Changdao Mu

List of Publications by Year
in descending order

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73 papers	4,048 citations	109264 35 h-index	118793 62 g-index
73 all docs	73 docs citations	73 times ranked	4600 citing authors

#	Article	IF	Citations
1	Modification of collagen with a natural cross-linker, procyanidin. International Journal of Biological Macromolecules, 2011, 48, 354-359.	3.6	282
2	Preparation and properties of dialdehyde carboxymethyl cellulose crosslinked gelatin edible films. Food Hydrocolloids, 2012, 27, 22-29.	5.6	270
3	Gelatin Particle-Stabilized High Internal Phase Emulsions as Nutraceutical Containers. ACS Applied Materials & Interfaces, 2014, 6, 13977-13984.	4.0	227
4	Concomitant degradation in periodate oxidation of carboxymethyl cellulose. Carbohydrate Polymers, 2011, 84, 881-886.	5.1	187
5	Periodate oxidation of xanthan gum and its crosslinking effects on gelatin-based edible films. Food Hydrocolloids, 2014, 39, 243-250.	5.6	184
6	Biological properties of dialdehyde carboxymethyl cellulose crosslinked gelatinâ€“PEG composite hydrogel fibers for wound dressings. Carbohydrate Polymers, 2016, 137, 508-514.	5.1	141
7	Facile Fabrication of Biocompatible Gelatin-Based Self-Healing Hydrogels. ACS Applied Polymer Materials, 2019, 1, 1350-1358.	2.0	120
8	Heteroaggregation in Binary Mixtures of Oppositely Charged Colloidal Particles. Langmuir, 2006, 22, 1038-1047.	1.6	112
9	Temperature induced denaturation of collagen in acidic solution. Biopolymers, 2007, 86, 282-287.	1.2	111
10	Fabrication of Antibacterial Collagen-Based Composite Wound Dressing. ACS Sustainable Chemistry and Engineering, 2018, 6, 9153-9166.	3.2	110
11	Gelatin Effects on the Physicochemical and Hemocompatible Properties of Gelatin/PAAm/Laponite Nanocomposite Hydrogels. ACS Applied Materials & Interfaces, 2015, 7, 18732-18741.	4.0	109
12	Collagen Cryogel Crossâ€Linked by Dialdehyde Starch. Macromolecular Materials and Engineering, 2010, 295, 100-107.	1.7	107
13	Development of active rosmarinic acid-gelatin biodegradable films with antioxidant and long-term antibacterial activities. Food Hydrocolloids, 2018, 83, 308-316.	5.6	106
14	Preparation, characterization and antibacterial activity of oxidized Î²-carrageenan. Carbohydrate Polymers, 2017, 174, 1051-1058.	5.1	89
15	Ultrasonic irradiation in the enzymatic extraction of collagen. Ultrasonics Sonochemistry, 2009, 16, 605-609.	3.8	85
16	Effects of Cr³⁺ on the Structure of Collagen Fiber. Langmuir, 2009, 25, 11905-11910.	1.6	83
17	Preparation, physicochemical characterization and release behavior of the inclusion complex of trans -anethole and Î²-cyclodextrin. Food Research International, 2015, 74, 55-62.	2.9	76
18	Collagen cryogel cross-linked by naturally derived dialdehyde carboxymethyl cellulose. Carbohydrate Polymers, 2015, 129, 17-24.	5.1	75

