Biopolymer: A Sustainable Material for Food and Medica

Polymers

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Citation Report

#	Article	IF	CITATIONS
1	Bio-Based Materials for Packaging. International Journal of Molecular Sciences, 2022, 23, 3611.	4.1	8
2	Bio-based smart materials for fish product packaging: a review. International Journal of Food Properties, 2022, 25, 857-871.	3.0	15
3	Innovative Approach for Controlling Black Rot of Persimmon Fruits by Means of Nanobiotechnology from Nanochitosan and Rosmarinic Acid-Mediated Selenium Nanoparticles. Polymers, 2022, 14, 2116.	4.5	7
4	Production and Characterization of Gelatin Biomaterials Based on Agave Microfibers and Bentonite as Reinforcements. Foods, 2022, 11, 1573.	4.3	7
5	Application of Nanocomposites from Bees Products and Nano-Selenium in Edible Coating for Catfish Fillets Biopreservation. Polymers, 2022, 14, 2378.	4.5	11
6	Biopolymer from Water Kefir as a Potential Clean-Label Ingredient for Health Applications: Evaluation of New Properties. Molecules, 2022, 27, 3895.	3.8	2
7	Production of biopolymers from food waste: Constrains and perspectives. Bioresource Technology, 2022, 361, 127650.	9.6	23
8	Characterization of Pectin from Grape Pomace: A Comparison of Conventional and Pulsed Ultrasound-Assisted Extraction Techniques. Foods, 2022, 11, 2274.	4.3	4
9	Bio-Based Degradable Poly(ether-ester)s from Melt-Polymerization of Aromatic Ester and Ether Diols. International Journal of Molecular Sciences, 2022, 23, 8967.	4.1	6
10	Study on Filtration Performance of PVDF/PUL Composite Air Filtration Membrane Based on Far-Field Electrospinning. Polymers, 2022, 14, 3294.	4.5	4
11	Green bioprocessing and applications of microalgae-derived biopolymers as a renewable feedstock: Circular bioeconomy approach. Environmental Technology and Innovation, 2022, 28, 102872.	6.1	26
12	Biopolymers for Food Packaging and Biomedical Applications: Options or Obligations?. Coatings, 2022, 12, 1261.	2.6	8
13	Biobased Polymer Composites: A Review. Journal of Composites Science, 2022, 6, 255.	3.0	31
14	Material and Environmental Properties of Natural Polymers and Their Composites for Packaging Applications—A Review. Polymers, 2022, 14, 4033.	4.5	11
15	Pharmaceutical and drug delivery applications of pectin and its modified nanocomposites. Heliyon, 2022, 8, e10654.	3.2	26
16	Nano/microencapsulation of plant biocontrol agents by chitosan, alginate, and other important biopolymers as a novel strategy for alleviating plant biotic stresses. International Journal of Biological Macromolecules, 2022, 222, 1589-1604.	7.5	39
17	Biopolymers as alternatives to synthetic polymers in flameâ€retarded polymeric composites: A study of fire and mechanical behaviors. Journal of Vinyl and Additive Technology, 2023, 29, 120-129.	3.4	7
18	Nanotechnological Interventions and Mechanistic Insights into Wound-Healing Events. , 0, , .		O

