

# Biofilm-inspired adhesive and antibacterial hydrogel with performance for sealing hemostasis and wound healing

Bioactive Materials

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Chitosan-Based Thermo-Sensitive Hydrogel Loading Oyster Peptides for Hemostasis Application. <i>Materials</i> , 2020, 13, 5038.	1.3	30
2	Different Forms of Chitosan and Its Derivatives as Hemostatic Agent and Tissue Sealants. <i>Advances in Polymer Science</i> , 2021, , 1-28.	0.4	4
3	The fabrication of antibacterial hydrogels for wound healing. <i>European Polymer Journal</i> , 2021, 146, 110268.	2.6	109
4	Wound Dressing Hydrogel of <i>Enteromorpha prolifera</i> Polysaccharide-Polyacrylamide Composite: A Facile Transformation of Marine Blooming into Biomedical Material. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 14530-14542.	4.0	48
5	Preclinical evaluation of a regenerative immiscible biogel for vesico-vaginal fistula. <i>Acta Biomaterialia</i> , 2021, 125, 183-196.	4.1	5
6	Engineering Hydrogel Adhesion for Biomedical Applications via Chemical Design of the Junction. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4048-4076.	2.6	89
7	Bioinspired Self-Healable Polyallylamine-Based Hydrogels for Wet Adhesion: Synergistic Contributions of Catechol-Amino Functionalities and Nanosilicate. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 18324-18337.	4.0	50
8	Ultrafast Self-Gelling and Wet Adhesive Powder for Acute Hemostasis and Wound Healing. <i>Advanced Functional Materials</i> , 2021, 31, 2102583.	7.8	146
9	Research Progress of Chitosan-Based Biomimetic Materials. <i>Marine Drugs</i> , 2021, 19, 372.	2.2	15
10	Enhancing Tissue Adhesion and Osteoblastic Differentiation of MC3T3-E1 Cells on Poly(aryl ether) Tj ETQq1 1 0.784314 rgBT /Overl Bioscience, 2021, 21, e2100078.	2.1	9
11	Enhanced Antibacterial and Anti-Biofilm Activities of Antimicrobial Peptides Modified Silver Nanoparticles. <i>International Journal of Nanomedicine</i> , 2021, Volume 16, 4831-4846.	3.3	33
12	Cellulose fibers-reinforced self-expanding porous composite with multiple hemostatic efficacy and shape adaptability for uncontrollable massive hemorrhage treatment. <i>Bioactive Materials</i> , 2021, 6, 2089-2104.	8.6	49
13	Synergy of bioinspired chimeric protein and silver nanoparticles for fabricating "kill-release" antibacterial coating. <i>Applied Surface Science</i> , 2021, 557, 149799.	3.1	13
14	Photocrosslinking silver nanoparticles-aloe vera-silk fibroin composite hydrogel for treatment of full-thickness cutaneous wounds. <i>International Journal of Energy Production and Management</i> , 2021, 8, rbab048.	1.9	23
15	Haemostatic materials for wound healing applications. <i>Nature Reviews Chemistry</i> , 2021, 5, 773-791.	13.8	371
16	Mussel-inspired nanozyme catalyzed conductive and self-setting hydrogel for adhesive and antibacterial bioelectronics. <i>Bioactive Materials</i> , 2021, 6, 2676-2687.	8.6	138
17	A mussel-inspired supramolecular hydrogel with robust tissue anchor for rapid hemostasis of arterial and visceral bleedings. <i>Bioactive Materials</i> , 2021, 6, 2829-2840.	8.6	152
18	Physiologically-Regulated Adhesion of Hydrogels for Wound Dressing. <i>Advanced Materials Interfaces</i> , 2021, 8, 2101131.	1.9	20