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19	Towards zero discharge of chromium-containing leather waste through improved alkali hydrolysis. Waste Management, 2003, 23, 835-843.	3.7	73
20	Development and characterization of dialdehyde xanthan gum crosslinked gelatin based edible films incorporated with amino-functionalized montmorillonite. Food Hydrocolloids, 2015, 51, 129-135.	5.6	62
21	Ringâ€opening polymerization of genipin and its longâ€range crosslinking effect on collagen hydrogel. Journal of Biomedical Materials Research - Part A, 2013, 101A, 385-393.	2.1	55
22	pH-Responsive nanoparticles based on cholesterol/imidazole modified oxidized-starch for targeted anticancer drug delivery. Carbohydrate Polymers, 2020, 233, 115858.	5.1	53
23	Effects of carboxyl and aldehyde groups on the antibacterial activity of oxidized amylose. Carbohydrate Polymers, 2018, 192, 118-125.	5.1	52
24	A Novel Approach for Synthesis of Zwitterionic Polyurethane Coating with Protein Resistance. Langmuir, 2014, 30, 12860-12867.	1.6	51
25	Emulsion Template Method for the Fabrication of Gelatin-Based Scaffold with a Controllable Pore Structure. ACS Applied Materials & Interfaces, 2019, 11, 269-277.	4.0	51
26	A waterborne polyurethane coating functionalized by isobornyl with enhanced antibacterial adhesion and hydrophobic property. European Polymer Journal, 2018, 108, 498-506.	2.6	50
27	Effect of pH on gelatin self-association investigated by laser light scattering and atomic force microscopy. Polymer International, 2002, 51, 233-238.	1.6	47
28	Advances in Pickering emulsions stabilized by protein particles: Toward particle fabrication, interaction and arrangement. Food Research International, 2022, 157, 111380.	2.9	47
29	Tailor-made zwitterionic polyurethane coatings: microstructure, mechanical property and their antimicrobial performance. RSC Advances, 2017, 7, 27522-27529.	1.7	46
30	Fabrication of Polypyrrole-Grafted Gelatin-Based Hydrogel with Conductive, Self-Healing, and Injectable Properties. ACS Applied Polymer Materials, 2020, 2, 3016-3023.	2.0	46
31	Freezingâ€“thawing effects on the properties of dialdehyde carboxymethyl cellulose crosslinked gelatin-MMT composite films. Food Hydrocolloids, 2013, 33, 273-279.	5.6	45
32	Development of Antimicrobial and Controlled Biodegradable Gelatin-Based Edible Films Containing Nisin and Amino-Functionalized Montmorillonite. Food and Bioprocess Technology, 2017, 10, 1727-1736.	2.6	42
33	Functional-modified polyurethanes for rendering surfaces antimicrobial: An overview. Advances in Colloid and Interface Science, 2020, 283, 102235.	7.0	41
34	Development of Disulfide Bond Crosslinked Gelatin/Îµ-Polylysine Active Edible Film with Antibacterial and Antioxidant Activities. Food and Bioprocess Technology, 2020, 13, 577-588.	2.6	41
35	Interconnected macroporous 3D scaffolds templated from gelatin nanoparticle-stabilized high internal phase emulsions for biomedical applications. Soft Matter, 2017, 13, 3871-3878.	1.2	38
36	Using oxidized amylose as carrier of linalool for the development of antibacterial wound dressing. Carbohydrate Polymers, 2017, 174, 1095-1105.	5.1	35

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37	Novel hemocompatible nanocomposite hydrogels crosslinked with methacrylated gelatin. RSC Advances, 2016, 6, 43663-43671.	1.7	34
38	Synthesis of oxidized Î²-cyclodextrin with high aqueous solubility and broad-spectrum antimicrobial activity. Carbohydrate Polymers, 2017, 177, 97-104.	5.1	33
39	Development of Antimicrobial Gelatin-Based Edible Films by Incorporation of Trans-Anethole/Î²-Cyclodextrin Inclusion Complex. Food and Bioprocess Technology, 2017, 10, 1844-1853.	2.6	32
40	Dihydromyricetin-Loaded Pickering Emulsions Stabilized by Dialdehyde Cellulose Nanocrystals for Preparation of Antioxidant Gelatinâ€“Based Edible Films. Food and Bioprocess Technology, 2021, 14, 1648-1661.	2.6	32
41	Oxidized amylose with high carboxyl content: A promising solubilizer and carrier of linalool for antimicrobial activity. Carbohydrate Polymers, 2016, 154, 13-19.	5.1	31
42	Green synthesis of Îº-carrageenan@Ag submicron-particles with high aqueous stability, robust antibacterial activity and low cytotoxicity. Materials Science and Engineering C, 2020, 106, 110185.	3.8	31
43	Antibacterial dialdehyde sodium alginate/Îµ-polylysine microspheres for fruit preservation. Food Chemistry, 2022, 387, 132885.	4.2	31
44	Influence of palygorskite on the structure and thermal stability of collagen. Applied Clay Science, 2012, 62-63, 41-46.	2.6	30
45	pH-Sensitive nanoparticles based on amphiphilic imidazole/cholesterol modified hydroxyethyl starch for tumor chemotherapy. Carbohydrate Polymers, 2022, 277, 118827.	5.1	30
46	Comparative study of the effects of anatase and rutile titanium dioxide nanoparticles on the structure and properties of waterborne polyurethane. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 470, 92-99.	2.3	29
47	Freezing/thawing effects on the exfoliation of montmorillonite in gelatinâ€based bionanocomposite. Journal of Applied Polymer Science, 2013, 128, 3141-3148.	1.3	25
48	Trivalent chromium and aluminum affect the thermostability and conformation of collagen very differently. Journal of Inorganic Biochemistry, 2012, 117, 124-130.	1.5	24
49	A novel hydrophobic all-biomass aerogel reinforced by dialdehyde carboxymethyl cellulose for oil/organic solvent-water separation. Polymer, 2022, 238, 124402.	1.8	23
50	Preparation and characterization of dialdehyde Î²-cyclodextrin with broad-spectrum antibacterial activity. Food Research International, 2018, 111, 237-243.	2.9	22
51	A facile preparation of a novel non-leaching antimicrobial waterborne polyurethane leather coating functionalized by quaternary phosphonium salt. Journal of Leather Science and Engineering, 2020, 2, .	2.7	22
52	Development of Microspheres Based on Thiol-Modified Sodium Alginate for Intestinal-Targeted Drug Delivery. ACS Applied Bio Materials, 2019, 2, 5810-5818.	2.3	21
53	Revisit the pre-transition of type I collagen denaturation in dilute solution by ultrasensitive differential scanning calorimetry. Thermochimica Acta, 2012, 548, 1-5.	1.2	20
54	Fabrication of water-resistance and durable antimicrobial adhesion polyurethane coating containing weakly amphiphilic poly(isobornyl acrylate) Side chains. Progress in Organic Coatings, 2020, 147, 105812.	1.9	19

