhesive wearable strain sensor based on a highly stretchable, tough, self-healing and ultra-sensitive ionic hydrogel. Journal of Materials Chemistry C, 2020, 8, 17349-17364.	2.7	94
210	Supramolecular adhesive materials from smallâ€molecule selfâ€assembly. SmartMat, 2020, 1, e1012.	6.4	79
211	Stretchable, dynamic covalent polymers for soft, long-lived bioresorbable electronic stimulators designed to facilitate neuromuscular regeneration. Nature Communications, 2020, 11, 5990.	5.8	144
212	Role of a high calcium ion content in extending the properties of alginate dual-crosslinked hydrogels. Journal of Materials Chemistry A, 2020, 8, 25390-25401.	5.2	114
213	Recent Progress in 3D Printing of Elastic and High-Strength Hydrogels for the Treatment of Osteochondral and Cartilage Diseases. Frontiers in Bioengineering and Biotechnology, 2020, 8, 604814.	2.0	15
214	Hydrogel-Tissue Adhesion Using Blood Coagulation Induced by Silica Nanoparticle Coatings. ACS Applied Bio Materials, 2020, 3, 8808-8819.	2.3	10
215	Transparent Stretchable Dual-Network Ionogel with Temperature Tolerance for High-Performance Flexible Strain Sensors. ACS Applied Materials & Interfaces, 2020, 12, 37597-37606.	4.0	92
216	Biomaterial surface modification for underwater adhesion. Smart Materials in Medicine, 2020, 1, 77-91.	3.7	39
217	Inkâ€Based Additive Nanomanufacturing of Functional Materials for Humanâ€Integrated Smart Wearables Advanced Intelligent Systems, 2020, 2, 2000117.	. 3.3	17

#	Article	IF	CITATIONS
218	Transparent and UV Blocking Structural Colored Hydrogel for Contact Lenses. ACS Applied Materials & Interfaces, 2020, 12, 39639-39648.	4.0	23
219	Biocompatible polypeptide-based interpenetrating network (IPN) hydrogels with enhanced mechanical properties. Journal of Materials Chemistry B, 2020, 8, 7785-7791.	2.9	16
220	Inhomogeneous swelling behavior of a bi-layered spherical hydrogel containing a hard core. Journal of Applied Physics, 2020, 128, .	1.1	3
221	Effect of the constituent networks of double-network gels on their mechanical properties and energy dissipation process. Soft Matter, 2020, 16, 8618-8627.	1.2	18
222	Topological adhesion II. Stretchable adhesion. Extreme Mechanics Letters, 2020, 40, 100891.	2.0	25
223	Micro–Nano Hierarchical Structure Enhanced Strong Wet Friction Surface Inspired by Tree Frogs. Advanced Science, 2020, 7, 2001125.	5.6	69
224	Autologous cell membrane coatings on tissue engineering xenografts for suppression and alleviation of acute host immune responses. Biomaterials, 2020, 258, 120310.	5.7	25
225	Dynamic,3DSchiff base networks for medical applications. Journal of Applied Polymer Science, 2020, 137, 49756.	1.3	3
226	Fabricating Tough Interpenetrating Network Cryogels with DNA as the Primary Network for Biomedical Applications. ACS Macro Letters, 2020, 9, 1230-1236.	2.3	20
227	Bioinspired adenine–dopamine immobilized polymer hydrogel adhesives for tissue engineering. Chemical Communications, 2020, 56, 11303-11306.	2.2	17
228	3D Coaxial Printing Tough and Elastic Hydrogels for Tissue Engineering Using a Catechol Functionalized Ink System. Advanced Healthcare Materials, 2020, 9, e2001342.	3.9	20
229	Ctenophore-inspired hydrogels for efficient and repeatable underwater specific adhesion to biotic surfaces. Materials Horizons, 2020, 7, 2651-2661.	6.4	127
230	Supramolecular Cross-Links in Mussel-Inspired Tissue Adhesives. ACS Macro Letters, 2020, 9, 1439-1445.	2.3	31
232	Engineering hydrogels by soaking: from mechanical strengthening to environmental adaptation. Chemical Communications, 2020, 56, 13731-13747.	2.2	30
233	A Phenolâ€Amine Superglue Inspired by Insect Sclerotization Process. Advanced Materials, 2020, 32, e2002118.	11.1	55
234	Comparative Animal Mucomics: Inspiration for Functional Materials from Ubiquitous and Understudied Biopolymers. ACS Biomaterials Science and Engineering, 2020, 6, 5377-5398.	2.6	12
235	Uniting Drug and Delivery: Metal Oxide Hybrid Nanotherapeutics for Skin Wound Care. Pharmaceutics, 2020, 12, 780.	2.0	28
236	Solvent-Resistant and Nonswellable Hydrogel Conductor toward Mechanical Perception in Diverse Liquid Media. ACS Nano, 2020, 14, 13709-13717.	7.3	128

#	Article	IF	CITATIONS
237	Selfâ€Bondable and Stretchable Conductive Composite Fibers with Spatially Controlled Percolated Ag Nanoparticle Networks: Novel Integration Strategy for Wearable Electronics. Advanced Functional Materials, 2020, 30, 2005447.	7.8	28
238	Polymeric Hydrogel Systems as Emerging Biomaterial Platforms to Enable Hemostasis and Wound Healing. Advanced Healthcare Materials, 2020, 9, e2000905.	3.9	194
239	An Adhesive Hydrogel with "Loadâ€Sharing―Effect as Tissue Bandages for Drug and Cell Delivery. Advanced Materials, 2020, 32, e2001628.	11.1	128
240	Characterization of the <i>Arion vulgaris</i> pedal gland system. Journal of Morphology, 2020, 281, 1059-1071.	0.6	6
241	A Janus Hydrogel Wet Adhesive for Internal Tissue Repair and Antiâ€Postoperative Adhesion. Advanced Functional Materials, 2020, 30, 2005689.	7.8	182
242	Highly stretchable supramolecular conductive self-healable gels for injectable adhesive and flexible sensor applications. Journal of Materials Chemistry A, 2020, 8, 19954-19964.	5.2	52
243	Adhesive Hydrogel Patch with Enhanced Strength and Adhesiveness to Skin for Transdermal Drug Delivery. Advanced Functional Materials, 2020, 30, 2004407.	7.8	142
244	Mussel-Inspired Redox-Active and Hydrophilic Conductive Polymer Nanoparticles for Adhesive Hydrogel Bioelectronics. Nano-Micro Letters, 2020, 12, 169.	14.4	98
245	Heteropoly acid-driven assembly of glutathione into redox-responsive underwater adhesive. Chemical Communications, 2020, 56, 11034-11037.	2.2	25
246	Polymer Based Bioadhesive Biomaterials for Medical Application—A Perspective of Redefining Healthcare System Management. Polymers, 2020, 12, 3015.	2.0	13
247	Combined Catalysis for Engineering Bioinspired, Lignin-Based, Long-Lasting, Adhesive, Self-Mending, Antimicrobial Hydrogels. ACS Nano, 2020, 14, 17004-17017.	7.3	101
248	A Solventâ€Exchange Strategy to Regulate Noncovalent Interactions for Strong and Antiswelling Hydrogels. Advanced Materials, 2020, 32, e2004579.	11.1	177
249	The new generation of soft and wearable electronics for health monitoring in varying environment: From normal to extreme conditions. Materials Today, 2020, 41, 219-242.	8.3	125
250	Bioinspired Selfâ€Healing Human–Machine Interactive Touch Pad with Pressure ensitive Adhesiveness on Targeted Substrates. Advanced Materials, 2020, 32, e2004290.	11.1	210
251	Gelatin Hydrogels Reinforced by Absorbable Nanoparticles and Fibrils Cured In Situ by Visible Light for Tissue Adhesive Applications. Polymers, 2020, 12, 1113.	2.0	15
252	Engineering an adhesive based on photosensitive polymer hydrogels and silver nanoparticles for wound healing. Journal of Materials Chemistry B, 2020, 8, 5756-5764.	2.9	46
253	An anti-infective hydrogel adhesive with non-swelling and robust mechanical properties for sutureless wound closure. Journal of Materials Chemistry B, 2020, 8, 5682-5693.	2.9	42
254	Transformation of Biomass DNA into Biodegradable Materials from Gels to Plastics for Reducing Petrochemical Consumption. Journal of the American Chemical Society, 2020, 142, 10114-10124.	6.6	66

#	Article	IF	CITATIONS
255	Stable antibacterial polysaccharide-based hydrogels as tissue adhesives for wound healing. RSC Advances, 2020, 10, 17280-17287.	1.7	45
256	Synergy of noncovalent interlink and covalent toughener for tough hydrogel adhesion. Extreme Mechanics Letters, 2020, 39, 100797.	2.0	10
257	Mussel cuticle-mimetic ultra-tough, self-healing elastomers with double-locked nanodomains exhibit fast stimuli-responsive shape transformation. Journal of Materials Chemistry A, 2020, 8, 12463-12471.	5.2	22
258	Gelatin Methacryloyl Bioadhesive Improves Survival and Reduces Scar Burden in a Mouse Model of Myocardial Infarction. Journal of the American Heart Association, 2020, 9, e014199.	1.6	16
259	Introduction to Editorial Board Member: Professor David J. Mooney. Bioengineering and Translational Medicine, 2020, 5, e10162.	3.9	0
260	An Antifreezing/Antiheating Hydrogel Containing Catechol Derivative Urushiol for Strong Wet Adhesion to Various Substrates. ACS Applied Materials & Interfaces, 2020, 12, 32031-32040.	4.0	70
261	Instant tough bioadhesive with triggerable benign detachment. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15497-15503.	3.3	210
262	Topological adhesion. I. Rapid and strong topohesives. Extreme Mechanics Letters, 2020, 39, 100803.	2.0	43
263	Bioâ€Derived Natural Materials Based Triboelectric Devices for Selfâ€Powered Ubiquitous Wearable and Implantable Intelligent Devices. Advanced Sustainable Systems, 2020, 4, 2000108.	2.7	42
264	Fatigue-resistant adhesion I. Long-chain polymers as elastic dissipaters. Extreme Mechanics Letters, 2020, 39, 100813.	2.0	29
265	A dielectric elastomer membrane integrated with protective passive layers under explicit and implicit prestretch. International Journal of Mechanics and Materials in Design, 2020, 16, 733-748.	1.7	0
266	Strength and toughness of adhesion of soft materials measured in lap shear. Journal of the Mechanics and Physics of Solids, 2020, 143, 103988.	2.3	44
267	Advances in Photoreactive Tissue Adhesives Derived from Natural Polymers. ChemEngineering, 2020, 4, 32.	1.0	13
268	Biofilm-inspired adhesive and antibacterial hydrogel with tough tissue integration performance for sealing hemostasis and wound healing. Bioactive Materials, 2020, 5, 768-778.	8.6	127
269	Stabilized albumin coatings on engineered xenografts for attenuation of acute immune and inflammatory responses. Journal of Materials Chemistry B, 2020, 8, 6080-6091.	2.9	16
270	Autonomous and Reversible Adhesion using Elastomeric Suction Cups for In-vivo Medical Treatments. IEEE Robotics and Automation Letters, 2020, , 1-1.	3.3	6
271	The recent progress of tissue adhesives in design strategies, adhesive mechanism and applications. Materials Science and Engineering C, 2020, 111, 110796.	3.8	69
272	Pressure-Sensitive Tissue Adhesion and Biodegradation of Viscoelastic Polymer Blends. ACS Applied Materials & Amp; Interfaces, 2020, 12, 16050-16057.	4.0	21

#	Article	IF	CITATIONS
273	Viscoelastic Hydrogel Microfibers Exploiting Cucurbit[8]uril Host–Guest Chemistry and Microfluidics. ACS Applied Materials & Interfaces, 2020, 12, 17929-17935.	4.0	23
274	A medical adhesive used in a wet environment by blending tannic acid and silk fibroin. Biomaterials Science, 2020, 8, 2694-2701.	2.6	46
275	A bioinspired hydrogen bond crosslink strategy toward toughening ultrastrong and multifunctional nanocomposite hydrogels. Journal of Materials Chemistry B, 2020, 8, 4002-4015.	2.9	88
276	An engineered cell-laden adhesive hydrogel promotes craniofacial bone tissue regeneration in rats. Science Translational Medicine, 2020, 12, .	5.8	199
277	Octopus Arm-Inspired Tapered Soft Actuators with Suckers for Improved Grasping. Soft Robotics, 2020, 7, 639-648.	4.6	171
278	The Potential of Electrospinning/Electrospraying Technology in the Rational Design of Hydrogel Structures. Macromolecular Materials and Engineering, 2020, 305, 2000285.	1.7	29
279	A natural polymer based bioadhesive with self-healing behavior and improved antibacterial properties. Biomaterials Science, 2020, 8, 4346-4357.	2.6	49
280	A high-strength double network polydopamine nanocomposite hydrogel for adhesion under seawater. Journal of Materials Chemistry B, 2020, 8, 8232-8241.	2.9	50
282	Advances in Materials for Soft Stretchable Conductors and Their Behavior under Mechanical Deformation. Polymers, 2020, 12, 1454.	2.0	11
283	Polypeptide-based self-healing hydrogels: Design and biomedical applications. Acta Biomaterialia, 2020, 113, 84-100.	4.1	100
284	Bioinspired hybrid patches with self-adhesive hydrogel and piezoelectric nanogenerator for promoting skin wound healing. Nano Research, 2020, 13, 2525-2533.	5.8	92
285	Scaling effect on the detachment of pressure-sensitive adhesives through fibrillation characterized by a probe-tack test. Soft Matter, 2020, 16, 6493-6500.	1.2	10
286	Soy protein and chitin sponge-like scaffolds: from natural by-products to cell delivery systems for biomedical applications. Green Chemistry, 2020, 22, 3445-3460.	4.6	23
287	Study on Large Deformation Behavior of Polyacrylamide Hydrogel Using Dissipative Particle Dynamics. Frontiers in Chemistry, 2020, 8, 115.	1.8	16
288	A multi-functional reversible hydrogel adhesive. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 593, 124622.	2.3	48
289	Underwater Adhesion of Multiresponsive Complex Coacervates. Advanced Materials Interfaces, 2020, 7, 1901785.	1.9	40
290	Weak Bonds in a Biomimetic Adhesive Enhance Toughness and Performance. Journal of the American Chemical Society, 2020, 142, 4762-4768.	6.6	106
291	Near-Infrared-Detached Adhesion Enabled by Upconverting Nanoparticles. IScience, 2020, 23, 100832.	1.9	12