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19	Biofilms in plant-based fermented foods: Formation mechanisms, benefits and drawbacks on quality and safety, and functionalization strategies. Trends in Food Science and Technology, 2021, 116, 940-953.	7.8	15
20	Recent advances in biopolymer-based formulations for wound healing applications. European Polymer Journal, 2021, 160, 110784.	2.6	31
21	Development of the mussel-inspired pH-responsive hydrogel based on Bletilla striata polysaccharide with enhanced adhesiveness and antioxidant properties. Colloids and Surfaces B: Biointerfaces, 2021, 208, 112066.	2.5	27
22	Mussel-inspired adhesive antioxidant antibacterial hemostatic composite hydrogel wound dressing via photo-polymerization for infected skin wound healing. Bioactive Materials, 2022, 8, 341-354.	8.6	273
23	Polymeric Tissue Adhesives. Chemical Reviews, 2021, 121, 11336-11384.	23.0	306
24	Injectable Self-Healing Hydrogels Containing CuS Nanoparticles with Abilities of Hemostasis, Antibacterial activity, and Promoting Wound Healing. ACS Biomaterials Science and Engineering, 2021, 7, 335-349.	2.6	52
25	Preparation and characterization of antibacterial and anti-inflammatory hyaluronic acid-chitosan-dexamethasone hydrogels for peri-implantitis repair. Journal of Biomaterials Applications, 2022, 36, 1141-1150.	1.2	6
26	Highly stretchable, compressible, adhesive hydrogels with double network. Journal of Polymer Research, 2021, 28, 1.	1.2	8
27	Mussel-inspired chemistry: A promising strategy for natural polysaccharides in biomedical applications. Progress in Polymer Science, 2021, 123, 101472.	11.8	77
28	Carbon Nanotubes-Based Hydrogels for Bacterial Eradication and Wound-Healing Applications. Applied Sciences (Switzerland), 2021, 11, 9550.	1.3	27
29	Underwater and wet adhesion strategies for hydrogels in biomedical applications. Chemical Engineering Journal, 2022, 431, 133372.	6.6	51
30	Polymer Adhesion: Seeking New Solutions for an Old Problem. Macromolecules, 2021, 54, 10617-10644.	2.2	59
31	Chitosan-gum arabic embedded alizarin nanocarriers inhibit biofilm formation of multispecies microorganisms. Carbohydrate Polymers, 2022, 284, 118959.	5.1	38
32	Polysaccharide hydrogels: Functionalization, construction and served as scaffold for tissue engineering. Carbohydrate Polymers, 2022, 278, 118952.	5.1	91
33	Supramolecular Adhesive Hydrogels for Tissue Engineering Applications. Chemical Reviews, 2022, 122, 5604-5640.	23.0	238
34	Light-Triggered Adhesive Silk-Based Film for Effective Photodynamic Antibacterial Therapy and Rapid Hemostasis. Frontiers in Bioengineering and Biotechnology, 2021, 9, 820434.	2.0	16
35	Review: the latest advances in biomedical applications of chitosan hydrogel as a powerful natural structure with eye-catching biological properties. Journal of Materials Science, 2022, 57, 3855-3891.	1.7	34
36	Photocurable GelMA Adhesives for Corneal Perforations. Bioengineering, 2022, 9, 53.	1.6	16

