A review on recent advances in chitosan based composi

International Journal of Biological Macromolecules
124, 138-147
DOI: 10.1016/j.ijbiomac.2018.11.045

Citation Report

#	Article	IF	Citations
1	Chitosan-Based Bioactive Hemostatic Agents with Antibacterial Propertiesâ€"Synthesis and Characterization. Molecules, 2019, 24, 2629.	1.7	63
2	A feasible biocompatible hydrogel film embedding Periplaneta americana extract for acute wound healing. International Journal of Pharmaceutics, 2019, 571, 118707.	2.6	36
3	Chitosans for Tissue Repair and Organ Three-Dimensional (3D) Bioprinting. Micromachines, 2019, 10, 765.	1.4	59
4	Progress in the Development of Chitosan-Based Biomaterials for Tissue Engineering and Regenerative Medicine. Biomolecules, 2019, 9, 470.	1.8	220
5	Progress in the polymer-paclitaxel conjugate. Journal of Drug Delivery Science and Technology, 2019, 54, 101237.	1.4	9
6	Development of bacterial cellulose/alginate/chitosan composites incorporating copper (II) sulfate as an antibacterial wound dressing. Journal of Drug Delivery Science and Technology, 2019, 51, 662-671.	1.4	79
7	Polysaccharide-Based Lotus Seedpod Surface-Like Porous Microsphere with Precise and Controllable Micromorphology for Ultrarapid Hemostasis. ACS Applied Materials & Interfaces, 2019, 11, 46558-46571.	4.0	85
8	Efficacy of a Temporary Hemostatic Device in a Swine Model of Closed, Lethal Liver Injury. Military Medicine, 2020, 185, e742-e747.	0.4	4
9	Preparation of chitosan-based composites with urethane cross linkage and evaluation of their properties for using as wound healing dressing. Carbohydrate Polymers, 2020, 230, 115606.	5.1	53
10	Chitosan Hydrogels for Synergistic Delivery of Chemotherapeutics to Triple Negative Breast Cancer Cells and Spheroids. Pharmaceutical Research, 2020, 37, 142.	1.7	8
11	The alginateâ€"chitosan composite sponges with biogenic Ag nanoparticles produced by combining of cryostructuration, ionotropic gelation and ion replacement methods. International Journal of Polymeric Materials and Polymeric Biomaterials, 2022, 71, 34-44.	1.8	10
12	Rapid hemostatic chitosan/cellulose composite sponge by alkali/urea method for massive haemorrhage. International Journal of Biological Macromolecules, 2020, 164, 2769-2778.	3.6	41
13	Marine collagen peptide grafted carboxymethyl chitosan: Optimization preparation and coagulation evaluation. International Journal of Biological Macromolecules, 2020, 164, 3953-3964.	3.6	29
14	Advances in Topical Hemostatic Agent Therapies: A Comprehensive Update. Advances in Therapy, 2020, 37, 4132-4148.	1.3	48
15	Thermoresponsive Chitosan/DOPA-Based Hydrogel as an Injectable Therapy Approach for Tissue-Adhesion and Hemostasis. ACS Biomaterials Science and Engineering, 2020, 6, 3619-3629.	2.6	78
16	Degradable porous carboxymethyl chitin hemostatic microspheres. Journal of Biomaterials Science, Polymer Edition, 2020, 31, 1369-1384.	1.9	16
17	Preparation and characterization of crosslinked porous starch hemostatic. International Journal of Biological Macromolecules, 2020, 160, 429-436.	3.6	24
18	Hemostatic agents for prehospital hemorrhage control: a narrative review. Military Medical Research, 2020, 7, 13.	1.9	59

#	Article	IF	Citations
19	Preparation and characterization of PLLA/chitosan-graft-poly (Îµ-caprolactone) (CS-g-PCL) composite fibrous mats: The microstructure, performance and proliferation assessment. International Journal of Biological Macromolecules, 2020, 162, 320-332.	3.6	12
20	Polysaccharide Based Hemostatic Strategy for Ultrarapid Hemostasis. Macromolecular Bioscience, 2020, 20, e1900370.	2.1	62