#	Article	IF	CITATIONS
20	Green Carbon Dots as Additives of Biopolymer Films for Preserving from Oxidation of Oil-Based Products. Antioxidants, 2022, 11, 2193.	5.1	3
21	Preparation and Characterization of Porous Poly(Lactic Acid)/Poly(Butylene Adipate-Co-Terephthalate) (PLA/PBAT) Scaffold with Polydopamine-Assisted Biomineralization for Bone Regeneration. Materials, 2022, 15, 7756.	2.9	4
22	Synthesis of bio-nanocomposites based on Chitosan and Organomodified-Maghniteâ€∢ (Algerian MMT). Nano Structures Nano Objects, 2022, 32, 100925.	3.5	1
23	Biopolymer Waste Management. , 2022, , 1-21.		O
24	Safety Issues, Environmental Impacts, and Health Effects of Biopolymers., 2022, , 1-27.		0
25	Enhanced Functional Properties of Bioplastic Films Using Lignin Nanoparticles from Oil Palm-Processing Residue. Polymers, 2022, 14, 5126.	4.5	7
26	Lignin-Based Nanoparticles as Both Structural and Active Elements in Self-Assembling and Self-Healing Multifunctional Hydrogels for Chronic Wound Management. Pharmaceutics, 2022, 14, 2658.	4. 5	6
27	Biopolymer derived superabsorbent for environmental sustainability: A review. Environmental Quality Management, 2022, 32, 177-185.	1.9	2
28	Sustainable biopolymer soil stabilisation: the effect of microscale chemical characteristics on macroscale mechanical properties. Acta Geotechnica, 2023, 18, 3213-3227.	5.7	5
29	Ovation of biopolymers in conterminous EU members via clustering of biotechnological advances : A mini-compendium. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	0
30	Accurate detection of enzymatic degradation processes of gelatin–alginate microcapsule by 1H NMR spectroscopy: Probing biodegradation mechanism and kinetics. Carbohydrate Polymers, 2023, 304, 120490.	10.2	3
31	Alkali-cellulose/ Polyvinyl alcohol biofilms fabricated with essential clove oil as a novel scented antimicrobial packaging material. Carbohydrate Polymer Technologies and Applications, 2022, , 100273.	2.6	1
32	Recent progress in biobased synthetic textile fibers. Frontiers in Materials, 0, 9, .	2.4	4
33	Sustainable Manufacturing for a Circular Economy. Sustainability, 2022, 14, 17010.	3.2	7
34	Biopolymers for packaging applications: An overview. Packaging Technology and Science, 2023, 36, 229-251.	2.8	10
35	Gelatin and Chitosan as Meat By-Products and Their Recent Applications. Foods, 2023, 12, 60.	4.3	5
36	Polysaccharide-based films reinforced with nanocellulose isolated from raw and bleached cotton. Cellulose, 2023, 30, 1657-1668.	4.9	1
37	Observation of Spectacular hysteresis In Poly(methyl methacrylate) Thin Films: Studies On Charge Storage Properties. Chemical Physics Letters, 2023, , 140317.	2.6	0

3

#	Article	IF	Citations
38	Gum Based Green Nanocomposites and Their Applications. Engineering Materials, 2023, , 295-315.	0.6	2
39	An Overview of Green Bioprocessing of Algae-Derived Biochar and Biopolymers: Synthesis, Preparation, and Potential Applications. Energies, 2023, 16, 791.	3.1	4
40	An overview on recent biomedical applications of biopolymers: Their role in drug delivery systems and comparison of major systems. Journal of Drug Delivery Science and Technology, 2023, 80, 104121.	3.0	9
41	ORR Catalysts Derived from Biopolymers. Catalysts, 2023, 13, 80.	3.5	3
42	Carboxymethyl cellulose-polyvinyl alcohol based materials: A review. Materials Today: Proceedings, 2023, , .	1.8	8
43	Challenges and Issues in Biopolymer Applications. , 2022, , 1-16.		0
44	Synthesis and thermomechanical properties of bioplastics and biocomposites: a systematic review. Journal of Materials Chemistry B, 2023, 11 , 3307-3337.	5.8	8
45	Radiation synthesis and modification of biopolymers and polymeric composites for biomedical applications. Polymers and Polymer Composites, 2023, 31, 096739112311666.	1.9	3
46	Application of plant products in the synthesis and functionalisation of biopolymers. International Journal of Biological Macromolecules, 2023, 237, 124174.	7.5	7
47	Aloe vera silver nanoparticles addition in chitosan films: improvement of physicochemical properties for eco-friendly food packaging material. Journal of Materials Research and Technology, 2023, 24, 1015-1033.	5.8	14
48	Recent advances in biodegradable polymers – Properties, applications and future prospects. European Polymer Journal, 2023, 192, 112068.	5.4	29
49	Chitosan/silica: A hybrid formulation to mitigate phytopathogens. International Journal of Biological Macromolecules, 2023, 239, 124192.	7.5	9
50	Novel 3D printable bio-based and biodegradable poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) microspheres for selective laser sintering applications. Materials Today Sustainability, 2023, 22, 100379.	4.1	1
51	Biopolymers. , 2022, , 1-22.		0
52	Sustainable Biodegradable Biopolymer-Based Nanoparticles for Healthcare Applications. International Journal of Molecular Sciences, 2023, 24, 3188.	4.1	13
53	Antibacterial Aloe vera Based Biocompatible Hydrogel for Use in Dermatological Applications. International Journal of Molecular Sciences, 2023, 24, 3893.	4.1	10
54	Drug Delivery Systems for Localized Cancer Combination Therapy. ACS Applied Bio Materials, 2023, 6, 934-950.	4.6	10
55	Synthesis by Melt-Polymerization of a Novel Series of Bio-Based and Biodegradable Thiophene-Containing Copolyesters with Promising Gas Barrier and High Thermomechanical Properties. Molecules, 2023, 28, 1825.	3.8	4