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37	Hydrogel adhesives for generalized wound treatment: Design and applications. <i>Journal of Polymer Science</i> , 2022, 60, 1328-1359.	2.0	34
38	Multi- $\epsilon$ -Crosslinked Hydrogels with Instant Self-Healing and Tissue Adhesive Properties for Biomedical Applications. <i>Macromolecular Bioscience</i> , 2022, 22, e2100443.	2.1	9
39	Injectable hydrogel based on dodecyl-modified N-carboxyethyl chitosan/oxidized konjac glucomannan effectively prevents bleeding and postoperative adhesions after partial hepatectomy. <i>International Journal of Biological Macromolecules</i> , 2022, 199, 401-412.	3.6	22
40	Polyphenol-based hydrogels: Pyramid evolution from crosslinked structures to biomedical applications and the reverse design. <i>Bioactive Materials</i> , 2022, 17, 49-70.	8.6	64
41	Self-Assembling Peptide-Based Hydrogels for Wound Tissue Repair. <i>Advanced Science</i> , 2022, 9, e2104165.	5.6	99
42	Use in Products. , 2022, , 127-205.		0
43	Topical hemostatic materials for coagulopathy. <i>Journal of Materials Chemistry B</i> , 2022, 10, 1946-1959.	2.9	11
44	Asymmetric composite wound dressing with hydrophobic flexible bandage and tissue-adhesive hydrogel for joints skin wound healing. <i>Composites Part B: Engineering</i> , 2022, 235, 109762.	5.9	26
45	Temperature-triggered fluorocopolymer aggregate coating switching from antibacterial to antifouling and superhydrophobic hemostasis. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 215, 112496.	2.5	5
46	Poly(aspartic acid) based self-healing hydrogel with blood coagulation characteristic for rapid hemostasis and wound healing applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2022, 214, 112430.	2.5	19
47	Modification of polysulfone and the biomedical application of modified polysulfone. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2023, 72, 224-242.	1.8	4
48	A short review on chitosan and gelatin-based hydrogel composite polymers for wound healing. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2022, 33, 1595-1622.	1.9	16
49	Low-temperature activable, carbon dioxide based, highly adhesive and degradable oligo-urethane and its potential application as an auto-detachable dressing. <i>Materials Chemistry Frontiers</i> , 2022, 6, 1658-1671.	3.2	4
50	Advances in modified hyaluronic acid-based hydrogels for skin wound healing. <i>Biomaterials Science</i> , 2022, 10, 3393-3409.	2.6	58
51	Bioactive hydrogels based on polysaccharides and peptides for soft tissue wound management. <i>Journal of Materials Chemistry B</i> , 2022, 10, 7148-7160.	2.9	13
52	Polyhexamethylene guanidine hydrochloride modified sodium alginate nonwoven with potent antibacterial and hemostatic properties for infected full-thickness wound healing. <i>International Journal of Biological Macromolecules</i> , 2022, 209, 2142-2150.	3.6	14
53	Advances in adhesive hydrogels for tissue engineering. <i>European Polymer Journal</i> , 2022, 172, 111241.	2.6	18
54	Cellulose nanocrystal/calcium alginate-based porous microspheres for rapid hemostasis and wound healing. <i>Carbohydrate Polymers</i> , 2022, 293, 119688.	5.1	36

#	ARTICLE	IF	CITATIONS
55	Osteichthyes skin-inspired tough and sticky composite hydrogels for dynamic adhesive dressings. <i>Composites Part B: Engineering</i> , 2022, 241, 110010.	5.9	23
56	Convergent architecting of multifunction-in-one hydrogels as wound dressings for surgical anti-infections. <i>Materials Today Chemistry</i> , 2022, 25, 100968.	1.7	10
57	Engineered Hemostatic Biomaterials for Sealing Wounds. <i>Chemical Reviews</i> , 2022, 122, 12864-12903.	23.0	79
58	Synthesis of bovine serum albumin-gelatin composite adhesive hydrogels by physical crosslinking. <i>Journal of Polymer Research</i> , 2022, 29, .	1.2	3
59	Recent Advances in Hydrogel-Mediated Nitric Oxide Delivery Systems Targeted for Wound Healing Applications. <i>Pharmaceutics</i> , 2022, 14, 1377.	2.0	11
60	Nature-Derived Okra Gel as Strong Hemostatic Bioadhesive in Human Blood, Liver, and Heart Trauma of Rabbits and Dogs. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	15
61	Mussel-Inspired Adhesive and Self-Healing Hydrogel as an Injectable Wound Dressing. <i>Polymers</i> , 2022, 14, 3346.	2.0	5
62	A non-surgical suturing strategy for rapid cardiac hemostasis. <i>Nano Research</i> , 2023, 16, 810-821.	5.8	4
63	Regenerative antibacterial hydrogels from medicinal molecule for diabetic wound repair. <i>Bioactive Materials</i> , 2023, 25, 541-554.	8.6	10
64	Borrowing the Features of Biopolymers for Emerging Wound Healing Dressings: A Review. <i>International Journal of Molecular Sciences</i> , 2022, 23, 8778.	1.8	20
65	Emerging hemostatic materials for non-compressible hemorrhage control. <i>National Science Review</i> , 2022, 9, .	4.6	46
66	Multifunctional carboxymethyl chitosan/oxidized dextran/sodium alginate hydrogels as dressing for hemostasis and closure of infected wounds. <i>International Journal of Biological Macromolecules</i> , 2022, 219, 1337-1350.	3.6	57
67	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
68	Enhanced Carboxymethylcellulose Sponge for Hemostasis and Wound Repair. <i>Frontiers in Materials</i> , 2022, 9, .	1.2	4
69	Instant and Tough Adhesives for Rapid Gastric Perforation and Traumatic Pneumothorax Sealing. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	5
70	Bio-macromolecular design roadmap towards tough bioadhesives. <i>Chemical Society Reviews</i> , 2022, 51, 9127-9173.	18.7	31
71	Mussel adhesion: A fundamental perspective on factors governing strong underwater adhesion. <i>Biointerphases</i> , 2022, 17, .	0.6	4
72	Polysaccharide-Based Adhesive Antibacterial and Self-Healing Hydrogel for Sealing Hemostasis. <i>Biomacromolecules</i> , 2022, 23, 5106-5115.	2.6	12