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55	Functionalization of an Electroactive Self-Healing Polypyrrole-Grafted Gelatin-Based Hydrogel by Incorporating a Polydopamine@AgNP Nanocomposite. ACS Applied Bio Materials, 2021, 4, 5797-5808.	2.3	19
56	Crosslinking effect of dialdehyde cholesterol modified starch nanoparticles on collagen hydrogel. Carbohydrate Polymers, 2022, 285, 119237.	5.1	19
57	Advances in Antimicrobial Polymer Coatings in the Leather Industry: A Comprehensive Review. Industrial & Engineering Chemistry Research, 2021, 60, 15004-15018.	1.8	18
58	Molecular weight effects of PEG on the crystal structure and photocatalytic activities of PEG-capped TiO₂ nanoparticles. RSC Advances, 2016, 6, 83366-83372.	1.7	17
59	Effect of oxidation level on the inclusion capacity and solution stability of oxidized amylose in aqueous solution. Carbohydrate Polymers, 2016, 138, 41-48.	5.1	16
60	Oxidized starch cross-linked porous collagen-based hydrogel for spontaneous agglomeration growth of adipose-derived stem cells. Materials Science and Engineering C, 2020, 116, 111165.	3.8	15
61	Shortâ€range and longâ€range crossâ€linking effects of polygenipin on gelatinâ€based composite materials. Journal of Biomedical Materials Research - Part A, 2016, 104, 2712-2722.	2.1	14
62	Controlling the Pore Structure of Collagen Sponge by Adjusting the Cross-Linking Degree for Construction of Heterogeneous Double-Layer Bone Barrier Membranes. ACS Applied Bio Materials, 2020, 3, 2058-2067.	2.3	14
63	Matrix metalloproteinase-responsive collagen-oxidized hyaluronic acid injectable hydrogels for osteoarthritic therapy. , 2022, 137, 212804.		13
64	Stability Enhanced Pickering Emulsions Based on Gelatin and Dialdehyde Starch Nanoparticles as Simple Strategy for Structuring Liquid Oils. Food and Bioprocess Technology, 2021, 14, 1600-1610.	2.6	10
65	Functionalization of an Injectable Self-Healing pH-Responsive Hydrogel by Incorporating a Curcumin/Polymerized Î²-Cyclodextrin Inclusion Complex for Selective Toxicity to Osteosarcoma. ACS Applied Polymer Materials, 2022, 4, 1243-1254.	2.0	10
66	¹³¹I-Labeled Silk Fibroin Microspheres for Radioembolic Therapy of Rat Hepatocellular Carcinoma. ACS Applied Materials & Interfaces, 2022, 14, 21848-21859.	4.0	10
67	Effects of montmorillonite on the structure and properties of gelatinâ€polyethylene glycol composite fibers. Journal of Applied Polymer Science, 2013, 129, 773-778.	1.3	9
68	Emulsion Template Fabrication of Antibacterial Gelatin-Based Scaffolds with a Preferred Microstructure for Accelerated Wound Healing. ACS Applied Polymer Materials, 2022, 4, 3885-3895.	2.0	8
69	Mimicking the Composition and Structure of the Osteochondral Tissue to Fabricate a Heterogeneous Three-Layer Scaffold for the Repair of Osteochondral Defects. ACS Applied Bio Materials, 2022, 5, 734-746.	2.3	7
70	One-Pot Approach for the Synthesis of Water-Soluble Anatase TiO₂ Nanoparticle Cluster with Efficient Visible Light Photocatalytic Activity. Journal of Physical Chemistry C, 2018, 122, 26447-26453.	1.5	6
71	Hydrothermal shrinkage behavior of pigskin. Thermochimica Acta, 2021, 699, 178896.	1.2	2
72	Effect of pH on gelatin selfâ€association investigated by laser light scattering and atomic force microscopy. Polymer International, 2002, 51, 233-238.	1.6	2

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73	Comparative study of the physicochemical and photocatalytic properties of water-soluble polymer-capped TiO2 nanoparticles. Environmental Science and Pollution Research, 2018, 25, 26259-26266.	2.7	1