

# Electrospinning: A novel nano-encapsulation approach

Trends in Food Science and Technology

70, 56-68

DOI: [10.1016/j.tifs.2017.10.009](https://doi.org/10.1016/j.tifs.2017.10.009)

Citation Report

#	ARTICLE	IF	CITATIONS
1	A colon-specific delivery system for quercetin with enhanced cancer prevention based on co-axial electrospinning. Food and Function, 2018, 9, 5999-6009.	4.6	38
2	Electrospinning Cargo-Containing Polyelectrolyte Complex Fibers: Correlating Molecular Interactions to Complex Coacervate Phase Behavior and Fiber Formation. Macromolecules, 2018, 51, 8821-8832.	4.8	28
3	Release kinetics of rosemary (Rosmarinus officinalis) polyphenols from polyvinyl alcohol (PVA) electrospun nanofibers in several food simulants. Food Packaging and Shelf Life, 2018, 18, 42-50.	7.5	79
4	Nanoencapsulation techniques for compounds and products with antioxidant and antimicrobial activity - A critical view. European Journal of Medicinal Chemistry, 2018, 157, 1326-1345.	5.5	108
5	Electrospun characteristics of gallic acid-loaded poly vinyl alcohol fibers: Release characteristics and antioxidant properties. Journal of Science: Advanced Materials and Devices, 2018, 3, 175-180.	3.1	11
6	Modifying an Active Compound's Release Kinetic Using a Supercritical Impregnation Process to Incorporate an Active Agent into PLA Electrospun Mats. Polymers, 2018, 10, 479.	4.5	22
7	Preparation and Characterization of Electrospun Colon-Specific Delivery System for Quercetin and Its Antiproliferative Effect on Cancer Cells. Journal of Agricultural and Food Chemistry, 2018, 66, 11550-11559.	5.2	34
8	Emulsion electrospinning: Fundamentals, food applications and prospects. Trends in Food Science and Technology, 2018, 80, 175-186.	15.1	184
9	Application of different nanocarriers for encapsulation of curcumin. Critical Reviews in Food Science and Nutrition, 2019, 59, 3468-3497.	10.3	161
10	Encapsulation of tomato peel extract into nanofibers and its application in model food. Journal of Food Processing and Preservation, 2019, 43, e14090.	2.0	8
11	Encapsulation and Stabilization of $\alpha$ -Lipoic Acid in Cyclodextrin Inclusion Complex Electrospun Nanofibers: Antioxidant and Fast-Dissolving $\alpha$ -Lipoic Acid/Cyclodextrin Nanofibrous Webs. Journal of Agricultural and Food Chemistry, 2019, 67, 13093-13107.	5.2	34
12	Encapsulation of Bioactive Ingredients by Extrusion with Vibrating Technology: Advantages and Challenges. Food and Bioprocess Technology, 2019, 12, 1472-1486.	4.7	26
13	Fabrication of Electrospun Probiotic Functionalized Nanocomposite Scaffolds for Infection Control and Dermal Burn Healing in a Mice Model. ACS Biomaterials Science and Engineering, 2019, 5, 6109-6116.	5.2	29
14	Application of different biopolymers for nanoencapsulation of antioxidants via electrohydrodynamic processes. Food Hydrocolloids, 2019, 97, 105170.	10.7	129
15	Nanostructures of silk fibroin for encapsulation of food ingredients. , 2019, , 305-331.		2
16	Nanostructures of chitosan for encapsulation of food ingredients. , 2019, , 381-418.		11
17	Pectin polymers as wall materials for the nano-encapsulation of bioactive compounds. Trends in Food Science and Technology, 2019, 90, 35-46.	15.1	183
18	Nanoencapsulation of Hydrophobic Food Flavor Ingredients and Their Cyclodextrin Inclusion Complexes. Food and Bioprocess Technology, 2019, 12, 1157-1173.	4.7	29

#	ARTICLE	IF	CITATIONS
19	Improvement in the Oxidative Stability of Flaxseed Oil Using an Edible Guar Gum-Tannic Acid Nanofibrous Mat. European Journal of Lipid Science and Technology, 2019, 121, 1800438.	1.5	7
20	Nano-scale polysaccharide materials in food and agricultural applications. Advances in Food and Nutrition Research, 2019, 88, 85-128.	3.0	19
21	Biocompatible and Biodegradable Electrospun Nanofibrous Membranes Loaded with Grape Seed Extract for Wound Dressing Application. Journal of Nanomaterials, 2019, 2019, 1-11.	2.7	45
22	Thermal properties of electrospun polyvinylpyrrolidone/titanium tetraisopropoxide composite nanofibers. Journal of Thermal Analysis and Calorimetry, 2019, 137, 1249-1254.	3.6	21
23	Production of food bioactive-loaded nanofibers by electrospinning. , 2019, , 31-105.		4
24	A Simple Homemade Electrospinning for Nanoscale Fibres Production. E3S Web of Conferences, 2019, 125, 12001.	0.5	1
25	Formation of PA12 fibres via melt electrospinning process: parameter analysis and optimisation. Journal of Polymer Engineering, 2019, 40, 49-56.	1.4	2
26	Micro- and Nanostructures of Agave Fructans to Stabilize Compounds of High Biological Value via Electrohydrodynamic Processing. Nanomaterials, 2019, 9, 1659.	4.1	16
27	Multifunctional Cellulose Ester Containing Hindered Phenol Groups with Free-Radical-Scavenging and UV-Resistant Activities. ACS Applied Materials & Interfaces, 2019, 11, 4302-4310.	8.0	33
28	Use of electrospinning technique to produce nanofibres for food industries: A perspective from regulations to characterisations. Trends in Food Science and Technology, 2019, 85, 92-106.	15.1	79
29	Biomedical applications of chitosan electrospun nanofibers as a green polymer – Review. Carbohydrate Polymers, 2019, 207, 588-600.	10.2	286
30	Functional and Engineered Colloids from Edible Materials for Emerging Applications in Designing the Food of the Future. Advanced Functional Materials, 2020, 30, 1806809.	14.9	87
31	Recent advances of electrosprayed particles as encapsulation systems of bioactives for food application. Food Hydrocolloids, 2020, 99, 105376.	10.7	80
32	Electrospinning of zein-ethyl cellulose hybrid nanofibers with improved water resistance for food preservation. International Journal of Biological Macromolecules, 2020, 142, 592-599.	7.5	107
33	Role of Encapsulation in Functional Beverages. , 2020, , 195-232.		6
34	Spray drying strategy for encapsulation of bioactive peptide powders for food applications. Advanced Powder Technology, 2020, 31, 409-415.	4.1	53
35	A fibronectin-coated gold nanostructure composite for electrochemical detection of effects of curcumin-carrying nanoliposomes on human stomach cancer cells. Analyst, The, 2020, 145, 675-684.	3.5	20
36	Gelatin/zein fiber mats encapsulated with resveratrol: Kinetics, antibacterial activity and application for pork preservation. Food Hydrocolloids, 2020, 101, 105577.	10.7	62