21	Biocompatible fungal chitosan encapsulated phytogenic silver nanoparticles enhanced antidiabetic, antioxidant and antibacterial activity. International Journal of Biological Macromolecules, 2020, 153, 63-71.	3.6	102
22	Cationic chitosan derivatives as potential antifungals: A review of structural optimization and applications. Carbohydrate Polymers, 2020, 236, 116002.	5.1	106
23	Polysaccharide-Based Biomaterials for Protein Delivery. Medicine in Drug Discovery, 2020, 7, 100031.	2.3	22
24	Polyelectrolyte multilayers containing a tannin derivative polyphenol improve blood compatibility through interactions with platelets and serum proteins. Materials Science and Engineering C, 2020, 112, 110919.	3.8	29
25	Antibacterial and Hemostatic Thiol-Modified Chitosan-Immobilized AgNPs Composite Sponges. ACS Applied Materials & Interfaces, 2020, 12, 20307-20320.	4.0	159
26	Terpinenâ€4â€ol liposomesâ€incorporated chitosan/polyethylene oxide electrospun nanofibrous film ameliorates the external microenvironment of healing cutaneous wounds. Journal of Applied Polymer Science, 2021, 138, 49670.	1.3	5
27	Injectable dry cryogels with excellent blood-sucking expansion and blood clotting to cease hemorrhage for lethal deep-wounds, coagulopathy and tissue regeneration. Chemical Engineering Journal, 2021, 403, 126329.	6.6	146
28	Hemostatic performance and biocompatibility of chitosan-based agents in experimental parenchymal bleeding. Materials Science and Engineering C, 2021, 120, 111740.	3.8	20
29	Layer-by-layer coating of carboxymethyl chitosan-gelatin-alginate on cotton gauze for hemostasis and wound healing. Surface and Coatings Technology, 2021, 406, 126644.	2.2	50
30	Polysaccharide-Based Composites for Biomedical Applications. Materials Horizons, 2021, , 19-34.	0.3	2
31	Biopolymer Matrix Composites for New Medical Applications. , 2021, , 842-866.		2
32	Blood-clotting model and simulation analysis of polyvinyl alcoholâ€“chitosan composite hemostatic materials. Journal of Materials Chemistry B, 2021, 9, 5465-5475.	2.9	8
33	Different Forms of Chitosan and Its Derivatives as Hemostatic Agent and Tissue Sealants. Advances in Polymer Science, 2021, , 1-28.	0.4	4
34	Preparation and biomedical application of injectable hydrogels. Materials Chemistry Frontiers, 2021, 5, 4912-4936.	3.2	28
35	Review of the Structure of Chitosan in the Context of Other Sugar-Based Polymers. Advances in Polymer Science, 2021, , 23-74.	0.4	2
36	Delivery of Biomolecules Using Chitosan Wound Dressings. Advances in Polymer Science, 2021, , 447-467.	0.4	2

#	Article	IF	Citations
37	Chitosan-Based Functional Materials for Skin Wound Repair: Mechanisms and Applications. Frontiers in Bioengineering and Biotechnology, 2021, 9, 650598.	2.0	208
38	Biosynthesis and characterization of deuterated chitosan in filamentous fungus and yeast. Carbohydrate Polymers, 2021, 257, 117637.	5.1	8
39	Characterization and antimicrobial properties of ferulic acid grafted selfâ€assembled bacterial celluloseâ€chitosan membranes. Journal of Applied Polymer Science, 2021, 138, 50824.	1.3	12
40	Application and outlook of topical hemostatic materials: a narrative review. Annals of Translational Medicine, 2021, 9, 577-577.	0.7	50
41	Antimicrobial and Wound Healing Properties of FeO Fabricated Chitosan/PVA Nanocomposite Sponge. Antibiotics, 2021, 10, 524.	1.5	45
42	Hemostatic and Tissue Regeneration Performance of Novel Electrospun Chitosan-Based Materials. Biomedicines, 2021, 9, 588.	1.4	20
43	Bioaerogels: Promising Nanostructured Materials in Fluid Management, Healing and Regeneration of Wounds. Molecules, 2021, 26, 3834.	1.7	31
