

Skin-Inspired Antibacterial Conductive Hydrogels for Wound Dressings

Advanced Functional Materials

29, 1901474

DOI: [10.1002/adfm.201901474](https://doi.org/10.1002/adfm.201901474)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Versatile Polydopamine Platforms: Synthesis and Promising Applications for Surface Modification and Advanced Nanomedicine. ACS Nano, 2019, 13, 8537-8565.	7.3	670
2	Highly Stretchable, Adhesive, and Mechanical Zwitterionic Nanocomposite Hydrogel Biomimetic Skin. ACS Applied Materials & Interfaces, 2019, 11, 40620-40628.	4.0	120
3	Efficient Angiogenesis-Based Diabetic Wound Healing/Skin Reconstruction through Bioactive Antibacterial Adhesive Ultraviolet Shielding Nanodressing with Exosome Release. ACS Nano, 2019, 13, 10279-10293.	7.3	343
4	Radical free crosslinking of direct-write 3D printed hydrogels through a base catalyzed thiol-Michael reaction. Polymer Chemistry, 2019, 10, 5979-5984.	1.9	10
5	Fabrication of CS/SA Double- β -Network Hydrogel and Application in pH-Controllable Drug Release. ChemistrySelect, 2019, 4, 14036-14042.	0.7	38
6	Natural skin-inspired versatile cellulose biomimetic hydrogels. Journal of Materials Chemistry A, 2019, 7, 26442-26455.	5.2	236
7	High-strength and high-toughness sodium alginate/polyacrylamide double physically crosslinked network hydrogel with superior self-healing and self-recovery properties prepared by a one-pot method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 589, 124402.	2.3	65
8	Recent innovations in artificial skin. Biomaterials Science, 2020, 8, 776-797.	2.6	38
9	Transparent Conductive Supramolecular Hydrogels with Stimuli-Responsive Properties for On-Demand Dissolvable Diabetic Foot Wound Dressings. Macromolecular Rapid Communications, 2020, 41, e2000441.	2.0	41
10	Application status and technical analysis of chitosan-based medical dressings: a review. RSC Advances, 2020, 10, 34308-34322.	1.7	37
11	Biomimetic epidermal sensors assembled from polydopamine-modified reduced graphene oxide/polyvinyl alcohol hydrogels for the real-time monitoring of human motions. Journal of Materials Chemistry B, 2020, 8, 10549-10558.	2.9	31
12	Nanotechnology-driven advances in the treatment of diabetic wounds. Biotechnology and Applied Biochemistry, 2020, , .	1.4	7
13	Antibacterial Zwitterionic Polyelectrolyte Hydrogel Adhesives with Adhesion Strength Mediated by Electrostatic Mismatch. ACS Applied Materials & Interfaces, 2020, 12, 46816-46826.	4.0	77
14	Strengthened, Antibacterial, and Conductive Flexible Film for Humidity and Strain Sensors. ACS Applied Materials & Interfaces, 2020, 12, 35482-35492.	4.0	41
15	Natural Polymer-Based Antimicrobial Hydrogels without Synthetic Antibiotics as Wound Dressings. Biomacromolecules, 2020, 21, 2983-3006.	2.6	207
16	Implantable fibrous scaffold with hierarchical microstructure for the "on-site" synergistic cancer therapy. Chemical Engineering Journal, 2020, 402, 126204.	6.6	15
17	Nanocolloidal Hydrogel with Sensing and Antibacterial Activities Governed by Iron Ion Sequestration. Chemistry of Materials, 2020, 32, 10066-10075.	3.2	32
18	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

#	ARTICLE	IF	CITATIONS
19	Extreme Temperature-Tolerant Conductive Gel with Antibacterial Activity for Flexible Dual-Response Sensors. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 56470-56479.	4.0	37
20	Design Strategies of Conductive Hydrogel for Biomedical Applications. <i>Molecules</i> , 2020, 25, 5296.	1.7	69
21	Preparation and Characterization of Antibacterial Porcine Acellular Dermal Matrices with High Performance. <i>ACS Omega</i> , 2020, 5, 20238-20249.	1.6	20
22	Melanin and Melanin-Like Hybrid Materials in Regenerative Medicine. <i>Nanomaterials</i> , 2020, 10, 1518.	1.9	44
23	Full Poly(ethylene glycol) Hydrogels with High Ductility and Self-Recoverability. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 37549-37560.	4.0	23
24	Degradable Gelatin-Based IPN Cryogel Hemostat for Rapidly Stopping Deep Noncompressible Hemorrhage and Simultaneously Improving Wound Healing. <i>Chemistry of Materials</i> , 2020, 32, 6595-6610.	3.2	265
25	Unconventional Device and Material Approaches for Monolithic Biointegration of Implantable Sensors and Wearable Electronics. <i>Advanced Materials Technologies</i> , 2020, 5, .	3.0	37
26	Regulation of inflammatory microenvironment using a self-healing hydrogel loaded with BM-MSCs for advanced wound healing in rat diabetic foot ulcers. <i>Journal of Tissue Engineering</i> , 2020, 11, 204173142094724.	2.3	75
27	Manufacture of pH- and HAase-responsive hydrogels with on-demand and continuous antibacterial activity for full-thickness wound healing. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 2418-2431.	3.6	25
28	In situ sprayed NIR-responsive, analgesic black phosphorus-based gel for diabetic ulcer treatment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 28667-28677.	3.3	244
29	Biocompatible and Highly Stretchable PVA/AgNWs Hydrogel Strain Sensors for Human Motion Detection. <i>Advanced Materials Technologies</i> , 2020, 5, 2000426.	3.0	83
30	Preparation of a Multifunctional Wound Dressing Based on a Natural Deep Eutectic Solvent. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 14243-14252.	3.2	21
31	<p>Potential Applications of Nanomaterials and Technology for Diabetic Wound Healing</p>. <i>International Journal of Nanomedicine</i> , 2020, Volume 15, 9717-9743.	3.3	106
32	Recent advances on synthesis and biomaterials applications of hyperbranched polymers. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2020, 12, e1640.	3.3	23
33	Injectable Antimicrobial Conductive Hydrogels for Wound Disinfection and Infectious Wound Healing. <i>Biomacromolecules</i> , 2020, 21, 1841-1852.	2.6	264
34	Mussel-inspired hydrogels: from design principles to promising applications. <i>Chemical Society Reviews</i> , 2020, 49, 3605-3637.	18.7	346
35	Mussel-inspired sandwich-like nanofibers/hydrogel composite with super adhesive, sustained drug release and anti-infection capacity. <i>Chemical Engineering Journal</i> , 2020, 399, 125668.	6.6	54
36	Conductive Hydrogelsâ€™ A Novel Material: Recent Advances and Future Perspectives. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 7269-7280.	2.4	60