#	ARTICLE	IF	CITATIONS
37	A novel route for double-layered encapsulation of probiotics with improved viability under adverse conditions. Food Chemistry, 2020, 310, 125977.	8.2	81
38	Preparation and characterization of pea protein isolate-pullulan blend electrospun nanofiber films. International Journal of Biological Macromolecules, 2020, 157, 641-647.	7.5	54
39	Quality by Design Micro-Engineering Optimisation of NSAID-Loaded Electrospun Fibrous Patches. Pharmaceutics, 2020, 12, 2.	4.5	5
40	Design of active electrospun mats with single and core-shell structures to achieve different curcumin release kinetics. Journal of Food Engineering, 2020, 273, 109900.	5.2	29
41	Bioactive peptides from food fermentation: A comprehensive review of their sources, bioactivities, applications, and future development. Comprehensive Reviews in Food Science and Food Safety, 2020, 19, 3825-3885.	11.7	112
42	Importance of electrospun chitosan-based nanoscale materials for seafood products safety. , 2020, , 195-223.		6
43	Cellulose acetate electrospun nanofibers encapsulating Lemon Myrtle essential oil as active agent with potent and sustainable antimicrobial activity. Reactive and Functional Polymers, 2020, 157, 104769.	4.1	45
44	Fabrication and characterization of cinnamaldehyde loaded polysaccharide composite nanofiber film as potential antimicrobial packaging material. Food Packaging and Shelf Life, 2020, 26, 100600.	7.5	35
45	Photostability and characterization of spray-dried maltodextrin powders loaded with Sida rhombifolia extract. Biocatalysis and Agricultural Biotechnology, 2020, 27, 101716.	3.1	6
46	Polymeric carriers for enhanced delivery of probiotics. Advanced Drug Delivery Reviews, 2020, 161-162, 1-21.	13.7	66
47	Design of polymer-free Vitamin-A acetate/cyclodextrin nanofibrous webs: antioxidant and fast-dissolving properties. Food and Function, 2020, 11, 7626-7637.	4.6	26
48	A comprehensive review on the nanocomposites loaded with chitosan nanoparticles for food packaging. Critical Reviews in Food Science and Nutrition, 2022, 62, 1383-1416.	10.3	131
49	Patterned nanofiber air filters with high optical transparency, robust mechanical strength, and effective PM <sub>2.5</sub> capture capability. RSC Advances, 2020, 10, 20155-20161.	3.6	31
50	Colon-targeted delivery systems for nutraceuticals: A review of current vehicles, evaluation methods and future prospects. Trends in Food Science and Technology, 2020, 102, 203-222.	15.1	53
51	Characterization of electrospun polylactide nanofibers modified via atom transfer radical polymerization. Journal of Industrial Textiles, 2020, , 152808372093038.	2.4	1
52	Nanosystems of plant-based pigments and its relationship with oxidative stress. Food and Chemical Toxicology, 2020, 143, 111433.	3.6	11
53	A review on electrospun polymeric nanofibers: Production parameters and potential applications. Polymer Testing, 2020, 90, 106647.	4.8	183
54	Vascularized silk electrospun fiber for promoting oral mucosa regeneration. NPG Asia Materials, 2020, 12, .	7.9	17

#	ARTICLE	IF	CITATIONS
55	Encapsulation of Bioactive Compounds from Aloe Vera Agrowastes in Electrospun Poly (Ethylene) Terephthalate (PET) Nanofibers. <i>Journal of Food Engineering</i> , 2020, 270, 109502.	4.5	40
56	A Novel Profiled Multi-Pin Electrospinning System for Nanofiber Production and Encapsulation of Nanoparticles into Nanofibers. <i>Scientific Reports</i> , 2020, 10, 4302.	3.3	56
57	Natural anti-aging skincare: role and potential. <i>Biogerontology</i> , 2020, 21, 293-310.	3.9	77
58	Electrospun nanofibers for biomedical applications. <i>Journal of Electrostatics</i> , 2020, 240, 103301.		16
59	Electrospraying Technique and Its Recent Application Advances for Biological Macromolecule Encapsulation of Food Bioactive Substances. <i>Food Reviews International</i> , 2022, 38, 566-588.	8.4	26
60	Needleless electrospun carboxymethyl cellulose/polyethylene oxide mats with medicinal plant extracts for advanced wound care applications. <i>Cellulose</i> , 2020, 27, 4487-4508.	4.9	40
61	Electrospun protein fibers loaded with yerba mate extract for bioactive release in food packaging. <i>Journal of the Science of Food and Agriculture</i> , 2020, 100, 3341-3350.	3.5	32
62	Electrospun Eco-Friendly Materials Based on Poly(3-hydroxybutyrate) (PHB) and TiO <sub>2</sub> with Antifungal Activity Prospective for Esca Treatment. <i>Polymers</i> , 2020, 12, 1384.	4.5	13
63	Enhancing physical properties of chitosan/pullulan electrospinning nanofibers via green crosslinking strategies. <i>Carbohydrate Polymers</i> , 2020, 247, 116734.	10.2	64
64	Alginate-based bionanocomposites. <i>Journal of Materials Science: Materials in Medicine</i> , 2020, 31, 173-205.		1
65	Electrospinning of nanofibers: Potentials and perspectives for active food packaging. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2020, 19, 479-502.	11.7	250
66	Free and encapsulated orange essential oil into a $\beta$ -cyclodextrin inclusion complex and zein to delay fungal spoilage in cakes. <i>Journal of Food Processing and Preservation</i> , 2020, 44, e14411.	2.0	35
67	Influence of high voltage polarity in multi-pin upward electrospinning system on the Fiber morphology of poly (vinyl alcohol). <i>Journal of Polymer Research</i> , 2020, 27, 1.	2.4	5
68	Encapsulation of phycocyanin by prebiotics and polysaccharides-based electrospun fibers and improved colon cancer prevention effects. <i>International Journal of Biological Macromolecules</i> , 2020, 149, 672-681.	7.5	38
69	Development and Characterization of Electrospun Nanostructures Using Polyethylene Oxide: Potential Means for Incorporation of Bioactive Compounds. <i>Colloids and Interfaces</i> , 2020, 4, 14.	2.1	11
70	Electrospinning approach for nanoencapsulation of bioactive compounds; recent advances and innovations. <i>Trends in Food Science and Technology</i> , 2020, 100, 190-209.	15.1	96
71	Overcoming restrictions of bioactive compounds biological effects in food using nanometer-sized structures. <i>Food Hydrocolloids</i> , 2020, 107, 105939.	10.7	41
72	Electrospinning of ultra-thin membranes with incorporation of antimicrobial agents for applications in active packaging: a review. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2021, 70, 1053-1076.	3.4	12