44	pH-controlled nucleolin targeted release of dual drug from chitosan-gold based aptamer functionalized nano drug delivery system for improved glioblastoma treatment. Carbohydrate Polymers, 2021, 262, 117907.	5.1	67
45	Silk fibroin/chitosan hydrogel with antibacterial, hemostatic and sustained drugâ€release activities. Polymer International, 2021, 70, 1741-1751.	1.6	20
46	Chitosan/alginate/hyaluronic acid polyelectrolyte composite sponges crosslinked with genipin for wound dressing application. International Journal of Biological Macromolecules, 2021, 182, 512-523.	3.6	56
47	Polysaccharides-modified chitosan as improved and rapid hemostasis foam sponges. Carbohydrate Polymers, 2021, 264, 118028.	5.1	72
48	Fast acting hemostatic agent based on self-assembled hybrid nanofibers from chitosan and casein. International Journal of Biological Macromolecules, 2021, 185, 525-534.	3.6	14
49	Development of Poloxamer Hydrogels Containing Antibacterial Guanidine-Based Polymers for Healing of Full-Thickness Skin Wound. ACS Biomaterials Science and Engineering, 2021, 7, 4557-4568.	2.6	17
50	Curcumin-loaded sandwich-like nanofibrous membrane prepared by electrospinning technology as wound dressing for accelerate wound healing. Materials Science and Engineering C, 2021, 127, 112245.	3.8	65
51	Chitosan/PDLLA-PEG-PDLLA solution preparation by simple stirring and formation into a hydrogel at body temperature for whole wound healing. International Journal of Biological Macromolecules, 2021, 184, 787-796.	3.6	12
52	Chitosan/Hyaluronic acid/Alginate and an assorted polymers loaded with honey, plant, and marine compounds for progressive wound healingâ€"Know-how. International Journal of Biological Macromolecules, 2021, 186, 656-685.	3.6	104
53	The Efficacy of Chitosan Hemostatic Pad on Hemostatic Function in Patients Undergoing Cardiac Catheterization: A Systematic Review and Meta-Analysis. Heart Surgery Forum, 2021, 24, E833-E841.	0.2	1
54	High strength antibacterial membranes consisted of nanofibrous chitosan immobilized silver nanoparticles. Journal of Applied Polymer Science, 2021, 138, 51518.	1.3	1

#	Article	IF	Citations
55	A chitosan hydrogel sealant with self-contractile characteristic: From rapid and long-term hemorrhage control to wound closure and repair. Carbohydrate Polymers, 2021, 271, 118428.	5.1	36
56	The role of nanoscale structures in the development of topical hemostatic agents. Materials Today Nano, 2021, 16, 100137.	2.3	9
57	High-strength anti-bacterial composite cryogel for lethal noncompressible hemorrhage hemostasis: Synergistic physical hemostasis and chemical hemostasis. Chemical Engineering Journal, 2022, 427, 131977.	6.6	60
58	New Biologicals to Assist Clotting. , 2021, , 81-88.		0
59	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
60	Batch and column studies for adsorption of naphthalene from its aqueous solution using nanochitosan/sodium alginate composite. Polymer Bulletin, 2022, 79, 8695-8715.	1.7	8
61	Fabrication and Characterization of Chitosan-Polyethylene Glycol (Ch-Peg) Based Hydrogels and Evaluation of Their Potency in Rat Skin Wound Model. International Journal of Biomaterials, 2021, 2021, 1-11.	1.1	9
62	Safety and efficacy assessment of aerogels for biomedical applications. Biomedicine and Pharmacotherapy, 2021, 144, 112356.	2.5	24
63	Construction of chitosan/Ag nanocomposite sponges and their properties. International Journal of Biological Macromolecules, 2021, 192, 272-277.	3.6	20
64	Formulation of a Topical Tannic Acid and Chitosan Gel Haemostatic Drug Delivery System for Treatment of Wounds and Abrasions. Journal of Pharmaceutical Research International, 0, , 109-119.	1.0	0
