

Review on recent progress in chitosan-based hydrogels application

Carbohydrate Polymers

201, 264-279

DOI: [10.1016/j.carbpol.2018.08.070](https://doi.org/10.1016/j.carbpol.2018.08.070)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Chitosan dissolution with sulfopropyl imidazolium Brønsted acidic ionic liquids. <i>Journal of Molecular Liquids</i> , 2019, 293, 111533.	2.3	13
3	Applications of chitosan in food, pharmaceuticals, medicine, cosmetics, agriculture, textiles, pulp and paper, biotechnology, and environmental chemistry. <i>Environmental Chemistry Letters</i> , 2019, 17, 1667-1692.	8.3	401
4	Chitosan for direct bioflocculation of wastewater. <i>Environmental Chemistry Letters</i> , 2019, 17, 1603-1621.	8.3	90
5	Historical review on chitin and chitosan biopolymers. <i>Environmental Chemistry Letters</i> , 2019, 17, 1623-1643.	8.3	160
6	Dye removal by biosorption using cross-linked chitosan-based hydrogels. <i>Environmental Chemistry Letters</i> , 2019, 17, 1645-1666.	8.3	94
7	Handy purifier based on bacterial cellulose and Ca-montmorillonite composites for efficient removal of dyes and antibiotics. <i>Carbohydrate Polymers</i> , 2019, 222, 115017.	5.1	34
8	The Importance of Reaction Conditions on the Chemical Structure of N,O-Acylated Chitosan Derivatives. <i>Molecules</i> , 2019, 24, 3047.	1.7	31
9	The antioxidant and antifungal activity of chitosan derivatives bearing Schiff bases and quaternary ammonium salts. <i>Carbohydrate Polymers</i> , 2019, 226, 115256.	5.1	99
10	Impact of Counter Ions of Cationic Monomers on the Production and Characteristics of Chitosan-Based Hydrogel. <i>ACS Omega</i> , 2019, 4, 15087-15096.	1.6	11
11	Synthesis of chitosan cross-linked 3D network-structured hydrogel for methylene blue removal. <i>International Journal of Biological Macromolecules</i> , 2019, 141, 98-107.	3.6	55
12	Chitosan-g-Poly(acrylic acid) Copolymer and Its Sodium Salt as Stabilized Aqueous Binders for Silicon Anodes in Lithium-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 16274-16283.	3.2	45
13	In situ Preparation of Chitosan/ZIF-8 Composite Beads for Highly Efficient Removal of U(VI). <i>Frontiers in Chemistry</i> , 2019, 7, 607.	1.8	56
14	Durable, cost-effective and superhydrophilic chitosan-alginate hydrogel-coated mesh for efficient oil/water separation. <i>Carbohydrate Polymers</i> , 2019, 226, 115279.	5.1	60
15	Photodegradation of toxic dye using Gum Arabic-crosslinked-poly(acrylamide)/Ni(OH) ₂ /FeOOH nanocomposites hydrogel. <i>Journal of Cleaner Production</i> , 2019, 241, 118263.	4.6	322
16	Development of chitosan-poly(ethyleneimine) based double network cryogels and their application as superadsorbents for phosphate. <i>Carbohydrate Polymers</i> , 2019, 210, 17-25.	5.1	67
17	Fundamentals and Applications of Chitosan. <i>Sustainable Agriculture Reviews</i> , 2019, , 49-123.	0.6	60
18	Sustainable Agriculture Reviews 36. <i>Sustainable Agriculture Reviews</i> , 2019, , .	0.6	12
19	Cross-Linked Chitosan-Based Hydrogels for Dye Removal. <i>Sustainable Agriculture Reviews</i> , 2019, , 381-425.	0.6	12