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73	Inorganic-based biomaterials for rapid hemostasis and wound healing. <i>Chemical Science</i> , 2022, 14, 29-53.	3.7	22
74	Bio-inspired adhesive hydrogel for wound healing. , 2023, 1, 65-72.		5
75	Bio-inspired adhesive hydrogel for biomedicine principles and design strategies. , 2022, 1, .		17
76	Carboxymethyl chitosan/sodium alginate hydrogels with polydopamine coatings as promising dressings for eliminating biofilm and multidrug-resistant bacteria induced wound healing. <i>International Journal of Biological Macromolecules</i> , 2023, 225, 923-937.	3.6	14
77	Supramolecular peptide hydrogel doped with nanoparticles for local siRNA delivery and diabetic wound healing. <i>Chemical Engineering Journal</i> , 2023, 457, 141244.	6.6	4
78	Review: Application of chitosan and its derivatives in medical materials. <i>International Journal of Biological Macromolecules</i> , 2023, 240, 124398.	3.6	28
79	Catechol derivative urushiol's reactivity and applications beyond traditional coating. <i>Industrial Crops and Products</i> , 2023, 197, 116598.	2.5	9
80	Intelligent design and medical applications of antimicrobial hydrogels. <i>Colloids and Interface Science Communications</i> , 2023, 53, 100696.	2.0	18
81	A multifunctional hydrogel loaded with two nanoagents improves the pathological microenvironment associated with radiation combined with skin wounds. <i>Acta Biomaterialia</i> , 2023, 159, 111-127.	4.1	14
82	Injectable, self-healing, transparent, and antibacterial hydrogels based on chitosan and dextran for wound dressings. <i>International Journal of Biological Macromolecules</i> , 2023, 233, 123494.	3.6	20
83	Polysaccharide-Based Multifunctional Hydrogel Bio-Adhesives for Wound Healing: A Review. <i>Gels</i> , 2023, 9, 138.	2.1	32
84	Recent advances in hydrogels for preventing tumor recurrence. <i>Biomaterials Science</i> , 2023, 11, 2678-2692.	2.6	4
85	Recent advances in biomimetic hemostatic materials. <i>Materials Today Bio</i> , 2023, 19, 100592.	2.6	5
86	Applications of hydrogel materials in different types of corneal wounds. <i>Survey of Ophthalmology</i> , 2023, 68, 746-758.	1.7	1
87	Collagen-based injectable and self-healing hydrogel with multifunction for regenerative repairment of infected wounds. <i>Regenerative Biomaterials</i> , 2023, 10, .	2.4	8
88	Application of Mussel Biomimetic Materials in Biomedical Field. , 2022, , .		0
89	Recent advances in adhesive materials used in the biomedical field: adhesive properties, mechanism, and applications. <i>Journal of Materials Chemistry B</i> , 2023, 11, 3338-3355.	2.9	6
90	Double-Network Chitosan-Based Hydrogels with Improved Mechanical, Conductive, Antimicrobial, and Antibiofouling Properties. <i>Gels</i> , 2023, 9, 278.	2.1	8

#	ARTICLE	IF	CITATIONS
91	Advances in Hydrogel Adhesives for Gastrointestinal Wound Closure and Repair. <i>Gels</i> , 2023, 9, 282.	2.1	3
92	Bioinspired Polyacrylic Acid-Based Dressing: Wet Adhesive, Self-Healing, and Multi-Biofunctional Coacervate Hydrogel Accelerates Wound Healing. <i>Advanced Science</i> , 2023, 10, .	5.6	19
119	Functionalized polysaccharide-based hydrogels: spanning accession in tissue engineering and regenerative medicines. , 2024, , 215-264.		0