#	ARTICLE	IF	CITATIONS
73	Inulin added electrospun composite nanofibres by electrospinning for the encapsulation of probiotics: characterisation and assessment of viability during storage and simulated gastrointestinal digestion. International Journal of Food Science and Technology, 2021, 56, 927-935.	2.7	25
74	Encapsulation in food industry with emerging electrohydrodynamic techniques: Electrospinning and electrospraying â€” A review. Food Chemistry, 2021, 339, 127850.	8.2	121
75	Bioactive electrospun scaffolds for wound healing applications: A comprehensive review. Polymer Testing, 2021, 93, 106952.	4.8	55
76	Electrospun ultrafine fibers for advanced face masks. Materials Science and Engineering Reports, 2021, 143, 100594.	31.8	120
77	Nanoencapsulation: Prospects in Edible Food Packaging. Materials Horizons, 2021, , 259-272.	0.6	1
78	Advances in Biosensors Based on Electrospun Micro/Nanomaterials for Food Quality Control and Safety. Concepts and Strategies in Plant Sciences, 2021, , 243-274.	0.5	2
79	Enzymatic Production of Novel European Eel Proteins Hydrolysates: Biological Activities, Techno-Functional Properties and Maltodextrin-Hydrolysates Efficient Electrosprayability. International Journal of Peptide Research and Therapeutics, 2021, 27, 1129-1148.	1.9	2
80	Novel oxygen-generation from electrospun nanofibrous scaffolds with anticancer properties: synthesis of PMMA-conjugate PVPâ€”H <sub>2</sub> O <sub>2</sub> nanofibers, characterization, and <i>in vitro</i> bio-evaluation tests. RSC Advances, 2021, 11, 19978-19991.	3.6	8
81	Microencapsulation and co-encapsulation of bioactive compounds for application in food: challenges and perspectives. Ciencia Rural, 2021, 51, .	0.5	11
82	Effective Probiotic Delivery: Current Trends and Future Perspectives. , 2021, , 497-517.		0
83	Electrospun biosystems made of nylon 6 and laccase and its application in dyes removal. Environmental Technology and Innovation, 2021, 21, 101332.	6.1	18
84	Electrospinning and cyclodextrin inclusion complexes: An emerging technological combination for developing novel active food packaging materials. Critical Reviews in Food Science and Nutrition, 2022, 62, 5495-5510.	10.3	28
85	Reduced Graphene Oxide (rGO)-Loaded Metal-Oxide Nanofiber Gas Sensors: An Overview. Sensors, 2021, 21, 1352.	3.8	60
86	Encapsulation of plant extract compounds using cyclodextrin inclusion complexes, liposomes, electrospinning and their combinations for food purposes. Trends in Food Science and Technology, 2021, 108, 177-186.	15.1	63
87	Fabrication of eugenol loaded gelatin nanofibers by electrospinning technique as active packaging material. LWT - Food Science and Technology, 2021, 139, 110800.	5.2	60
88	Cyclodextrinâ€”phytochemical inclusion complexes: Promising food materials with targeted nutrition and functionality. Trends in Food Science and Technology, 2021, 109, 398-412.	15.1	30
90	Nanoencapsulation of essential oils and their bioactive constituents: A novel strategy to control mycotoxin contamination in food system. Food and Chemical Toxicology, 2021, 149, 112019.	3.6	78
91	Effect of Crosslinking Type on the Physical-Chemical Properties and Biocompatibility of Chitosan-Based Electrospun Membranes. Polymers, 2021, 13, 831.	4.5	32