#	Article	IF	CITATIONS
292	Supramolecular β‣heet Suckerin–Based Underwater Adhesives. Advanced Functional Materials, 2020, 30, 1907534.	7.8	39
293	Overcoming the translational barriers of tissue adhesives. Nature Reviews Materials, 2020, 5, 310-329.	23.3	213
294	Tunable Adhesion from Stoichiometry-Controlled and Sequence-Defined Supramolecular Polymers Emerges Hierarchically from Cyanostar-Stabilized Anion–Anion Linkages. Journal of the American Chemical Society, 2020, 142, 2579-2591.	6.6	68
295	Catechol-functionalized hydrogels: biomimetic design, adhesion mechanism, and biomedical applications. Chemical Society Reviews, 2020, 49, 433-464.	18.7	517
296	Activating proper inflammation for wound-healing acceleration via mesoporous silica nanoparticle tissue adhesive. Nano Research, 2020, 13, 373-379.	5.8	27
297	Flexible, Reconfigurable, and Self-Healing TPU/Vitrimer Polymer Blend with Copolymerization Triggered by Bond Exchange Reaction. ACS Applied Materials & Interfaces, 2020, 12, 8740-8750.	4.0	47
298	Bioinspired structural color patch with anisotropic surface adhesion. Science Advances, 2020, 6, eaax8258.	4.7	150
299	Hydrogel machines. Materials Today, 2020, 36, 102-124.	8.3	625
300	Topological prime. Science China Technological Sciences, 2020, 63, 1314-1322.	2.0	9
301	A Highly Stretchable, Realâ€Time Selfâ€Healable Hydrogel Adhesive Matrix for Tissue Patches and Flexible Electronics. Advanced Healthcare Materials, 2020, 9, e1901423.	3.9	89
302	Dynamic and Programmable Cellular-Scale Granules Enable Tissue-like Materials. Matter, 2020, 2, 948-964.	5.0	30
303	Titanium as an Instant Adhesive for Biological Soft Tissue. Advanced Materials Interfaces, 2020, 7, 1902089.	1.9	9
304	Factors That Determine the Adhesive Strength in a Bioinspired Bone Tissue Adhesive. ChemEngineering, 2020, 4, 19.	1.0	10
305	Injectable and Cytocompatible Dual Cross-Linking Hydrogels with Enhanced Mechanical Strength and Stability. ACS Biomaterials Science and Engineering, 2020, 6, 3529-3538.	2.6	19
306	Stretchable Conductive Fabric for Cardiac Electrophysiology Applications. ACS Applied Bio Materials, 2020, 3, 3114-3122.	2.3	3
307	Dopamine-Modified Hyaluronic Acid Hydrogel Adhesives with Fast-Forming and High Tissue Adhesion. ACS Applied Materials & amp; Interfaces, 2020, 12, 18225-18234.	4.0	175
308	Engineering Tough, Injectable, Naturally Derived, Bioadhesive Composite Hydrogels. Advanced Healthcare Materials, 2020, 9, e1901722.	3.9	78
309	Controlling Longâ€Distance Photoactuation with Protein Additives. Small, 2020, 16, e2000043.	5.2	17

-11-	ARTICLE	IF	CITATIONS
310	Musselâ€Inspired Hydrogels for Selfâ€Adhesive Bioelectronics. Advanced Functional Materials, 2020, 30, 1909954.	7.8	285
311	Wet-adhesive, haemostatic and antimicrobial bilayered composite nanosheets for sealing and healing soft-tissue bleeding wounds. Biomaterials, 2020, 252, 120018.	5.7	62
312	Fish-inspired anti-icing hydrogel sensors with low-temperature adhesion and toughness. Journal of Materials Chemistry A, 2020, 8, 9373-9381.	5.2	90
313	Molecular engineering of metal coordination interactions for strong, tough, and fast-recovery hydrogels. Science Advances, 2020, 6, eaaz9531.	4.7	111
314	Progress in Nanorobotics for Advancing Biomedicine. IEEE Transactions on Biomedical Engineering, 2021, 68, 130-147.	2.5	32
315	Functional hydrogel coatings. National Science Review, 2021, 8, nwaa254.	4.6	191
316	Evaluation of scaffolding, inflammatory response, and wound healing support of a reverse thermal gel for myelomeningocele patching. Journal of Applied Polymer Science, 2021, 138, 50013.	1.3	1
317	Electrical bioadhesive interface for bioelectronics. Nature Materials, 2021, 20, 229-236.	13.3	361
318	Advanced hydrogels for the repair of cartilage defects and regeneration. Bioactive Materials, 2021, 6, 998-1011.	8.6	201
319	3D-printed multifunctional materials enabled by artificial-intelligence-assisted fabrication technologies. Nature Reviews Materials, 2021, 6, 27-47.	23.3	140
320			
	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249.	6.6	7
321	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249. Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie - International Edition, 2021, 60, 2346-2354.	6.6 7.2	7 34
321 322	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249. Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie - International Edition, 2021, 60, 2346-2354. Recent advances in three-dimensional microelectrode array technologies for in vitro and in vivo cardiac and neuronal interfaces. Biosensors and Bioelectronics, 2021, 171, 112687.	6.6 7.2 5.3	7 34 62
321 322 323	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249.Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie - International Edition, 2021, 60, 2346-2354.Recent advances in three-dimensional microelectrode array technologies for in vitro and in vivo cardiac and neuronal interfaces. Biosensors and Bioelectronics, 2021, 171, 112687.Magnetically Active Cardiac Patches as an Untethered, Nonâ€Blood Contacting Ventricular Assist Device. Advanced Science, 2021, 8, 2000726.	6.6 7.2 5.3 5.6	7 34 62 10
321 322 323 324	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249. Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie - International Edition, 2021, 60, 2346-2354. Recent advances in three-dimensional microelectrode array technologies for in vitro and in vivo cardiac and neuronal interfaces. Biosensors and Bioelectronics, 2021, 171, 112687. Magnetically Active Cardiac Patches as an Untethered, Nonâ€Blood Contacting Ventricular Assist Device. Advanced Science, 2021, 8, 2000726. Nanocomposite adhesive hydrogels: from design to application. Journal of Materials Chemistry B, 2021, 9, 585-593.	6.6 7.2 5.3 5.6 2.9	7 34 62 10 51
321 322 323 324 325	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249. Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie - International Edition, 2021, 60, 2346-2354. Recent advances in three-dimensional microelectrode array technologies for in vitro and in vivo cardiac and neuronal interfaces. Biosensors and Bioelectronics, 2021, 171, 112687. Magnetically Active Cardiac Patches as an Untethered, Nonâ€Blood Contacting Ventricular Assist Device. Advanced Science, 2021, 8, 2000726. Nanocomposite adhesive hydrogels: from design to application. Journal of Materials Chemistry B, 2021, 9, 585-593. Modified hyaluronic acid hydrogels with chemical groups that facilitate adhesion to host tissues enhance cartilage regeneration. Bioactive Materials, 2021, 6, 1689-1698.	6.6 7.2 5.3 5.6 2.9 8.6	7 34 62 10 51
 321 322 323 324 325 326 	Synthesis of novel copolymer/Mn+ biomimetic adhesives based on temperature strengthened coacervation effect. Chemical Engineering Journal, 2021, 425, 127249. Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie - International Edition, 2021, 60, 2346-2354. Recent advances in three-dimensional microelectrode array technologies for in vitro and in vivo cardiac and neuronal interfaces. Biosensors and Bioelectronics, 2021, 171, 112687. Magnetically Active Cardiac Patches as an Untethered, Nonâ€Blood Contacting Ventricular Assist Device. Advanced Science, 2021, 8, 2000726. Nanocomposite adhesive hydrogels: from design to application. Journal of Materials Chemistry B, 2021, 9, 585-593. Modified hyaluronic acid hydrogels with chemical groups that facilitate adhesion to host tissues enhance cartilage regeneration. Bioactive Materials, 2021, 6, 1689-1698. The Fracture of Highly Deformable Soft Materials: A Tale of Two Length Scales. Annual Review of Condensed Matter Physics, 2021, 12, 71-94.	6.6 7.2 5.3 5.6 2.9 8.6 5.2	 7 34 62 10 51 107 103

#	Article	IF	CITATIONS
328	Hydrogels Generated from Cyclic Poly(2â€Oxazoline)s Display Unique Swelling and Mechanical Properties. Macromolecular Rapid Communications, 2021, 42, e2000658.	2.0	13
329	Tissue adhesives: From research to clinical translation. Nano Today, 2021, 36, 101049.	6.2	90
330	Quaternary Lipophilic Chitosan and Gelatin Cross-Linked Antibacterial Hydrogel Effectively Kills Multidrug-Resistant Bacteria with Minimal Toxicity toward Mammalian Cells. Biomacromolecules, 2021, 22, 557-571.	2.6	12
331	Investigation of zero-degree peeling behavior of visco-hyperelastic highly stretchable adhesive tape on rigid substrate. Engineering Fracture Mechanics, 2021, 241, 107368.	2.0	11
332	A novel two-component, expandable bioadhesive for exposed defect coverage: Applicability to prenatal procedures. Journal of Pediatric Surgery, 2021, 56, 165-169.	0.8	11
333	Engineered Coatings via the Assembly of Aminoâ€Quinone Networks. Angewandte Chemie, 2021, 133, 2376-2384.	1.6	5
334	Selfâ€adhesive plasticized regenerated silk on poly(3â€hydroxybutyrateâ€ <i>co</i> â€3â€hydroxyvalerate) for bioâ€piezoelectric force sensor and microwave circuit design. Journal of Applied Polymer Science, 2021, 138, 49726.	1.3	13
335	Intestinal permeation enhancers to improve oral bioavailability of macromolecules: reasons for low efficacy in humans. Expert Opinion on Drug Delivery, 2021, 18, 273-300.	2.4	36
336	Adhesive and tough hydrogels: from structural design to applications. Journal of Materials Chemistry B, 2021, 9, 5954-5966.	2.9	31
337	Hydrogel: Diversity of Structures and Applications in Food Science. Food Reviews International, 2021, 37, 313-372.	4.3	81
338	Functionalized Elastomers for Intrinsically Soft and Biointegrated Electronics. Advanced Healthcare Materials, 2021, 10, e2002105.	3.9	36
339	An environmentally friendly wound dressing based on a self-healing, extensible and compressible antibacterial hydrogel. Green Chemistry, 2021, 23, 1312-1329.	4.6	69
340	A catechol-chitosan-based adhesive and injectable hydrogel resistant to oxidation and compatible with cell therapy. Journal of Materials Chemistry B, 2021, 9, 8406-8416.	2.9	10
341	Rapid Underwater Adhesive Utilizing Crosslinker and Amine Catalyst-Filled Microcapsules. ACS Applied Polymer Materials, 2021, 3, 996-1002.	2.0	8
342	Bioinspired self-degradable hydrogels towards wound sealing. Biomaterials Science, 2021, 9, 3645-3649.	2.6	6
343	Injectable Selfâ€Healing Natural Biopolymerâ€Based Hydrogel Adhesive with Thermoresponsive Reversible Adhesion for Minimally Invasive Surgery. Advanced Functional Materials, 2021, 31, 2007457.	7.8	160
344	Role of hydrophobicity in underwater adhesion. , 2021, , 257-276.		2
345	Hyperbranched polymer with dynamic thiol–aldehyde crosslinking and its application as a self-healable bioadhesive. Journal of Materials Chemistry B, 2021, 9, 5818-5828.	2.9	8

	Сітатіо	n Report	
#	Article	IF	Citations
346	Interface Design for Stretchable Electronic Devices. Advanced Science, 2021, 8, 2004170.	5.6	44
347	Photoswitching between Waterâ€Tolerant Adhesion and Swift Release by Inverting Liquid Crystal Fingerprint Topography. Advanced Science, 2021, 8, 2004051.	5.6	18
348	A perspective on intelligent design of engineered materials and structures by interface mechanics. Mechanics Research Communications, 2021, , 103668.	1.0	3
349	Bone Mineral Analogue Ceramic Block as an Instant Adhesive to Biological Soft Tissue. Advanced Materials Interfaces, 2021, 8, 2002032.	1.9	4
350	From Diagnosis to Treatment: Recent Advances in Patient-Friendly Biosensors and Implantable Devices. ACS Nano, 2021, 15, 1960-2004.	7.3	171
351	Fatigue-resistant adhesion II: Swell tolerance. Extreme Mechanics Letters, 2021, 43, 101182.	2.0	8
352	An All-in-One Tannic Acid-Containing Hydrogel Adhesive with High Toughness, Notch Insensitivity, Self-Healability, Tailorable Topography, and Strong, Instant, and On-Demand Underwater Adhesion. ACS Applied Materials & Interfaces, 2021, 13, 9748-9761.	4.0	83
353	Integration of Soft Electronics and Biotissues. Innovation(China), 2021, 2, 100074.	5.2	14
354	Chemically Stable, Strongly Adhesive Sealant Patch for Intestinal Anastomotic Leakage Prevention. Advanced Functional Materials, 2021, 31, 2007099.	7.8	34
355	Switchable adhesion between hydrogels by wrinkling. Extreme Mechanics Letters, 2021, 43, 101193.	2.0	31
356	Regeneration and tissue engineering: How pediatric surgeons contributed to building a new field to change the future of medicine. Seminars in Pediatric Surgery, 2021, 30, 151018.	0.5	0
357	Starch-based adhesive hydrogel with gel-point viscoelastic behavior and its application in wound sealing and hemostasis. Journal of Materials Science and Technology, 2021, 63, 228-235.	5.6	45
358	Comparative adhesion of chemically and physically crosslinked poly(acrylic acid)-based hydrogels to soft tissues. European Polymer Journal, 2021, 146, 110250.	2.6	21
359	Bioinspired Polymeric Highâ€Aspectâ€Ratio Particles with Asymmetric Janus Functionalities. Advanced NanoBiomed Research, 2021, 1, 2000057.	1.7	3
360	Enzyme Catalyzed Hydrogel as Versatile Bioadhesive for Tissue Wound Hemostasis, Bonding, and Continuous Repair. Biomacromolecules, 2021, 22, 1346-1356.	2.6	38
361	A review on recent advances in gel adhesion and their potential applications. Journal of Molecular Liquids, 2021, 325, 115254.	2.3	33
362	A Spider‣ilkâ€Inspired Wet Adhesive with Supercold Tolerance. Advanced Materials, 2021, 33, e2007301	. 11.1	59
364	Direct Construction of Catechol Lignin for Engineering Longâ€Acting Conductive, Adhesive, and UVâ€Blocking Hydrogel Bioelectronics. Small Methods, 2021, 5, e2001311.	4.6	59