#	ARTICLE	IF	CITATIONS
56	Chitosan-based drug delivery systems for skin atopic dermatitis: recent advancements and patent trends. Drug Delivery and Translational Research, 2023, 13, 1436-1455.	5.8	6
57	A Systematic Review of Different Classes of Biopolymers and Their Use as Antimicrobial Agents. Russian Journal of Bioorganic Chemistry, 0, , .	1.0	0
58	Polylactic Acid (PLA)., 2022,, 1-33.		0
59	Synthesis of Bio-Based Polyester from Microbial Lipidic Residue Intended for Biomedical Application. International Journal of Molecular Sciences, 2023, 24, 4419.	4.1	3
60	Biosensors in Food and Healthcare Industries: Bio-Coatings Based on Biogenic Nanoparticles and Biopolymers. Coatings, 2023, 13, 486.	2.6	2
61	Biomedical applications of bio-degradable green composites. , 2023, , 55-110.		0
62	A thin biofilm of chitosan as a sorptive phase in the rotating disk sorptive extraction of triclosan and methyl triclosan from water samples. Analytica Chimica Acta, 2023, 1252, 341053.	5.4	2
63	Investigation of Soft Matter Nanomechanics by Atomic Force Microscopy and Optical Tweezers: A Comprehensive Review. Nanomaterials, 2023, 13, 963.	4.1	32
64	Recent trends in nanocomposite packaging films utilising waste generated biopolymers: Industrial symbiosis and its implication in sustainability. IET Nanobiotechnology, 2023, 17, 127-153.	3.8	7
65	Antibody–Biopolymer Conjugates in Oncology: A Review. Molecules, 2023, 28, 2605.	3.8	8
66	Animal sourced biopolymer for mitigating xenobiotics and hazardous materials. ChemistrySelect, 2022, .	1.5	0
67	Chitosan nanoparticles as used against food pathogens. , 2023, , 69-114.		0
68	Characterization and In Vivo Assay of Allantoin-Enriched Pectin Hydrogel for the Treatment of Skin Wounds. International Journal of Molecular Sciences, 2023, 24, 7377.	4.1	3
69	Inspired by nature: Fiber networks functionalized with tannic acid and condensed tannin-rich extracts of Norway spruce bark show antimicrobial efficacy. Frontiers in Bioengineering and Biotechnology, 0, 11 , .	4.1	2
70	Fe3O4@nano-almondshell/Si(CH2)3/2-(1-piperazinyl)ethylamine as an effective magnetite almond shell-based nanocatalyst for the synthesis of dihydropyrano[3,2-c]chromene and tetrahydrobenzo[b]pyran derivatives. Scientific Reports, 2023, 13, .	3.3	2
71	Recent advances in bioinspired sustainable sensing technologies. Nano Structures Nano Objects, 2023, 34, 100974.	3.5	5
72	Development of sustainable biopolymer-based composites for lightweight applications from agricultural waste biomass: A review. Advanced Industrial and Engineering Polymer Research, 2023, 6, 436-450.	4.7	15
73	Electrochemistry Study of Bio-Based Composite Biopolymer Electrolyte—Starch/Cardol. Polymers, 2023, 15, 1994.	4.5	0