#	ARTICLE	IF	CITATIONS
37	Tissue Engineering and Regenerative Medicine: Achievements, Future, and Sustainability in Asia. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 83.	2.0	136
38	Electrically Conductive Tough Gelatin Hydrogel. <i>Advanced Electronic Materials</i> , 2020, 6, 2000040.	2.6	55
39	Injectable self-healing supramolecular hydrogels with conductivity and photo-thermal antibacterial activity to enhance complete skin regeneration. <i>Chemical Engineering Journal</i> , 2020, 400, 125994.	6.6	255
40	Hydrogel-Based Gas Sensors for NO ₂ and NH ₃ . <i>ACS Sensors</i> , 2020, 5, 772-780.	4.0	52
41	PB@PDA@Ag nanosystem for synergistically eradicating MRSA and accelerating diabetic wound healing assisted with laser irradiation. <i>Biomaterials</i> , 2020, 243, 119936.	5.7	153
42	Recent Advances in Mechano-Responsive Hydrogels for Biomedical Applications. <i>ACS Applied Polymer Materials</i> , 2020, 2, 1092-1107.	2.0	59
43	Nucleotide-driven skin-attachable hydrogels toward visual human-machine interfaces. <i>Journal of Materials Chemistry A</i> , 2020, 8, 4515-4523.	5.2	68
44	Effect of initial freezing temperature and comonomer concentration on the properties of poly(aniline-co-m-phenylenediamine) cryogels supported by poly(vinyl alcohol). <i>Colloid and Polymer Science</i> , 2020, 298, 293-301.	1.0	6
45	Anti-Liquid Interfering and Bacterially Antiadhesive Strategy for Highly Stretchable and Ultrasensitive Strain Sensors Based on Cassia Waxer Wetting State. <i>Advanced Functional Materials</i> , 2020, 30, 2000398.	7.8	172
46	Mussel-Inspired Hydrogels for Self-Adhesive Bioelectronics. <i>Advanced Functional Materials</i> , 2020, 30, 1909954.	7.8	285
47	Fish-inspired anti-icing hydrogel sensors with low-temperature adhesion and toughness. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9373-9381.	5.2	90
48	Robust natural biomaterial based flexible artificial skin sensor with high transparency and multiple signals capture. <i>Chemical Engineering Journal</i> , 2020, 394, 124855.	6.6	40
49	Nanotechnology Approaches in Chronic Wound Healing. <i>Advances in Wound Care</i> , 2021, 10, 234-256.	2.6	76
50	Development of nanosilver doped carboxymethyl chitosan-polyamideamine alginate composite dressing for wound treatment. <i>International Journal of Biological Macromolecules</i> , 2021, 166, 1335-1351.	3.6	30
51	Conductive Materials for Healing Wounds: Their Incorporation in Electroactive Wound Dressings, Characterization, and Perspectives. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001384.	3.9	88
52	Hydrogel facilitated bioelectronic integration. <i>Biomaterials Science</i> , 2021, 9, 23-37.	2.6	17
53	Ionic conductive hydrogels toughened by latex particles for strain sensors. <i>Science China Technological Sciences</i> , 2021, 64, 827-835.	2.0	11
54	Polydopamine-based nanomaterials and their potentials in advanced drug delivery and therapy. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 199, 111502.	2.5	86

#	ARTICLE	IF	CITATIONS
55	Promote anti-inflammatory and angiogenesis using a hyaluronic acid-based hydrogel with miRNA-laden nanoparticles for chronic diabetic wound treatment. <i>International Journal of Biological Macromolecules</i> , 2021, 166, 166-178.	3.6	50
56	Antibacterial Hybrid Hydrogels. <i>Macromolecular Bioscience</i> , 2021, 21, e2000252.	2.1	105
57	Intra-articular Injection of Chitosan-Based Supramolecular Hydrogel for Osteoarthritis Treatment. <i>Tissue Engineering and Regenerative Medicine</i> , 2021, 18, 113-125.	1.6	25
58	Modulation of hydrogel stiffness by external stimuli: soft materials for mechanotransduction studies. <i>Journal of Materials Chemistry B</i> , 2021, 9, 7578-7596.	2.9	22
59	Dual-Effective Chronic Wounds Management System through a Monoglyceride Binary Blend Matrix Based Thermal-Responsive Phase-Transition Substrate. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001966.	3.9	9
60	A DNA-inspired hydrogel mechanoreceptor with skin-like mechanical behavior. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1835-1844.	5.2	48
61	A highly conductive hydrogel driven by phytic acid towards a wearable sensor with freezing and dehydration resistance. <i>Journal of Materials Chemistry A</i> , 2021, 9, 22615-22625.	5.2	80
62	Synergistic Antibacterial and Anti-Inflammatory Effects of a Drug-Loaded Self-Standing Porphyrin-COF Membrane for Efficient Skin Wound Healing. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001821.	3.9	59
63	Knittable and Sewable Spandex Yarn with Nacre-Mimetic Composite Coating for Wearable Health Monitoring and Thermo- and Antibacterial Therapies. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 9053-9063.	4.0	52
64	An anti-freezing/drying, adhesive and self-healing motion sensor with humidity-enhanced conductivity. <i>Polymer</i> , 2021, 214, 123354.	1.8	19
65	Recent Advances in the Design of Three-Dimensional and Bioprinted Scaffolds for Full-Thickness Wound Healing. <i>Tissue Engineering - Part B: Reviews</i> , 2022, 28, 160-181.	2.5	19
66	Ultra-Conformable Ionic Skin with Multi-Modal Sensing, Broad-Spectrum Antimicrobial and Regenerative Capabilities for Smart and Expedited Wound Care. <i>Advanced Science</i> , 2021, 8, 2004627.	5.6	52
67	Multifunctional hydrogels for wound healing: Special focus on biomacromolecular based hydrogels. <i>International Journal of Biological Macromolecules</i> , 2021, 170, 728-750.	3.6	151
68	Green Tea Derivative Driven Smart Hydrogels with Desired Functions for Chronic Diabetic Wound Treatment. <i>Advanced Functional Materials</i> , 2021, 31, 2009442.	7.8	202
69	Bioinspired Conductive Silk Microfiber Integrated Bioelectronic for Diagnosis and Wound Healing in Diabetes. <i>Advanced Functional Materials</i> , 2021, 31, 2010461.	7.8	120
70	Polymeric Materials with Antibacterial Activity: A Review. <i>Polymers</i> , 2021, 13, 613.	2.0	53
71	The Dynamic Inflammatory Tissue Microenvironment: Signaling and Disease Therapy by Biomaterials. <i>Research</i> , 2021, 2021, 4189516.	2.8	35
73	Intelligent Patches for Wound Management: In Situ Sensing and Treatment. <i>Analytical Chemistry</i> , 2021, 93, 4687-4696.	3.2	28