#	Article	IF	Citations
365	Leveraging triboelectric nanogenerators for bioengineering. Matter, 2021, 4, 845-887.	5.0	192
366	Degradable and Removable Tough Adhesive Hydrogels. Advanced Materials, 2021, 33, e2008553.	11.1	99
367	Fabrication of PVA/PAAm IPN hydrogel with high adhesion and enhanced mechanical properties for body sensors and antibacterial activity. European Polymer Journal, 2021, 146, 110253.	2.6	81
368	Current Concepts on Tissue Adhesive Use for Meniscal Repair—We Are Not There Yet: A Systematic Review of the Literature. American Journal of Sports Medicine, 2021, , 036354652110036.	1.9	5
369	Anti-icing propylene-glycol materials. Extreme Mechanics Letters, 2021, 44, 101225.	2.0	10
370	Light-Switchable Adhesion of Azobenzene-Containing Siloxane-Based Tough Adhesive. ACS Applied Polymer Materials, 2021, 3, 2325-2329.	2.0	15
371	Emerging Functional Biomaterials as Medical Patches. ACS Nano, 2021, 15, 5977-6007.	7.3	48
372	In Situ Preparation of Mechanically Enhanced Hydrogel via Dispersion Polymerization in Aqueous Solution. Macromolecular Rapid Communications, 2021, 42, e2100028.	2.0	4
373	Soft Materials by Design: Unconventional Polymer Networks Give Extreme Properties. Chemical Reviews, 2021, 121, 4309-4372.	23.0	472
374	Mussel-inspired hydrogels as tissue adhesives for hemostasis with fast-forming and self-healing properties. European Polymer Journal, 2021, 148, 110361.	2.6	14
375	Engineering Hydrogel Adhesion for Biomedical Applications via Chemical Design of the Junction. ACS Biomaterials Science and Engineering, 2021, 7, 4048-4076.	2.6	89
376	Genetically Engineered Polypeptide Adhesive Coacervates for Surgical Applications. Angewandte Chemie, 2021, 133, 23880-23887.	1.6	8
377	Tough Adhesion of Freezing- and Drying-Tolerant Transparent Nanocomposite Organohydrogels. ACS Applied Materials & Interfaces, 2021, 13, 21822-21830.	4.0	25
378	Genetically Engineered Polypeptide Adhesive Coacervates for Surgical Applications. Angewandte Chemie - International Edition, 2021, 60, 23687-23694.	7.2	78
379	An Intrinsicallyâ€Adhesive Family of Injectable and Photo urable Hydrogels with Functional Physicochemical Performance for Regenerative Medicine. Macromolecular Rapid Communications, 2021, 42, e2000660.	2.0	25
380	Bioinspired tough gel sheath for robust and versatile surface functionalization. Science Advances, 2021, 7, .	4.7	44
381	Swell induced stress in a hydrogel coating. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 797-802.	1.5	4
382	Ionic tactile sensors as promising biomaterials for artificial skin: Review of latest advances and future perspectives. European Polymer Journal, 2021, 151, 110421.	2.6	38

#	Article	IF	CITATIONS
383	Recent advances in wet adhesives: Adhesion mechanism, design principle and applications. Progress in Polymer Science, 2021, 116, 101388.	11.8	251
384	Robust Hydrogel Adhesive with Dual Hydrogen Bond Networks. Molecules, 2021, 26, 2688.	1.7	13
385	Thermosensitive gallic acid-conjugated hexanoyl glycol chitosan as a novel wound healing biomaterial. Carbohydrate Polymers, 2021, 260, 117808.	5.1	39
386	Carbon Nanotubes/Regenerated Silk Composite as a Three-Dimensional Printable Bio-Adhesive Ink with Self-Powering Properties. ACS Applied Materials & amp; Interfaces, 2021, 13, 21007-21017.	4.0	17
387	Tissue-like skin-device interface for wearable bioelectronics by using ultrasoft, mass-permeable, and low-impedance hydrogels. Science Advances, 2021, 7, .	4.7	144
388	Ultraâ€Đeformable and Tissueâ€Adhesive Liquid Metal Antennas with High Wireless Powering Efficiency. Advanced Materials, 2021, 33, e2008062.	11.1	65
389	Recent progress in polymer hydrogel bioadhesives. Journal of Polymer Science, 2021, 59, 1312-1337.	2.0	77
390	Rational Design of a High‣trength Tough Hydrogel from Fundamental Principles. Macromolecular Chemistry and Physics, 2021, 222, 2100064.	1.1	8
391	Diatom Silica/Polysaccharide Elastomeric Hydrogels: Adhesion and Interlocking Synergy. ACS Applied Materials & Interfaces, 2021, 13, 21703-21713.	4.0	17
392	Efficacy evaluation of an in situ forming tissue adhesive hydrogel as sealant for lung and vascular injury. Biomedical Materials (Bristol), 2021, 16, 044106.	1.7	10
393	Enhancing Biopolymer Hydrogel Functionality through Interpenetrating Networks. Trends in Biotechnology, 2021, 39, 519-538.	4.9	138
394	Printable homocomposite hydrogels with synergistically reinforced molecular-colloidal networks. Nature Communications, 2021, 12, 2834.	5.8	41
395	Adhesion-Induced Instability Regulates Contact Mechanics of Soft Thin Elastic Films. ACS Applied Materials & Interfaces, 2021, 13, 21994-21999.	4.0	4
396	Biomimetic clotrimazole-loaded PLGA films with enhanced adhesiveness for controlled drug release. International Journal of Pharmaceutics, 2021, 601, 120578.	2.6	7
397	Multifaceted Design and Emerging Applications of Tissue Adhesives. Advanced Materials, 2021, 33, e2007663.	11.1	117
398	A New Type of Biological Glue Derived from Fish Swim Bladder: Outstanding Adhesion and Surgical Applications. Advanced Materials Technologies, 2021, 6, 2100303.	3.0	6
399	Ultra-strong bio-glue from genetically engineered polypeptides. Nature Communications, 2021, 12, 3613.	5.8	104
400	Ultrafast self-gelling powder mediates robust wet adhesion to promote healing of gastrointestinal perforations. Science Advances, 2021, 7, .	4.7	118

#	Article	IF	CITATIONS
401	Photoinitiator-grafted polymer chains for integrating hydrogels with various materials. Cell Reports Physical Science, 2021, 2, 100463.	2.8	14
402	Endowing water-based polyacrylics adhesives with enhanced water-resistant capability by integrating with tannic acid. Reactive and Functional Polymers, 2021, 163, 104890.	2.0	13
403	Ferrocene-functionalized hybrid hydrogel dressing with high-adhesion for combating biofilm. Materials Science and Engineering C, 2021, 125, 112111.	3.8	12
404	Cooperative Multivalent Weak and Strong Interfacial Interactions Enhance the Adhesion of Mussel-Inspired Adhesives. Macromolecules, 2021, 54, 5417-5428.	2.2	12
405	A Smart Patch with Onâ€Đemand Detachable Adhesion for Bioelectronics. Small, 2021, 17, e2101220.	5.2	109
406	Novel Diabetic Foot Wound Dressing Based on Multifunctional Hydrogels with Extensive Temperature-Tolerant, Durable, Adhesive, and Intrinsic Antibacterial Properties. ACS Applied Materials & Interfaces, 2021, 13, 26770-26781.	4.0	73
407	A Strong Dual-Component Bioadhesive Based on Solventless Thiol-isocyanate Click Chemistry. ACS Biomaterials Science and Engineering, 2021, 7, 3389-3398.	2.6	2
408	Short-Sequence Superadhesive Peptides with Topologically Enhanced Cationâ^'ï€ Interactions. Chemistry of Materials, 2021, 33, 5168-5176.	3.2	8
409	Skin temperature-triggered, debonding-on-demand sticker for a self-powered mechanosensitive communication system. Matter, 2021, 4, 1962-1974.	5.0	54
410	Effect of Metals on Underwater Adhesion of Gastropod Adhesive Mucus. ACS Omega, 2021, 6, 15580-15589.	1.6	3
411	Tissue adhesion with tough hydrogels: Experiments and modeling. Mechanics of Materials, 2021, 157, 103800.	1.7	16
412	Interfacial Adhesion of Fully Transient, Musselâ€Inspired Hydrogels with Different Network Crosslink Modalities. Advanced Materials Interfaces, 2021, 8, 2100319.	1.9	7
413	Mechanical strength and hydrostatic testing of VIVO adhesive in sutureless microsurgical anastomoses: an ex vivo study. Scientific Reports, 2021, 11, 13598.	1.6	9
415	Renatured hydrogel painting. Science Advances, 2021, 7, .	4.7	41
416	Adhesive aero-hydrogel hybrid conductor assembled from silver nanowire architectures. Science China Materials, 2021, 64, 2868-2876.	3.5	12
417	Perspective for a New Bioinspired Permanent Adhesive for dry Conditions - Insights in the Glue Producing Japanese art of Defence System of the Oita Salamander Hynobius dunni. Frontiers in Mechanical Engineering, 2021, 7, .	0.8	2
418	Stimulation Modulates Adhesion and Mechanics of Hydrogel Adhesives. Langmuir, 2021, 37, 7097-7106.	1.6	12
419	Bioinspired pagoda-like microneedle patches with strong fixation and hemostasis capabilities. Chemical Engineering Journal, 2021, 414, 128905.	6.6	59

#	Article	IF	CITATIONS
420	Fabricating hydrogels to mimic biological tissues of complex shapes and high fatigue resistance. Matter, 2021, 4, 1935-1946.	5.0	78
421	Poly(ionic liquid)s Containing Alkoxy Chains and Bis(trifluoromethanesulfonyl)imide Anions as Highly Adhesive Materials. Advanced Materials, 2021, 33, e2100962.	11.1	76
422	Biomineral interface with superior cell adhesive and antibacterial properties based on enzyme-triggered digestion of saliva acquired pellicle-inspired polypeptide coatings. Chemical Engineering Journal, 2021, 415, 128955.	6.6	12
423	Hydrogel–mesh composite for wound closure. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	62
424	Ionic Network Based on Dynamic Ionic Liquids for Electronic Tattoo Application. ACS Applied Materials & Interfaces, 2021, 13, 33557-33565.	4.0	26
425	Photocurable bioresorbable adhesives as functional interfaces between flexible bioelectronic devices and soft biological tissues. Nature Materials, 2021, 20, 1559-1570.	13.3	114
426	Mussel-Inspired Bisphosphonated Injectable Nanocomposite Hydrogels with Adhesive, Self-Healing, and Osteogenic Properties for Bone Regeneration. ACS Applied Materials & Interfaces, 2021, 13, 32673-32689.	4.0	56
427	Ionotronic Tough Adhesives with Intrinsic Multifunctionality. ACS Applied Materials & Interfaces, 2021, 13, 37849-37861.	4.0	16
428	Blending poly(2â€ethylâ€2â€oxazoline) with hydrophobic polymers as a hybrid adhesive with enhanced waterâ€resistant properties. Journal of Applied Polymer Science, 2021, 138, 51404.	1.3	1
429	Snake extract–laden hemostatic bioadhesive gel cross-linked by visible light. Science Advances, 2021, 7,	4.7	96
430	PVAâ€Based Hydrogels: Promising Candidates for Articular Cartilage Repair. Macromolecular Bioscience, 2021, 21, e2100147.	2.1	32
431	Polymer Network Editing of Elastomers for Robust Underwater Adhesion and Tough Bonding to Diverse Surfaces. ACS Applied Materials & Interfaces, 2021, 13, 36527-36537.	4.0	11
432	Reversible electroadhesion of hydrogels to animal tissues for suture-less repair of cuts or tears. Nature Communications, 2021, 12, 4419.	5.8	38
433	Soft Gel-Filled Composite Adhesive for Dry and Wet Adhesion. ACS Applied Polymer Materials, 2021, 3, 3755-3765.	2.0	4
434	A Microfluidic Model Artery for Studying the Mechanobiology of Endothelial Cells. Advanced Healthcare Materials, 2021, 10, e2100508.	3.9	1
435	Mechanomaterials: A Rational Deployment of Forces and Geometries in Programming Functional Materials. Advanced Materials, 2021, 33, e2007977.	11.1	34
436	Lactobionic acid-modified chitosan thermosensitive hydrogels that lift lesions and promote repair in endoscopic submucosal dissection. Carbohydrate Polymers, 2021, 263, 118001.	5.1	19
437	An Antiâ€Freezing, Ambient‣table and Highly Stretchable Ionic Skin with Strong Surface Adhesion for Wearable Sensing and Soft Robotics. Advanced Functional Materials, 2021, 31, 2104665.	7.8	140

#	Article	IF	CITATIONS
438	Underwater flexible mechanoreceptors constructed by anti-swelling self-healable hydrogel. Science China Materials, 2021, 64, 3069-3078.	3.5	26
439	Visible-light-driven isotropic hydrogels as anisotropic underwater actuators. Nano Energy, 2021, 85, 105965.	8.2	57
440	Multifunctional double network hydrogel film for skin wound healing. Materials Express, 2021, 11, 1084-1091.	0.2	7
441	A Topological Stitching Strategy for Biocompatible Wet Adhesion Using Musselâ€Inspired Polyurethane. Advanced Materials Interfaces, 2021, 8, 2100657.	1.9	8
442	Boost Tendon/Ligament Repair With Biomimetic and Smart Cellular Constructs. Frontiers in Bioengineering and Biotechnology, 2021, 9, 726041.	2.0	4
443	Triggerâ€Detachable Hydrogel Adhesives for Bioelectronic Interfaces. Advanced Functional Materials, 2021, 31, 2106446.	7.8	63
444	Strong, Removable, and Photoluminescent Hyperbranched Polyamide-amine Hot Melt Adhesive. Chinese Journal of Polymer Science (English Edition), 2021, 39, 1319-1327.	2.0	7
445	Selection of hydrogel electrolytes for flexible zinc–air batteries. Materials Today Chemistry, 2021, 21, 100538.	1.7	30
446	Burgeoning hydrogel technology in burn wound care: A comprehensive meta-analysis. European Polymer Journal, 2021, 157, 110640.	2.6	9
447	Bioinspired hydrogels build a bridge from bench to bedside. Nano Today, 2021, 39, 101157.	6.2	28
448	Rapid and coagulation-independent haemostatic sealing by a paste inspired by barnacle glue. Nature Biomedical Engineering, 2021, 5, 1131-1142.	11.6	146
449	Catalyst-Free Self-Healing Bio-Based Polymers: Robust Mechanical Properties, Shape Memory, and Recyclability. Journal of Agricultural and Food Chemistry, 2021, 69, 9338-9349.	2.4	31
450	Self-Healing, Self-Adhesive Silk Fibroin Conductive Hydrogel as a Flexible Strain Sensor. ACS Applied Materials & Interfaces, 2021, 13, 40013-40031.	4.0	146
451	Wearable Biofuel Cells: Advances from Fabrication to Application. Advanced Functional Materials, 2021, 31, 2103976.	7.8	38
452	Bio-inspired hydrogel-based bandage with robust adhesive and antibacterial abilities for skin closure. Science China Materials, 2022, 65, 246-254.	3.5	13
453	An injectable double cross-linked hydrogel adhesive inspired by synergistic effects of mussel foot proteins for biomedical application. Colloids and Surfaces B: Biointerfaces, 2021, 204, 111782.	2.5	10
454	Flaw-sensitivity of a tough hydrogel under monotonic and cyclic loads. Journal of the Mechanics and Physics of Solids, 2021, 153, 104483.	2.3	20
455	Unraveling the Role of Architecture in Polymer-Based Glues for Hydrogels. ACS Applied Materials & amp; Interfaces, 2021, 13, 42230-42239.	4.0	0

