Elizabeth Carvajal-Millan

List of Publications by Year
in descending order

115 papers	2,925 citations	172386 29 h-index	197736 49 g-index
115 all docs	115 docs citations	115 times ranked	2691 citing authors

#	Article	IF	Citations
1	Extraction and characterization of arabinoxylans obtained from nixtamalized brewersâ€™ spent grains. Food Science and Technology International, 2023, 29, 40-49.	1.1	2
2	Current challenging issues of biological macromolecules in biomedicine. , 2022, , 581-606.		1
3	Artocarpus heterophyllus Lam. leaf extracts added to pectin-based edible coating for Alternaria sp. control in tomato. LWT - Food Science and Technology, 2022, 156, 113022.	2.5	7
4	Malnutrition and Biomarkers: A Journey through Extracellular Vesicles. Nutrients, 2022, 14, 1002.	1.7	5
5	Fermentation of Ferulated Arabinoxylan Recovered from the Maize Bioethanol Industry. Processes, 2021, 9, 165.	1.3	3
6	Ferulated Pectins and Ferulated Arabinoxylans Mixed Gel for Saccharomyces boulardii Entrapment in Electrosprayed Microbeads. Molecules, 2021, 26, 2478.	1.7	7
7	Highly cross-linked arabinoxylans microspheres as a microbiota-activated carrier for colon-specific insulin delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2021, 163, 16-22.	2.0	9
8	Effect of part-baking time, freezing rate and storage time on part-baked bread quality. Food Science and Technology, 2021, 41, 352-359.	0.8	5
9	Polysaccharide-Based Nanoparticles for Colon-Targeted Drug Delivery Systems. Polysaccharides, 2021, 2, 626-647.	2.1	28
10	Conformational Behavior, Topographical Features, and Antioxidant Activity of Partly De-Esterified Arabinoxylans. Polymers, 2021, 13, 2794.	2.0	4
11	Ferulated Pectins from Sugar Beet Bioethanol Solids: Extraction, Macromolecular Characteristics, and Enzymatic Gelling Properties. Sustainability, 2021, 13, 10723.	1.6	3
12	Composition, Physicochemical Features, and Covalent Gelling Properties of Ferulated Pectin Extracted from Three Sugar Beet (Beta vulgaris L.) Cultivars Grown under Desertic Conditions. Agronomy, 2021, 11, 40.	1.3	11
13	Toward Understanding the Molecular Recognition of Fungal Chitin and Activation of the Plant Defense Mechanism in Horticultural Crops. Molecules, 2021, 26, 6513.	1.7	13
14	The underlying mechanisms for severe COVID-19 progression in people with diabetes mellitus: a critical review. AIMS Public Health, 2021, 8, 720-742.	1.1	6
15	Making Dense Covalent Arabinoxylan Gels with High Swelling Properties: A Strategy Based on Water Extraction through Osmotic Compression. ACS Applied Polymer Materials, 2021, 3, 6176-6185.	2.0	2
16	Covalently Cross-Linked Particles Based on Arabinoxylans: Antioxidant Activity and Cytotoxicity on a Human Colon Cell Line. Biology and Life Sciences Forum, 2021, 7, .	0.6	0
17	Alkali-Extracted Feruloylated Arabinoxylans from Nixtamalized Maize Bran Byproduct: A Synonymous with Soluble Antioxidant Dietary Fiber. Waste and Biomass Valorization, 2020, 11, 403-409.	1.8	27
18	Arabinoxylans and gelled arabinoxylans used as anti-obesogenic agents could protect the stability of intestinal microbiota of rats consuming high-fat diets. International Journal of Food Sciences and Nutrition, 2020, 71, 74-83.	1.3	12