65	Clinically relevant materials & applications inspired by food technologies. EBioMedicine, 2022, 75, 103792.	2.7	5
66	Analysis of clinical trials on biomaterial and therapeutic applications of chitosan: A review. Carbohydrate Polymers, 2022, 278, 118999.	5.1	39
67	Antimicrobial cotton gauzes modified with poly(acrylic acid-co-maltodextrin) hydrogel using chitosan as crosslinker. International Journal of Biological Macromolecules, 2022, 198, 119-127.	3.6	6
68	Microcluster colloidosomes for hemostat delivery into complex wounds: A platform inspired by the attack action of torpedoes. Bioactive Materials, 2022, 16, 372-387.	8.6	8
69	Preparation and characterization of bifunctional edible gellan-polylysine fiber. International Journal of Biological Macromolecules, 2022, 204, 293-299.	3.6	1
70	A combination of sugar esters and chitosan to promote in vivo wound care. International Journal of Pharmaceutics, 2022, 616, 121508.	2.6	15
71	Polymeric Materials for Hemostatic Wound Healing. Pharmaceutics, 2021, 13, 2127.	2.0	29
72	Topical hemostatic materials for coagulopathy. Journal of Materials Chemistry B, 2022, 10, 1946-1959.	2.9	11

#	Article	IF	Citations
73	Biomimetic peptide nanoparticles participate in natural coagulation for hemostasis and wound healing. Biomaterials Science, 2022, 10, 2628-2637.	2.6	4
74	Chitosan and its application in dental implantology. Journal of Stomatology, Oral and Maxillofacial Surgery, 2022, 123, e701-e707.	0.5	8
75	Is It an Outbreak of Health Care-Associated Infection? An Investigation of Binocular Conjunctival Congestion After Laparoscopic Cholecystectomy Was Traced to Chitosan Derivatives. Frontiers in Medicine, 2022, 9, 759945.	1.2	0
76	A robust polyacrylic acid/chitosan cryogel for rapid hemostasis. Science China Technological Sciences, 2022, 65, 1029-1042.	2.0	16
77	Effect of naturally derived surgical hemostatic materials on the proliferation of A549 human lung adenocarcinoma cells. Materials Today Bio, 2022, 14, 100233.	2.6	4
78	Biomaterials as Haemostatic Agents in Cardiovascular Surgery: Review of Current Situation and Future Trends. Polymers, 2022, 14, 1189.	2.0	11
79	Chitosan as a Tool for Sustainable Development: A Mini Review. Polymers, 2022, 14, 1475.	2.0	40
80	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
81	Preparation of Chitosan/Clay Composites for Safe and Effective Hemorrhage Control. Molecules, 2022, 27, 2571.	1.7	6
82	Green Synthesis-Mediated Silver Nanoparticles Based Biocomposite Films for Wound Healing Application. Journal of Inorganic and Organometallic Polymers and Materials, 2022, 32, 2994-3011.	1.9	8
83	A Comparative Evaluation of fibrin density with Chitosan, Papain and 17% EDTA-Normal saline combination as irrigants in teeth with open apices: An ex vivo SEM study. Journal of Conservative Dentistry, 2022, 25, 140.	0.3	0
84	Berberine coated biocomposite hemostatic film based alginate as absorbable biomaterial for wound healing. International Journal of Biological Macromolecules, 2022, 209, 1731-1744.	3.6	17
85	Porous textile composites (PTCs) for the removal and the decomposition of chemical warfare agents (CWAs) â€“ A review. Coordination Chemistry Reviews, 2022, 467, 214598.	9.5	17
86	A multifunctional chitosan hydrogel dressing for liver hemostasis and infected wound healing. Carbohydrate Polymers, 2022, 291, 119631.	5.1	50
87	In situ forming injectable Î³-poly(glutamic acid)/PEG adhesive hydrogels for hemorrhage control. Biomaterials Science, 2022, 10, 4218-4227.	2.6	18