#	ARTICLE	IF	CITATIONS
74	Simple preparation of carboxymethyl cellulose-based ionic conductive hydrogels for highly sensitive, stable and durable sensors. <i>Cellulose</i> , 2021, 28, 4253-4265.	2.4	15
75	Highly Stretchable, Adhesive, Biocompatible, and Antibacterial Hydrogel Dressings for Wound Healing. <i>Advanced Science</i> , 2021, 8, 2003627.	5.6	291
76	Enhancement of conductivity, mechanical and biological properties of polyaniline-poly(N-vinylpyrrolidone) cryogels by phytic acid. <i>Polymer</i> , 2021, 217, 123450.	1.8	9
77	Rational design of injectable conducting polymer-based hydrogels for tissue engineering. <i>Acta Biomaterialia</i> , 2022, 139, 4-21.	4.1	33
78	Conductive Hydrogels with Dynamic Reversible Networks for Biomedical Applications. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100012.	3.9	47
79	Single Tungsten Atom-Modified Cotton Fabrics for Visible-Light-Driven Photocatalytic Degradation and Antibacterial Activity. <i>ACS Applied Bio Materials</i> , 2021, 4, 4345-4353.	2.3	8
80	Smart Asymmetric Hydrogel with Integrated Multi-Functions of NIR-Triggered Tunable Adhesion, Self-Deformation, and Bacterial Eradication. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100784.	3.9	74
81	Recent progress in polymer hydrogel bioadhesives. <i>Journal of Polymer Science</i> , 2021, 59, 1312-1337.	2.0	77
82	Hydrogels and Their Role in Biosensing Applications. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100062.	3.9	133
83	Flexible Polydopamine Bioelectronics. <i>Advanced Functional Materials</i> , 2021, 31, 2103391.	7.8	102
84	Dual-crosslinked mussel-inspired smart hydrogels with enhanced antibacterial and angiogenic properties for chronic infected diabetic wound treatment via pH-responsive quick cargo release. <i>Chemical Engineering Journal</i> , 2021, 411, 128564.	6.6	168
85	Antibacterial, conductive, and osteocompatible polyorganophosphazene microscaffolds for the repair of infectious calvarial defect. <i>Journal of Biomedical Materials Research - Part A</i> , 2021, 109, 2580-2596.	2.1	12
86	Skin-inspired nanofibrillated cellulose-reinforced hydrogels with high mechanical strength, long-term antibacterial, and self-recovery ability for wearable strain/pressure sensors. <i>Carbohydrate Polymers</i> , 2021, 261, 117894.	5.1	48
87	Comb-like structural modification stabilizes polyvinylidene fluoride membranes to realize thermal-regulated sustainable transportation efficiency. <i>Journal of Colloid and Interface Science</i> , 2021, 591, 173-183.	5.0	10
88	Antimicrobial core-shell electrospun nanofibers containing Ajwain essential oil for accelerating infected wound healing. <i>International Journal of Pharmaceutics</i> , 2021, 603, 120698.	2.6	39
89	Metal cation-ligand interaction modulated mono-network ionic conductive hydrogel for wearable strain sensor. <i>Journal of Materials Science</i> , 2021, 56, 14531-14541.	1.7	11
90	Lignin and cellulose derivatives-induced hydrogel with asymmetrical adhesion, strength, and electriferous properties for wearable bioelectrodes and self-powered sensors. <i>Chemical Engineering Journal</i> , 2021, 414, 128903.	6.6	80
91	Biocompatible and antibacterial soy protein isolate/quaternized chitosan composite sponges for acute upper gastrointestinal hemostasis. <i>International Journal of Energy Production and Management</i> , 2021, 8, rbab034.	1.9	14

#	ARTICLE	IF	CITATIONS
92	Novel Diabetic Foot Wound Dressing Based on Multifunctional Hydrogels with Extensive Temperature-Tolerant, Durable, Adhesive, and Intrinsic Antibacterial Properties. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 26770-26781.	4.0	73
93	Injectable adaptive self-healing hyaluronic acid/poly (β -glutamic acid) hydrogel for cutaneous wound healing. <i>Acta Biomaterialia</i> , 2021, 127, 102-115.	4.1	83
94	In Situ Photo-Cross-Linking Hydrogel Accelerates Diabetic Wound Healing through Restored Hypoxia-Inducible Factor 1-Alpha Pathway and Regulated Inflammation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29363-29379.	4.0	53
95	Sprayable antibacterial Persian gum-silver nanoparticle dressing for wound healing acceleration. <i>Materials Today Communications</i> , 2021, 27, 102225.	0.9	22
96	Functionalization of an Electroactive Self-Healing Polypyrrole-Grafted Gelatin-Based Hydrogel by Incorporating a Polydopamine@AgNP Nanocomposite. <i>ACS Applied Bio Materials</i> , 2021, 4, 5797-5808.	2.3	19
97	Materials and Cytokines in the Healing of Diabetic Foot Ulcers. <i>Advanced Therapeutics</i> , 2021, 4, 2100075.	1.6	18
98	Rational Design of Immunomodulatory Hydrogels for Chronic Wound Healing. <i>Advanced Materials</i> , 2021, 33, e2100176.	11.1	271
100	Functional Hydrogels as Wound Dressing to Enhance Wound Healing. <i>ACS Nano</i> , 2021, 15, 12687-12722.	7.3	1,131
101	Polydopamine loaded fluorescent nanocellulose-agarose hydrogel: A pH-responsive drug delivery carrier for cancer therapy. <i>Composites Communications</i> , 2021, 26, 100739.	3.3	27
102	Bio-inspired hydrogel-based bandage with robust adhesive and antibacterial abilities for skin closure. <i>Science China Materials</i> , 2022, 65, 246-254.	3.5	13
103	Advancements in release-active antimicrobial biomaterials: A journey from release to relief. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2022, 14, e1745.	3.3	27
104	Muscle-inspired MXene Conductive Hydrogels with Anisotropy and Low Temperature Tolerance for Wearable Flexible Sensors and Arrays. <i>Advanced Functional Materials</i> , 2021, 31, 2105264.	7.8	171
105	3D printing of dual-cell delivery titanium alloy scaffolds for improving osseointegration through enhancing angiogenesis and osteogenesis. <i>BMC Musculoskeletal Disorders</i> , 2021, 22, 734.	0.8	12
106	A biological functional hybrid scaffold based on decellularized extracellular matrix/gelatin/chitosan with high biocompatibility and antibacterial activity for skin tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2021, 187, 840-849.	3.6	49
107	A hierarchically designed nanocomposite hydrogel with multisensory capabilities towards wearable devices for human-body motion and glucose concentration detection. <i>Composites Science and Technology</i> , 2021, 213, 108894.	3.8	35
108	Anti-drying, transparent, ion-conducting, and tough organohydrogels for wearable multifunctional human-machine interfaces. <i>Chemical Engineering Journal</i> , 2022, 430, 132635.	6.6	11
109	Skin-inspired gelatin-based flexible bio-electronic hydrogel for wound healing promotion and motion sensing. <i>Biomaterials</i> , 2021, 276, 121026.	5.7	81
110	Conducting polymer hydrogels as a sustainable platform for advanced energy, biomedical and environmental applications. <i>Science of the Total Environment</i> , 2021, 786, 147430.	3.9	19