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19	Stabilization of betalains by encapsulationâ€"a review. Journal of Food Science and Technology, 2020, 57, 1587-1600.	1.4	43
20	Influence of carboxymethylation on the gelling capacity, rheological properties, and antioxidant activity of feruloylated arabinoxylans from different sources. Journal of Applied Polymer Science, 2020, 137, 48325.	1.3	9
21	Biological and functional properties of peptide fractions obtained from collagen hydrolysate derived from mixed by-products of different fish species. Food Chemistry, 2020, 331, 127350.	4.2	73
22	Covalently Cross-Linked Nanoparticles Based on Ferulated Arabinoxylans Recovered from a Distillerâ€™s Dried Grains Byproduct. Processes, 2020, 8, 691.	1.3	12
23	Effect of Ultrasound-Treated Arabinoxylans on the Oxidative Stability of Soybean Oil. Antioxidants, 2020, 9, 147.	2.2	8
24	Effect of Ultrafiltration of Pitaya Extract (Stenocereus thurberi) on Its Phytochemical Content, Antioxidant Capacity, and UPLC-DAD-MS Profile. Molecules, 2020, 25, 281.	1.7	16
25	Tailor-made polysaccharide-based hydrogels for biomedical applications. , 2020, , 101-132.		2
26	Electrosprayed highly cross-linked arabinoxylan particles: effect of partly fermentation on the inhibition of Caco-2 cells proliferation. AIMS Bioengineering, 2020, 8, 52-70.	0.6	1
27	Polysaccharides nanoparticles as oral drug delivery systems. , 2019, , 399-417.		3
28	Arabinoxylan-Based Particles: In Vitro Antioxidant Capacity and Cytotoxicity on a Human Colon Cell Line. Medicina (Lithuania), 2019, 55, 349.	0.8	18
29	Pectin in drug delivery applications. , 2019, , 249-262.		2
30	Preparation and Characterization of Quercetinâ€Loaded Zein Nanoparticles by Electrospraying and Study of In Vitro Bioavailability. Journal of Food Science, 2019, 84, 2883-2897.	1.5	72
31	Feruloylated Arabinoxylans from Nixtamalized Maize Bran Byproduct: A Functional Ingredient in Frankfurter Sausages. Molecules, 2019, 24, 2056.	1.7	12
32	Prolamins from cereal by-products: Classification, extraction, characterization and its applications in micro- and nanofabrication. Trends in Food Science and Technology, 2019, 90, 111-132.	7.8	53
33	Tailoring reversible insulin aggregates loaded in electrosprayed arabinoxylan microspheres intended for colonâ€targeted delivery. Journal of Applied Polymer Science, 2019, 136, 47960.	1.3	9
34	Acemannan Gels and Aerogels. Polymers, 2019, 11, 330.	2.0	7
35	Nixtamalized Maize Flour By-product as a Source of Health-Promoting Ferulated Arabinoxylans (AX). , 2019, , 225-235.		0
36	Feruloylated Arabinoxylans from Maize Distillerâ€™s Dried Grains with Solubles: Effect of Feruloyl Esterase on their Macromolecular Characteristics, Gelling, and Antioxidant Properties. Sustainability, 2019, 11, 6449.	1.6	15

