Maria Rita Sierakowski

List of Publications by Year
in descending order

124	4,379	109264	123376
papers	citations	35 h-index	61 g-index

124	124	124	5562
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bacterial cellulose in biomedical applications: A review. International Journal of Biological Macromolecules, 2017, 104, 97-106.	3.6	457
2	Starch films reinforced with mineral clay. Carbohydrate Polymers, 2003, 52, 101-110.	5.1	351
3	Nanostructural Reorganization of Bacterial Cellulose by Ultrasonic Treatment. Biomacromolecules, 2010, 11, 1217-1224.	2.6	181
4	In vitro and in vivo antiviral properties of sulfated galactomannans against yellow fever virus (BeH111) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.9	120
5	Production and characterization of nanospheres of bacterial cellulose from Acetobacter xylinum from processed rice bark. Materials Science and Engineering C, 2009, 29, 546-551.	3.8	112
6	Amylose contents, rheological properties and gelatinization kinetics of yam (Dioscorea alata) and cassava (Manihot utilissima) starches. Carbohydrate Polymers, 2004, 55, 3-8.	5.1	104
7	The effect of calcium salts on the viscosity and adsorption behavior of xanthan. Carbohydrate Polymers, 2011, 84, 669-676.	5.1	99
8	Bionanocomposites of thermoplastic starch reinforced with bacterial cellulose nanofibres: Effect of enzymatic treatment on mechanical properties. Carbohydrate Polymers, 2010, 80, 866-873.	5.1	94
9	Microencapsulation of JuÃ§ara (Euterpe edulis M.) Pulp by Spray Drying Using Different Carriers and Drying Temperatures. Drying Technology, 2015, 33, 153-161.	1.7	83
10	Physico-chemical properties of seed xyloglucans from different sources. Carbohydrate Polymers, 2005, 60, 507-514.	5.1	79
11	Piezoelectric immunochip coated with thin films of bacterial cellulose nanocrystals for dengue detection. Biosensors and Bioelectronics, 2017, 92, 47-53.	5.3	76
12	Dynamic rheological study of Sterculia striata and karaya polysaccharides in aqueous solution. Food Hydrocolloids, 2005, 19, 861-867.	5.6	75
13	Specific modifications of galactomannans. Carbohydrate Polymers, 2000, 42, 51-57.	5.1	69
14	Influence of green banana pulp on the rheological behaviour and chemical characteristics of emulsions (mayonnaises). LWT - Food Science and Technology, 2008, 41, 1018-1028.	2.5	68
15	The influence of layered compounds on the properties of starch/layered compound composites. Polymer International, 2003, 52, 1035-1044.	1.6	67
16	Layer-by-layer polysaccharide-coated liposomes for sustained delivery of epidermal growth factor. Carbohydrate Polymers, 2016, 140, 129-135.	5.1	67
17	Electrospinning of commercial guar-gum: Effects of purification and filtration. Carbohydrate Polymers, 2013, 93, 484-491.	5.1	66
18	Chemical structure and physical-chemical properties of mucilage from the leaves of Pereskia aculeata. Food Hydrocolloids, 2017, 70, 20-28.	5.6	66

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19	Physical and chemical properties of ultrasonically, spray-dried green banana (Musa cavendish) starch. Journal of Food Engineering, 2011, 104, 639-648.	2.7	63
20	Structural characterization and emulsifying properties of polysaccharides of Acacia mearnsii de Wild gum. Carbohydrate Polymers, 2013, 92, 312-320.	5.1	63
21	Chitosan andN-carboxymethylchitosan: I. The role ofN-carboxymethylation of chitosan in the thermal stability and dynamic mechanical properties of its films. Polymer International, 2006, 55, 961-969.	1.6	56
22	Complexes of arabinogalactan of Pereskia aculeata and Co2+, Cu2+, Mn2+, and Ni2+. Bioresource Technology, 2001, 76, 29-37.	4.8	53
23	Viscometric studies on xanthan and galactomannan systems. Carbohydrate Polymers, 1997, 33, 131-138.	5.1	52
24	A rheological description of mixtures of a galactoxyloglucan with high amylose and waxy corn starches. Carbohydrate Polymers, 2003, 51, 25-32.	5.1	51
25	Nanocomposites coated with xyloglucan for drug delivery: In vitro studies. International Journal of Pharmaceutics, 2009, 367, 204-210.	2.6	50
26	Microbicidal gentamicin-alginate hydrogels. Carbohydrate Polymers, 2018, 186, 159-167.	5.1	48
27	Influence of temperature on the rheological behavior of whole araÃ§Ã¡ pulp (Psidium cattleianum) Tj ETQq1 1 0.784314 rgBT /Overlock	2.5	47
28	Effects of iota-carrageenan on the rheological properties of starches. Carbohydrate Polymers, 2006, 65, 49-57.	5.1	45
29	Characterization and potential uses of Copaifera langsdorfii seeds and seed oil. Bioresource Technology, 2008, 99, 2659-2663.	4.8	43
30	Chemical and Functional Characterization of Products Obtained from Yam Tubers. Starch/Staerke, 2002, 54, 476-481.	1.1	42
31	Xyloglucan nano-aggregates: Physico-chemical characterisation in buffer solution and potential application as a carrier for camptothecin, an anti-cancer drug. Carbohydrate Polymers, 2010, 82, 355-362.	5.1	42
32	Property evaluations of dry-cast reconstituted bacterial cellulose/tamarind xyloglucan biocomposites. Carbohydrate Polymers, 2013, 93, 144-153.	5.1	42
33	Xyloglucan Octasaccharide XXLGol Derived from the Seeds ofHymenaea courbaril Acts as a Signaling Molecule1. Plant Physiology, 1998, 116, 1013-1021.	2.3	41
34	Oxidation of cashew tree gum exudate polysaccharide with TEMPO reagent. Journal of the Brazilian Chemical Society, 2007, 18, 85-92.	0.6	38
35	Galactomannans and arabinans from seeds of caesalpiniaceae. Phytochemistry, 1998, 49, 737-743.	1.4	36
36	Influence of mechanical pretreatment to isolate cellulose nanocrystals by sulfuric acid hydrolysis. International Journal of Biological Macromolecules, 2019, 130, 622-626.	3.6	36