#	Article	IF	CITATIONS
74	A Comparative Study of the Properties of Gelatin (Porcine and Bovine)-Based Edible Films Loaded with Spearmint Essential Oil. Biomimetics, 2023, 8, 172.	3.3	5
75	Challenges and Issues in Biopolymer Applications. , 2023, , 1497-1511.		0
76	Safety Issues, Environmental Impacts, and Health Effects of Biopolymers., 2023, , 1469-1495.		0
77	Polylactic Acid (PLA)., 2023, , 1195-1227.		0
78	Biopolymer Waste Management. , 2023, , 1447-1467.		0
79	Biopolymers. , 2023, , 3-24.		0
80	Sustainable Approach of Functional Biomaterials–Tissue Engineering for Skin Burn Treatment: A Comprehensive Review. Pharmaceuticals, 2023, 16, 701.	3.8	5
81	Synthesis and Characterization of a New Alginate/Carrageenan Crosslinked Biopolymer and Study of the Antibacterial, Antioxidant, and Anticancer Performance of Its Mn(II), Fe(III), Ni(II), and Cu(II) Polymeric Complexes. Polymers, 2023, 15, 2511.	4.5	4
82	Development of Chitosan Green Composites Reinforced with Hemp Fibers: Study of Mechanical and Barrier Properties for Packaging Application. Molecules, 2023, 28, 4488.	3.8	1
83	The versatile world of cellulose-based materials in healthcare: From production to applications. Industrial Crops and Products, 2023, 201, 116929.	5.2	8
84	Formation and characterization of novel antimicrobial chitosan/Moringa oleifera gum/nano silicon dioxide nanocomposite film for active food packaging. Journal of Materials Research, 2023, 38, 3372-3382.	2.6	1
85	A Brief Review of Sustainable Composites for Food Packaging Applications. Management and Industrial Engineering, 2023, , 119-130.	0.4	0
87	Chitosan/In situ Gelatin-Mg3Si2O5(OH)4 Nanocomposites via Sol–Gel Method: Preparation, Characterization and Antimicrobial Properties. Arabian Journal for Science and Engineering, 2024, 49, 1015-1024.	3.0	0
88	Multifunctional Application of Biopolymers and Biomaterials. International Journal of Molecular Sciences, 2023, 24, 10372.	4.1	1
89	Insights into the Adsorption Properties of Mixed Matrix Membranes (Pebax) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Treatment Drugs Remdesivir and Nirmatrelvir: An In Silico Study. ACS Applied Materials & Samp; Interfaces, 2023, 15, 31185-31205.	192 Td (1 8.0	.657- <i>g</i> 11
90	A comparative study between two carboxymethylated polysaccharides/protein electrostatic and	7. 5	1
91	Influence of Reduction with NaBH4 and HCl in Obtaining Amino Derivatives of Cashew Gum and Cytotoxic Profile. Polymers, 2023, 15, 2856.	4.5	0
92	Preparation of Surgical Thread from a Bioplastic Based on Nopal Mucilage. Polymers, 2023, 15, 2112.	4.5	0

#	Article	IF	CITATIONS
93	Food biopolymer behaviors in the digestive tract: implications for nutrient delivery. Critical Reviews in Food Science and Nutrition, 0 , 1 -19.	10.3	2
94	A Comprehensive Review on Cuâ€Catalysed Aerobic Oxidation of Amines to Imines. ChemistrySelect, 2023, 8, .	1.5	1
95	Carbon Quantum Dots Based on Marine Polysaccharides: Types, Synthesis, and Applications. Marine Drugs, 2023, 21, 338.	4.6	4
96	Effect of Biopolymer Dip-Coating Pretreatments as a Non-Thermal Green Technology on Physicochemical Characteristics, Drying, and Rehydration Kinetics of Santa Maria Pears. Foods, 2023, 12, 2466.	4.3	1
97	Recent Developments in Edible Films and Coatings for Fruits and Vegetables. Coatings, 2023, 13, 1177.	2.6	6
98	Innovative Materials with Possible Applications in the Wound Dressings Field: Alginate-Based Films with Moringa oleifera Extract. Gels, 2023, 9, 560.	4.5	0
99	A Review on the Development of Biopolymer Nanocomposite-Based Triboelectric Nanogenerators (Bio-TENGs). ACS Applied Electronic Materials, 2023, 5, 3546-3559.	4.3	3
101	Production of polyhydroxyalkanoates as a feasible alternative for an integrated multiproduct lignocellulosic biorefinery. Bioresource Technology, 2023, 386, 129493.	9.6	2
102	Fabrication of bioactive nanocomposites from chitosan, cress mucilage, and selenium nanoparticles with powerful antibacterial and anticancerous actions. Frontiers in Microbiology, 0, 14 , .	3.5	0
103	Marine Microbial Polysaccharides: An Untapped Resource for Biotechnological Applications. Marine Drugs, 2023, 21, 420.	4.6	3
104	Bilayer Polylactic Acid and Chitosan/Gelatin Film Containing Epigallocatechin Gallate Prepared through Solvent Casting and Electrospinning: Properties, Bioactivities and Release Kinetics. Journal of Polymers and the Environment, 0, , .	5.0	0
105	Surface-Modified Biobased Polymeric Nanoparticles for Dual Delivery of Doxorubicin and Gefitinib in Glioma Cell Lines. ACS Omega, 2023, 8, 28165-28184.	3.5	2
106	Effect of water on the dissolution of flax fiber bundles in the ionic liquid 1-ethyl-3-methylimidazolium acetate. Cellulose, 2023, 30, 7619-7632.	4.9	0
108	Current trends in biopolymers for food packaging: a review. Frontiers in Sustainable Food Systems, 0, 7, .	3.9	8
109	Pullulan-based films impregnated with silver nanoparticles from the Fusarium culmorum strain JTW1 for potential applications in the food industry and medicine. Frontiers in Bioengineering and Biotechnology, $0,11,.$	4.1	0
110	Preparation and 3D printability study of bio-based PBAT powder for selective laser sintering additive manufacturing. Materials Today Chemistry, 2023, 33, 101687.	3.5	1
111	Polysaccharides Based Biosensors for Medical Applications: Prospective and Future Aspects. Starch/Staerke, 2023, 75, .	2.1	0
113	Waste and their polysaccharides: Are they worth bioprocessing?. Bioresource Technology Reports, 2023, 24, 101594.	2.7	2