#	ARTICLE	IF	CITATIONS
111	Polyphenol and Cu ²⁺ surface-modified chitin sponge synergizes with antibacterial, antioxidant and pro-vascularization activities for effective scarless regeneration of burned skin. <i>Chemical Engineering Journal</i> , 2021, 419, 129488.	6.6	35
112	Injectable biomimetic hydrogels encapsulating Gold/metal-organic frameworks nanocomposites for enhanced antibacterial and wound healing activity under visible light actuation. <i>Chemical Engineering Journal</i> , 2021, 420, 129668.	6.6	64
113	The diameter factor of aligned membranes facilitates wound healing by promoting epithelialization in an immune way. <i>Bioactive Materials</i> , 2022, 11, 206-217.	8.6	24
114	Performance of Polydopamine Complex and Mechanisms in Wound Healing. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10563.	1.8	23
115	Dynamic nanocellulose hydrogels: Recent advancements and future outlook. <i>Carbohydrate Polymers</i> , 2021, 270, 118357.	5.1	32
116	An excellent antibacterial and high self-adhesive hydrogel can promote wound fully healing driven by its shrinkage under NIR. <i>Materials Science and Engineering C</i> , 2021, 129, 112395.	3.8	18
117	Preclinical models of diabetic wound healing: A critical review. <i>Biomedicine and Pharmacotherapy</i> , 2021, 142, 111946.	2.5	14
118	Tough, antibacterial and self-healing ionic liquid/multiwalled carbon nanotube hydrogels as elements to produce flexible strain sensors for monitoring human motion. <i>European Polymer Journal</i> , 2021, 160, 110779.	2.6	13
119	Cationic peptide-based salt-responsive antibacterial hydrogel dressings for wound healing. <i>International Journal of Biological Macromolecules</i> , 2021, 190, 754-762.	3.6	25
120	pH-responsive hydrogel loaded with insulin as a bioactive dressing for enhancing diabetic wound healing. <i>Materials and Design</i> , 2021, 210, 110104.	3.3	56
121	Proactive biomaterials for chronic wound management and treatment. <i>Current Opinion in Biomedical Engineering</i> , 2021, 20, 100327.	1.8	3
122	Skin-inspired highly stretchable, tough and adhesive hydrogels for tissue-attached sensor. <i>Chemical Engineering Journal</i> , 2021, 425, 131523.	6.6	86
123	Self-adhesive, biodegradable silk-based dry electrodes for epidermal electrophysiological monitoring. <i>Chemical Engineering Journal</i> , 2022, 427, 131999.	6.6	26
124	Spatiotemporally dynamic therapy with shape-adaptive drug-gel for the improvement of tissue regeneration with ordered structure. <i>Bioactive Materials</i> , 2022, 8, 165-176.	8.6	12
125	Mimicking skin cellulose hydrogels for sensor applications. <i>Chemical Engineering Journal</i> , 2022, 427, 130921.	6.6	64
126	Protein-assisted freeze-tolerant hydrogel with switchable performance toward customizable flexible sensor. <i>Chemical Engineering Journal</i> , 2022, 428, 131171.	6.6	34
127	Multifunctional conductive hydrogels and their applications as smart wearable devices. <i>Journal of Materials Chemistry B</i> , 2021, 9, 2561-2583.	2.9	166
128	Physically crosslinked PVA/graphene-based materials/aloe vera hydrogel with antibacterial activity. <i>RSC Advances</i> , 2021, 11, 29029-29041.	1.7	25

#	ARTICLE	IF	CITATIONS
129	Highly synergistic, electromechanical and mechanochromic dual-sensing ionic skin with multiple monitoring, antibacterial, self-healing, and anti-freezing functions. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23916-23928.	5.2	32
130	Flexible Self-Repairing Materials for Wearable Sensing Applications: Elastomers and Hydrogels. <i>Macromolecular Rapid Communications</i> , 2020, 41, e2000444.	2.0	79
131	Spider web-inspired ultra-stable 3D Ti ₃ C ₂ TX (MXene) hydrogels constructed by temporary ultrasonic alignment and permanent in-situ self-assembly fixation. <i>Composites Part B: Engineering</i> , 2020, 197, 108187.	5.9	41
132	Tailored hydrogels for biosensor applications. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 89, 1-12.	2.9	54
133	Hydrogel-based flexible materials for diabetes diagnosis, treatment, and management. <i>Npj Flexible Electronics</i> , 2021, 5, .	5.1	30
134	Preparation of NIR-responsive, ROS-generating and antibacterial black phosphorus quantum dots for promoting the MRSA-infected wound healing in diabetic rats. <i>Acta Biomaterialia</i> , 2022, 137, 199-217.	4.1	58
135	Mussel-inspired chemistry: A promising strategy for natural polysaccharides in biomedical applications. <i>Progress in Polymer Science</i> , 2021, 123, 101472.	11.8	77
136	Heat- and freeze-tolerant organohydrogel with enhanced ionic conductivity over a wide temperature range for highly mechanoresponsive smart paint. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 2158-2168.	5.0	8
137	Intrinsic Antibacterial and Conductive Hydrogels Based on the Distinct Bactericidal Effect of Polyaniline for Infected Chronic Wound Healing. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52308-52320.	4.0	41
138	Biodegradable gelatin/silver nanoparticle composite cryogel with excellent antibacterial and antibiofilm activity and hemostasis for <i>Pseudomonas aeruginosa</i> -infected burn wound healing. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 2278-2289.	5.0	96
139	Conductive, Self-Healing, Adhesive, and Antibacterial Hydrogels Based on Lignin/Cellulose for Rapid MRSA-Infected Wound Repairing. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52333-52345.	4.0	68
140	Recent Progress in Intelligent Wearable Sensors for Health Monitoring and Wound Healing Based on Biofluids. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 765987.	2.0	24
141	Multifunctional bacterial cellulose-based organohydrogels with long-term environmental stability. <i>Journal of Colloid and Interface Science</i> , 2022, 608, 820-829.	5.0	21
142	Natural glycyrrhizic acid-tailored hydrogel with in-situ gradient reduction of AgNPs layer as high-performance, multi-functional, sustainable flexible sensors. <i>Chemical Engineering Journal</i> , 2022, 430, 132779.	6.6	21
143	Organic Photo-antimicrobials: Principles, Molecule Design, and Applications. <i>Journal of the American Chemical Society</i> , 2021, 143, 17891-17909.	6.6	71
144	Injectable, Intrinsically Antibacterial Conductive Hydrogels with Self-Healing and pH Stimulus Responsiveness for Epidermal Sensors and Wound Healing. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 53541-53552.	4.0	54
146	Multifunctional antimicrobial materials: From rational design to biomedical applications. <i>Progress in Materials Science</i> , 2022, 125, 100887.	16.0	108
147	An NIR-Triggered Au Nanocage Used for Photo-Thermo Therapy of Chronic Wound in Diabetic Rats Through Bacterial Membrane Destruction and Skin Cell Mitochondrial Protection. <i>Frontiers in Pharmacology</i> , 2021, 12, 779944.	1.6	13