#	Article	IF	Citations
456	Natural Polysaccharides as Multifunctional Components for Oneâ€6tep 3D Printing Tough Hydrogels. Macromolecular Materials and Engineering, 2021, 306, 2100433.	1.7	4
457	Highâ€&trength and Nonfouling Zwitterionic Tripleâ€Network Hydrogel in Saline Environments. Advanced Materials, 2021, 33, e2102479.	11.1	58
458	Chitosan thermosensitive hydrogels based on lyophilizate powders demonstrate significant potential for clinical use in endoscopic submucosal dissection procedures. International Journal of Biological Macromolecules, 2021, 184, 593-603.	3.6	9
459	Biomimetic Glycopolypeptide Hydrogels with Tunable Adhesion and Microporous Structure for Fast Hemostasis and Highly Efficient Wound Healing. Advanced Functional Materials, 2021, 31, 2105628.	7.8	123
460	Polymer Pressureâ€5ensitive Adhesive with A Temperatureâ€Insensitive Loss Factor Operating Under Water and Oil. Advanced Functional Materials, 2021, 31, 2104296.	7.8	34
461	A high-strength and ultra-stable halloysite nanotubes-crosslinked polyacrylamide hydrogel electrolyte for flexible zinc-ion batteries. Journal of Power Sources, 2021, 506, 230196.	4.0	35
462	Skin-like hydrogel devices for wearable sensing, soft robotics and beyond. IScience, 2021, 24, 103174.	1.9	103
463	Mussel-Inspired Catechol Functionalisation as a Strategy to Enhance Biomaterial Adhesion: A Systematic Review. Polymers, 2021, 13, 3317.	2.0	16
464	Haemostatic materials for wound healing applications. Nature Reviews Chemistry, 2021, 5, 773-791.	13.8	371
465	Robust Antiwater and Anti-oil-fouling Double-Sided Tape Enabled by SiO ₂ Reinforcement and a Liquefied Surface. ACS Applied Materials & Interfaces, 2021, 13, 43404-43413.	4.0	6
466	Bioinspired Underwater Adhesives. Advanced Materials, 2021, 33, e2102983.	11.1	178
467	Study on the degradation mechanism of the frame for membrane electrode assembly in proton exchange membrane fuel cell. International Journal of Hydrogen Energy, 2021, 46, 36954-36968.	3.8	6
468	Strong, Multifaceted Guanidinium-Based Adhesion of Bioorganic Nanoparticles to Wet Biological Tissue. Jacs Au, 2021, 1, 1399-1411.	3.6	16
469	A pH-driven genipin gelator to engineer decellularized extracellular matrix-based tissue adhesives. Acta Biomaterialia, 2021, 131, 211-221.	4.1	20
470	A Universal and Reversible Wet Adhesive via Straightforward Aqueous Self-Assembly of Polyethylenimine and Polyoxometalate. ACS Applied Materials & Interfaces, 2021, 13, 47155-47162.	4.0	13
471	Antibacterial hydrogel microparticles with drug loading for wound healing. Materials Research Express, 2021, 8, 095403.	0.8	7
472	Stretchable, Bio-Compatible, Antioxidant and Self-Powering Adhesives from Soluble Silk Fibroin and Vegetal Polyphenols Exfoliated Graphite. Nanomaterials, 2021, 11, 2352.	1.9	8
473	Cold nanoparticles-deranged double network for Janus adhesive-tough hydrogel as strain sensor. Chemical Engineering Journal, 2021, 420, 130447.	6.6	53

#	Article	IF	CITATIONS
474	Switchable Photonic Bioâ€Adhesive Materials. Advanced Materials, 2021, 33, e2103674.	11.1	33
475	Recent Progress of Spider-Silk-Inspired Adhesive Materials. , 2021, 3, 1453-1467.		15
476	Air Bubble Bridgeâ€Based Bioinspired Underwater Adhesion. Small, 2021, 17, e2103423.	5.2	15
477	A General Crosslinker Strategy to Realize Intrinsic Frozen Resistance of Hydrogels. Advanced Materials, 2021, 33, e2104006.	11.1	82
478	Boneâ€Adhesive Hydrogels Based on Dual Crosslinked Poly(2â€oxazoline)s. Macromolecular Bioscience, 2021, 21, e2100257.	2.1	10
479	Physiologicallyâ€Regulated Adhesion of Hydrogels for Wound Dressing. Advanced Materials Interfaces, 2021, 8, 2101131.	1.9	20
480	Transforming natural silk nonwovens into robust bioadhesives for in vivo tissue amendment. Journal of Cleaner Production, 2021, 314, 127996.	4.6	11
481	Sticking Effect of a Tackifier on the Fibrillation of Acrylic Pressure-Sensitive Adhesives. Langmuir, 2021, 37, 11457-11464.	1.6	7
482	Mechanisms and applications of bioinspired underwater/wet adhesives. Journal of Polymer Science, 2021, 59, 2911-2945.	2.0	42
483	Emerging bioadhesives: from traditional bioactive and bioinert to a new biomimetic protein-based approach. Advances in Colloid and Interface Science, 2021, 296, 102521.	7.0	12
484	Fracture and fatigue of ideal polymer networks. Extreme Mechanics Letters, 2021, 48, 101399.	2.0	24
485	Enhance the debonding resistance of hydrogel by large-scale bridging. Journal of the Mechanics and Physics of Solids, 2021, 155, 104570.	2.3	18
486	Catalyst-free self-healing fully bio-based vitrimers derived from tung oil: Strong mechanical properties, shape memory, and recyclability. Industrial Crops and Products, 2021, 171, 113978.	2.5	55
487	Injectable supramolecular hydrogels based on host–guest interactions with cell encapsulation capabilities. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 628, 127338.	2.3	15
488	Wet soft bio-adhesion of insect-inspired polymeric oil-loadable perforated microcylinders. Chemical Engineering Journal, 2021, 423, 130194.	6.6	9
489	An ultrasmall infinite coordination polymer nanomedicine-composited biomimetic hydrogel for programmed dressing-chemo-low level laser combination therapy of burn wounds. Chemical Engineering Journal, 2021, 426, 130610.	6.6	49
490	Modulating nanocellulose hydrogels and cryogels strength by crosslinking and blending. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 630, 127608.	2.3	10
491	Spatiotemporally dynamic therapy with shape-adaptive drug-gel for the improvement of tissue regeneration with ordered structure. Bioactive Materials, 2022, 8, 165-176.	8.6	12

#	Article	IF	CITATIONS
492	A hydra tentacle-inspired hydrogel with underwater ultra-stretchability for adhering adipose surfaces. Chemical Engineering Journal, 2022, 428, 131049.	6.6	24
493	Gels as emerging anti-icing materials: a mini review. Materials Horizons, 2021, 8, 3266-3280.	6.4	49
494	A highly transparent ionogel with strength enhancement ability for robust bonding in an aquatic environment. Materials Horizons, 2021, 8, 2057-2064.	6.4	73
495	Pure-silk fibroin hydrogel with stable aligned micropattern toward peripheral nerve regeneration. Nanotechnology Reviews, 2021, 10, 10-19.	2.6	10
496	Polymeric Tissue Adhesives. Chemical Reviews, 2021, 121, 11336-11384.	23.0	306
497	Research Progress of Hydrogels in Tissue Adhesive. Advances in Analytical Chemistry, 2021, 11, 99-107.	0.1	1
498	Chitosan nanocrystals synthesis <i>via</i> aging and application towards alginate hydrogels for sustainable drug release. Green Chemistry, 2021, 23, 6527-6537.	4.6	16
499	Scaling Behavior of Fracture Properties of Tough Adhesive Hydrogels. ACS Macro Letters, 2021, 10, 180-185.	2.3	20
500	Robust Underwater Adhesives Based on Dynamic Hydrophilic and Hydrophobic Moieties to Diverse Surfaces. ACS Applied Materials & Interfaces, 2021, 13, 3435-3444.	4.0	24
501	Barnacle Cement Proteinsâ€Inspired Tough Hydrogels with Robust, Longâ€Lasting, and Repeatable Underwater Adhesion. Advanced Functional Materials, 2021, 31, 2009334.	7.8	148
502	A Solventâ€Free and Waterâ€Resistant Dipole–Dipole Interactionâ€Based Super Adhesive. Macromolecular Rapid Communications, 2021, 42, 2100010.	2.0	8
503	Tissue Sealants in Cardiac Surgery. , 2020, , 119-127.		3
504	Biofabrication in Tissue Engineering. , 2020, , 289-312.		7
505	EML webinar overview: Extreme mechanics of soft materials for merging human–machine intelligence. Extreme Mechanics Letters, 2020, 39, 100784.	2.0	9
506	Tough Underwater Super-tape Composed of Semi-interpenetrating Polymer Networks with a Water-Repelling Liquid Surface. ACS Applied Materials & Interfaces, 2021, 13, 1535-1544.	4.0	33
507	Development of a Tough, Self-Healing Polyampholyte Terpolymer Hydrogel Patch with Enhanced Skin Adhesion via Tuning the Density and Strength of Ion-Pair Associations. ACS Applied Materials & Interfaces, 2021, 13, 8889-8900.	4.0	21
508	Chitin is a functional component of the larval adhesive of barnacles. Communications Biology, 2020, 3, 31.	2.0	20
510	Singular Nature of the Elastocapillary Ridge. Physical Review X, 2020, 10, .	2.8	11

#	Article	IF	CITATIONS
512	Flexible Dry Hydrogel with Lamella-Like Structure Engineered via Dehydration in Poor Solvent. CCS Chemistry, 2020, 2, 533-543.	4.6	7
513	Nano Surface-Heterogeneities of Particles Modulate the Macroscopic Properties of Hydrogels. SSRN Electronic Journal, 0, , .	0.4	0
514	Recent advances in materials for hemostatic management. Biomaterials Science, 2021, 9, 7343-7378.	2.6	40
515	Self-adhesive hydrogels for tissue engineering. Journal of Materials Chemistry B, 2021, 9, 8739-8767.	2.9	46
516	Highly stretchable, compressible, adhesive hydrogels with double network. Journal of Polymer Research, 2021, 28, 1.	1.2	8
517	Chitosan-based multifunctional flexible hemostatic bio-hydrogel. Acta Biomaterialia, 2021, 136, 170-183.	4.1	68
518	Design of tough adhesive from commodity thermoplastics through dynamic crosslinking. Science Advances, 2021, 7, eabk2451.	4.7	66
519	In situ-formed adhesive hyaluronic acid hydrogel with prolonged amnion-derived conditioned medium release for diabetic wound repair. Carbohydrate Polymers, 2022, 276, 118752.	5.1	31
520	Printable Tough Adhesive for Instant Fatigueâ€Resistant Bonding of Diverse Surfaces. Advanced Functional Materials, 2022, 32, 2107732.	7.8	11
521	A photocurable bioelectronics–tissue interface. Nature Materials, 2021, 20, 1460-1461.	13.3	1
522	Predictably Engineering the Viscoelastic Behavior of Dynamic Hydrogels via Correlation with Molecular Parameters. Advanced Materials, 2021, 33, e2104460.	11.1	24
523	Ability of photocurable gelatin to prevent stricture recurrence after urethral dilation in rabbits. International Journal of Urology, 2021, , .	0.5	1
524	Effects of network structures on the fracture of hydrogel. Extreme Mechanics Letters, 2021, 49, 101495.	2.0	15
525	Anti-freezing organohydrogel triboelectric nanogenerator toward highly efficient and flexible human-machine interaction at â^'Â30°C. Nano Energy, 2021, 90, 106614.	8.2	74
526	Slug-inspired glue stays sticky when wet. Nature, 2017, 548, 9-9.	13.7	1
528	Bioadhesives. , 2018, , 1-45.		3
529	Beyond Thermogels – Other Forms of Noncovalently Formed Polymeric Hydrogels. Biomaterials Science Series, 2018, , 162-182.	0.1	0
532	Recent Physical Interaction-based Bioadhesives. , 2020, , 693-721.		1