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37	Partial removal of protein associated with arabinoxylans: Impact on the viscoelasticity, crosslinking content, and microstructure of the gels formed. Journal of Applied Polymer Science, 2019, 136, 47300.	1.3	22
38	Enzymatically cross-linked arabinoxylan microspheres as oral insulin delivery system. International Journal of Biological Macromolecules, 2019, 126, 952-959.	3.6	38
39	Enzymatic treatments as alternative to produce chitin fragments of low molecular weight from Alternaria alternata. Journal of Applied Polymer Science, 2019, 136, 47339.	1.3	12
40	Enzymatic cross-linking of ferulated arabinoxylan: effect of laccase or peroxidase catalysis on the gel characteristics. Food Science and Biotechnology, 2019, 28, 311-318.	1.2	21
41	PECTIN HYDROGELS PH STABILITY AS AFFECTED BY METHACRYLIC GRAFTING TO LOW METHOXY PECTIN STRUCTURE. Revista Mexicana De Ingeniera Quimica, 2019, 18, 531-542.	0.2	3
42	Partial Characterization of a Low-Molecular-Mass Fraction with Cryoprotectant Activity from Jumbo Squid (Dosidicus gigas) Mantle Muscle. Food Technology and Biotechnology, 2019, 57, 39-47.	0.9	2
43	Dynamic rheology and microstructure of starch gels affected by triticale genomic composition and developing stage. International Agrophysics, 2019, 33, 21-30.	0.7	0
44	Electrosprayâ€assisted fabrication of coreâ€shell arabinoxylan gel particles for insulin and probiotics entrapment. Journal of Applied Polymer Science, 2018, 135, 46411.	1.3	34
45	Amaranth addition to enzymatically modified wheat flour improves dough functionality, bread immunoreactivity and quality. Food and Function, 2018, 9, 534-540.	2.1	16
46	Rheology and microstructure of gels based on wheat arabinoxylans enzymatically modified in arabinose to xylose ratio. Journal of the Science of Food and Agriculture, 2018, 98, 914-922.	1.7	19
47	Chemical characterization and antioxidant activity of sulfated polysaccharides from Navicula sp.. Food Hydrocolloids, 2018, 75, 229-236.	5.6	84
48	Analysis of rhamnogalacturonan I fragments as elicitors of the defense mechanism in tomato fruit. Chilean Journal of Agricultural Research, 2018, 78, 339-349.	0.4	6
49	Electrosprayed Coreâ€“Shell Composite Microbeads Based on Pectin-Arabinoxylans for Insulin Carrying: Aggregation and Size Dispersion Control. Polymers, 2018, 10, 108.	2.0	23
50	Production and characterization of supercritical CO2 dried chitosan nanoparticles as novel carrier device. Carbohydrate Polymers, 2018, 198, 556-562.	5.1	17
51	Polysaccharides in Alternative Methods for Insulin Delivery. , 2018, , 175-197.		3
52	Pectin and Pectin-Based Composite Materials: Beyond Food Texture. Molecules, 2018, 23, 942.	1.7	294
53	Ferulated Arabinoxylans and Their Gels: Functional Properties and Potential Application as Antioxidant and Anticancer Agent. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-22.	1.9	71
54	VISCOELASTIC CHARACTERISTICS OF PART-BAKED BREAD UNDER DIFFERENT PROCESS CONDITIONS. Biotecnia, 2018, 21, 68-78.	0.1	2

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55	Efecto prebiÃ³tico de los Arabinoxilanos y los Arabinoxilo-OligosacÃ¡ridos y su relaciÃ³n con la promociÃ³n de la buena salud. CienciaUAT, 2018, 13, 146.	0.3	5
56	Ferulated Arabinoxylans and Î²-Glucans as Fat Replacers in Yoghurt and their Effects on Sensorial Properties. , 2018, , 61-70.		0
57	Comparison of Solubility of Corn Proteins in Propanol, Ethanol, and tert-Butyl Alcohol Solutions on the Tortilla Process Samples. Cereal Chemistry, 2017, 94, CCHEM-05-17-011.	1.1	0
58	Supercritical CO₂dried chitosan nanoparticles: production and characterization. RSC Advances, 2017, 7, 30879-30885.	1.7	24
59	Control of blue mold decay on Persian lime: Application of covalently cross-linked arabinoxylans bioactive coatings with antagonistic yeast entrapped. LWT - Food Science and Technology, 2017, 85, 187-196.	2.5	42
60	Aerogels from Chitosan Solutions in Ionic Liquids. Polymers, 2017, 9, 722.	2.0	27
61	Syneresis in Gels of Highly Ferulated Arabinoxylans: Characterization of Covalent Cross-Linking, Rheology, and Microstructure. Polymers, 2017, 9, 164.	2.0	22
62	Gels of Ferulated Arabinoxylans: Rheology, Structural Parameters and Microstructure. , 2017, , 208-221.		2
63	Navicula sp. Sulfated Polysaccharide Gels Induced by Fe(III): Rheology and Microstructure. International Journal of Molecular Sciences, 2016, 17, 1238.	1.8	16
64	Maize Processing Waste Water Upcycling in Mexico: Recovery of Arabinoxylans for Probiotic Encapsulation. Sustainability, 2016, 8, 1104.	1.6	20
65	Effect of freezing rate and storage on the rheological, thermal and structural properties of frozen wheat dough starch. Starch/Staerke, 2016, 68, 1103-1110.	1.1	20
66	Molecular characterization of water extractable arabinoxylans isolated from wheat fine bran and their effect on dough viscosity. LWT - Food Science and Technology, 2016, 74, 484-492.	2.5	34
67	Starch Debranching Enzyme Activity and Its Effects on Some Starch Physicochemical Characteristics in Developing Substituted and Complete Triticales (X Triticosecale Wittmack). Cereal Chemistry, 2016, 93, 64-70.	1.1	11
68	Corn proteins solubility changes during extrusion and traditional nixtamalization for tortilla processing: A study using size exclusion chromatography. Journal of Cereal Science, 2016, 69, 351-357.	1.8	15
69	In vitro degradation of covalently cross-linked arabinoxylan hydrogels by bifidobacteria. Carbohydrate Polymers, 2016, 144, 76-82.	5.1	49
70	Covalently Cross-Linked Arabinoxylans Films for Debaryomyces hansenii Entrapment. Molecules, 2015, 20, 11373-11386.	1.7	30
71	Mechanical, thermal, and antioxidant properties of composite films prepared from durum wheat starch and lignin. Starch/Staerke, 2015, 67, 502-511.	1.1	34
72	Hydroxylysyl-pyridinoline occurrence and chemical characteristics of collagen present in jumbo squid (Dosidicus gigas) tissues. Journal of Food Composition and Analysis, 2015, 44, 10-17.	1.9	14