#	ARTICLE	IF	CITATIONS
148	An M2 macrophage-polarized anti-inflammatory hydrogel combined with mild heat stimulation for regulating chronic inflammation and impaired angiogenesis of diabetic wounds. <i>Chemical Engineering Journal</i> , 2022, 433, 133859.	6.6	53
149	An injectable adhesive antibacterial hydrogel wound dressing for infected skin wounds. <i>Materials Science and Engineering C</i> , 2022, 134, 112584.	3.8	24
150	Conductive Biomaterials as Bioactive Wound Dressing for Wound Healing and Skin Tissue Engineering. <i>Nano-Micro Letters</i> , 2022, 14, 1.	14.4	405
151	Microenvironment-responsive multifunctional hydrogels with spatiotemporal sequential release of tailored recombinant human collagen type III for the rapid repair of infected chronic diabetic wounds. <i>Journal of Materials Chemistry B</i> , 2021, 9, 9684-9699.	2.9	26
152	Stretchable, adhesive, antifreezing and 3D printable double-network hydrogel for flexible strain sensors. <i>European Polymer Journal</i> , 2022, 164, 110977.	2.6	19
153	Intelligent peptide-nanorods against drug-resistant bacterial infection and promote wound healing by mild-temperature photothermal therapy. <i>Chemical Engineering Journal</i> , 2022, 432, 134061.	6.6	26
154	Water-resistant and underwater adhesive ion-conducting gel for motion-robust bioelectric monitoring. <i>Chemical Engineering Journal</i> , 2022, 431, 134012.	6.6	52
155	Supramolecular Adhesive Hydrogels for Tissue Engineering Applications. <i>Chemical Reviews</i> , 2022, 122, 5604-5640.	23.0	238
156	Recent Progress on Self-Healable Conducting Polymers. <i>Advanced Materials</i> , 2022, 34, e2108932.	11.1	58
157	Antibacterial biomaterials for skin wound dressing. <i>Asian Journal of Pharmaceutical Sciences</i> , 2022, 17, 353-384.	4.3	182
158	Light-Stimulated Carbon Dot Hydrogel: Targeting and Clearing Infectious Bacteria In Vivo. <i>ACS Applied Bio Materials</i> , 2022, 5, 761-770.	2.3	10
159	Stretchable, self-healing and adhesive sodium alginate-based composite hydrogels as wearable strain sensors for expansion-contraction motion monitoring. <i>Soft Matter</i> , 2022, 18, 1644-1652.	1.2	22
160	Wound Dressing: From Nanomaterials to Diagnostic Dressings and Healing Evaluations. <i>ACS Nano</i> , 2022, 16, 1708-1733.	7.3	173
161	Engineering Multifunctional Hydrogel-Integrated 3D Printed Bioactive Prosthetic Interfaces for Osteoporotic Osseointegration. <i>Advanced Healthcare Materials</i> , 2022, 11, e2102535.	3.9	22
162	Novel multifunctional dual-dynamic-bonds crosslinked hydrogels for multi-strategy therapy of MRSA-infected wounds. <i>Applied Materials Today</i> , 2022, 26, 101362.	2.3	18
163	Supramolecular semiquinone radicals confined with DNazymes for dissipative ROS generation and therapy. <i>Nano Today</i> , 2022, 43, 101402.	6.2	9
164	Thermo-spun reaction encapsulation fabrication of environment-stable and knittable fibrous ionic conductors with large elasticity and high fatigue resistance. <i>Chemical Engineering Journal</i> , 2022, 435, 134826.	6.6	10
165	Highly Transparent, Self-Healing, and Self-Adhesive Double Network Hydrogel for Wearable Sensors. <i>Frontiers in Bioengineering and Biotechnology</i> , 2022, 10, 846401.	2.0	5

#	ARTICLE	IF	CITATIONS
166	Quaternized Polysaccharide-Based Cationic Micelles as a Macromolecular Approach to Eradicate Multidrug-Resistant Bacterial Infections while Mitigating Antimicrobial Resistance. <i>Small</i> , 2022, 18, e2104885.	5.2	15
167	Electrical Stimulation Mediated by Piezo-Driven Triboelectric Nanogenerator and Electroactive Hydrogel Encourage Wound Repair. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
168	Recent advances in the 3D printing of electrically conductive hydrogels for flexible electronics. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5380-5399.	2.7	39
169	Engineering Robust Ag-Decorated Polydopamine Nano-Photothermal Platforms to Combat Bacterial Infection and Prompt Wound Healing. <i>Advanced Science</i> , 2022, 9, e2106015.	5.6	198
170	Balloon Inspired Conductive Hydrogel Strain Sensor for Reducing Radiation Damage in Peritumoral Organs During Brachytherapy. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	65
171	Motion Detecting, Temperature Alarming, and Wireless Wearable Bioelectronics Based on Intrinsically Antibacterial Conductive Hydrogels. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 14596-14606.	4.0	24
172	Application of conductive polymer hydrogels in flexible electronics. <i>Journal of Polymer Science</i> , 2022, 60, 2635-2662.	2.0	25
173	A novel hydrogel with glucose-responsive hyperglycemia regulation and antioxidant activity for enhanced diabetic wound repair. <i>Nano Research</i> , 2022, 15, 5305-5315.	5.8	42
174	Cell/Tissue Adhesive, Self-Healable, Biocompatible, Hemostasis, and Antibacterial Hydrogel Dressings for Wound Healing Applications. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	14
175	Mussel- and Barnacle Cement Proteins-Inspired Dual-Bionic Bioadhesive with Repeatable Wet-Tissue Adhesion, Multimodal Self-Healing, and Antibacterial Capability for Nonpressing Hemostasis and Promoted Wound Healing. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	93
176	Mixed Ionic and Electronic Conducting Eutectogels for 3D-Printable Wearable Sensors and Bioelectrodes. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	40
177	Nanocomposite hydrogels for biomedical applications. <i>Bioengineering and Translational Medicine</i> , 2022, 7, .	3.9	34
178	Dual functional electrospun nanofiber membrane with ROS scavenging and revascularization ability for diabetic wound healing. <i>Colloids and Interface Science Communications</i> , 2022, 48, 100620.	2.0	17
179	Preparation and characterization of multi-network hydrogels based on sodium alginate/krill protein/polyacrylamide-Strength, shape memory, conductivity and biocompatibility. <i>International Journal of Biological Macromolecules</i> , 2022, 207, 140-151.	3.6	22
180	Carboxymethyl chitosan-based hydrogels containing fibroblast growth factors for triggering diabetic wound healing. <i>Carbohydrate Polymers</i> , 2022, 287, 119336.	5.1	98
181	Ionic liquids enhancement of hydrogels and impact on biosensing applications. <i>Journal of Molecular Liquids</i> , 2022, 357, 119075.	2.3	17
182	Deep eutectic solvent based adhesive with dynamic adhesion, water-resistant and NIR-responsive retrieval properties. <i>Chemical Engineering Journal</i> , 2022, 439, 135646.	6.6	15
183	A Packaged and Reusable Hydrogel Strain Sensor with Conformal Adhesion to Skin for Human Motions Monitoring. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	7