#	ARTICLE	IF	CITATIONS
92	Fabrication of nanostructured multi-unit vehicle for intestinal-specific delivery and controlled release of peptide. <i>Nanotechnology</i> , 2021, 32, 245101.	2.6	7
93	Coaxial electrospinning of PVA/Nigella seed oil nanofibers: Processing and morphological characterization. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2021, 265, 115012.	3.5	28
94	Antibiotic Resistance Crisis: An Update on Antagonistic Interactions between Probiotics and Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA). <i>Current Microbiology</i> , 2021, 78, 2194-2211.	2.2	39
95	Influence of elastin on the properties of hybrid <scp>PCL</scp>/elastin scaffolds for tissue engineering. <i>Journal of Applied Polymer Science</i> , 2021, 138, 50893.	2.6	11
96	Electrospun antimicrobial materials: Advanced packaging materials for food applications. <i>Trends in Food Science and Technology</i> , 2021, 111, 520-533.	15.1	39
97	Preservation of strawberry fruit quality via the use of active packaging with encapsulated thyme essential oil in zein nanofiber film. <i>International Journal of Food Science and Technology</i> , 2021, 56, 4239-4247.	2.7	34
98	Whey protein based electrosprayed nanospheres for encapsulation and controlled release of bioactive compounds from <i>Tinospora cordifolia</i> extract. <i>Innovative Food Science and Emerging Technologies</i> , 2021, 69, 102671.	5.6	11
99	Effect of Electro-spinning applied Voltage on Electro-spun EPS Membranes Thickness and Fibers Diameters. <i>Journal of Physics: Conference Series</i> , 2021, 1879, 032085.	0.4	0
100	Î³-Cyclodextrin-BSA for nano-encapsulation of hydrophobic substance. <i>Food Bioscience</i> , 2021, 41, 101009.	4.4	2
101	Electrospun Microfibers Modulate Intracellular Amino Acids in Liver Cells via Integrin Î²1. <i>Bioengineering</i> , 2021, 8, 88.	3.5	2
102	Effects of double layer membrane loading eugenol on postharvest quality of cucumber. <i>LWT - Food Science and Technology</i> , 2021, 145, 111310.	5.2	10
103	Fabrication and characterization of cuminaldehyde-loaded electrospun gliadin fiber mats. <i>LWT - Food Science and Technology</i> , 2021, 145, 111373.	5.2	24
104	Tecnologia de encapsulamento na Área de alimentos: Uma revisão. <i>Research, Society and Development</i> , 2021, 10, e6210716240.	0.1	1
105	Electrospun phospholipid nanofibers encapsulated with cinnamaldehyde/HP-Î²-CD inclusion complex as a novel food packaging material. <i>Food Packaging and Shelf Life</i> , 2021, 28, 100647.	7.5	28
106	Spray-dried microcapsules of red palm olein-flaxseed oil blend: Development, physicochemical characterization, and evaluation of its potential applications as a fat replacer and Î²-carotene fortificant in cupcakes. <i>Journal of Food Processing and Preservation</i> , 2021, 45, e15663.	2.0	2
107	The efficiency of PCL/HAp electrospun nanofibers in bone regeneration: a review. <i>Journal of Medical Engineering and Technology</i> , 2021, 45, 511-531.	1.4	21
108	Catalytic and Photocatalytic Electrospun Nanofibers for Hydrogen Generation from Ammonia Borane Complex: A Review. <i>Polymers</i> , 2021, 13, 2290.	4.5	9
109	Polymer-free cyclodextrin and natural polymer-cyclodextrin electrospun nanofibers: A comprehensive review on current applications and future perspectives. <i>Carbohydrate Polymers</i> , 2021, 264, 118042.	10.2	50



#	ARTICLE	IF	CITATIONS
110	Electro-Spinning and Electro-Spraying as Innovative Approaches in Developing of a Suitable Food Vehicle for Polyphenols-Based Functional Ingredients. , 0, , .		0
111	In-vitro and in-silico characterization of zein fiber incorporating cuminaldehyde. Food and Bioproducts Processing, 2021, 128, 166-176.	3.6	18
112	Development of Nervilia fordii Extract-Loaded Electrospun PVA/PVP Nanocomposite for Antioxidant Packaging. Foods, 2021, 10, 1728.	4.3	12
113	Fish oil-gelatin core-shell electrospun nanofibrous membranes as promising edible films for the encapsulation of hydrophobic and hydrophilic nutrients. LWT - Food Science and Technology, 2021, 146, 111500.	5.2	16
114	Design and characterization of novel ecofriendly European fish eel gelatin-based electrospun microfibers applied for fish oil encapsulation. Process Biochemistry, 2021, 106, 10-19.	3.7	8
115	Enhancement of bioavailability and bioactivity of diet-derived flavonoids by application of nanotechnology: a review. Critical Reviews in Food Science and Nutrition, 2023, 63, 378-393.	10.3	47
116	Enhancement of Biological and Pharmacological Properties of an Encapsulated Polyphenol: Curcumin. Molecules, 2021, 26, 4244.	3.8	26
117	Electrospinning nanofibers to 1D, 2D, and 3D scaffolds and their biomedical applications. Nano Research, 2022, 15, 787-804.	10.4	42
118	A Critical Review on the Microencapsulation of Bioactive Compounds and Their Application. Food Reviews International, 2023, 39, 2594-2634.	8.4	20
119	Controlled Release of Chlorogenic Acid from Polyvinyl Alcohol/Poly( $\gamma$ -Glutamic Acid) Blended Electrospun Nanofiber Mats with Potential Applications in Diabetic Foot Treatment. Polymers, 2021, 13, 2943.	4.5	3
120	Electrohydrodynamic processing of natural polymers for active food packaging: A comprehensive review. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 6027-6056.	11.7	32
121	Fabrication and characterization of jujube extract-loaded electrospun polyvinyl alcohol nanofiber for strawberry preservation. Food Science and Nutrition, 2021, 9, 6353-6361.	3.4	13
122	Nanoencapsulation of <sc>casein</sc>-derived peptides within electrospun nanofibres. Journal of the Science of Food and Agriculture, 2022, 102, 1684-1698.	3.5	9
123	Essential contributions of food hydrocolloids and phospholipid liposomes to the formation of carriers for controlled delivery of biologically active substances via the gastrointestinal tract. Food Hydrocolloids, 2021, 120, 106890.	10.7	22
124	A new approach to the production of zein microstructures with vitamin B12, by electrospinning and spray drying techniques. Powder Technology, 2021, 392, 47-57.	4.2	18
125	The progress and application of vitamin E encapsulation – A review. Food Hydrocolloids, 2021, 121, 106998.	10.7	27
126	Fabrication of cumin seed oil loaded gliadin-ethyl cellulose nanofibers reinforced with adipic acid for food packaging application. Food Packaging and Shelf Life, 2021, 30, 100754.	7.5	13
127	Poly(vinylidene fluoride)/poly(styrene-co-acrylic acid) nanofibers as potential materials for blood separation. Journal of Membrane Science, 2022, 641, 119881.	8.2	8