#	ARTICLE	IF	CITATIONS
114	Substantial utilization of food wastes for existence of nanocomposite polymers in sustainable development: a review. Environment, Development and Sustainability, 0 , , .	5.0	0
115	Bio-sourced and biodegradable materials for membrane fabrication. , 2023, , 169-208.		0
116	Future perspectives of biopolymeric industry. ChemistrySelect, 2023, .	1.5	0
117	Biopolymeric conjugation with food additives. ChemistrySelect, 2023, .	1.5	O
118	Sustainable polymers targeted at the surgical and otolaryngological applications: Circularity and future. Polymers From Renewable Resources, 0, , .	1.3	0
119	Development of Composite Sponge Scaffolds Based on Carrageenan (CRG) and Cerium Oxide Nanoparticles (CeO2 NPs) for Hemostatic Applications. Biomimetics, 2023, 8, 409.	3.3	0
120	Biodegradable Water-Soluble Matrix for Immobilization of Biocidal 4-Hexylresorcinol. International Journal of Molecular Sciences, 2023, 24, 14717.	4.1	0
121	The Green Approach-Based Biomaterials for Tissue Engineering Application. , 2023, , 27-47.		O
122	Influence of betalain natural dye from red beet in gum acacia biopolymer: optical and electrical perspective. Journal of Polymer Engineering, 2023, 43, 783-790.	1.4	0
123	A Comprehensive Mini-Review on Lignin-Based Nanomaterials for Food Applications: Systemic Advancement and Future Trends. Molecules, 2023, 28, 6470.	3.8	0
124	Biopolymers Synthesized by Microalgae Grown in Wastewater: a Technological Survey. Bioenergy Research, 2024, 17, 73-86.	3.9	0
125	Biodegradable Conductive Layers Based on a Biopolymer Polyhydroxybutyrate/Polyhydroxyvalerate and Graphene Nanoplatelets Deposited by Spray-Coating Technique. Coatings, 2023, 13, 1791.	2.6	0
126	Effect of Edible Coating Made from Arrowroot Flour and Kaffir Lime Leaf Essential Oil on the Quality Changes of Pork Sausage under Prolonged Refrigerated Storage. Foods, 2023, 12, 3691.	4.3	1
127	Materials Engineering to Help Pest Control: A Narrative Overview of Biopolymer-Based Entomopathogenic Fungi Formulations. Journal of Fungi (Basel, Switzerland), 2023, 9, 918.	3.5	1
128	Consumer Studies Focus on Prebiotics, Probiotics, and Synbiotics in Food Packaging: a Review., 2023, 1, 13-29.		2
129	Natural and Semi-natural Polymers. AAPS Introductions in the Pharmaceutical Sciences, 2023, , 55-70.	0.1	0
130	In Silico Study of Enzymatic Degradation of Bioplastic by Microalgae: An Outlook on Microplastic Environmental Impact Assessment, Challenges, and Opportunities. Molecular Biotechnology, 0, , .	2.4	0
131	Evaluation of betanin-encapsulated biopolymeric nanoparticles for antitumor activity via PI3K/Akt/mTOR signaling pathway. Arabian Journal of Chemistry, 2023, 16, 105323.	4.9	1

