Marta MartÃ-nez-Sanz

List of Publications by Year
in descending order

82 papers	2,979 citations	126858 33 h-index	182361 51 g-index
82 all docs	82 docs citations	82 times ranked	3299 citing authors

#	Article	IF	Citations
1	Optimization of the nanofabrication by acid hydrolysis of bacterial cellulose nanowhiskers. Carbohydrate Polymers, 2011, 85, 228-236.	5.1	172
2	Electrospun curcumin-loaded protein nanofiber mats as active/bioactive coatings for food packaging applications. Food Hydrocolloids, 2019, 87, 758-771.	5.6	135
3	Optimization of the Dispersion of Unmodified Bacterial Cellulose Nanowhiskers into Polylactide via Melt Compounding to Significantly Enhance Barrier and Mechanical Properties. Biomacromolecules, 2012, 13, 3887-3899.	2.6	117
4	Characterization of polyhydroxyalkanoates synthesized from microbial mixed cultures and of their nanobiocomposites with bacterial cellulose nanowhiskers. New Biotechnology, 2014, 31, 364-376.	2.4	97
5	Production of unpurified agar-based extracts from red seaweed Gelidium sesquipedale by means of simplified extraction protocols. Algal Research, 2019, 38, 101420.	2.4	91
6	Development and characterization of chitosan/gelatin electrosprayed microparticles as food grade delivery vehicles for anthocyanin extracts. Food Hydrocolloids, 2018, 77, 699-710.	5.6	90
7	Application of X-ray and neutron small angle scattering techniques to study the hierarchical structure of plant cell walls: A review. Carbohydrate Polymers, 2015, 125, 120-134.	5.1	80
8	Structure of cellulose microfibrils in mature cotton fibres. Carbohydrate Polymers, 2017, 175, 450-463.	5.1	74
9	Development of electrospun EVOH fibres reinforced with bacterial cellulose nanowhiskers. Part I: Characterization and method optimization. Cellulose, 2011, 18, 335-347.	2.4	67
10	Evidence for differential interaction mechanism of plant cell wall matrix polysaccharides in hierarchically-structured bacterial cellulose. Cellulose, 2015, 22, 1541-1563.	2.4	67
11	Potential of lignocellulosic fractions from Posidonia oceanica to improve barrier and mechanical properties of bio-based packaging materials. International Journal of Biological Macromolecules, 2018, 118, 542-551.	3.6	67
12	High-barrier coated bacterial cellulose nanowhiskers films with reduced moisture sensitivity. Carbohydrate Polymers, 2013, 98, 1072-1082.	5.1	66
13	Structural and physicochemical characterization of thermoplastic corn starch films containing microalgae. Carbohydrate Polymers, 2018, 186, 184-191.	5.1	63
14	Superabsorbent food packaging bioactive cellulose-based aerogels from Arundo donax waste biomass. Food Hydrocolloids, 2019, 96, 151-160.	5.6	62
15	Incorporation of poly(glycidylmethacrylate) grafted bacterial cellulose nanowhiskers in poly(lactic) Tj ETQq1 1 0.784314 rgBT /Overlock 49, 2062-2072.	2.6	59
16	Development of food packaging bioactive aerogels through the valorization of Gelidium sesquipedale seaweed. Food Hydrocolloids, 2019, 89, 337-350.	5.6	58
17	Coaxial electrospraying of biopolymers as a strategy to improve protection of bioactive food ingredients. Innovative Food Science and Emerging Technologies, 2019, 51, 2-11.	2.7	57
18	Cellulose-pectin composite hydrogels: Intermolecular interactions and material properties depend on order of assembly. Carbohydrate Polymers, 2017, 162, 71-81.	5.1	56