#	ARTICLE	IF	CITATIONS
184	Antimicrobial Properties of Silver and Gold Nanomaterials. , 2022, , .		0
185	Thermosensitive Hydrogel Loaded with Primary Chondrocyte-Derived Exosomes Promotes Cartilage Repair by Regulating Macrophage Polarization in Osteoarthritis. Tissue Engineering and Regenerative Medicine, 2022, 19, 629-642.	1.6	26
186	Wearable Tissue Adhesive Ternary Hydrogel of <i>N</i> -(2-Hydroxyl) Propyl-3-trimethyl Ammonium Chitosan, Tannic Acid, and Polyacrylamide. Industrial & Engineering Chemistry Research, 2022, 61, 5502-5513.	1.8	10
187	Ultrastretchable, self-healable and adhesive composite organohydrogels with a fast response for human-machine interface applications. Journal of Materials Chemistry C, 2022, 10, 8266-8277.	2.7	36
188	Nanocage Ferritin Reinforced Polyacrylamide Hydrogel for Wearable Flexible Strain Sensors. ACS Applied Materials & Interfaces, 2022, 14, 21278-21286.	4.0	30
189	Antibacterial adhesive self-healing hydrogels to promote diabetic wound healing. Acta Biomaterialia, 2022, 146, 119-130.	4.1	147
190	Novel functionalized selenium nanowires as antibiotic adjuvants in multiple ways to overcome drug resistance of multidrug-resistant bacteria. , 2022, 137, 212815.		5
191	Nano-Scaled Materials and Polymer Integration in Biosensing Tools. Biosensors, 2022, 12, 301.	2.3	10
192	Gelatin/Persian gum/bacterial nanocellulose composite films containing Frankincense essential oil and Teucrium polium extract as a novel and bactericidal wound dressing. Journal of Drug Delivery Science and Technology, 2022, 72, 103423.	1.4	8
193	Î²-CD/PEI/PVA composite hydrogels with superior self-healing ability and antibacterial activity for wound healing. Composites Part B: Engineering, 2022, 238, 109921.	5.9	32
194	Intelligent wireless theranostic contact lens for electrical sensing and regulation of intraocular pressure. Nature Communications, 2022, 13, 2556.	5.8	36
195	A cyclic freezing-thawing approach to layered Janus hydrogel tapes with single-sided adhesiveness for wearable strain sensors. Chemical Engineering Journal, 2022, 446, 137163.	6.6	16
196	Smart Polycationic Hydrogel Dressing for Dynamic Wound Healing. Small, 2022, 18, .	5.2	39
197	Engineering an integrated electroactive dressing to accelerate wound healing and monitor noninvasively progress of healing. Nano Energy, 2022, 99, 107393.	8.2	32
198	Hyaluronic acid-based glucose-responsive antioxidant hydrogel platform for enhanced diabetic wound repair. Acta Biomaterialia, 2022, 147, 147-157.	4.1	59
199	Rational design of electrically conductive biomaterials toward excitable tissues regeneration. Progress in Polymer Science, 2022, 131, 101573.	11.8	21
200	Stretchable conductive nanocomposites and their applications in wearable devices. Applied Physics Reviews, 2022, 9, .	5.5	27
201	Amino-Terminated Hyperbranched Polymer-Based Recyclable Elastic Fibers for a Breathable and Antibacterial Triboelectric Nanogenerator. Macromolecular Materials and Engineering, 2022, 307, .	1.7	9

#	ARTICLE	IF	CITATIONS
202	Construction of Rhodamine-Based AIE Photosensitizer Hydrogel with Clinical Potential for Selective Ablation of Drug-Resistant Gram-Positive Bacteria In Vivo. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	29
203	Bioactive Natural and Synthetic Polymers for Wound Repair. <i>Macromolecular Research</i> , 2022, 30, 495-526.	1.0	8
204	A ternary heterogeneous hydrogel with strength elements for resilient, self-healing, and recyclable epidermal electronics. <i>Npj Flexible Electronics</i> , 2022, 6, .	5.1	11
205	Multifunctional Silver Nanoparticles Based on Chitosan: Antibacterial, Antibiofilm, Antifungal, Antioxidant, and Wound-Healing Activities. <i>Journal of Fungi (Basel, Switzerland)</i> , 2022, 8, 612.	1.5	59
206	Glucose-Activated Nanoconfinement Supramolecular Cascade Reaction <i>in Situ</i> for Diabetic Wound Healing. <i>ACS Nano</i> , 2022, 16, 9929-9937.	7.3	33
207	Protease-responsive hydrogel, cross-linked with bioactive curcumin-derived carbon dots, encourage faster wound closure. , 2022, 139, 212978.		12
208	Oxidized Bletilla rhizome polysaccharide-based aerogel with synergistic antibiosis and hemostasis for wound healing. <i>Carbohydrate Polymers</i> , 2022, 293, 119696.	5.1	25
209	Bioinspired aligned wrinkling dressings for monitoring joint motion and promoting joint wound healing. <i>Biomaterials Science</i> , 2022, 10, 5146-5157.	2.6	6
210	Antibacterial, Adhesive, and Msc Exosomes Encapsulated Microneedles with Spatio-Temporal Variation Functions for Diabetic Wound Healing. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
211	A smart hydrogel patch with high transparency, adhesiveness and hemostasis for all-round treatment and glucose monitoring of diabetic foot ulcers. <i>Journal of Materials Chemistry B</i> , 2022, 10, 5804-5817.	2.9	16
212	MiR-21 regulating PVT1/PTEN/IL-17 axis towards the treatment of infectious diabetic wound healing by modified GO-derived biomaterial in mouse models. <i>Journal of Nanobiotechnology</i> , 2022, 20, .	4.2	11
213	Hysteresis-Free Double-Network Hydrogel-Based Strain Sensor for Wearable Smart Bioelectronics. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 31363-31372.	4.0	29
214	Supramolecular Hydrogel Based on Pseudopolyrotaxane Aggregation for Bacterial Microenvironment-Responsive Antibiotic Delivery. <i>Chemistry - an Asian Journal</i> , 2022, 17, .	1.7	4
215	Pressure-sensitive antibacterial hydrogel dressing for wound monitoring in bed ridden patients. <i>Journal of Colloid and Interface Science</i> , 2022, 627, 942-955.	5.0	28
216	Next-Generation Diagnostic Wound Dressings for Diabetic Wounds. <i>ACS Measurement Science Au</i> , 2022, 2, 377-384.	1.9	15
217	ECM-mimetic immunomodulatory hydrogel for methicillin-resistant <i>Staphylococcus aureus</i> infected chronic skin wound healing. <i>Science Advances</i> , 2022, 8, .	4.7	102
218	Chitosan@Puerarin hydrogel for accelerated wound healing in diabetic subjects by miR-29ab1 mediated inflammatory axis suppression. <i>Bioactive Materials</i> , 2023, 19, 653-665.	8.6	27
219	Progress in bioactive surface coatings on biodegradable Mg alloys: A critical review towards clinical translation. <i>Bioactive Materials</i> , 2023, 19, 717-757.	8.6	46