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73	Protein/Arabinoxylans Gels: Effect of Mass Ratio on the Rheological, Microstructural and Diffusional Characteristics. International Journal of Molecular Sciences, 2014, 15, 19106-19118.	1.8	19
74	Effect of Freezing Rate and Storage Time on Gluten Protein Solubility, and Dough and Bread Properties. Journal of Food Process Engineering, 2014, 37, 237-247.	1.5	15
75	Entrapment of Probiotics in Water Extractable Arabinoxylan Gels: Rheological and Microstructural Characterization. Molecules, 2014, 19, 3628-3637.	1.7	24
76	Antioxidant and Antimicrobial Activity of Commercial Propolis Extract in Beef Patties. Journal of Food Science, 2014, 79, C1499-504.	1.5	45
77	Antioxidant Activity of Maize Bran Arabinoxylan Microspheres. , 2014, , 19-28.		3
78	EFFECT OF XYLANASE ON EXTRUDED NIXTAMALIZED CORN FLOUR AND TORTILLA: PHYSICOCHEMICAL AND RHEOLOGICAL CHARACTERISTICS. Journal of Food Process Engineering, 2013, 36, 179-186.	1.5	12
79	Water Extractable Arabinoxylan Aerogels Prepared by Supercritical CO2 Drying. Molecules, 2013, 18, 5531-5542.	1.7	20
80	Gels of ferulated arabinoxylans extracted from nixtamalized and non-nixtamalized maize bran: rheological and structural characteristics. CYTA - Journal of Food, 2013, 11, 22-28.	0.9	27
81	Extruded nixtamalized corn flour for making tortilla: the effect of xylanase on the depolymerization of ferulated arabinoxylans. CYTA - Journal of Food, 2013, 11, 84-89.	0.9	1
82	Arabinoxylan Microspheres: Structural and Textural Characteristics. Molecules, 2013, 18, 4640-4650.	1.7	24
83	Characterization of Water Extractable Arabinoxylans from a Spring Wheat Flour: Rheological Properties and Microstructure. Molecules, 2013, 18, 8417-8428.	1.7	47
84	Characterization of the Nutraceutical Quality and Antioxidant Activity in Bell Pepper in Response to Grafting. Molecules, 2013, 18, 15689-15703.	1.7	33
85	In vitro Evaluation of Arabinoxylan Gels as an Oral Delivery System for Insulin. Materials Research Society Symposia Proceedings, 2012, 1487, 33.	0.1	4
86	Arabinoxylans Gels as Lycopene Carriers: in vitro Degradation by Colonic Bacteria. Materials Research Society Symposia Proceedings, 2012, 1487, 26.	0.1	4
87	Lycopene/Arabinoxylan Gels: Rheological and Controlled Release Characteristics. Molecules, 2012, 17, 2428-2436.	1.7	29
88	Pectin Extraction, Gelation, and Sources. , 2012, , 583-592.		0
89	Non-Starch Polysaccharides in Maize and Oat. , 2011, , 153-159.		3
90	The Peroxidase/H2O2 System as a Free Radical-Generating Agent for Gelling Maize Bran Arabinoxylans: Rheological and Structural Properties. Molecules, 2011, 16, 8410-8418.	1.7	22