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20	Chitosan-Based Hydrogels. Sustainable Agriculture Reviews, 2019, , 147-173.	0.6	3
21	Chitosan for Direct Bioflocculation Processes. Sustainable Agriculture Reviews, 2019, , 335-380.	0.6	7
22	Historical Landmarks in the Discovery of Chitin. Sustainable Agriculture Reviews, 2019, , 1-47.	0.6	11
23	Sustainable Agriculture Reviews 35. Sustainable Agriculture Reviews, 2019, , .	0.6	15
24	The size-controllable preparation of chitosan/silver nanoparticle composite microsphere and its antimicrobial performance. Carbohydrate Polymers, 2019, 220, 22-29.	5.1	39
25	The Use of Lanthanum Ions and Chitosan for Boron Elimination from Aqueous Solutions. Polymers, 2019, 11, 718.	2.0	9
26	Inherent N-Doped Honeycomb-like Carbon/Fe ₃ O ₄ Composites with Versatility for Efficient Microwave Absorption and Wastewater Treatment. ACS Sustainable Chemistry and Engineering, 2019, 7, 9237-9248.	3.2	79
27	Salecan polysaccharide-based hydrogels and their applications: a review. Journal of Materials Chemistry B, 2019, 7, 2577-2587.	2.9	83
28	Chitosan Hydrogel Beads Supported with Ceria for Boron Removal. International Journal of Molecular Sciences, 2019, 20, 1567.	1.8	18
29	Chitosan-Cross-Linked Graphene Oxide/Carboxymethyl Cellulose Aerogel Globules with High Structure Stability in Liquid and Extremely High Adsorption Ability. ACS Sustainable Chemistry and Engineering, 2019, 7, 8775-8788.	3.2	120
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31	Interpolyelectrolyte complexes: advances and prospects of application. Russian Chemical Reviews, 2019, 88, 1046-1062.	2.5	33
32	Polymer Hydrogels for Wastewater Treatment. , 0, , .		5
33	Silkworm cocoon derived N, O-codoped hierarchical porous carbon with ultrahigh specific surface area for efficient capture of methylene blue with exceptionally high uptake: kinetics, isotherm, and thermodynamics. RSC Advances, 2019, 9, 33872-33882.	1.7	6
34	Comparison of the physicochemical, rheological, and morphologic properties of chitosan from four insects. Carbohydrate Polymers, 2019, 209, 266-275.	5.1	94
35	Preparation of polyvinyl alcohol, chitosan and polyurethane-based pH-sensitive and biodegradable hydrogels for controlled drug release applications. International Journal of Polymeric Materials and Polymeric Biomaterials, 2020, 69, 1167-1177.	1.8	25
36	Uniform and stable immobilization of metal-organic frameworks into chitosan matrix for enhanced tetracycline removal from water. Chemical Engineering Journal, 2020, 382, 122893.	6.6	258
37	Bio-inspired and biomaterials-based hybrid photocatalysts for environmental detoxification: A review. Chemical Engineering Journal, 2020, 382, 122937.	6.6	201

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38	Multifunctional adsorbent based on metal-organic framework modified bacterial cellulose/chitosan composite aerogel for high efficient removal of heavy metal ion and organic pollutant. <i>Chemical Engineering Journal</i> , 2020, 383, 123127.	6.6	244
39	Advances in porous chitosan-based composite hydrogels: Synthesis and applications. <i>Reactive and Functional Polymers</i> , 2020, 146, 104372.	2.0	128
40	Preparation of polysaccharide-based hydrogels via radiation technique. , 2020, , 119-148.		11
41	A one-pot microwave-assisted synthesis of IPN hydrogels based on HEMA/AM/PVA blend for enhancing Cu(II) and Pb(II) ions removal. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 103469.	3.3	21
42	Energy performance evaluation for benchmarking school buildings using dynamic clustering analysis and particle swarm optimization. <i>Building Services Engineering Research and Technology</i> , 2020, 41, 429-440.	0.9	0
43	Facile and Green Preparation of Superfast Responsive Macroporous Polyacrylamide Hydrogels by Frontal Polymerization of Polymerizable Deep Eutectic Monomers. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 1526-1533.	1.8	20
44	Electrospun cellulose acetate/P(DMDAAC- ϵ -AM) nanofibrous membranes for dye adsorption. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48565.	1.3	24
45	Redox response, antibacterial and drug package capacities of chitosan- γ -lipoic acid conjugates. <i>International Journal of Biological Macromolecules</i> , 2020, 154, 1166-1174.	3.6	12
46	Preparation of chitosan/hydrolyzed collagen/hyaluronic acid based hydrogel composite with caffeic acid addition. <i>International Journal of Biological Macromolecules</i> , 2020, 162, 1937-1943.	3.6	31
47	Antimicrobial and antioxidant properties of chitosan and its derivatives and their applications: A review. <i>International Journal of Biological Macromolecules</i> , 2020, 164, 2726-2744.	3.6	403
48	Facile formation of agarose hydrogel and electromechanical responses as electro-responsive hydrogel materials in actuator applications. <i>Carbohydrate Polymers</i> , 2020, 247, 116709.	5.1	41
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51	Sequestration of Sulfate Anions from Groundwater by Biopolymer-Metal Composite Materials. <i>Polymers</i> , 2020, 12, 1502.	2.0	21
52	Wet Spinning of Chitosan Fibers: Effect of Sodium Dodecyl Sulfate Adsorption and Enhanced Dope Temperature. <i>ACS Applied Polymer Materials</i> , 2020, 2, 3867-3875.	2.0	23
53	An elegant coupling: Freeze-casting and versatile polymer composites. <i>Progress in Polymer Science</i> , 2020, 109, 101289.	11.8	69
54	Development of multicomponent interpenetrating polymer network (IPN) hydrogel films based on 2-hydroxyethyl methacrylate (HEMA), acrylamide (AM), polyvinyl alcohol (PVA) and chitosan (CS) with enhanced mechanical strengths, water swelling and antibacterial properties. <i>Reactive and Functional Polymers</i> , 2020, 156, 104739.	2.0	51
55	Recent development in cellulose nanocrystal-based hydrogel for decolouration of methylene blue from aqueous solution: a review. <i>International Journal of Environmental Analytical Chemistry</i> , 2022, 102, 6766-6783.	1.8	12