#	ARTICLE	IF	CITATIONS
132	Development of microfibrillated cellulose-based films from globe artichokes (Cynara scolymus). Bioresource Technology Reports, 2023, 24, 101656.	2.7	0
133	Smart Packaging Based on Polylactic Acid: The Effects of Antibacterial and Antioxidant Agents from Natural Extracts on Physical–Mechanical Properties, Colony Reduction, Perishable Food Shelf Life, and Future Prospective. Polymers, 2023, 15, 4103.	4.5	3
134	From Linear to Nets: Multiconfiguration Polymer Structure Generation with PolyFlin. Journal of Chemical Information and Modeling, 0 , , .	5.4	0
135	Combining ZnPc-liposomes and chitosan on a hybrid matrix for enhanced photodynamic therapy. International Journal of Biological Macromolecules, 2023, , 127544.	7.5	0
136	Recent trends in polysaccharide-based biodegradable polymers for smart food packaging industry. International Journal of Biological Macromolecules, 2023, 253, 127524.	7.5	2
137	Innovative Bioactive Nanofibrous Materials Combining Medicinal and Aromatic Plant Extracts and Electrospinning Method. Membranes, 2023, 13, 840.	3.0	2
138	Whey: A Potential Source of Bacterial Cellulose and Xanthan Gum. , 2023, , 83-102.		0
139	Sustainable natural biopolymers for biomedical applications. Journal of Thermoplastic Composite Materials, 0, , .	4.2	1
140	Electrospun Nanofibers: Shaping the Future of Controlled and Responsive Drug Delivery. Materials, 2023, 16, 7062.	2.9	0
141	Sustainable formulation polymers for home, beauty and personal care: challenges and opportunities. Chemical Science, 2023, 14, 12926-12940.	7.4	2
142	Synthesis and Characterization of Polymer-Based Membranes for Methotrexate Drug Delivery. Polymers, 2023, 15, 4325.	4.5	0
143	Nanoparticles, nanofibrils, and tissues as novel carriers in cosmetic dermatology. Advances in Chemical Engineering, 2023, , 257-287.	0.9	0
144	Production and characterization of starch-lignin based materials: A review. Biotechnology Advances, 2024, 70, 108281.	11.7	0
145	Recent progress in the conversion of agricultural waste into functional materials. Biomass Conversion and Biorefinery, 0, , .	4.6	1
146	Applications of biodegradable carboxymethyl cellulose-based composites. Results in Materials, 2023, 20, 100481.	1.8	0
147	Elaboration of Nanostructured Levan-Based Colloid System as a Biological Alternative with Antimicrobial Activity for Applications in the Management of Pathogenic Microorganisms. Nanomaterials, 2023, 13, 2969.	4.1	0
148	The emerging potential of green-synthesized nanoparticles as colorimetric sensors for ammonia detection. Microchemical Journal, 2024, 196, 109646.	4.5	0
149	Advanced pectin-based films: Enhancing antioxidant, antibacterial, UV barrier, and physicochemical properties upon oligomeric limonene derivative incorporation. Food Hydrocolloids, 2024, 149, 109558.	10.7	0