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91	Enzymatic Cross-Linking of Alkali Extracted Arabinoxylans: Gel Rheological and Structural Characteristics. International Journal of Molecular Sciences, 2011, 12, 5853-5861.	1.8	28
92	Feruloylated arabinoxylans and arabinoxylan gels: structure, sources and applications. Phytochemistry Reviews, 2010, 9, 111-120.	3.1	111
93	Microcalorimetric measurement of Trichoderma spp. growth at different temperatures. Thermochimica Acta, 2010, 509, 40-45.	1.2	9
94	Component Analysis and Free Radicals Scavenging Activity of Cicer arietinum L. Husk Pectin. Molecules, 2010, 15, 6948-6955.	1.7	33
95	A Novel Pectin Material: Extraction, Characterization and Gelling Properties. International Journal of Molecular Sciences, 2010, 11, 3686-3695.	1.8	79
96	Maize Arabinoxylan Gels as Protein Delivery Matrices. Molecules, 2009, 14, 1475-1482.	1.7	44
97	Trametes sp. as a Source of Biopolymer Cross-Linking Agents: Laccase Induced Gelation of Ferulated Arabinoxylans. Molecules, 2009, 14, 4159-4165.	1.7	4
98	Pectin from low quality â€˜Golden Deliciousâ€™ apples: Composition and gelling capability. Food Chemistry, 2009, 116, 101-103.	4.2	63
99	Metabolic activity of low chilling grapevine buds forced to break. Thermochimica Acta, 2009, 481, 28-31.	1.2	18
100	Maize processing waste water arabinoxylans: Gelling capability and cross-linking content. Food Chemistry, 2009, 115, 1286-1290.	4.2	84
101	Maize bran/oat flour extruded breakfast cereal: A novel source of complex polysaccharides and an antioxidant. Food Chemistry, 2008, 111, 654-657.	4.2	43
102	Respiratory response of apple buds treated with budbreaking agents. Thermochimica Acta, 2007, 457, 109-112.	1.2	6
103	Maize bran gum: Extraction, characterization and functional properties. Carbohydrate Polymers, 2007, 69, 280-285.	5.1	108
104	Arabinoxylan/protein gels: Structural, rheological and controlled release properties. Food Hydrocolloids, 2006, 20, 53-61.	5.6	58
105	Impact of the structure of arabinoxylan gels on their rheological and protein transport properties. Carbohydrate Polymers, 2005, 60, 431-438.	5.1	55
106	Storage stability of laccase induced arabinoxylan gels. Carbohydrate Polymers, 2005, 59, 181-188.	5.1	89
107	Arabinoxylan Gels:Â Impact of the Feruloylation Degree on Their Structure and Properties. Biomacromolecules, 2005, 6, 309-317.	2.6	137
108	Arabinoxylan networks as affected by ovalbumin content. Macromolecular Symposia, 2003, 200, 129-136.	0.4	3

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109	Calorimetric assessment of microbial growth in milk as affected by different conditions. Thermochimica Acta, 2002, 394, 179-184.	1.2	14
110	Polyphenol Oxidase Activity, Color Changes, and Dehydration in Table Grape Rachis during Development and Storage As Affected byN-(2-Chloro-4-pyridyl)-N-phenylurea. Journal of Agricultural and Food Chemistry, 2001, 49, 946-951.	2.4	52
111	MICROCALORIMETRY: AN ACCURATE TOOL FOR EXPEDITE DETERMINATIONS OF PLANT TISSUE METABOLISM. Acta Horticulturae, 2001, , 79-85.	0.1	1
112	Effect of chilling on calorimetric responses of dormant vegetative apple buds. Thermochimica Acta, 2000, 349, 89-94.	1.2	11
113	Chilling injury in husk tomato leaves as defined by scanning calorimetry. Thermochimica Acta, 2000, 349, 125-129.	1.2	3
114	Low-Value Maize and Wheat By-Products as a Source of Ferulated Arabinoxylans. , 0, , .		4
115	Gelation of Arabinoxylans from Maize Wastewater â€" Effect of Alkaline Hydrolysis Conditions on the Gel Rheology and Microstructure. , 0, , .		4