#	ARTICLE	IF	CITATIONS
220	Advanced Multifunctional Wound Dressing Hydrogels as Drug Carriers. <i>Macromolecular Bioscience</i> , 2022, 22, .	2.1	8
222	Rational Design of Intelligent and Multifunctional Dressing to Promote Acute/Chronic Wound Healing. <i>ACS Applied Bio Materials</i> , 2022, 5, 4055-4085.	2.3	40
223	Precisely controlled polydopamine-mediated antibacterial system: mathematical model of polymerization, prediction of antibacterial capacity, and promotion of wound healing. <i>Nanotechnology</i> , 2022, 33, 455102.	1.3	1
224	Manufacturing and post-engineering strategies of hydrogel actuators and sensors: From materials to interfaces. <i>Advances in Colloid and Interface Science</i> , 2022, 308, 102749.	7.0	17
225	Polyvinyl alcohol/carboxymethyl chitosan hydrogel loaded with silver nanoparticles exhibited antibacterial and self-healing properties. <i>International Journal of Biological Macromolecules</i> , 2022, 220, 211-222.	3.6	25
226	A 3D bioprinted decellularized extracellular matrix/gelatin/quaternized chitosan scaffold assembling with poly(ionic liquid)s for skin tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2022, 220, 1253-1266.	3.6	21
227	Electrospun nanofibers for bone regeneration: from biomimetic composition, structure to function. <i>Journal of Materials Chemistry B</i> , 2022, 10, 6078-6106.	2.9	12
228	Facile preparation of PVA hydrogels with adhesive, self-healing, antimicrobial, and on-demand removable capabilities for rapid hemostasis. <i>Biomaterials Science</i> , 2022, 10, 5620-5633.	2.6	14
229	Integrating supercapacitor with sodium hyaluronate based hydrogel as a novel All-In-One wound Dressing: Self-Powered electronic stimulation. <i>Chemical Engineering Journal</i> , 2023, 452, 139491.	6.6	19
230	A nanofibrous membrane loaded with doxycycline and printed with conductive hydrogel strips promotes diabetic wound healing in vivo. <i>Acta Biomaterialia</i> , 2022, 152, 60-73.	4.1	33
231	Antibacterial conductive self-healable supramolecular hydrogel dressing for infected motional wound healing. <i>Science China Chemistry</i> , 2022, 65, 2238-2251.	4.2	26
232	Flexible Accelerated Wound Healing Antibacterial MXene-Based Epidermic Sensor for Intelligent Wearable Human-Machine Interaction. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	82
233	Antibacterial, adhesive, and MSC exosomes encapsulated microneedles with spatio-temporal variation functions for diabetic wound healing. <i>Nano Today</i> , 2022, 47, 101630.	6.2	27
234	Electrostimulation of fibroblast proliferation by an electrospun poly (lactide-co-glycolide)/polydopamine/chitosan membrane in a humid environment. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 220, 112902.	2.5	10
235	Recent Advances in Functional Wound Dressings. <i>Advances in Wound Care</i> , 2023, 12, 399-427.	2.6	4
236	Reverse-traction skin-stretching device for primary closure of large skin defects. <i>Archives of Dermatological Research</i> , 2023, 315, 751-760.	1.1	1
237	Multifunctional GO Hybrid Hydrogel Scaffolds for Wound Healing. <i>Research</i> , 2022, 2022, .	2.8	12
238	High-Performance, Superhydrophobic, and Wearable Strain Sensor for Amphibious Human Motion Detection. <i>Advanced Materials Technologies</i> , 2023, 8, .	3.0	4

#	ARTICLE	IF	CITATIONS
239	Advances in the Translation of Electrochemical Hydrogel-Based Sensors. <i>Advanced Healthcare Materials</i> , 2023, 12, .	3.9	15
240	Mussel-inspired adhesive zwitterionic composite hydrogel with antioxidant and antibacterial properties for wound healing. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 220, 112914.	2.5	13
241	Carbon Dot-Anchored Cobalt Oxyhydroxide Composite-Based Hydrogel Sensor for On-Site Monitoring of Organophosphorus Pesticides. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 53340-53347.	4.0	9
242	Electroactive materials: Innovative antibacterial platforms for biomedical applications. <i>Progress in Materials Science</i> , 2023, 132, 101045.	16.0	19
243	Semi-IPN ionogel based on poly (ionic liquids)/xanthan gum for highly sensitive pressure sensor. <i>International Journal of Biological Macromolecules</i> , 2022, 223, 327-334.	3.6	9
244	Injectable polylysine and dextran hydrogels with robust antibacterial and ROS-scavenging activity for wound healing. <i>International Journal of Biological Macromolecules</i> , 2022, 223, 950-960.	3.6	12
245	Antibacterial smart hydrogels: New hope for infectious wound management. <i>Materials Today Bio</i> , 2022, 17, 100499.	2.6	18
246	Anisotropic hydrogels with high-sensitivity and self-adhesion for wearable sensors. <i>Journal of Materials Chemistry C</i> , 2022, 11, 196-203.	2.7	13
247	Recent advances in conductive hydrogels: classifications, properties, and applications. <i>Chemical Society Reviews</i> , 2023, 52, 473-509.	18.7	125
248	Green tea derivative-based hydrogel with ROS-scavenging property for accelerating diabetic wound healing. <i>Materials and Design</i> , 2023, 225, 111452.	3.3	11
249	Highly biocompatible Ag nanocluster-reinforced wound dressing with long-term and synergistic bactericidal activity. <i>Journal of Colloid and Interface Science</i> , 2023, 633, 851-865.	5.0	16
250	Biocompatible and breathable healthcare electronics with sensing performances and photothermal antibacterial effect for motion-detecting. <i>Npj Flexible Electronics</i> , 2022, 6, .	5.1	12
251	Antimicrobial MXene-based conductive alginate hydrogels as flexible electronics. <i>Chemical Engineering Journal</i> , 2023, 455, 140546.	6.6	6
252	Hydrothermal Synthesis of Multifunctional Bimetallic Ag-CuO Nanohybrids and Their Antimicrobial, Antibiofilm and Antiproliferative Potential. <i>Nanomaterials</i> , 2022, 12, 4167.	1.9	3
253	Microenvironment-Based Diabetic Foot Ulcer Nanomedicine. <i>Advanced Science</i> , 2023, 10, .	5.6	51
254	Wireless, closed-loop, smart bandage with integrated sensors and stimulators for advanced wound care and accelerated healing. <i>Nature Biotechnology</i> , 2023, 41, 652-662.	9.4	93
255	Soft, Wireless Pressure-Sensor-Integrated Smart Bandage for the Management of Diabetic Foot Ulcers. <i>Advanced Materials Technologies</i> , 2023, 8, .	3.0	4
256	Chestnut-Tannin-Crosslinked, Antibacterial, Antifreezing, Conductive Organohydrogel as a Strain Sensor for Motion Monitoring, Flexible Keyboards, and Velocity Monitoring. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 2147-2162.	4.0	67