#	Article	IF	CITATIONS
150	Editorial on Special Issue "Recent Developments in Food Gels― Gels, 2023, 9, 899.	4.5	0
151	Polycaprolactone Composites/Blends and Their Applications Especially in Water Treatment. ChemEngineering, 2023, 7, 104.	2.4	1
152	Progress in sustainable applications of polymers and biopolymers. , 2023, , .		0
153	A sustainable and eco-friendly approach for environmental and energy management using biopolymers chitosan, lignin and cellulose — A review. International Journal of Biological Macromolecules, 2024, 257, 128550.	7.5	O
154	Effects of using collagen and aloe vera grafted fibroin scaffolds on osteogenic differentiation of rat bone marrow mesenchymal stem cells in SBF-enriched cell culture medium. Biomedical Materials (Bristol), O, , .	3.3	1
155	Organic and Biogenic Nanocarriers as Bio-Friendly Systems for Bioactive Compounds' Delivery: State-of-the Art and Challenges. Materials, 2023, 16, 7550.	2.9	2
156	Production methods for bacterial biomaterials: A review. Materials Today Sustainability, 2024, 25, 100623.	4.1	0
157	BİYOMEDİKAL UYGULAMALARDA KULLANILAN MİKROBİYAL BİYOPOLİMERLERE BAKIŞ. Eskişehir Osm Üniversitesi Mýhendislik Ve Mimarlık Fakültesi Dergisi, 0, , .	nangazi O.2	O
158	Magnetic sorbents: Synthetic pathways and application in dispersive (micro)extraction techniques for bioanalysis. TrAC - Trends in Analytical Chemistry, 2024, 171, 117486.	11.4	0
159	Multilevel Reset Dependent Set of a Biodegradable Memristor with Physically Transient. Advanced Science, 2024, 11 , .	11.2	O
160	Application of Biopolymers as Sustainable Cladding Materials: A Review. Sustainability, 2024, 16, 27.	3.2	0
161	Electrical, Thermal, and Structural Characterization of Plant-Based 3D Printed Gel Polymer Electrolytes for Future Electrochemical Applications. Polymers, 2023, 15, 4713.	4.5	1
162	The development of Biomaterials in Medical Applications: A review. Journal of Physical Chemistry and Functional Materials:, 2023, 6, 27-39.	1.4	0
163	Applications of Bioengineered Polymer in the Field of Nano-Based Drug Delivery. ACS Omega, 2024, 9, 81-96.	3.5	1
164	Recent progress on UV-light barrier food packaging films – a systematic review. Innovative Food Science and Emerging Technologies, 2024, 91, 103550.	5.6	2
165	A review of emerging bio-based constituents for natural fiber polymer composites. Journal of the Textile Institute, 0, , 1-27.	1.9	O
166	Recent advances in production of sustainable and biodegradable polymers from agro-food waste: Applications in tissue engineering and regenerative medicines. International Journal of Biological Macromolecules, 2024, 259, 129129.	7.5	2
167	A Step toward Sustainability: A Review of Biodegradable Packaging in the Pharmaceutical Industry. Matrix Science Pharma, 2023, 7, 73-84.	0.1	O

#	Article	IF	Citations
168	Chitin-Derived Silver Nanoparticles for Enhanced Food Preservation: Synthesis, Characterization, and Antimicrobial Potential. Micro, 2023, 3, 912-929.	2.0	0
169	Chemical/green synthesized cobalt/copper-doped α-Fe2O3 nanoparticles: Potential for environmental remediation. Journal of Materials Research, 2024, 39, 836-849.	2.6	0
170	Potential of PHA (Polyhydroxyalkanoates) Polymers as Packaging Materials: From Concept to Commercialization., 2023,, 67-100.		0
171	Sustainable and green membranes for chemical separations: A review. Separation and Purification Technology, 2024, 336, 126271.	7.9	0
172	Biogenic Nanomaterials: Synthesis, Characterization, and Applications. Environmental Science and Engineering, 2024, , 13-43.	0.2	1
173	Magnetic decorated 5-sulfosalicylic acid grafted to chitosan: A solid acid organocatalyst for green synthesis of quinazoline derivatives. Carbohydrate Polymer Technologies and Applications, 2024, 7, 100420.	2.6	0
174	Anthocyanin-Loaded Polymers as Promising Nature-Based, Responsive, and Bioactive Materials. Polymers, 2024, 16, 163.	4.5	1
175	Emerging trends in biomaterials for sustainable food packaging: A comprehensive review. Heliyon, 2024, 10, e24122.	3.2	1
177	Bio-based conductive polyurethane composites derived from renewable castor oil with enhanced self-healing ability for flexible supercapacitors. Journal of Materials Science and Technology, 2024, 188, 44-61.	10.7	2
178	Advances, Synergy, and Perspectives of Machine Learning and Biobased Polymers for Energy, Fuels, and Biochemicals for a Sustainable Future. Energy & Energy & 1593-1617.	5.1	0
179	Exploring the potentiality of top-fermenting surplus yeast as a biopolymer for leather fabrication based on consumer expectations. AIP Conference Proceedings, 2024, , .	0.4	0
181	Additive Manufacturing Applications in Biosensors Technologies. Biosensors, 2024, 14, 60.	4.7	0
182	Smart Tissue Carriers for Innovative Cosmeceuticals and Nutraceuticals. Cosmetics, 2024, 11, 20.	3.3	0
183	Biodegradable Materials-Based Sensors. , 2024, , 1-34.		0
184	Polysaccharide-based hydrogels for microencapsulation of bioactive compounds: A review. Journal of Agriculture and Food Research, 2024, 15, 101038.	2.5	0
185	Biopolymers as Support Materials for Photocatalysts During Wastewater Treatment. , 2024, , .		0
186	Study of properties of guar gum and its use in development of packaging film. Materials Today: Proceedings, 2024, , .	1.8	0
187	Metal and metal oxides nanoparticles as nanofillers for biodegradable polymers. ChemPhysChem, 0, , .	2.1	0