#	Article	IF	CITATIONS
533	Functional Hydrogel Interface Materials for Advanced Bioelectronic Devices. Accounts of Materials Research, 2021, 2, 1010-1023.	5.9	39
534	A bio-inspired multifunctional soy protein-based material: From strong underwater adhesion to 3D printing. Chemical Engineering Journal, 2022, 430, 133017.	6.6	26
535	Adhesion strategies for heterogeneous soft materials – A review. Engineering Research Express, 0, , .	0.8	1
536	On-Site Supramolecular Adhesion to Wet and Soft Surfaces via Solvent Exchange. ACS Applied Materials & Interfaces, 2021, 13, 53083-53090.	4.0	27
537	Biomimetic Joint Paint for Efficient Cartilage Repair by Simultaneously Regulating Cartilage Degeneration and Regeneration in Pigs. ACS Applied Materials & Interfaces, 2021, 13, 54801-54816.	4.0	17
538	Deoxyribonucleic acid polymer nanoparticle hydrogels. Chemical Communications, 2021, 57, 12111-12114.	2.2	4
539	Recent advances in regenerative medicine. , 2020, , 367-412.		0
540	Looking at Nature from the Perspective of Physical Sciences. Advances in Multimedia and Interactive Technologies Book Series, 2020, , 1-103.	0.1	0
541	Imparting conformational memory for material adhesion. Materials Horizons, 2022, 9, 675-687.	6.4	1
542	Underwater and wet adhesion strategies for hydrogels in biomedical applications. Chemical Engineering Journal, 2022, 431, 133372.	6.6	51
543	A hyperbranched polymer-based water-resistant adhesive: Durable underwater adhesion and primer for anchoring anti-fouling hydrogel coating. Science China Technological Sciences, 2022, 65, 201-213.	2.0	12
544	Doze. , 2020, , .		0
545	Usefulness of web search queries for early detection of diseases in infants. Nagoya Journal of Medical Science, 2021, 83, 107-111.	0.6	0
546	High-tough hydrogels formed via Schiff base reaction between PAMAM dendrimer and Tetra-PEG and their potential as dual-function delivery systems. Materials Today Communications, 2022, 30, 103019.	0.9	7
547	Cohesion mechanisms for bioadhesives. Bioactive Materials, 2022, 13, 105-118.	8.6	43
548	Self-Healing Silicone Elastomer with Stable and High Adhesion in Harsh Environments. Langmuir, 2021, 37, 13696-13702.	1.6	17
549	Polymer Adhesion: Seeking New Solutions for an Old Problem. Macromolecules, 2021, 54, 10617-10644.	2.2	59
550	Crosslink bio-adhesives for bronchoscopic lung volume reduction: current status and future direction. European Respiratory Review, 2021, 30, 210142.	3.0	7

#	Article	IF	CITATIONS
551	Electrostatic–Mechanical Synergistic In Situ Multiscale Tissue Adhesion for Sustainable Residueâ€Free Bioelectronics Interfaces. Advanced Materials, 2022, 34, e2105338.	11.1	19
552	Adhesive anastomosis for organ transplantation. Bioactive Materials, 2022, 13, 260-268.	8.6	16
553	Photocrosslinked gelatin hydrogel improves wound healing and skin flap survival by the sustained release of basic fibroblast growth factor. Scientific Reports, 2021, 11, 23094.	1.6	27
554	Drug-Loaded Chondroitin Sulfate Microspheres Generated from Microfluidic Electrospray for Wound Healing. Macromolecular Research, 2022, 30, 36-42.	1.0	10
555	Recent Advances on Designs and Applications of Hydrogel Adhesives. Advanced Materials Interfaces, 2022, 9, 2101038.	1.9	27
556	Injectable Double rosslinked Adhesive Hydrogels with High Mechanical Resilience and Effective Energy Dissipation for Joint Wound Treatment. Advanced Functional Materials, 2022, 32, 2109687.	7.8	81
557	Design principles for creating synthetic underwater adhesives. Chemical Society Reviews, 2021, 50, 13321-13345.	18.7	57
558	Injectable Double Network Hydrogel with Hemostasis and Antibacterial Activity for Promoting Multidrugâ^'Resistant Bacteria Infected Wound Healing. SSRN Electronic Journal, 0, , .	0.4	0
559	Colloidal Supraballs of Mesoporous Silica Nanoparticles as Bioresorbable Adhesives for Hydrogels. Chemistry of Materials, 2022, 34, 584-593.	3.2	9
560	Gradient adhesion modification of polyacrylamide/alginate–calcium tough hydrogels. Journal of Materials Chemistry B, 2022, 10, 757-764.	2.9	26
561	Enhanced tendon healing by a tough hydrogel with an adhesive side and high drug-loading capacity. Nature Biomedical Engineering, 2022, 6, 1167-1179.	11.6	92
562	Stress Dissipation Encoded Silk Fibroin Electrode for the Athleteâ€Beneficial Silk Bioelectronics. Advanced Science, 2022, 9, e2105420.	5.6	11
563	Challenges and emerging opportunities in transistor-based ultrathin electronics: design and fabrication for healthcare applications. Journal of Materials Chemistry C, 2022, 10, 2450-2474.	2.7	6
564	Fabrication of adhesive hydrogels based on poly (acrylic acid) and modified hyaluronic acid. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 105044.	1.5	15
565	Self-adhering implantable device of titanium: Enhanced soft-tissue adhesion by sandblast pretreatment. Colloids and Surfaces B: Biointerfaces, 2022, 211, 112283.	2.5	10
566	Supramolecular Adhesive Hydrogels for Tissue Engineering Applications. Chemical Reviews, 2022, 122, 5604-5640.	23.0	238
567	Effect of Cross-Linkers on Mussel- and Elastin-Inspired Adhesives on Physiological Substrates. ACS Applied Bio Materials, 2022, 5, 630-641.	2.3	6
568	A Shapeâ€Programmable Hierarchical Fibrous Membrane Composite System to Promote Wound Healing in Diabetic Patients. Small, 2022, 18, e2107544.	5.2	27

#	Article	IF	CITATIONS
570	Bioinspired super-strong aqueous synthetic tissue adhesives. Matter, 2022, 5, 933-956.	5.0	14
571	New Forms of Electrospun Nanofibers Applied in Cardiovascular Field. Frontiers in Cardiovascular Medicine, 2021, 8, 801077.	1.1	5
572	Electrostatic Interaction-Based High Tissue Adhesive, Stretchable Microelectrode Arrays for the Electrophysiological Interface. ACS Applied Materials & amp; Interfaces, 2022, 14, 4852-4861.	4.0	20
573	Molecular Rationale for the Design of Instantaneous, Strain-Tolerant Polymeric Adhesive in a Stretchable Underwater Human–Machine Interface. ACS Nano, 2022, 16, 1368-1380.	7.3	19
574	Revisiting the adhesion mechanism of mussel-inspired chemistry. Chemical Science, 2022, 13, 1698-1705.	3.7	53
575	A hyperbranched polymer elastomer-based pressure sensitive adhesive. Journal of Materials Chemistry A, 2022, 10, 1257-1269.	5.2	25
576	A low-swelling and toughened adhesive hydrogel with anti-microbial and hemostatic capacities for wound healing. Journal of Materials Chemistry B, 2022, 10, 915-926.	2.9	36
577	A Tissue Adhesionâ€Controllable and Biocompatible Smallâ€Scale Hydrogel Adhesive Robot. Advanced Materials, 2022, 34, e2109325.	11.1	70
578	Multifunctional Injectable Hydrogel for <i>In Vivo</i> Diagnostic and Therapeutic Applications. ACS Nano, 2022, 16, 554-567.	7.3	49
579	Hydrogel adhesive formed <i>via</i> multiple chemical interactions: from persistent wet adhesion to rapid hemostasis. Biomaterials Science, 2022, 10, 1486-1497.	2.6	12
580	Rapidly Self-Deactivating and Injectable Succinyl Ester-Based Bioadhesives for Postoperative Antiadhesion. ACS Applied Materials & amp; Interfaces, 2022, 14, 373-382.	4.0	11
581	Antigen–Antibody Interactionâ€Derived Bioadhesion of Bacterial Cellulose Nanofibers to Promote Topical Wound Healing. Advanced Functional Materials, 2022, 32, .	7.8	17
582	Efficient, biosafe and tissue adhesive hemostatic cotton gauze with controlled balance of hydrophilicity and hydrophobicity. Nature Communications, 2022, 13, 552.	5.8	55
583	Super Adhesive MXeneâ€based Nanocomposite Hydrogel with Selfâ€Healable and Conductivity Properties via Radiation Synthesis. Advanced Engineering Materials, 2022, 24, 2101692.	1.6	8
584	Mechanically Competent Chitosanâ€Based Bioadhesive for Tendonâ€ŧoâ€Bone Repair. Advanced Healthcare Materials, 2022, 11, e2102344.	3.9	6
585	Electrically Programmable Interfacial Adhesion for Ultrastrong Hydrogel Bonding. Advanced Materials, 2022, 34, e2108820.	11.1	28
586	An off-the-shelf bioadhesive patch for sutureless repair of gastrointestinal defects. Science Translational Medicine, 2022, 14, eabh2857.	5.8	67
587	A hydrogel spinal dural patch with potential anti-inflammatory, pain relieving and antibacterial effects. Bioactive Materials, 2022, 14, 389-401.	8.6	11

#	Article	IF	Citations
588	Soft bioelectronics for cardiac interfaces. Biophysics Reviews, 2022, 3, .	1.0	8
589	Soft armour-like layer-protected hydrogels for wet tissue adhesion and biological imaging. Chemical Engineering Journal, 2022, 434, 134418.	6.6	24
590	Biopolymers for Surgical Applications. Coatings, 2022, 12, 211.	1.2	13
591	Recent and Future Strategies of Mechanotherapy for Tissue Regenerative Rehabilitation. ACS Biomaterials Science and Engineering, 2022, 8, 4639-4642.	2.6	9
592	Functional Bioelectronic Materials for Long-Term Biocompatibility and Functionality. ACS Applied Electronic Materials, 2022, 4, 1449-1468.	2.0	15
593	Engineering a highly elastic bioadhesive for sealing soft and dynamic tissues. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2022, 110, 1511-1522.	1.6	10
594	Synergistically Detachable Microneedle Dressing for Programmed Treatment of Chronic Wounds. Advanced Healthcare Materials, 2022, 11, e2102180.	3.9	30
595	Application of Alginate-Based Hydrogels in Hemostasis. Gels, 2022, 8, 109.	2.1	30
596	Antiâ€5welling, Robust, and Adhesive Extracellular Matrixâ€Mimicking Hydrogel Used as Intraoral Dressing. Advanced Materials, 2022, 34, e2200115.	11.1	61
597	Hydrogel tapes for fault-tolerant strong wet adhesion. Nature Communications, 2021, 12, 7156.	5.8	122
598	Effect of Antibacterial Enoxacin on the Properties of Injectable Nano-hydroxyapatite/Polyurethane Cement for Bone Repairing. Journal of Bionic Engineering, 2022, 19, 483-496.	2.7	7
599	Radiation synthesis and characterization of polymeric wet adhesives for attracting and trapping insects. International Journal of Materials Research, 2022, 113, 101-111.	0.1	1
600	Visible-Light-Mediated Nano-biomineralization of Customizable Tough Hydrogels for Biomimetic Tissue Engineering. ACS Nano, 2022, 16, 4734-4745.	7.3	26
601	Flexible and wearable strain sensors based on conductive hydrogels. Journal of Polymer Science, 2022, 60, 2663-2678.	2.0	45
602	Effective Antifogging Coating from Hydrophilic/Hydrophobic Polymer Heteronetwork. Advanced Science, 2022, 9, e2200072.	5.6	38
603	Strong Dynamic Interfacial Adhesion by Polymeric Ionic Liquids under Extreme Conditions. ACS Nano, 2022, 16, 5303-5315.	7.3	19
604	An Ionic Hydrogel-Based Antifreezing Triboelectric Nanogenerator. ACS Applied Electronic Materials, 2022, 4, 1930-1938.	2.0	21
605	Research Progress on Hydrogel–Elastomer Adhesion. Materials, 2022, 15, 2548.	1.3	6

ARTICLE IF CITATIONS # Reversibly Stretchable Organohydrogel-Based Soft Electronics with Robust and Redox-Active Interfaces Enabled by Polyphenol-Incorporated Double Networks. ACS Applied Materials & amp; 606 4.0 14 Interfaces, 2022, 14, 12583-12595. Topoarchitected polymer networks expand the space of material properties. Nature Communications, 5.8 2022, 13, 1622. A silk fibroin based bioadhesive with synergistic photothermal-reinforced antibacterial activity. 608 3.6 13 International Journal of Biological Macromolecules, 2022, 209, 608-617. Embedded 3D Printing of Ultrasoundâ€Compatible Arterial Phantoms with Biomimetic Elasticity. 609 Advanced Functional Materials, 2022, 32, . Mussel†and Barnacle Cement Proteinsâ€Inspired Dualâ€Bionic Bioadhesive with Repeatable Wetâ€Tissue Adhesion, Multimodal Selfâ€Healing, and Antibacterial Capability for Nonpressing Hemostasis and 610 7.8 93 Promoted Wound Healing. Advanced Functional Materials, 2022, 32, . Instant Strong and Responsive Underwater Adhesion Manifested by Bioinspired Supramolecular 2.2 Polymeric Adhesives. Macromolecules, 2022, 55, 2003-2013. Antibacterial self-fused supramolecular polymer hydrogel for infected wound healing. Materials 612 0.8 2 Research Express, 2022, 9, 035401. Mistletoe viscin: a hygro- and mechano-responsive cellulose-based adhesive for diverse material applications., 2022, 1, . Polyglutamic Acidâ€Based Elastic and Tough Adhesive Patch Promotes Tissue Regeneration through In 614 5.6 14 Situ Macrophage Modulation. Advanced Science, 2022, 9, e2106115. Superstrong yet water-detachable eutectogel adhesives. Chemical Engineering Journal, 2022, 442, 6.6 136289. A Biodegradable Multifunctional Film as a Tissue Adhesive for Instant Hemostasis and Wound Closure. 617 2.0 1 Macromolecular Rapid Communications, 2022, 43, e2200031. Bioinspired wet-resistant organogel for highly sensitive mechanical perception. Science China 3.5 Materials, 2022, 65, 2262-2273. An instant, repeatable and universal supramolecular adhesive based on natural small molecules for 619 6.6 25 dry/wet environments. Chemical Engineering Journal, 2022, 442, 136206. Hydrogel Bioadhesives with Extreme Acidâ€Tolerance for Gastric Perforation Repairing. Advanced Functional Materials, 2022, 32, . 621 Strategies for body-conformable electronics. Matter, 2022, 5, 1104-1136. 5.090 Fatigue of amorphous hydrogels with dynamic covalent bonds. Extreme Mechanics Letters, 2022, 53, 2.0 101679. A biomechanical testing method to assess tissue adhesives for annulus closure. Journal of the 623 1.51 Mechanical Behavior of Biomedical Materials, 2022, 129, 105150. Natural extracts-meditated efficient and electrically responsive bioglues. Extreme Mechanics Letters, 624 2022, 53, 101687.