#	ARTICLE	IF	CITATIONS
128	Encapsulation of saffron bioactive compounds. , 2021, , 183-220.		1
129	Thermal stability, hydrophobicity and antioxidant potential of ultrafine poly (lactic acid)/rice husk lignin fibers. Brazilian Journal of Chemical Engineering, 2021, 38, 133-144.	1.3	13
130	Nano-technological approaches for plant and marine-based polysaccharides for nano-encapsulations and their applications in food industry. Advances in Food and Nutrition Research, 2021, 97, 187-236.	3.0	4
131	Yeast encapsulation in nanofiber via electrospinning: Shape transformation, cell activity and immobilized efficiency. Materials Science and Engineering C, 2021, 120, 111747.	7.3	20
132	Natural Polymers in Micro- and Nanoencapsulation for Therapeutic and Diagnostic Applications: Part II - Polysaccharides and Proteins. , 0, , .		7
133	Application of antimicrobial-loaded nano/microcarriers in different food products. , 2021, , 469-517.		4
134	Nano-Films for Food Packaging. Food Engineering Series, 2020, , 287-307.	0.7	2
135	Encapsulation of Bioactive Compound and Its Therapeutic Potential. Advanced Structured Materials, 2021, , 687-714.	0.5	10
136	Electrospun nanofibers of poly(vinyl alcohol) and chitosan-based emulsions functionalized with cabreuva essential oil. International Journal of Biological Macromolecules, 2020, 160, 307-318.	7.5	43
137	Phytosterols as the core or stabilizing agent in different nanocarriers. Trends in Food Science and Technology, 2020, 101, 73-88.	15.1	47
138	Electroencapsulation (Electrospraying & Electrospinning) of Active Compounds for Food Applications. Current Pharmaceutical Design, 2019, 25, 1881-1888.	1.9	14
139	Polydopamine treatment of chitosan nanofibers for the conception of osteoinductive scaffolds for bone reconstruction. Carbohydrate Polymers, 2022, 276, 118774.	10.2	11
140	A Systematic Review of Drug-Loaded Electrospun Nanofiber-Based Ophthalmic Inserts. Pharmaceutics, 2021, 13, 1637.	4.5	16
141	Antibacterial Properties of Coaxial Spinning Membrane of Methyl ferulate/zein and Its Preservation Effect on Sea Bass. Foods, 2021, 10, 2385.	4.3	13
142	Encapsulation of Natural Bioactive Compounds by Electrospinning Applications in Food Storage and Safety. Polymers, 2021, 13, 3771.	4.5	26
143	Curcumin as Dietary Supplements Against Various Diseases: An Insight into the New Trends and Future Perspectives. Food Chemistry, Function and Analysis, 2020, , 349-380.	0.2	0
144	Collagen/zein electrospun films incorporated with gallic acid for tilapia (Oreochromis niloticus) muscle preservation. Journal of Food Engineering, 2022, 317, 110860.	5.2	29
145	Electrospun Fibers Loaded with Natural Bioactive Compounds as a Biomedical System for Skin Burn Treatment. A Review. Pharmaceutics, 2021, 13, 2054.	4.5	11

#	ARTICLE	IF	CITATIONS
146	Neem oil and its nanoemulsion in sustainable food preservation and packaging: Current status and future prospects. Journal of Agriculture and Food Research, 2022, 7, 100254.	2.5	18
147	ENTRAPMENT OF FREE CELLS WITHIN ELECTROSPUN NANOFIBERS: MINI REVIEW ON PARAMETERS INFLUENCING NANOFIBERS CHARACTERISTICS AND CELLS VIABILITY. Jurnal Teknologi (Sciences and Engineering Technology), 2022, 64, 1-10.	0.8	1
148	Electrospun Nanofibers: Current Progress and Applications in Food Systems. Journal of Agricultural and Food Chemistry, 2022, 70, 1391-1409.	5.2	49
149	Use of essential oils and phytochemicals against the mycotoxins producing fungi for shelf-life enhancement and food preservation. International Journal of Food Science and Technology, 2022, 57, 2171-2184.	2.7	15
150	Biomedical applications of electrospun chitosan nanofibers. , 2022, , 75-110.		1
151	Encapsulation of thyme essential oil using electrospun zein fiber for strawberry preservation. Chemical and Biological Technologies in Agriculture, 2022, 9, .	4.6	35
152	Tunable Spun Fiber Constructs in Biomedicine: Influence of Processing Parameters in the Fibers' Architecture. Pharmaceutics, 2022, 14, 164.	4.5	23
153	Electrospinning Techniques for Encapsulation. Composites Science and Technology, 2022, , 39-61.	0.6	1
154	Delivery Systems of Plant-Derived Antimicrobials. , 2022, , 397-442.		1
155	Application of Solâ€Gels for Treatment of Gynaecological Conditionsâ€Physiological Perspectives and Emerging Concepts in Intravaginal Drug Delivery. Gels, 2022, 8, 99.	4.5	8
156	Antimicrobial nanocoating for food industry. , 2022, , 255-283.		0
157	Sensory and Biological Potential of Encapsulated Common Bean Protein Hydrolysates Incorporated in a Greek-Style Yogurt Matrix. Polymers, 2022, 14, 854.	4.5	9
158	Antimutagenic and Antiproliferative Activity of the Cocoloba uvifera L. Extract Loaded in Nanofibers of Gelatin/Agave Fructans Elaborated by Electrospinning.. Anti-Cancer Agents in Medicinal Chemistry, 2022, 22, .	1.7	2
159	Fermented Jussara: Evaluation of Nanostructure Formation, Bioaccessibility, and Antioxidant Activity. Frontiers in Bioengineering and Biotechnology, 2022, 10, 814466.	4.1	6
160	Novel encapsulation approaches for phytosterols and their importance in food products: A review. Journal of Food Process Engineering, 2022, 45, .	2.9	15
161	Natural protein-based electrospun nanofibers for advanced healthcare applications: progress and challenges. 3 Biotech, 2022, 12, 92.	2.2	4
162	Assembly of electrospun tri-layered nanofibrous structure of zein/basil seed gum/zein for increasing the bioaccessibility of lycopene. LWT - Food Science and Technology, 2022, 161, 113328.	5.2	15
163	<i>Bifidobacterium</i> spp. as functional foods: A review of current status, challenges, and strategies. Critical Reviews in Food Science and Nutrition, 2023, 63, 8048-8065.	10.3	13