88	Chitosan-based composites reinforced with antibacterial flexible wood membrane for rapid hemostasis. International Journal of Biological Macromolecules, 2022, 215, 450-464.	3.6	9
89	Hemostasis and Anti-Inflammatory Abilities of AuNPs-Coated Chitosan Dressing for Burn Wounds. Journal of Personalized Medicine, 2022, 12, 1089.	1.1	10
90	Biofabrication of ZnO/Malachite nanocomposite and its coating with chitosan to heal infectious wounds. Scientific Reports, 2022, 12, .	1.6	14

#	Article	IF	Citations
91	Physicochemical Characterization of Star Anise Silver Nanoparticles Incorporated Chitosan Biomaterial for Absorb Water and Cure Wounds. Adsorption Science and Technology, 2022, 2022, .	1.5	1
92	Prospective, randomized, controlled, noninferiority clinical trial to evaluate the safety and efficacy of absorbable macroporous polysaccharide composites as adjunct to hemostasis during open surgery. Journal of Cardiac Surgery, 0, , .	0.3	1
93	Injectable shape memory hydroxyethyl cellulose/soy protein isolate based composite sponge with antibacterial property for rapid noncompressible hemorrhage and prevention of wound infection. International Journal of Biological Macromolecules, 2022, 217, 367-380.	3.6	3
94	Expandable carboxymethyl chitosan/cellulose nanofiber composite sponge for traumatic hemostasis. Carbohydrate Polymers, 2022, 294, 119805.	5.1	17
95	Electrospun kaolin-loaded chitosan/PEO nanofibers for rapid hemostasis and accelerated wound healing. International Journal of Biological Macromolecules, 2022, 217, 998-1011.	3.6	26
96	Deciphering the focuses and trends in skin regeneration research through bibliometric analyses. Frontiers in Medicine, 0, 9, .	1.2	2
97	Tannic acid-crosslinked O-carboxymethyl chitosan hydrogels for enhanced antibacterial activity and rapid hemostasis. Journal of Biomaterials Science, Polymer Edition, 2023, 34, 184-199.	1.9	9
98	Starch and chitosan-based antibacterial dressing for infected wound treatment via self-activated NO release strategy. International Journal of Biological Macromolecules, 2022, 220, 1177-1187.	3.6	4
99	Advances in chitosan-based wound dressings: Modifications, fabrications, applications and prospects. Carbohydrate Polymers, 2022, 297, 120058.	5.1	32
100	Biodegradable alginate-based sponge with antibacterial and shape memory properties for penetrating wound hemostasis. Composites Part B: Engineering, 2022, 247, 110263.	5.9	23
101	Application of Chitosan in the Medical and Biomedical Field. Engineering Materials and Processes, 2022, , 291-321.	0.2	0
102	Biomedical Application of Chitosan-Based Nanocomposites as Antifungal Agents. , 2022, , 251-271.		0
103	Optimization of Oligomer Chitosan/Polyvinylpyrrolidone Coating for Enhancing Antibacterial, Hemostatic Effects and Biocompatibility of Nanofibrous Wound Dressing. Polymers, 2022, 14, 3541.	2.0	6
104	Application of chitosan-based materials in surgical or postoperative hemostasis. Frontiers in Materials, 0, 9, .	1.2	7
105	Chitosan: A biopolymer for textile processes and products. Textile Reseach Journal, 2023, 93, 1456-1484.	1.1	11
106	Bio-macromolecular design roadmap towards tough bioadhesives. Chemical Society Reviews, 2022, 51, 9127-9173.	18.7	31
107	Preparation and property of soluble hemostatic material with 3D knitted structure. Journal of Industrial Textiles, 2022, 52, 152808372211073.	1.1	0
108	A Narrative Review of Different Hemostatic Materials in Emergency Treatment of Trauma. Emergency Medicine International, 2022, 2022, 1-8.	0.3	1