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57	A one-step aqueous route to prepare polyacrylonitrile-based hydrogels with excellent ionic conductivity and extreme low temperature tolerance. <i>Journal of Materials Chemistry A</i> , 2020, 8, 22090-22099.	5.2	40
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60	Utilization of industrial by-product fungal biomass from <i>Aspergillus niger</i> and <i>Fusarium culmorum</i> to obtain biosorbents for removal of pesticide and metal ions from aqueous solutions. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104355.	3.3	14
61	Preparation of an environmentally friendly lead adsorbent. A contribution to the rational design of heavy metal adsorbents. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104210.	3.3	3
62	Removal of heavy metals by polysaccharide: a review. <i>Polymer-Plastics Technology and Materials</i> , 2020, 59, 1770-1790.	0.6	20
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64	Upgrading of marine (fish and crustaceans) biowaste for high added-value molecules and bio(nano)-materials. <i>Chemical Society Reviews</i> , 2020, 49, 4527-4563.	18.7	93
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66	Removal of Boron and Manganese Ions from Wet-Flue Gas Desulfurization Wastewater by Hybrid Chitosan-Zirconium Sorbent. <i>Polymers</i> , 2020, 12, 635.	2.0	15
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75	Chilean crab (<i>Aegla cholchol</i>) as a new source of chitin and chitosan with antifungal properties against <i>Candida</i> spp. <i>International Journal of Biological Macromolecules</i> , 2020, 149, 962-975.	3.6	36
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84	Biomass-derived metal-organic hybrids for CO ₂ transformation under ambient conditions. <i>Green Chemistry</i> , 2020, 22, 2846-2851.	4.6	17
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90	Novel semi-interpenetrated networks based on collagen-polyurethane-polysaccharides in hydrogel state for biomedical applications. <i>Journal of Applied Polymer Science</i> , 2021, 138, 49739.	1.3	24
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117	Water decontamination using bio-based, chemically functionalized, doped, and ionic liquid-enhanced adsorbents: review. <i>Environmental Chemistry Letters</i> , 2021, 19, 3075-3114.	8.3	34
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120	Soft Materials by Design: Unconventional Polymer Networks Give Extreme Properties. <i>Chemical Reviews</i> , 2021, 121, 4309-4372.	23.0	472
121	Multifunctional Adsorbent: Oleophobic Latex Sponge for Removing Dyes and Cu ²⁺ from Sewage Waste. <i>Macromolecular Materials and Engineering</i> , 2021, 306, 2100096.	1.7	5
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130	Removal of heavy metal ions from wastewater: a comprehensive and critical review. <i>Npj Clean Water</i> , 2021, 4, .	3.1	511
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148	Novel amidinothiourea-modified chitosan microparticles for selective removal of Hg(II) in solution. <i>Carbohydrate Polymers</i> , 2021, 269, 118273.	5.1	34
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