#	ARTICLE	IF	CITATIONS
164	Recent advances in food applications of phenolic-loaded micro/nanodelivery systems. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 8939-8959.	10.3	10
166	Recent Developments in Starch-Based Delivery Systems of Bioactive Compounds: Formulations and Applications. <i>Food Engineering Reviews</i> , 2022, 14, 271-291.	5.9	4
168	Recent Advances in Water-Soluble Vitamins Delivery Systems Prepared by Mechanical Processes (Electrospinning and Spray-Drying Techniques) for Food and Nutraceuticals Applicationsâ€”A Review. <i>Foods</i> , 2022, 11, 1271.	4.3	11
169	Electrospinning as a Promising Process to Preserve the Quality and Safety of Meat and Meat Products. <i>Coatings</i> , 2022, 12, 644.	2.6	25
170	Highly-hydrophobic nanofiber mat for efficient colonic delivery of lactoferrin: Preparation, characterization and release mechanism. <i>Innovative Food Science and Emerging Technologies</i> , 2022, 78, 103015.	5.6	5
171	pH-Sensitive Îµ-polylysine/polyaspartic acid/zein nanofiber membranes for the targeted release of polyphenols. <i>Food and Function</i> , 2022, 13, 6792-6801.	4.6	8
172	Nanoencapsulation of food bioactive constituents and its associated processes: A revisit. <i>Bioresource Technology Reports</i> , 2022, 19, 101088.	2.7	28
173	Impact of Electrospinning Parameters and Post-Treatment Method on Antibacterial and Antibiofilm Activity of Chitosan Nanofibers. <i>Molecules</i> , 2022, 27, 3343.	3.8	6
174	Insights for the control of dried-fruit beetle <i>Carpophilus hemipterus</i> (Nitidulidae) using rosemary essential oil loaded in chitosan nanoparticles. <i>International Journal of Environmental Health Research</i> , 0, , 1-11.	2.7	2
175	Fabrication and characterization of crosslinked pea protein isolated/pullulan/allicin electrospun nanofiber films as potential active packaging material. <i>Food Packaging and Shelf Life</i> , 2022, 33, 100873.	7.5	17
177	Recent advancements in encapsulation of chitosan-based enzymes and their applications in food industry. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 11044-11062.	10.3	3
179	Label-Free Electrogenenerated Chemiluminescence Biosensor for Quantization of CD44 on Basis of its Heterodimerization with Matrix Metalloproteinase-14. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
180	Personal protective equipment to protect from viruses. , 2022, , 79-111.		0
181	Nano-biocatalysts for food applications; immobilized enzymes within different nanostructures. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 11351-11369.	10.3	10
182	Encapsulation of Jujube Extract in Electrospun Nanofiber: Release Profile, Functional Effectiveness, and Application for Active Packaging. <i>Food and Bioprocess Technology</i> , 2022, 15, 2009-2019.	4.7	6
183	Optimization and Characterization of the Gelatin/Wheat Gliadin Nanofiber Electrospinning Process. <i>Food Biophysics</i> , 0, , .	3.0	8
184	Food-grade encapsulated polyphenols: recent advances as novel additives in foodstuffs. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 11545-11560.	10.3	3
185	Novel nano-encapsulated probiotic agents: Encapsulate materials, delivery, and encapsulation systems. <i>Journal of Controlled Release</i> , 2022, 349, 184-205.	9.9	52

#	ARTICLE	IF	CITATIONS
186	Alginate-based nanocarriers for the delivery and controlled-release of bioactive compounds. <i>Advances in Colloid and Interface Science</i> , 2022, 307, 102744.	14.7	40
187	Spectrum-effect relationship between HPLC fingerprint and antioxidant of “San-Bai Decoction” extracts. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2022, 1208, 123380.	2.3	8
188	Egg white protein-based delivery system for bioactive substances: a review. <i>Critical Reviews in Food Science and Nutrition</i> , 2024, 64, 617-637.	10.3	3
189	Assessment of curcumin incorporated chickpea flour/PEO (polyethylene oxide) based electrospun nanofiber as an antioxidant and antimicrobial food package. <i>Food and Bioproducts Processing</i> , 2022, 135, 205-216.	3.6	4
190	Label-free electrogenerated chemiluminescence biosensor for quantization of CD44 on basis of its heterodimerization with matrix metalloproteinase-14. <i>Microchemical Journal</i> , 2022, 182, 107872.	4.5	1
191	Preparation of an ultrasensitive electrochemical immunosensor for the rapid detection of 19-nortestosterone based on polyvinyl alcohol/polyacrylic acid electrospun nanofiber mat. <i>Sensors and Actuators B: Chemical</i> , 2022, 370, 132450.	7.8	7
192	Bioactive-loaded nanodelivery systems for the feed and drugs of livestock; purposes, techniques and applications. <i>Advances in Colloid and Interface Science</i> , 2022, 308, 102772.	14.7	22
193	Cross-linked gluten/zein nanofibers via Maillard reaction with the loading of star anise essential oil/ $\beta$ -cyclodextrin inclusions for food-active packaging. <i>Food Packaging and Shelf Life</i> , 2022, 34, 100950.	7.5	9
194	Electrospinning Technology: Its Process Conditions and Food Packaging Applications. <i>Food Engineering Series</i> , 2022, , 447-468.	0.7	3
195	Electrospun Eugenol-Loaded Gelatin Nanofibers as Bioactive Packaging Materials to Preserve Quality Characteristics of Beef. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
196	Nanotechnology and Food Grade Enzymes. , 2022, , 455-487.		0
197	Production of pumice-containing nanofibers by electrospinning technique. <i>Materials Science-Poland</i> , 2022, 40, 206-213.	1.0	0
198	Extraction, purification, food applications, and recent advances for enhancing the bioavailability of 6-gingerol from ginger “ A review. <i>Quality Assurance and Safety of Crops and Foods</i> , 2022, 14, 67-83.	3.4	10
199	Recent advances in the application of nanotechnology to create antioxidant active food packaging materials. <i>Critical Reviews in Food Science and Nutrition</i> , 2024, 64, 2890-2905.	10.3	17
200	Electrospun Polymer Materials with Fungicidal Activity: A Review. <i>Molecules</i> , 2022, 27, 5738.	3.8	0
201	Polysaccharide-based porous biopolymers for enhanced bioaccessibility and bioavailability of bioactive food compounds: Challenges, advances, and opportunities. <i>Comprehensive Reviews in Food Science and Food Safety</i> , 2022, 21, 4610-4639.	11.7	19
202	Bioactive compounds from acerola pomace: A review. <i>Food Chemistry</i> , 2023, 404, 134613.	8.2	11
203	Chapter 16. Food-based Polymers for Encapsulation and Delivery of Bioactive Compounds. <i>RSC Polymer Chemistry Series</i> , 2022, , 488-544.	0.2	1