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19	Adsorption behaviour of polyphenols on cellulose is affected by processing history. Food Hydrocolloids, 2017, 63, 496-507.	5.6	55
20	Multi-scale model for the hierarchical architecture of native cellulose hydrogels. Carbohydrate Polymers, 2016, 147, 542-555.	5.1	52
21	Hierarchical architecture of bacterial cellulose and composite plant cell wall polysaccharide hydrogels using small angle neutron scattering. Soft Matter, 2016, 12, 1534-1549.	1.2	50
22	Nano- and microstructural evolution of alginate beads in simulated gastrointestinal fluids. Impact of M/G ratio, molecular weight and pH. Carbohydrate Polymers, 2019, 223, 115121.	5.1	48
23	Self-assembled gelatin-Î¹-carrageenan encapsulation structures for intestinal-targeted release applications. Journal of Colloid and Interface Science, 2018, 517, 113-123.	5.0	44
24	Adsorption isotherm studies on the interaction between polyphenols and apple cell walls: Effects of variety, heating and drying. Food Chemistry, 2019, 282, 58-66.	4.2	43
25	Understanding the different emulsification mechanisms of pectin: Comparison between watermelon rind and two commercial pectin sources. Food Hydrocolloids, 2021, 120, 106957.	5.6	40
26	Development of bacterial cellulose nanowhiskers reinforced EVOH composites by electrospinning. Journal of Applied Polymer Science, 2012, 124, 1398-1408.	1.3	39
27	Advanced structural characterisation of agar-based hydrogels: Rheological and small angle scattering studies. Carbohydrate Polymers, 2020, 236, 115655.	5.1	38
28	PLA coating improves the performance of renewable adsorbent pads based on cellulosic aerogels from aquatic waste biomass. Chemical Engineering Journal, 2020, 390, 124607.	6.6	37
29	On the extraction of cellulose nanowhiskers from food by-products and their comparative reinforcing effect on a polyhydroxybutyrate-co-valerate polymer. Cellulose, 2015, 22, 535-551.	2.4	36
30	Production of bacterial nanobiocomposites of polyhydroxyalkanoates derived from waste and bacterial nanocellulose by the electrospinning enabling melt compounding method. Journal of Applied Polymer Science, 2016, 133, .	1.3	36
31	Development and characterization of hybrid corn starch-microalgae films: Effect of ultrasound pre-treatment on structural, barrier and mechanical performance. Algal Research, 2017, 28, 80-87.	2.4	36
32	Valorization of alginate-extracted seaweed biomass for the development of cellulose-based packaging films. Algal Research, 2022, 61, 102576.	2.4	36
33	Rheological and structural properties of complex arabinoxylans from Plantago ovata seed mucilage under non-gelled conditions. Carbohydrate Polymers, 2018, 193, 179-188.	5.1	35
34	High-performance starch biocomposites with celullose from waste biomass: Film properties and retrogradation behaviour. Carbohydrate Polymers, 2019, 216, 180-188.	5.1	35
35	Valorization of Marine Waste: Use of Industrial By-Products and Beach Wrack Towards the Production of High Added-Value Products. Frontiers in Marine Science, 2021, 8, .	1.2	35
36	In-Depth Characterization of Bioactive Extracts from Posidonia oceanica Waste Biomass. Marine Drugs, 2019, 17, 409.	2.2	34

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37	Multifunctional and nanoreinforced polymers for food packaging. , 2011, , .		34
38	Development of gelatin-coated Î¹-carrageenan hydrogel capsules by electric field-aided extrusion. Impact of phenolic compounds on their performance. Food Hydrocolloids, 2019, 90, 523-533.	5.6	33
39	Combining polyhydroxyalkanoates with nanokeratin to develop novel biopackaging structures. Journal of Applied Polymer Science, 2016, 133, .	1.3	32
40	Pectin impacts cellulose fibre architecture and hydrogel mechanics in the absence of calcium. Carbohydrate Polymers, 2016, 153, 236-245.	5.1	32
41	Cost-efficient bio-based food packaging films from unpurified agar-based extracts. Food Packaging and Shelf Life, 2019, 21, 100367.	3.3	32
42	Keratinâ€"polyhydroxyalkanoate meltâ€compounded composites with improved barrier properties of interest in food packaging applications. Journal of Applied Polymer Science, 2014, 131, .	1.3	31
43	Investigation of the micro- and nano-scale architecture of cellulose hydrogels with plant cell wall polysaccharides: A combined USANS/SANS study. Polymer, 2016, 105, 449-460.	1.8	31
44	Rheological and structural characterization of carrageenan emulsion gels. Algal Research, 2020, 47, 101873.	2.4	31
45	Characterisation of bacterial cellulose from diverse Komagataeibacter strains and their application to construct plant cell wall analogues. Cellulose, 2017, 24, 1211-1226.	2.4	30
46	Nanocomposites of ethylene vinyl alcohol copolymer with thermally resistant cellulose nanowhiskers by melt compounding (I): Morphology and thermal properties. Journal of Applied Polymer Science, 2013, 128, 2666-2678.	1.3	29
47	Nanostructure and poroviscoelasticity in cell wall materials from onion, carrot and apple: Roles of pectin. Food Hydrocolloids, 2020, 98, 105253.	5.6	28
48	Development of polysaccharide-casein gel-like structures resistant to in vitro gastric digestion. Food Hydrocolloids, 2022, 127, 107505.	5.6	25
49	Valorization of Arundo donax for the production of high performance lignocellulosic films. Carbohydrate Polymers, 2018, 199, 276-285.	5.1	24
50	Multi-scale characterisation of deuterated cellulose composite hydrogels reveals evidence for different interaction mechanisms with arabinoxylan, mixed-linkage glucan and xyloglucan. Polymer, 2017, 124, 1-11.	1.8	23
51	Alternative protocols for the production of more sustainable agar-based extracts from Gelidium sesquipedale. Algal Research, 2021, 55, 102254.	2.4	23
52	Improved performance of less purified cellulosic films obtained from agar waste biomass. Carbohydrate Polymers, 2020, 233, 115887.	5.1	21
53	Emission pattern of semi-volatile organic compounds from recycled styrenic polymers using headspace solid-phase microextraction gas chromatographyâ€"mass spectrometry. Journal of Chromatography A, 2010, 1217, 359-367.	1.8	20
54	Antimicrobial Poly(lactic acid)-Based Nanofibres Developed by Solution Blow Spinning. Journal of Nanoscience and Nanotechnology, 2015, 15, 616-627.	0.9	20