#	Article	IF	CITATIONS
625	Stem from nature: Bioinspired adhesive formulations for wound healing. Journal of Controlled Release, 2022, 345, 292-305.	4.8	22
626	Biomimetic macroporous hydrogel with a triple-network structure for full-thickness skin regeneration. Applied Materials Today, 2022, 27, 101442.	2.3	7
627	Photo-curing preparation of biobased underwater adhesives with hydrophobic chain-ring interlace structure for protecting adhesion. Applied Materials Today, 2022, 27, 101436.	2.3	3
628	Junctional epithelium and hemidesmosomes: Tape and rivets for solving the "percutaneous device dilemma―in dental and other permanent implants. Bioactive Materials, 2022, 18, 178-198.	8.6	19
629	Hydrogel-Based Biomaterials Engineered from Natural-Derived Polysaccharides and Proteins for Hemostasis and Wound Healing. Frontiers in Bioengineering and Biotechnology, 2021, 9, 780187.	2.0	29
630	Tough Hydrogel Bioadhesives for Sutureless Wound Sealing, Hemostasis and Biointerfaces. Advanced Functional Materials, 2022, 32, .	7.8	67
631	Wearable Bioelectronics for Chronic Wound Management. Advanced Functional Materials, 2022, 32, .	7.8	64
632	Nature-Inspired Hydrogel Network for Efficient Tissue-Specific Underwater Adhesive. ACS Applied Materials & Interfaces, 2021, 13, 59761-59771.	4.0	26
633	Controllable Synthesis of Polyphenol Spheres via Amine-Catalyzed Polymerization-Induced Self-Assembly. Biomacromolecules, 2022, 23, 140-149.	2.6	8
634	Dual-network hydrogel based on ionic nano-reservoir for gastric perforation sealing. Science China Materials, 2022, 65, 827-835.	3.5	11
635	Adhesive Hemostatic Hydrogel with Ultrafast Gelation Arrests Acute Upper Gastrointestinal Hemorrhage in Pigs. Advanced Functional Materials, 2022, 32, .	7.8	48
636	Graphene foam/hydrogel scaffolds for regeneration of peripheral nerve using ADSCs in a diabetic mouse model. Nano Research, 2022, 15, 3434-3445.	5.8	9
637	An efficient photothermal-chemotherapy platform based on polyacrylamide/phytic acid/polydopamine hydrogel. Journal of Materials Chemistry B, 2022, , .	2.9	7
638	Ultrastrong underwater adhesion on diverse substrates using non-canonical phenolic groups. Nature Communications, 2022, 13, 1892.	5.8	40
639	Ternary Complex Coacervate of PEG/TA/Gelatin as Reinforced Bioadhesive for Skin Wound Repair. ACS Applied Materials & Interfaces, 2022, 14, 18097-18109.	4.0	21
640	Fluorinated Poly(ionic liquid) Copolymers as Transparent, Strong, and Versatile Adhesive Materials. ACS Applied Polymer Materials, 2022, 4, 3217-3224.	2.0	6
643	Mussel Inspired Triggerâ€Đetachable Adhesive Hydrogel. Small, 2022, 18, e2200336.	5.2	16
644	A short review on chitosan and gelatin-based hydrogel composite polymers for wound healing. Journal of Biomaterials Science, Polymer Edition, 2022, 33, 1595-1622.	1.9	16

#	Article	IF	CITATIONS
646	Hydrogels for underwater adhesion: adhesion mechanism, design strategies and applications. Journal of Materials Chemistry A, 2022, 10, 11823-11853.	5.2	74
647	An injectable double network hydrogel with hemostasis and antibacterial activity for promoting multidrug-resistant bacteria infected wound healing. Biomaterials Science, 2022, 10, 3268-3281.	2.6	11
648	Chondroitin Sulfate Improved Mechanical Properties of Gelatin Hydrogel for Cartilage Regeneration in Rats. SSRN Electronic Journal, 0, , .	0.4	0
649	Tannic acid-reinforced zwitterionic hydrogels with multi-functionalities for diabetic wound treatment. Journal of Materials Chemistry B, 2022, 10, 4142-4152.	2.9	21
650	Adhesive and Hydrophobic Bilayer Hydrogel Enabled Onâ€Skin Biosensors for Highâ€Fidelity Classification of Human Emotion. Advanced Functional Materials, 2022, 32, .	7.8	58
651	Silk Fibroin-Based Biomaterials for Hemostatic Applications. Biomolecules, 2022, 12, 660.	1.8	21
652	Bioinspired Functional Surfaces for Medical Devices. Chinese Journal of Mechanical Engineering (English Edition), 2022, 35, .	1.9	6
653	Wet-adhesive materials of oral and maxillofacial region: From design to application. Chinese Chemical Letters, 2023, 34, 107461.	4.8	5
654	Biomedical polymers: synthesis, properties, and applications. Science China Chemistry, 2022, 65, 1010-1075.	4.2	85
655	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.	1.8	8
656	Sweat-Resistant Silk Fibroin-Based Double Network Hydrogel Adhesives. ACS Applied Materials & Interfaces, 2022, 14, 21945-21953.	4.0	17
657	An instantly fixable and self-adaptive scaffold for skull regeneration by autologous stem cell recruitment and angiogenesis. Nature Communications, 2022, 13, 2499.	5.8	54
658	Infant Skin Friendly Adhesive Hydrogel Patch Activated at Body Temperature for Bioelectronics Securing and Diabetic Wound Healing. ACS Nano, 2022, 16, 8662-8676.	7.3	112
659	Hybrid nanocomposite multinetwork hydrogel containing magnesium hydroxide nanoparticles with enhanced antibacterial activity for wound dressing applications. Polymer, 2022, 251, 124902.	1.8	14
660	Targeting polysaccharides such as chitosan, cellulose, alginate and starch for designing hemostatic dressings. Carbohydrate Polymers, 2022, 291, 119574.	5.1	29
661	Barnacle-Inspired robust and aesthetic Janus patch with instinctive wet adhesive for oral ulcer treatment. Chemical Engineering Journal, 2022, 444, 136580.	6.6	15
662	Highly stretchable, elastic, antimicrobial conductive hydrogels with environment-adaptive adhesive property for health monitoring. Journal of Colloid and Interface Science, 2022, 622, 612-624.	5.0	13
663	Hemostatic biomaterials to halt non-compressible hemorrhage. Journal of Materials Chemistry B, 2022, 10, 7239-7259.	2.9	25

#	Article	IF	CITATIONS
664	Bioinspired Cationic-Aromatic Copolymer for Strong and Reversible Underwater Adhesion. ACS Applied Materials & Interfaces, 2022, 14, 26287-26294.	4.0	12
665	Automated next-generation profiling of genomic alterations in human cancers. Nature Communications, 2022, 13, .	5.8	8
666	Bioâ€Inspired Selfâ€Hydrophobized Sericin Adhesive with Tough Underwater Adhesion Enables Wound Healing and Fluid Leakage Sealing. Advanced Functional Materials, 2022, 32, .	7.8	29
667	Scalable Preparation of Synthetic Mucins via Nucleophilic Ring-Opening Polymerization of Glycosylated <i>N</i> -Carboxyanhydrides. Macromolecules, 2022, 55, 4710-4720.	2.2	4
668	Sweet Pepper Seed Germination and Seedling Growth After Treatment with Slug Mucus. Proceedings of the Latvian Academy of Sciences, 2022, 76, 289-294.	0.0	0
669	Investigation on the Effect of Butyl Acrylate (nBA) to Improve the Toughness Properties of Methacrylate-Based Waterproofing Adhesive Material (MMA) for the Steel Bridge Deck. Advances in Materials Science and Engineering, 2022, 2022, 1-14.	1.0	0
670	Gelatin-based rechargeable antibacterial hydrogel paint coating for reducing cross-contamination and biofilm formation on stainless steel. Food Control, 2022, 141, 109113.	2.8	7
671	Wireless soft millirobots for climbing three-dimensional surfaces in confined spaces. Science Advances, 2022, 8, .	4.7	68
672	Gelation of highly entangled hydrophobic macromolecular fluid for ultrastrong underwater in situ fast tissue adhesion. Science Advances, 2022, 8, .	4.7	31
673	Polyelectrolyte Complex-Covalent Interpenetrating Polymer Network Hydrogels. Macromolecules, 2022, 55, 4481-4491.	2.2	10
674	Bio-inspired, super-stretchable and self-adhesive hybrid hydrogel with SC-PDA/GO-Ca2+/PAM framework for high precision wearable sensors. Chemical Engineering Journal, 2022, 447, 137259.	6.6	35
675	A Dualâ€Bioinspired Tissue Adhesive Based on Peptide Dendrimer with Fast and Strong Wet Adhesion. Advanced Healthcare Materials, 2022, 11, .	3.9	15
676	<i>In situ</i> forming injectable γ-poly(glutamic acid)/PEG adhesive hydrogels for hemorrhage control. Biomaterials Science, 2022, 10, 4218-4227.	2.6	18
677	Recent advances in multi-mechanism design of crack-resistant hydrogels. Soft Matter, 2022, 18, 5153-5165.	1.2	3
678	Design of hydrogel-based wearable EEG electrodes for medical applications. Journal of Materials Chemistry B, 2022, 10, 7260-7280.	2.9	25
679	Synthesis of bovine serum albumin-gelatin composite adhesive hydrogels by physical crosslinking. Journal of Polymer Research, 2022, 29, .	1.2	3
680	Highly stretchable, strain-stiffening, self-healing ionic conductors for wearable sensors. Chemical Engineering Journal, 2022, 449, 137633.	6.6	15
681	Skin-inspired injectable adhesive gelatin/HA biocomposite hydrogel for hemostasis and full-thickness dermal wound healing. , 2022, 139, 212983.		15

#	ARTICLE	IF	CITATIONS
682	Additive manufacturing and advanced functionalities of cardiac patches: A review. European Polymer Journal, 2022, 174, 111332.	2.6	12
683	Thermoresponsive ionogels with switchable adhesion in air and aqueous environments induced by LCST phase behavior. Soft Matter, 2022, 18, 5934-5938.	1.2	8
684	A double-network strategy for the tough tissue adhesion of hydrogels with long-term stability under physiological environment. Soft Matter, 2022, 18, 6192-6199.	1.2	10
685	A Bionic Self-Assembly Hydrogel Constructed by Peptides With Favorable Biosecurity, Rapid Hemostasis and Antibacterial Property for Wound Healing. Frontiers in Bioengineering and Biotechnology, 0, 10, .	2.0	8
686	Sutureless gastrointestinal anastomoses. Nature Biomedical Engineering, 2022, 6, 1089-1091.	11.6	2
687	In situ fused granular hydrogels with ultrastretchability, strong adhesion, and mutli-bioactivities for efficient chronic wound care. Chemical Engineering Journal, 2022, 450, 138076.	6.6	12
688	Fast, strong, and reversible adhesives with dynamic covalent bonds for potential use in wound dressing. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	37
689	A strain-programmed patch for the healing of diabetic wounds. Nature Biomedical Engineering, 2022, 6, 1118-1133.	11.6	82
690	Rapid Ultratough Topological Tissue Adhesives. Advanced Materials, 2022, 34, .	11.1	31
691	Water-driven noninvasively detachable wet tissue adhesives for wound closure. Materials Today Bio, 2022, 16, 100369.	2.6	9
692	Rate-dependent fracture of hydrogels due to water migration. Journal of the Mechanics and Physics of Solids, 2022, 167, 105007.	2.3	12
693	Topology mediates transport of nanoparticles in macromolecular networks. Nature Communications, 2022, 13, .	5.8	20
694	Stability of hydrogel adhesion enabled by siloxane bonds. Engineering Fracture Mechanics, 2022, 271, 108662.	2.0	3
695	Transient and steady state viscoelastic crack propagation in a double cantilever beam specimen. International Journal of Mechanical Sciences, 2022, 229, 107510.	3.6	5
696	Lignin-containing hydrogel matrices with enhanced adhesion and toughness for all-hydrogel supercapacitors. Chemical Engineering Journal, 2022, 450, 138025.	6.6	22
697	Robust hydrogel adhesives for emergency rescue and gastric perforation repair. Bioactive Materials, 2023, 19, 703-716.	8.6	25
698	Functional Trachea Reconstruction Using 3Dâ€Bioprinted Nativeâ€Like Tissue Architecture Based on Designable Tissueâ€Specific Bioinks. Advanced Science, 2022, 9, .	5.6	24
699	A double crosslinking adhesion mechanism for developing tough hydrogel adhesives. Acta Biomaterialia, 2022, 150, 199-210.	4.1	6

#	Article	IF	CITATIONS
700	Medical Adhesives and Their Role in Laparoscopic Surgery—A Review of Literature. Materials, 2022, 15, 5215.	1.3	3
701	Highly Resilient Dual-Crosslinked Hydrogel Adhesives Based on a Dopamine-Modified Crosslinker. ACS Applied Materials & Interfaces, 2022, 14, 36304-36314.	4.0	22
702	Controlled tough bioadhesion mediated by ultrasound. Science, 2022, 377, 751-755.	6.0	79
703	Tailoring Physical Properties of Dual-Network Acrylamide Hydrogel Composites by Engineering Molecular Structures of the Cross-linked Network. ACS Omega, 2022, 7, 30028-30039.	1.6	5
704	An Injectable Rapidâ€Adhesion and Antiâ€5welling Adhesive Hydrogel for Hemostasis and Wound Sealing. Advanced Functional Materials, 2022, 32, .	7.8	50
705	Liquid-infused microstructured bioadhesives halt non-compressible hemorrhage. Nature Communications, 2022, 13, .	5.8	37
706	A non-surgical suturing strategy for rapid cardiac hemostasis. Nano Research, 2023, 16, 810-821.	5.8	4
707	A microscale regulation strategy for strong, tough, and efficiently self-healing energetic adhesives. Chemical Engineering Journal, 2023, 451, 138810.	6.6	8
708	High‣trength Plus Reversible Supramolecular Adhesives Achieved by Regulating Intermolecular Pt(II)··Ĥ·Pt(II) Interactions. Angewandte Chemie, 0, , .	1.6	0
709	Bioinspired gelatin based sticky hydrogel for diverse surfaces in burn wound care. Scientific Reports, 2022, 12, .	1.6	12
710	Successive Redoxâ€Reactionâ€Triggered Interface Radical Polymerization for Growing Hydrogel Coatings on Diverse Substrates. Angewandte Chemie - International Edition, 2022, 61, .	7.2	18
711	Injectable Hybrid-Crosslinked Hydrogels as Fatigue-Resistant and Shape-Stable Skin Depots. Biomacromolecules, 2022, 23, 3698-3712.	2.6	7
712	Injectable Adhesive Hydrogels for Soft tissue Reconstruction: A Materials Chemistry Perspective. Chemical Record, 2022, 22, .	2.9	8
713	High‣trength Plus Reversible Supramolecular Adhesives Achieved by Regulating Intermolecular Pt ^{II} â‹â‹â‹Pt ^{II} Interactions. Angewandte Chemie - International Edition, 2022, 61, .	7.2	9
714	Ultra-sounding out a technique that sticks. Science, 2022, 377, 707-708.	6.0	3
715	Spongeâ€Like Macroporous Hydrogel with Antibacterial and ROS Scavenging Capabilities for Diabetic Wound Regeneration. Advanced Healthcare Materials, 2022, 11, .	3.9	26
716	Alginate microfibers as therapeutic delivery scaffolds and tissue mimics. Experimental Biology and Medicine, 2022, 247, 2103-2118.	1.1	6
717	Successive Redoxâ€Reactionâ€Triggered Interface Radical Polymerization for Growing Hydrogel Coatings on Diverse Substrates. Angewandte Chemie, 2022, 134, .	1.6	1