#	Article	IF	CITATIONS
189	Engineered Bioâ€Based Hydrogels for Cancer Immunotherapy. Advanced Materials, 0, , .	21.0	0
190	Polymer-supported nanomaterials for photodegradation: Unraveling the methylene blue menace. Energy Conversion and Management: X, 2024, 22, 100547.	1.6	0
191	The global burden of plastics in oral health: prospects for circularity, sustainable materials development and practice., 2024, 2, 881-902.		0
192	Agricultural waste and mycelium derived biocomposite materials: A review. AIP Conference Proceedings, 2024, , .	0.4	0
193	Polymeric films of corn starch enhance the lethal effects of thymol and carvacrol terpenes upon Rhipicephalus microplus ticks. Veterinary Parasitology, 2024, 327, 110149.	1.8	0
194	Biodegradable Polymers in Veterinary Medicine—A Review. Molecules, 2024, 29, 883.	3.8	0
195	Multi-Attribute Decision Making: Parametric Optimization and Modeling of the FDM Manufacturing Process Using PLA/Wood Biocomposites. Materials, 2024, 17, 924.	2.9	0
196	Production of Micellar Structures From Medicinal Mushrooms. , 0, , .		0
197	Constant-pH Simulations of a Coarse-Grained Model of Polyfunctional Weak Charged Biopolymers. Biophysica, 2024, 4, 107-127.	1.4	0
198	Agar aerogel powder particles for future life science applications: fabrication and investigations on swelling behavior and cell compatibility. Polymer Bulletin, 0, , .	3.3	0
199	Chitosan-Based Biomaterial in Wound Healing: A Review. Cureus, 2024, , .	0.5	0
200	Dispatching Biocompatible Polymers toward Antimicrobial Applications. , 0, , .		0
201	Functionalization Methods of Starch and Its Derivatives: From Old Limitations to New Possibilities. Polymers, 2024, 16, 597.	4.5	0
202	Enhancing the mechanical and barrier properties of biobased polyester incorporated with carboxylated cellulose nanofibers. Materials Today Communications, 2024, 38, 108538.	1.9	0
203	Revolutionizing tropical fruits preservation: Emerging edible coating technologies. International Journal of Biological Macromolecules, 2024, 264, 130682.	7.5	0
204	A preface to the chitosan—biopolymer, its origin, and properties. , 2024, , 3-23.		0
205	Bringing innovative wound care polymer materials to the market: Challenges, developments, and new trends. Advanced Drug Delivery Reviews, 2024, 207, 115217.	13.7	0
206	Nano/Micro-Structural Supramolecular Biopolymers: Innovative Networks with the Boundless Potential in Sustainable Agriculture. Nano-Micro Letters, 2024, 16, .	27.0	O

#	Article	IF	CITATIONS
207	Nanotechnology Approaches for the Remediation of Agricultural Polluted Soils. ACS Omega, 2024, 9, 13522-13533.	3.5	0
208	Techniques, applications and prospects of polysaccharide and protein based biopolymer coatings: A review. International Journal of Biological Macromolecules, 2024, 266, 131104.	7.5	0
209	Atomistic Simulations for Mechanical Behaviour of Natural Biopolymers for Material Design. , 2024, , 467-476.		0
210	Sustainable Production of Carboxymethyl Cellulose: A Biopolymer Alternative from Sugarcane (Saccharum officinarum L.) Leaves. Sustainability, 2024, 16, 2352.	3.2	0
211	Exploring Biopolymer for Food and Pharmaceuticals Application in the Circular Bioeconomy: An Agro-Food Waste-to-Wealth Approach. Waste and Biomass Valorization, 0, , .	3.4	0
212	Quaternization of cassava starch and determination of antimicrobial activity against bacteria and coronavirus. Carbohydrate Research, 2024, 538, 109098.	2.3	0
213	Structure, Properties, and Recent Developments in Polysaccharide- and Aliphatic Polyester-Based Packaging—A Review. Journal of Composites Science, 2024, 8, 114.	3.0	0
214	Aplicações biotecnológicas e propriedades farmacológicas da goma guar com ênfase na atividade anticolinesterásica: uma prospecçÁ£o cientÃfica e tecnológica. Revista Caderno Pedagógico, 2024, 21, e3298.	0.0	0