#	ARTICLE	IF	CITATIONS
204	Red onion skin extract rich in flavonoids encapsulated in ultrafine fibers of sweet potato starch by electrospinning. Food Chemistry, 2023, 406, 134954.	8.2	14
205	Comparison of eugenol and dihydromyricetin loaded nanofibers by electro-blowing spinning for active packaging. Food Bioscience, 2023, 51, 102294.	4.4	3
206	Formulation with sage tea-loaded fish oil-based microcapsules to delay oxidation. Journal of Food Science and Technology, 0, , .	2.8	0
207	Electrospinning Composites as Carriers of Natural Pigment: Screening of Polymeric Blends. Processes, 2022, 10, 2737.	2.8	1
208	Long-term proliferation and delayed senescence of bone marrow-derived human mesenchymal stem cells on metformin co-embedded HA/Gel electrospun composite nanofibers. Journal of Drug Delivery Science and Technology, 2023, 80, 104071.	3.0	5
209	Valorisation of Micro/Nanoencapsulated Bioactive Compounds from Plant Sources for Food Applications Towards Sustainability. Foods, 2023, 12, 32.	4.3	11
210	Obtention of Sacha Inchi (Plukenetia volubilis Linneo) Seed Oil Microcapsules as a Strategy for the Valorization of Amazonian Fruits: Physicochemical, Morphological, and Controlled Release Characterization. Foods, 2022, 11, 3950.	4.3	4
211	The use of extrusion technology for encapsulation of bioactive components for their improved stability and bioavailability. Nutrition and Food Science, 2022, ahead-of-print, .	0.9	0
212	Pickering emulsions for functional food systems. Journal of Agriculture and Food Research, 2023, 11, 100510.	2.5	3
213	Encapsulation via electrospinning technology. , 2023, , 253-269.		1
214	Smart and novel nanofiber membranes. , 2023, , 603-623.		0
215	Anti-aging skincare. , 2023, , 269-284.		1
216	Encapsulation: Electrospray. , 2023, , 197-212.		2
217	Fabrication and characterization of gallic-acid/nisin loaded electrospun core/shell chitosan/polyethylene oxide nanofibrous membranes with free radical scavenging capacity and antimicrobial activity for food packing applications. Food Bioscience, 2023, 53, 102529.	4.4	4
218	An insight into Iranian natural hydrocolloids: Applications and challenges in health-promoting foods. Food Hydrocolloids, 2023, 141, 108725.	10.7	2
219	Assessment of Zataria Multiflora Essential Oilâ€™Incorporated Electrospun Polyvinyl Alcohol Fiber Mat as Active Packaging. Polymers, 2023, 15, 1048.	4.5	4
220	Designing biomimetic scaffolds for skin tissue engineering. Biomaterials Science, 2023, 11, 3051-3076.	5.4	14
221	Biodegradable Active Packaging Enriched with Essential Oils for Enhancing the Shelf Life of Strawberries. Antioxidants, 2023, 12, 755.	5.1	5

#	ARTICLE	IF	CITATIONS
222	Carnauba wax-based sustainable coatings for prolonging postharvest shelf-life of citrus fruits. , 2023, 1, 415-425.		6
223	Combined Nanofibrous Face Mask: Co-Formulation of Lipases and Antibiotic Agent by Electrospinning Technique. Pharmaceutics, 2023, 15, 1174.	4.5	1
224	Evaluation of Lactobacillus plantarum and PRGF as a new bioactive multi-layered scaffold PU/PRGF/gelatin/PU for wound healing. Tissue and Cell, 2023, 82, 102091.	2.2	2
225	A Brief Review on the Electrohydrodynamic Techniques Used to Build Antioxidant Delivery Systems from Natural Sources. Molecules, 2023, 28, 3592.	3.8	2
226	Electrospun Food Polysaccharides Loaded with Bioactive Compounds: Fabrication, Release, and Applications. Polymers, 2023, 15, 2318.	4.5	4
227	Micro- and nanoencapsulation of natural phytochemicals: Challenges and recent perspectives for the food and nutraceuticals industry applications. Advances in Food and Nutrition Research, 2023, , 77-137.	3.0	0
228	Development of nanoparticles with anthocyanins from açai by electrospraying process. Brazilian Journal of Chemical Engineering, 0, , .	1.3	0
229	Recent Advances in Seed Coating Treatment Using Nanoparticles and Nanofibers for Enhanced Seed Germination and Protection. Journal of Plant Growth Regulation, 2023, 42, 7374-7402.	5.1	7
230	Physical and chemical impact of nanoparticle-reinforced alginate-based biomaterials. , 2023, , 319-352.		0
231	Chitosan-based electrospun nanofibers for encapsulating food bioactive ingredients: A review. International Journal of Biological Macromolecules, 2023, 245, 125424.	7.5	12
233	Electrospinning and Electrospraying: Emerging Techniques for Probiotic Stabilization and Application. Polymers, 2023, 15, 2402.	4.5	6
234	Nanofiber-based Systems. , 2023, , 392-420.		0
235	Chitosanâ€“Collagen Electrospun Nanofibers Loaded with Curcumin as Wound-Healing Patches. Polymers, 2023, 15, 2931.	4.5	6
236	Multilayer polycaprolactone - pullulan nanofiber mats incorporated with the antimicrobial palindromic peptide LfcinB (21-25)Pal as a potential application in active packaging. Food Packaging and Shelf Life, 2023, 38, 101110.	7.5	0
237	Nanoformulation of lipase from Porcine pancreas by electrospinning as a novel alternative for enzyme-based per os therapies. Journal of Molecular Liquids, 2023, 389, 122819.	4.9	0
238	Electrospinning and electrospraying technologies for nutraceutical delivery system development. , 2023, , 279-323.		0
239	A review on trends in microencapsulation of bioactive compounds: coating materials, design, and applications. European Food Research and Technology, 0, , .	3.3	0
240	Alternative Processing Options for Improving the Proteins Functionality by Maillard Conjugation. Foods, 2023, 12, 3588.	4.3	1