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55	Unpurified Gelidium-extracted carbohydrate-rich fractions improve probiotic protection during storage. LWT - Food Science and Technology, 2018, 96, 694-703.	2.5	19
56	Cellulose nanocrystal-based films produced by more sustainable extraction protocols from Posidonia oceanica waste biomass. Cellulose, 2019, 26, 8007-8024.	2.4	19
57	Understanding nanostructural differences in hydrogels from commercial carrageenans: Combined small angle X-ray scattering and rheological studies. Algal Research, 2020, 47, 101882.	2.4	18
58	Composition and rheological properties of microalgae suspensions: Impact of ultrasound processing. Algal Research, 2020, 49, 101960.	2.4	17
59	Valorisation of vine shoots for the development of cellulose-based biocomposite films with improved performance and bioactivity. International Journal of Biological Macromolecules, 2020, 165, 1540-1551.	3.6	17
60	Macroalgae suspensions prepared by physical treatments: Effect of polysaccharide composition and microstructure on the rheological properties. Food Hydrocolloids, 2021, 120, 106989.	5.6	15
61	Dispersing Bacterial Cellulose Nanowhiskers in Polylactides via Electrohydrodynamic Processing. Journal of Polymers and the Environment, 2014, 22, 27-40.	2.4	14
62	Structural effects of microalgae additives on the starch gelatinisation process. Food Hydrocolloids, 2018, 77, 257-269.	5.6	14
63	Multifunctional cellulosic aerogels from Posidonia oceanica waste biomass with antioxidant properties for meat preservation. International Journal of Biological Macromolecules, 2021, 185, 654-663.	3.6	13
64	Maximizing the oil content in polysaccharide-based emulsion gels for the development of tissue mimicking phantoms. Carbohydrate Polymers, 2021, 256, 117496.	5.1	12
65	Matryoshka enzyme encapsulation: Development of zymoactive hydrogel particles with efficient lactose hydrolysis capability.. Food Hydrocolloids, 2019, 96, 171-177.	5.6	11
66	Confocal Raman imaging as a useful tool to understand the internal microstructure of multicomponent aerogels. Journal of Raman Spectroscopy, 2020, 51, 2022-2035.	1.2	11
67	Development of glucomannan-chitosan interpenetrating hydrocolloid networks (IHNs) as a potential tool for creating satiating ingredients. Food Hydrocolloids, 2016, 60, 533-542.	5.6	10
68	Emulsion gels and oil-filled aerogels as curcumin carriers: Nanostructural characterization of gastrointestinal digestion products. Food Chemistry, 2022, 387, 132877.	4.2	10
69	Cellulose nanofillers for food packaging. , 2011, , 86-107.		9
70	Nano-/microstructure of extruded Spirulina/starch foams in relation to their textural properties. Food Hydrocolloids, 2020, 103, 105697.	5.6	9
71	Food Packaging Based on Nanomaterials. Nanomaterials, 2019, 9, 1224.	1.9	8
72	Health Effect of Dietary Fibers. , 2019, , 125-163.		7

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73	Nanocomposites of ethylene vinyl alcohol copolymer with thermally resistant cellulose nanowhiskers by melt compounding (II): Water barrier and mechanical properties. Journal of Applied Polymer Science, 2013, 128, 2197-2207.	1.3	6
74	Biopolymer-Based Coatings and Packaging Structures for Improved Food Quality. Journal of Food Quality, 2017, 2017, 1-2.	1.4	6
75	Small-angle neutron scattering reveals basis for composition dependence of gel behaviour in oleic acid - sodium oleate oleogels. Innovative Food Science and Emerging Technologies, 2021, 73, 102763.	2.7	6
76	Pilot plant scale-up of the production of optimized starch-based biocomposites loaded with cellulosic nanocrystals from Posidonia oceanica waste biomass. Food Packaging and Shelf Life, 2021, 30, 100730.	3.3	6
77	Characterization and gelling properties of a bioactive extract from Ascophyllum nodosum obtained using a chemical-free approach. Current Research in Food Science, 2021, 4, 354-364.	2.7	6
78	Nanostructuring Biopolymers for Improved Food Quality and Safety. , 2018, , 33-64.		5
79	Thermal stability of bovine lactoferrin prepared by cation exchange chromatography and its blends with authorized additives for infant formulas. LWT - Food Science and Technology, 2021, 154, 112744.	2.5	2
80	A New Method for Developing Industrially Viable Nanocrystalline Cellulose-based Nanocomposites via Melt Compounding. Journal of Renewable Materials, 2014, 2, 107-117.	1.1	1
81	Small angle scattering (SAS) techniques for analysis of nanoencapsulated food ingredients. , 2020, , 459-502.		1
82	Chapter 13. Food Structure Characterisation Using Small-angle Scattering Methods. Food Chemistry, Function and Analysis, 2019, , 309-360.	0.1	1