#	ARTICLE	IF	CITATIONS
257	Silver Nanowires Deposited on Triblock Copolymer Microfibers for Stretchable Conductive Fabrics. ACS Applied Nano Materials, 2022, 5, 17721-17730.	2.4	4
258	In Vitro Biocompatibility of Hydrogel Polyvinyl Alcohol/Moringa oleifera Leaf Extract/Graphene Oxide for Wound Dressing. Polymers, 2023, 15, 468.	2.0	13
259	Multifunctional microneedle patches with aligned carbon nanotube sheet basement for promoting wound healing. Chemical Engineering Journal, 2023, 457, 141206.	6.6	9
260	Nanomaterials-Functionalized Hydrogels for the Treatment of Cutaneous Wounds. International Journal of Molecular Sciences, 2023, 24, 336.	1.8	1
261	Beneficial Effect of Wound Dressings Containing Silver and Silver Nanoparticles in Wound Healing—From Experimental Studies to Clinical Practice. Life, 2023, 13, 69.	1.1	11
262	Charge-Transfer Polymeric Hydrogels with Self-Healing, Injectable, Thermosensitive, Adhesive, and Antibacterial Properties for Diabetic Wound Healing. Advanced Materials Technologies, 2023, 8, .	3.0	5
263	Foundation of composites. , 2023, , 31-60.		1
264	Advances and Progress in Self-Healing Hydrogel and Its Application in Regenerative Medicine. Materials, 2023, 16, 1215.	1.3	14
265	Antimicrobial activities of nanomaterials. , 2023, , 127-148.		3
266	Band-Aid-Like Self-Fixed Barrier Membranes Enable Superior Bone Augmentation. Advanced Science, 2023, 10, .	5.6	2
267	A collagen-based theranostic wound dressing with visual, long-lasting infection detection capability. International Journal of Biological Macromolecules, 2023, 236, 123866.	3.6	6
268	A highly stretchable, fast self-healing elastomer with fast, tough, repeatable adhesion. Chemical Engineering Journal, 2023, 464, 142543.	6.6	7
269	Fabrication of high-quality microcapsules containing ionic liquid for application in self-healing conductive materials. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2023, 667, 131361.	2.3	2
270	Nanomaterials for diabetic wound healing: Visualization and bibliometric analysis from 2011 to 2021. Frontiers in Endocrinology, 0, 14, .	1.5	7
271	Responsive multifunctional hydrogels emulating the chronic wounds healing cascade for skin repair. Journal of Controlled Release, 2023, 354, 821-834.	4.8	28
272	Polysaccharide-Based Multifunctional Hydrogel Bio-Adhesives for Wound Healing: A Review. Gels, 2023, 9, 138.	2.1	32
273	3D bioprinting of dECM/Gel/QCS/nHAp hybrid scaffolds laden with mesenchymal stem cell-derived exosomes to improve angiogenesis and osteogenesis. Biofabrication, 2023, 15, 024103.	3.7	17
274	Elastomeric polymers for conductive layers of flexible sensors: Materials, fabrication, performance, and applications. Aggregate, 2023, 4, .	5.2	5

#	ARTICLE	IF	CITATIONS
275	Recent progress of antibacterial hydrogels in wound dressings. <i>Materials Today Bio</i> , 2023, 19, 100582.	2.6	52
276	Conductive hydrogels for tissue repair. <i>Chemical Science</i> , 2023, 14, 3091-3116.	3.7	27
277	Sustainable and Tough MXene Hydrogel Based on Interlocked Structure for Multifunctional Sensing. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 4177-4186.	3.2	7
278	Nanocomposite conductive hydrogels with Robust elasticity and multifunctional responsiveness for flexible sensing and wound monitoring. <i>Materials Horizons</i> , 2023, 10, 2096-2108.	6.4	18
279	Ga ³⁺ loaded radiation crosslinked gel-Alg-CMC hydrogels for promoting diabetic wound healing. <i>Journal of Biomaterials Applications</i> , 2023, 37, 1676-1686.	1.2	1
280	Multifunctional conductive hyaluronic acid hydrogels for wound care and skin regeneration. <i>Biomaterials Science</i> , 2023, 11, 2266-2276.	2.6	16
281	Mechanical-Responsive Materials: Properties, Design, and Applications. <i>ACS Symposium Series</i> , 0, , 129-144.	0.5	3
282	Ultrastretchable, Multihealable, and Highly Sensitive Strain Sensor Based on a Double Cross-Linked MXene Hydrogel. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 17163-17174.	4.0	8
283	Natureâ€ˆSkinâ€ˆDerived eâ€ˆSkin as Versatile â€ˆWound Therapyâ€ˆHealth Monitoringâ€ˆBioelectronic Skinâ€ˆScaffolds: Skin to Bioâ€ˆeâ€ˆSkin. <i>Advanced Healthcare Materials</i> , 2023, 12, .	3.9	5
284	Advances of Mussel-Inspired Nanocomposite Hydrogels in Biomedical Applications. <i>Biomimetics</i> , 2023, 8, 128.	1.5	5
285	Carbon Dot-Doped Hydrogel Sensor Array for Multiplexed Colorimetric Detection of Wound Healing. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 17675-17687.	4.0	17
287	Mussel inspired Cu-tannic autocatalytic strategy for rapid self-polymerization of conductive and adhesive hydrogel sensors with extreme environmental tolerance. <i>Chemical Engineering Journal</i> , 2023, 465, 142831.	6.6	20
288	Chitosan-Based Hybrid Dressing Materials for Treatment of Diabetic Wounds. <i>Biological and Medical Physics Series</i> , 2023, , 201-219.	0.3	1
290	Biodegradable Polymers and Polymer Composites with Antibacterial Properties. <i>International Journal of Molecular Sciences</i> , 2023, 24, 7473.	1.8	9
291	Nano-crosslinked dynamic hydrogels for biomedical applications. <i>Materials Today Bio</i> , 2023, 20, 100640.	2.6	9
307	Conductive polymer based hydrogels and their application in wearable sensors: a review. <i>Materials Horizons</i> , 2023, 10, 2800-2823.	6.4	23
310	Dermal Wound Healing. <i>ACS Symposium Series</i> , 0, , 137-158.	0.5	1
314	Emerging trends in nano-based antidiabetic therapeutics: a path to effective diabetes management. <i>Materials Advances</i> , 2023, 4, 3091-3113.	2.6	3

#	ARTICLE	IF	CITATIONS
316	Conductive hydrogels for bioelectronics: molecular structures, design principles, and operation mechanisms. <i>Journal of Materials Chemistry C</i> , 2023, 11, 10785-10808.	2.7	1
319	Recent progress of antibacterial hydrogel materials for biomedical applications. <i>Journal of Materials Chemistry C</i> , 2023, 11, 12848-12876.	2.7	0
329	Nanotechnological advancement in artificial intelligence for wound care. , 2024, , 281-318.		0
335	Conductive hydrogels for tissue engineering applications. , 2024, , 249-264.		0
338	Conductive and antibacterial dual-network hydrogel for soft bioelectronics. <i>Materials Horizons</i> , 2023, 10, 5805-5821.	6.4	2
339	Nanotechnology-based therapeutics to combat biofilms and antibacterial resistance in chronic wound infections. , 2023, , 175-206.		0