#	Article	IF	Citations
718	Sprayable Hydrogel for Instant Sealing of Vascular Anastomosis. Advanced Materials, 2022, 34, .	11.1	12
719	Debondingâ€Onâ€Demand Polymeric Wound Patches for Minimal Adhesion and Clinical Communication. Advanced Science, 2022, 9, .	5.6	12
720	Supramolecular Adhesive Materials with Antimicrobial Activity for Emerging Biomedical Applications. Pharmaceutics, 2022, 14, 1616.	2.0	3
721	Bionic Synthesis of Mussel-like Adhesive L-DMA and Its Effects on Asphalt Properties. Materials, 2022, 15, 5351.	1.3	1
722	On-demand anchoring of wireless soft miniature robots on soft surfaces. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	3.3	10
723	Emerging hemostatic materials for non-compressible hemorrhage control. National Science Review, 2022, 9, .	4.6	46
724	Stretchable and Self-Adhesive PEDOT:PSS Blend with High Sweat Tolerance as Conformal Biopotential Dry Electrodes. ACS Applied Materials & amp; Interfaces, 2022, 14, 39159-39171.	4.0	34
725	Adhesive polyethylene glycol-based hydrogel patch for tissue repair. Colloids and Surfaces B: Biointerfaces, 2022, 218, 112751.	2.5	9
726	High-adhesion PDMS/Ag conductive composites for flexible hybrid integration. Chemical Engineering Journal, 2023, 451, 138730.	6.6	8
727	Decellularized extracellular matrix: New promising and challenging biomaterials for regenerative medicine. Biomaterials, 2022, 289, 121786.	5.7	62
728	Underwater instant adhesion mechanism of self-assembled amphiphilic hemostatic granular hydrogel from Andrias davidianus skin secretion. IScience, 2022, 25, 105106.	1.9	9
729	Injectable hydrogels for spinal cord injury repair. Engineered Regeneration, 2022, 3, 407-419.	3.0	8
730	Self-assembly amino-quinone network coatings onto polyester fabric via single-sided spraying of natural polyphenols and polyethyleneimine for highly efficient moisture conducting and bacteriostatic properties. Applied Surface Science, 2022, 606, 154913.	3.1	4
731	A highly-stretchable and adhesive hydrogel for noninvasive joint wound closure driven by hydrogen bonds. Chemical Engineering Journal, 2023, 452, 139368.	6.6	41
732	Catch bond-inspired hydrogels with repeatable and loading rate-sensitive specific adhesion. Bioactive Materials, 2023, 21, 566-575.	8.6	4
733	Hydrogels for the treatment of oral and maxillofacial diseases: current research, challenges, and future directions. Biomaterials Science, 2022, 10, 6413-6446.	2.6	17
734	Turn Wastes into Valuables: Supuramolecular-Interaction Enabled Preparation of Super-Strong Water-Based Adhesives from Polymethylmethacrylate Wastes. SSRN Electronic Journal, 0, , .	0.4	0
735	Water content and guest size dictate the mechanical properties of cyclodextrin mediated hydrogels. Polymer Chemistry, 2022, 13, 5127-5134.	1.9	3

ARTICLE IF CITATIONS # A starch-regulated adhesive hydrogel dressing with controllable separation properties for painless 736 2.9 9 dressing change. Journal of Materials Chemistry B, 2022, 10, 6026-6037. Fatigue of hydrogels., 2022, , 119-138. Mechanically active small intestinal submucosa hydrogel for accelerating chronic wound healing. 738 2.9 11 Journal of Materials Chemistry B, 2022, 10, 6279-6286. Coatings of hydroxyapatite–bioactive glass microparticles for adhesion to biological tissues. RSC Advances, 2022, 12, 21079-21091. Gradient Modulus Tissue Adhesive Composite for Dynamic Wound Closure. Advanced Functional 740 7.8 10 Materials, 2022, 32, . Hydrogel–Tissue Interface Interactions for Implantable Flexible Bioelectronics. Langmuir, 2022, 38, 11503-11513. 1.6 A review of debonding behavior of soft material adhesive systems. Mechanics of Soft Materials, 2022, 742 0.4 5 4, . Structural Color Medical Patch with Surface Dualâ€Properties of Wet Bioadhesion and Slipperiness. 744 5.6 21 Advanced Science, 2022, 9, . 745 Safe, Durable, and Sustainable Self-Powered Smart Contact Lenses. ACS Nano, 2022, 16, 15827-15836. 7.3 10 Fe(III)-coordinated N-[tris(hydroxymethyl)methyl]acrylamide-modified acrylic pressure-sensitive 746 adhesives with enhanced adhesion and cohesion for efficient transdermal application. Acta 4.1 Biomaterialia, 2022, 152, 186-196. Regulation of the Inevitable Water-Responsivity of Silk Fibroin Biopolymer by Polar Amino Acid 747 7.31 Activation. ACS Nano, 2022, 16, 17274-17288. Multiâ€dimensional Selfâ€splitting Behaviors for Improving Wet Attachment on Nonuniform Bioinspired 748 Pillar Surface. Advanced Functional Materials, 2022, 32, . Mucosa-interfacing electronics. Nature Reviews Materials, 2022, 7, 908-925. 749 23.3 35 Sutureless transplantation using a semi-interpenetrating polymer network bioadhesive for ocular 4.1 surface reconstruction. Acta Biomaterialia, 2022, 153, 273-286. Development of cellulosic-based hemostatic dressing with antibacterial activity. Fashion and Textiles, 751 1.3 3 2022, 9, . Gradient Adhesive Hydrogel Decorated Superhydrophilic Membranes for Ultra table Oil/Water 58 Separation. Advanced Functional Materials, 2022, 32, . Bioinspired Injectable Self-Healing Hydrogel Sealant with Fault-Tolerant and Repeated Thermo-Responsive Adhesion for Sutureless Post-Wound-Closure and Wound Healing. Nano-Micro 753 14.4 101 Letters, 2022, 14, . Engineering Bio-Adhesives Based on Protein–Polysaccharide Phase Separation. International Journal 754 1.8 of Molecular Sciences, 2022, 23, 9987.

#	Article	IF	CITATIONS
755	Biomineralization-Inspired Intermediate Precursor for the Controllable Gelation of Polyphenol–Macromolecule Hydrogels. ACS Applied Materials & Interfaces, 2022, 14, 44890-44901.	4.0	6
756	Instant and Tough Adhesives for Rapid Gastric Perforation and Traumatic Pneumothorax Sealing. Advanced Healthcare Materials, 2022, 11, .	3.9	5
757	Morphing-to-Adhesion Polysaccharide Hydrogel for Adaptive Biointerfaces. ACS Applied Materials & Interfaces, 2022, 14, 42420-42429.	4.0	15
758	Non-planar embedded 3D printing for complex hydrogel manufacturing. Bioprinting, 2022, 28, e00242.	2.9	2
759	Bridging wounds: tissue adhesives' essential mechanisms, synthesis and characterization, bioinspired adhesives and future perspectives. Burns and Trauma, 2022, 10, .	2.3	12
760	Bio-macromolecular design roadmap towards tough bioadhesives. Chemical Society Reviews, 2022, 51, 9127-9173.	18.7	31
761	Double-Action Disinfection with Silk Fibroin Gauze: Reliable Therapeutics to Prevent Infectious Complications. , 2022, 4, 2219-2232.		2
762	Dynamic Fluorescent Patterning Based on Visible-Light-Responsive Diselenide Metathesis. Langmuir, 2022, 38, 13272-13278.	1.6	1
763	Controlled Delivery of Corticosteroids Using Tunable Tough Adhesives. Advanced Healthcare Materials, 2023, 12, .	3.9	8
764	Texture and rheological features of strain and pH sensitive chitosan-imine graphene-oxide composite hydrogel with fast self-healing nature. International Journal of Biological Macromolecules, 2022, 222, 3129-3141.	3.6	5
765	Hydrogel interfaces for merging humans and machines. Nature Reviews Materials, 2022, 7, 935-952.	23.3	153
766	A Narrative Review of Different Hemostatic Materials in Emergency Treatment of Trauma. Emergency Medicine International, 2022, 2022, 1-8.	0.3	1
767	Injectable thermogelling bioadhesive chitosan-based hydrogels for efficient hemostasis. International Journal of Biological Macromolecules, 2023, 224, 1091-1100.	3.6	18
768	Boneâ€Adhesive Anisotropic Tough Hydrogel Mimicking Tendon Enthesis. Advanced Materials, 2023, 35, .	11.1	17
769	Ultrathin Hydrogel Films toward Breathable Skinâ€integrated Electronics. Advanced Materials, 2023, 35,	11.1	66
770	Engineering multifunctional bioadhesive powders through dynamic metal-ligand coordination. Science China Chemistry, 2022, 65, 2260-2273.	4.2	3
771	Rational design of adhesives for effective underwater bonding. Frontiers in Chemistry, 0, 10, .	1.8	4
772	Scalable synthesis of paraffin@MoS2-melamine foam composite phase change materials with superior photo-thermal conversion and storage. Journal of Energy Storage, 2022, 56, 105954.	3.9	10

#	Article	IF	CITATIONS
773	Enhancing the fracture resistance of hydrogels by regulating the energy release rate via bilayer designs: Theory and experiments. Journal of the Mechanics and Physics of Solids, 2023, 170, 105125.	2.3	4
774	Enhancing cartilage repair with optimized supramolecular hydrogel-based scaffold and pulsed electromagnetic field. Bioactive Materials, 2023, 22, 312-324.	8.6	8
775	Corrosion resistance self-healing coating with bioinspired interfacial structure. Progress in Organic Coatings, 2023, 174, 107303.	1.9	1
776	Underwater Adhesion and Antiâ \in Swelling Hydrogels. Advanced Materials Technologies, 2023, 8, .	3.0	14
777	Strongly-adhesive easily-detachable carboxymethyl cellulose aerogel for noncompressible hemorrhage control. Carbohydrate Polymers, 2023, 301, 120324.	5.1	8
778	Superwetting Injectable Hydrogel with Ultrastrong and Fast Tissue Adhesion for Minimally Invasive Hemostasis. Advanced Healthcare Materials, 2023, 12, .	3.9	11
779	Electrochemical Bonding of Hydrogels at Rigid Surfaces. Small Methods, 2022, 6, .	4.6	3
780	Antibacterial, Adhesive, and Conductive Hydrogel for Diabetic Wound Healing. Macromolecular Bioscience, 2023, 23, .	2.1	9
781	Active tissue adhesive activates mechanosensors and prevents muscle atrophy. Nature Materials, 2023, 22, 249-259.	13.3	18
782	Flexible and Zwitterionic Fluorinated Hydrogel Scaffold with High Fluorine Content for Noninvasive ¹⁹ F Magnetic Resonance Imaging under Ultrahigh Scanning Resolution. Advanced Healthcare Materials, 2023, 12, .	3.9	2
783	Natural Small Biological Molecule Based Supramolecular Bioadhesives with Innate Photothermal Antibacterial Capability for Nonpressing Hemostasis and Effective Wound Healing. ACS Applied Materials & Interfaces, 2022, 14, 53546-53557.	4.0	7
784	A novel cation-ï€ coating of carbon fiber for promoting interfacial properties of fiber-based composites. Diamond and Related Materials, 2023, 131, 109574.	1.8	2
785	A triple-network carboxymethyl chitosan-based hydrogel for hemostasis of incompressible bleeding on wet wound surfaces. Carbohydrate Polymers, 2023, 303, 120434.	5.1	29
786	Bio-inspired adhesive hydrogel for wound healing. , 2023, 1, 65-72.		5
787	Gradient Micropillar Array Inspired by Tree Frog for Robust Adhesion on Dry and Wet Surfaces. Biomimetics, 2022, 7, 209.	1.5	6
788	Influence of Cedar Essential Oil on Physical and Biological Properties of Hemostatic, Antibacterial, and Antioxidant Polyvinyl Alcohol/Cedar Oil/Kaolin Composite Hydrogels. Pharmaceutics, 2022, 14, 2649.	2.0	16
789	Modular stimuli-responsive hydrogel sealants for early gastrointestinal leak detection and containment. Nature Communications, 2022, 13, .	5.8	14
790	Multifunctional 3D platforms for rapid hemostasis and wound healing: Structural and functional prospects at biointerfaces. International Journal of Bioprinting, 2022, 9, 648.	1.7	1