#	ARTICLE	IF	CITATIONS
241	Selected natural fibers and their electrospinning. Journal of Polymer Research, 2023, 30, .	2.4	2
242	Utilizing protein nanofibrils as a scaffold for enhancing nutritional value in toned milk. Environmental Research, 2023, 239, 117420.	7.5	1
243	Electrosprayed Bâ€complex vitamins/zein microparticles for drug sustained release and antioxidant applications. Journal of Chemical Technology and Biotechnology, 0, , .	3.2	0
244	The impact of electrospinning conditions on the properties of enzymes immobilized on electrospun materials: Exploring applications and future perspectives. Environmental Technology and Innovation, 2023, 32, 103408.	6.1	2
245	Innovative Bioactive Nanofibrous Materials Combining Medicinal and Aromatic Plant Extracts and Electrospinning Method. Membranes, 2023, 13, 840.	3.0	2
246	Approaches in line with human physiology to prevent skin aging. Frontiers in Physiology, 0, 14, .	2.8	1
247	Application and Development of Electrospun Nanofibers as an Efficient Platform for the Delivery of Anthocyanin Compounds in the Food Industry. Food and Bioprocess Technology, 0, , .	4.7	1
248	Development of composite electrospun films utilizing soy protein amyloid fibrils and pullulan for food packaging applications. Food Chemistry: X, 2023, 20, 100995.	4.3	0
249	Controlled release of dual food functional ingredients from octenyl succinic anhydride/Î²-cyclodextrin nanoparticles integrated carrageenan/polyvinyl alcohol hydrogels. Journal of Molecular Liquids, 2024, 393, 123646.	4.9	0
250	Application of inulin for the formulation and delivery of bioactive molecules and live cells. Carbohydrate Polymers, 2024, 327, 121670.	10.2	0
251	Release kinetics, color stability and antioxidant activity of red cabbage anthocyanins encapsulated in zein electrospun nanoribbons. Journal of Food Measurement and Characterization, 0, , .	3.2	0
252	In situ nanofibers patterned deposition based on electrostatic attractionâ€repulsion induction. Chemical Engineering Journal, 2024, 480, 147997.	12.7	0
253	Antimicrobial Activity of Electrospun Nanofibers Film Incorporated with Momordica charantia Seed Oil for Strawberry Freshness. Food and Bioprocess Technology, 0, , .	4.7	0
254	Multifunctional Electrospun Nanofibers for Biosensing and Biomedical Engineering Applications. Biosensors, 2024, 14, 13.	4.7	0
255	Antioxidant water-resistant fish gelatin nanofibers: A comparative analysis of fructose and citric acid crosslinking and investigation of chlorogenic acid release kinetics. Food Hydrocolloids, 2024, 150, 109696.	10.7	0
256	Effect of sesame protein/<scp>PVA</scp> nanofibers on oil separation and rheological properties in sesame paste. Journal of Food Process Engineering, 2024, 47, .	2.9	0
257	Starch-nanostructured-based active packaging for food applications. , 2024, , 103-160.		0
258	The developments and trends of electrospinning active food packaging: A review and bibliometrics analysis. Food Control, 2024, 160, 110291.	5.5	2



#	ARTICLE	IF	CITATIONS
259	Electrospinning meets food packaging: A promising pathway towards novel opportunities in food preservation. Food Packaging and Shelf Life, 2024, 41, 101234.	7.5	0
260	A novel antioxidant and antimicrobial food packaging based on Eudragit Â®/collagen electrospun nanofiber incorporated with bitter orange peel essential oil. LWT - Food Science and Technology, 2024, 193, 115730.	5.2	0
261	Biodegradable Polybutyrolactam Microfiber Membrane as a Highly Efficient Air Filter for PM2.5 Particle Filtration. ACS Applied Polymer Materials, 2024, 6, 1215-1223.	4.4	0
262	The application of essential oil for the management of mycotoxins. , 2024, , 149-162.		0
263	Electrospinning of legume proteins: Fundamentals, fiber production, characterization, and applications with a focus on soy proteins. Food Hydrocolloids, 2024, 151, 109795.	10.7	2
264	From PET bottle waste to enzyme support for removal of estrogens from wastewaters. Environmental Technology and Innovation, 2024, 34, 103555.	6.1	0
265	Development of a PVA/PCL/CS-Based Nanofibrous Membrane for Guided Tissue Regeneration and Controlled Delivery of Doxycycline Hydrochloride in Management of Periodontitis: In Vivo Evaluation in Rats. AAPS PharmSciTech, 2024, 25, .	3.3	0
266	Electrospun nanofibrous systems in food packaging. , 2024, , 409-445.		0
267	Bioformulation of Yamadazyma mexicana LPa14 by electrospraying process: Anthracnose control and effect on postharvest quality of avocado fruit. Biological Control, 2024, 190, 105449.	3.0	0
268	Edible coatings based on solid lipid nanoparticles containing essential oil to improve antimicrobial activity, shelf-life, and quality of strawberries. Journal of Stored Products Research, 2024, 106, 102262.	2.6	0
269	Electrospinning and electrospun polysaccharide-based nanofiber membranes: A review. International Journal of Biological Macromolecules, 2024, 263, 130335.	7.5	0
270	Advances in Microencapsulation and Nanoemulsion Techniques of Plant Pigments: Improving Stability, Bioavailability, and Bioactivity for Application in Food Industry. Reference Series in Phytochemistry, 2024, , 1-26.	0.4	0
271	Research advance about plant polysaccharide prebiotics, benefit for probiotics on gut homeostasis modulation. Food Bioscience, 2024, 59, 103831.	4.4	0
272	Electrospun Materials Based on Cellulose Acetate Loaded with Rosmarinic Acid with Antioxidant and Antifungal Properties. Biomimetics, 2024, 9, 152.	3.3	0
273	Isorecticular metal-organic framework-3 post-synthetic modification: Application in a new active film based on sodium alginate and carvacrol for pork preservation. Food Bioscience, 2024, 59, 103926.	4.4	0
274	Fabrication of multifunctional ethyl cellulose/gelatin-based composite nanofilm for the pork preservation and freshness monitoring. International Journal of Biological Macromolecules, 2024, 265, 130813.	7.5	0