#	Article	IF	Citations
109	Multifunctionalized alginate/polydopamine cryogel for hemostasis, antibacteria and promotion of wound healing. International Journal of Biological Macromolecules, 2023, 224, 1373-1381.	3.6	19
110	Design of biopolymer-based hemostatic material: Starting from molecular structures and forms. Materials Today Bio, 2022, 17, 100468.	2.6	10
111	Emerging materials for hemostasis. Coordination Chemistry Reviews, 2023, 475, 214823.	9.5	31
112	Promoting oral mucosal wound healing using a DCS-RuB2A2 hydrogel based on a photoreactive antibacterial and sustained release of BMSCs. Bioactive Materials, 2023, 23, 53-68.	8.6	13
113	Facile preparation and characterization of photopolymerized adhesive hydrogels based on methacrylated catechol-chitosan. Journal of Materials Science, 2022, 57, 20974-20986.	1.7	5
114	Sprayable surface-adaptive biocompatible membranes for efficient hemostasis via assembly of chitosan and polyphosphate. Carbohydrate Polymers, 2023, 302, 120360.	5.1	9
115	Preparation of Transdermal Patch Containing Selenium Nanoparticles Loaded with Doxycycline and Evaluation of Skin Wound Healing in a Rat Model. Pharmaceuticals, 2022, 15, 1381.	1.7	2
116	Design of Adhesive Hemostatic Hydrogels Guided by the Interfacial Interactions with Tissue Surface. Advanced NanoBiomed Research, 2023, 3, .	1.7	2
117	Nano-Enabled Chronic Wound Healing Strategies: Burn and Diabetic Ulcer Wounds. Journal of Biomedical Nanotechnology, 2022, 18, 2081-2099.	0.5	1
118	Preparation and evaluation of chitosan skin patches containing mesoporous silica nanoparticles loaded by doxycycline on skin wound healing. Archives of Dermatological Research, 0, , .	1.1	0
119	Bioabsorbable Fibrillar Gauze Dressing Based on N-Carboxyethyl Chitosan Gelling Fibers for Fatal Hemorrhage Control. ACS Applied Bio Materials, 2023, 6, 899-907.	2.3	3
120	Chitosan Sponge/Cuâ€“WO_{3â€“x} Composite for Photodynamic Therapy of Wound Infection. Langmuir, 2023, 39, 2631-2640.	1.6	7
121	Chitosan-based hemostatic sponges as new generation hemostatic materials for uncontrolled bleeding emergency: Modification, composition, and applications. Carbohydrate Polymers, 2023, 311, 120780.	5.1	12
122	Skin targeting by chitosan/hyaluronate hybrid nanoparticles for the management of irritant contact dermatitis: In vivo therapeutic efficiency in mouse-ear dermatitis model. International Journal of Biological Macromolecules, 2023, 232, 123458.	3.6	10
123	Fabrication of a Chitosan-Based Wound Dressing Patch for Enhanced Antimicrobial, Hemostatic, and Wound Healing Application. ACS Applied Bio Materials, 2023, 6, 615-627.	2.3	10
124	Kaolin-loaded carboxymethyl chitosan/sodium alginate composite sponges for rapid hemostasis. International Journal of Biological Macromolecules, 2023, 233, 123532.	3.6	14
125	Chitin and Chitosan as Polymers of the Futureâ€”Obtaining, Modification, Life Cycle Assessment and Main Directions of Application. Polymers, 2023, 15, 793.	2.0	32
126	Polysaccharide-Based Multifunctional Hydrogel Bio-Adhesives for Wound Healing: A Review. Gels, 2023, 9, 138.	2.1	32

#	Article	IF	Citations
127	A quaternized chitosan and carboxylated cellulose nanofiber-based sponge with a microchannel structure for rapid hemostasis and wound healing. International Journal of Biological Macromolecules, 2023, 233, 123631.	3.6	13
128	Mussel-inspired methacrylated gelatin-dopamine/quaternized chitosan/glycerin sponges with self-adhesion, antibacterial activity, and hemostatic ability for wound dressings. International Journal of Biological Macromolecules, 2023, 241, 124102.	3.6	8
133	Natural biopolymers in tissue engineeringâ€"role, challenges, and clinical applications. , 2023, , 409-434.		0