#	Article	IF	CITATIONS
792	Functional Tough Hydrogels: Design, Processing, and Biomedical Applications. Accounts of Materials Research, 2023, 4, 101-114.	5.9	23
794	High Performance Marine and Terrestrial Bioadhesives and the Biomedical Applications They Have Inspired. Molecules, 2022, 27, 8982.	1.7	5
795	Strong, Chemically Stable, and Enzymatically Onâ€Demand Detachable Hydrogel Adhesion Using Protein Crosslink. Macromolecular Rapid Communications, 2023, 44, .	2.0	2
796	Interfacial Molecular Lock: A Universal Strategy for Hydrogel Adhesion. ACS Applied Polymer Materials, 2023, 5, 1037-1045.	2.0	4
797	Self-Powered Gradient Hydrogel Sensor with the Temperature-Triggered Reversible Adhension. Polymers, 2022, 14, 5312.	2.0	2
798	Heart Energy Harvesting and Cardiac Bioelectronics: Technologies and Perspectives. Nanoenergy Advances, 2022, 2, 344-385.	3.6	4
799	Bio-inspired conductive adhesive based on calcium-free alginate hydrogels for bioelectronic interfaces. Biomedical Materials (Bristol), 2023, 18, 015020.	1.7	2
800	Plantâ€Inspired Multifunctional Bioadhesives with Selfâ€Healing Adhesion Strength to Promote Wound Healing. Advanced Materials Interfaces, 2023, 10, .	1.9	1
801	Silk Fibroin-Based Tough Hydrogels with Strong Underwater Adhesion for Fast Hemostasis and Wound Sealing. Biomacromolecules, 2023, 24, 319-331.	2.6	8
802	Interfacial Instabilityâ€Induced (31) Adhesives through "Mediator―Solvent Diffusion for Robust Underoil Adhesion. Advanced Materials, 2023, 35, .	11.1	5
803	Tough bioadhesion of ultrasound breakthrough barrier effect. Matter, 2022, 5, 4114-4115.	5.0	1
804	Advances in Hemostatic Hydrogels That Can Adhere to Wet Surfaces. Gels, 2023, 9, 2.	2.1	12
805	Design of Adhesive Hemostatic Hydrogels Guided by the Interfacial Interactions with Tissue Surface. Advanced NanoBiomed Research, 2023, 3, .	1.7	2
806	Bioâ€inspired adhesive hydrogel for biomedicine—principles and design strategies. , 2022, 1, .		17
807	Smart Hydrogels Bearing Transient Gel–Sol–Gel Transition Behavior Driven by a Biocompatible Chemical Fuel. ACS Applied Polymer Materials, 2023, 5, 1067-1074.	2.0	4
808	Improve Hydrogel Adhesion by Introducing Pillar Structures at the Interface. Journal of Applied Mechanics, Transactions ASME, 2023, 90, .	1.1	2
809	Engineering cohesion and adhesion through dynamic bonds for advanced adhesive materials. Canadian Journal of Chemical Engineering, 2023, 101, 4941-4954.	0.9	5
810	Chitosan-Based Hydrogels for Bioelectronic Sensing: Recent Advances and Applications in Biomedicine and Food Safety. Biosensors, 2023, 13, 93.	2.3	12

-	TION	Dena	
			2
		ILLI UI	N 1

#	Article	IF	CITATIONS
811	Omni-adhesive fibers via Taylor-cone co-electrospinning towards cold-supply chain. Nano Today, 2023, 48, 101748.	6.2	0
812	A wet-adhesive carboxymethylated yeast β-glucan sponge with radical scavenging, bacteriostasis and anti-inflammatory functions for rapid hemostasis. International Journal of Biological Macromolecules, 2023, 230, 123158.	3.6	5
813	Hydrogel as an advanced energy material for flexible batteries. Polymer-Plastics Technology and Materials, 2023, 62, 359-383.	0.6	0
814	Periosteum-inspired in situ CaP generated nanocomposite hydrogels with strong bone adhesion and superior stretchability for accelerated distraction osteogenesis. Biomaterials Research, 2022, 26, .	3.2	3
815	A Super Tough, Rapidly Biodegradable, Ultrafast Hemostatic Bioglue. Advanced Materials, 2023, 35, .	11.1	24
816	An Ultrasoundâ€Driven Bioadhesive Triboelectric Nanogenerator for Instant Wound Sealing and Electrically Accelerated Healing in Emergencies. Advanced Materials, 2023, 35, .	11.1	38
817	èšç"μè§£è^檶液的表界é¢çƒåЛ妿€§è^¨ç"ç©¶èį›å±•. Scientia Sinica Chimica, 2023, , .	0.2	0
818	An endoscopically compatible fast-gelation powder forms Janus-adhesive hydrogel barrier to prevent postoperative adhesions. Proceedings of the National Academy of Sciences of the United States of America, 2023, 120, .	3.3	10
819	A natural biological adhesive from snail mucus for wound repair. Nature Communications, 2023, 14, .	5.8	44
820	Hydrogen-bonded supramolecular adhesives: Synthesis, responsiveness, and application. , 2023, 2, 100032.		6
821	PEC-Based Photo-Cross-Linked Networks with Adjustable Topologies and Mechanical Properties. Biomacromolecules, 0, , .	2.6	0
822	Adhesive cryogel particles for bridging confined and irregular tissue defects. Military Medical Research, 2023, 10, .	1.9	0
823	Material Design in Implantable Biosensors toward Future Personalized Diagnostics and Treatments. Applied Sciences (Switzerland), 2023, 13, 4630.	1.3	1
824	Toughening of hydrogel adhering interface based on soft/hard heterogeneous structures. Extreme Mechanics Letters, 2023, 61, 102016.	2.0	1
825	Bandâ€Aid‣ike Selfâ€Fixed Barrier Membranes Enable Superior Bone Augmentation. Advanced Science, 2023, 10, .	5.6	2
826	An Integrally Formed Janus Hydrogel for Robust Wetâ€Tissue Adhesive and Antiâ€Postoperative Adhesion. Advanced Materials, 2023, 35, .	11.1	23
827	Dynamic Crosslinked Injectable Mussel-Inspired Hydrogels with Adhesive, Self-Healing, and Biodegradation Properties. Polymers, 2023, 15, 1876.	2.0	2
828	Complex-chamber hydrogel actuators based on strong interfacial adhesion for fluid-driven multi-degree-of-freedom motions. Sensors and Actuators B: Chemical, 2023, 383, 133608.	4.0	2

#	Article	IF	CITATIONS
829	Photocurable hydrogel-elastomer hybrids as an adhesive patch for meniscus repair. Materials and Design, 2023, 229, 111915.	3.3	3
830	Programmable Tissue Folding Patterns in Structured Hydrogels. Advanced Materials, 0, , .	11.1	5
831	Adhesive tapes: From daily necessities to flexible smart electronics. Applied Physics Reviews, 2023, 10, .	5.5	8
832	Supramolecular interaction enabled preparation of high-strength water-based adhesives from polymethylmethacrylate wastes. IScience, 2023, 26, 106022.	1.9	1
833	Soft underwater adhesives based on weak molecular interactions. Progress in Polymer Science, 2023, 139, 101649.	11.8	9
834	Adhesive hydrogels in osteoarthritis: from design to application. Military Medical Research, 2023, 10, .	1.9	7
835	A bioadhesive robot to activate muscles. Nature Materials, 2023, 22, 149-150.	13.3	0
836	Multi-crosslinked hydrogels with strong wet adhesion, self-healing, antibacterial property, reactive oxygen species scavenging activity, and on-demand removability for seawater-immersed wound healing. Acta Biomaterialia, 2023, 159, 95-110.	4.1	30
837	Modular Metalâ€Quinone Networks with Tunable Architecture and Functionality. Angewandte Chemie, 2023, 135, .	1.6	0
838	Modular Metalâ€Quinone Networks with Tunable Architecture and Functionality. Angewandte Chemie - International Edition, 2023, 62, .	7.2	7
839	A Nonswelling Hydrogel with Regenerable High Wet Tissue Adhesion for Bioelectronics. Advanced Materials, 2023, 35, .	11.1	35
840	Fracture Detection in Bioâ€Glues with Fluorescentâ€Proteinâ€Based Optical Force Probes. Advanced Materials, 2023, 35, .	11.1	7
841	Self-Healing Supramolecular Hydrogels with Antibacterial Abilities for Wound Healing. Journal of Healthcare Engineering, 2023, 2023, 1-10.	1.1	4
842	Sugar-painting inspired branched ureido polymers as high-performance formaldehyde-free wood adhesive. Wood Science and Technology, 0, , .	1.4	1
843	PEG-Based Hydrogel Coatings: Design Tools for Biomedical Applications. Annals of Biomedical Engineering, 0, , .	1.3	2
844	Tissue-mimetic hybrid bioadhesives for intervertebral disc repair. Materials Horizons, 2023, 10, 1705-1718.	6.4	9
845	Programmable bio-ionic liquid functionalized hydrogels for in situ 3D bioprinting of electronics at the tissue interface. Materials Today Advances, 2023, 17, 100352.	2.5	2
846	Tissue adhesives for wound closure. , 2023, 2, .		8

#	Article	IF	CITATIONS
847	Bioâ€inspired ionic skins for smart medicine. , 2023, 2, .		3
848	Deep Eutectic Solventsâ€Based Ionogels with Ultrafast Gelation and High Adhesion in Harsh Environments. Advanced Functional Materials, 2023, 33, .	7.8	41
849	A Bioinspired Polymerâ€Based Composite Displaying Both Strong Adhesion and Anisotropic Thermal Conductivity. Advanced Functional Materials, 2023, 33, .	7.8	26
850	Climbing robots for manufacturing. National Science Review, 2023, 10, .	4.6	4
851	Peel tests for quantifying adhesion and toughness: A review. Progress in Materials Science, 2023, 137, 101086.	16.0	25
852	Highly Efficient Switchable Underwater Adhesion in Channeled Hydrogel Networks. Advanced Functional Materials, 0, , .	7.8	10
853	Characterizing the nanostructures and mechanical properties of hydrogels by atomic force microscopy. , 2023, , 105-134.		0
854	A self-adhesive, self-healing and antibacterial hydrogel based on PVA/MXene-Ag/sucrose for fast-response, high-sensitivity and ultra-durable strain sensors. New Journal of Chemistry, 2023, 47, 6621-6630.	1.4	2
855	Machine learning and experiments: A synergy for the development of functional materials. MRS Bulletin, 2023, 48, 142-152.	1.7	4
856	Self-recoverable, highly adhesive, anti-freezing/drying, organohydrogel stretchable sensors. Applied Materials Today, 2023, 31, 101777.	2.3	2
857	Tough Adhesive Hydrogel for Intraoral Adhesion and Drug Delivery. Journal of Dental Research, 2023, 102, 497-504.	2.5	2
858	Structural Strategies for Supramolecular Hydrogels and Their Applications. Polymers, 2023, 15, 1365.	2.0	4
859	Mussel Foot Protein Inspired Tapeâ€Type Adhesive with Waterâ€Responsive, High Conformal, Tough, and Onâ€Demand Detachable Adhesion to Wet Tissue. Advanced Healthcare Materials, 2023, 12, .	3.9	6
860	Bioinspired chemical design to control interfacial wet adhesion. CheM, 2023, 9, 771-783.	5.8	14
861	Gelatin Methacryloyl-Based Sponge with Designed Conical Microchannels for Rapidly Controlling Hemorrhage and Theoretical Verification. ACS Biomaterials Science and Engineering, 2023, 9, 2001-2013.	2.6	1
862	Recent advances in adhesive materials used in the biomedical field: adhesive properties, mechanism, and applications. Journal of Materials Chemistry B, 2023, 11, 3338-3355.	2.9	6
863	Highly Stretchable, Self-Repairable, and Super-Adhesive Multifunctional Ionogel for a Flexible Wearable Sensor. ACS Applied Polymer Materials, 2023, 5, 2704-2715.	2.0	6
864	An Allâ€inâ€One "4A Hydrogelâ€: through Firstâ€Aid Hemostatic, Antibacterial, Antioxidant, and Angiogenic to Promoting Infected Wound Healing. Small, 2023, 19, .	5.2	15

#	Article	IF	CITATIONS
865	Janus Intelligent Antibacterial Hydrogel Dressings for Chronic Wound Healing in Diabetes. ACS Applied Polymer Materials, 2023, 5, 2596-2606.	2.0	4
866	Simultaneous Configuration of High Room-Temperature Self-Healing Efficiencies and Tough Mechanical Properties of Energetic Adhesives for Energetic Composites. ACS Applied Polymer Materials, 2023, 5, 3005-3014.	2.0	3
867	Evaluation of fibrin, cyanoacrylate, and polyurethane-based tissue adhesives in sutureless vascular anastomosis: a comparative mechanical ex vivo study. International Journal of Oral and Maxillofacial Surgery, 2023, 52, 1137-1144.	0.7	0
868	Supramolecular Adhesives with Extended Tolerance to Extreme Conditions via Waterâ€Modulated Noncovalent Interactions. Angewandte Chemie - International Edition, 2023, 62, .	7.2	11
869	Supramolecular Adhesives with Extended Tolerance to Extreme Conditions via Waterâ€Modulated Noncovalent Interactions. Angewandte Chemie, 0, , .	1.6	0
871	Mussel inspired Cu-tannic autocatalytic strategy for rapid self-polymerization of conductive and adhesive hydrogel sensors with extreme environmental tolerance. Chemical Engineering Journal, 2023, 465, 142831.	6.6	20
872	Hemoadhican, a Tissue Adhesion Hemostatic Material Independent of Blood Coagulation. Advanced Healthcare Materials, 2023, 12, .	3.9	2
873	A furan-containing biomimetic multiphase structure for strong and supertough sustainable adhesives. Cell Reports Physical Science, 2023, 4, 101374.	2.8	9
874	Nano Surfaceâ€Heterogeneities of Particles Modulate the Macroscopic Properties of Hydrogels. Advanced Materials Interfaces, 2023, 10, .	1.9	1
875	A tough and mechanically stable adhesive hydrogel for non-invasive wound repair. Frontiers in Bioengineering and Biotechnology, 0, 11, .	2.0	3
876	Bioinspired Polyacrylic Acidâ€Based Dressing: Wet Adhesive, Selfâ€Healing, and Multiâ€Biofunctional Coacervate Hydrogel Accelerates Wound Healing. Advanced Science, 2023, 10, .	5.6	19
877	Highly conductive tissue-like hydrogel interface through template-directed assembly. Nature Communications, 2023, 14, .	5.8	31
884	Nanoscale surface coatings based on plant phenolics. , 2023, , 195-216.		1
897	Soft Conductive Interfacing for Bioelectrical Uses: Adhesion Mechanisms and Structural Approaches. Macromolecules, 2023, 56, 4431-4446.	2.2	3
914	Multicomponent Hydrogels for Tissue Engineering Applications. , 2023, , 346-380.		0
927	A strain-reinforcing elastomer adhesive with superior adhesive strength and toughness. Materials Horizons, 2023, 10, 4183-4191.	6.4	4
939	Artificial Intelligence and the Contributions of Nanotechnology to the Biomedical Sector. Advances in Chemical and Materials Engineering Book Series, 2023, , 65-92.	0.2	1
1001	Ductile adhesive elastomers with force-triggered ultra-high adhesion strength. Materials Horizons, 2024, 11, 969-977.	6.4	0

IF

ARTICLE

1028 Incorporation of soft materials for flexible electronics. , 2024, , 155-225.

0

CITATIONS