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37	Lysozyme-Triggered Epidermal Growth Factor Release from Bacterial Cellulose Membranes Controlled by Smart Nanostructured Films. Journal of Pharmaceutical Sciences, 2014, 103, 3958-3965.	1.6	35
38	Sustainable hydroxypropyl methylcellulose/xyloglucan/gentamicin films with antimicrobial properties. Carbohydrate Polymers, 2017, 165, 285-293.	5.1	34
39	An active heparinoid obtained by sulphation of a galactomannan extracted from the endosperm of Senna macranthera seeds. Carbohydrate Polymers, 2001, 46, 165-169.	5.1	33
40	Bacterial cellulose nanocrystals: impact of the sulfate content on the interaction with xyloglucan. Cellulose, 2015, 22, 1773-1787.	2.4	33
41	Tuning Fe 3 O 4 nanoparticle dispersion through pH in PVA/guar gum/electrospun membranes. Carbohydrate Polymers, 2015, 134, 775-783.	5.1	33
42	Adsorption behavior of oxidized galactomannans onto amino-terminated surfaces and their interaction with bovine serum albumin. Carbohydrate Polymers, 2002, 49, 167-175.	5.1	30
43	Regeneration of Skin Tissue Promoted by Mesenchymal Stem Cells Seeded in Nanostructured Membrane. Transplantation Proceedings, 2014, 46, 1882-1886.	0.3	30
44	Interfacial properties of cellulose nanoparticles obtained from acid and enzymatic hydrolysis of cellulose. Cellulose, 2016, 23, 2421-2437.	2.4	30
45	Hydrophilicity improvement of mercerized bacterial cellulose films by polyethylene glycol graft. International Journal of Biological Macromolecules, 2016, 86, 599-605.	3.6	29
46	Characterisation of bacterial cellulose partly acetylated by dimethylacetamide/lithium chloride. Materials Science and Engineering C, 2011, 31, 190-197.	3.8	28
47	Structural Studies on Galactomannans From Brazilian Seeds. Journal of Carbohydrate Chemistry, 1993, 12, 753-767.	0.4	27
48	Oligosaccharides derived from the xyloglucan isolated from the seeds of Hymenaea courbaril var. stilbocarpa. International Journal of Biological Macromolecules, 1995, 17, 413-415.	3.6	27
49	Some structural features of a heteropolysaccharide from the leaves of the cactus Pereskia aculeata. Phytochemistry, 1987, 26, 1709-1713.	1.4	26
50	Physicochemical and in vitro biocompatibility of films combining reconstituted bacterial cellulose with arabinogalactan and xyloglucan. Carbohydrate Polymers, 2016, 151, 889-898.	5.1	26
51	In vitro antiherpetic and antirotaviral activities of a sulfate prepared from Mimosa scabrella galactomannan. International Journal of Biological Macromolecules, 2009, 45, 453-457.	3.6	24
52	Bioactive nanocomposites of bacterial cellulose and natural hydrocolloids. Journal of Materials Chemistry B, 2014, 2, 7034-7044.	2.9	24
53	Polyelectrolyte complexes from gum arabic and gelatin: Optimal complexation pH as a key parameter to obtain reproducible microcapsules. Food Hydrocolloids, 2015, 46, 201-207.	5.6	24
54	Rheological study of ternary mixtures and pectic gels of red fruit pulps. International Journal of Food Science and Technology, 2007, 42, 629-639.	1.3	23

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55	Caesalpinia ferrea var. ferrea seeds as a new source of partially substituted galactomannan. Carbohydrate Polymers, 2010, 82, 641-647.	5.1	23
56	Stability and rheological behaviour of salad dressing obtained with whey and different combinations of stabilizers. International Journal of Food Science and Technology, 2009, 44, 777-783.	1.3	22
57	Chemical, physico-chemical and cytotoxicity characterisation of xyloglucan from Guibourtia hymenifolia (Moric.) J. Leonard seeds. Food Hydrocolloids, 2011, 25, 1242-1250.	5.6	22
58	Fe (III) - Galactomannan Solid and Aqueous Complexes: Potentiometric, EPR Spectroscopy and Thermal Data. Journal of the Brazilian Chemical Society, 2001, 12, 791-798.	0.6	20
59	Sensory Evaluation and Rheological Behavior of Commercial Mayonnaise. International Journal of Food Engineering, 2007, 3, .	0.7	20
60	Specific modification of xyloglucan from Hymenaea courbaril seeds. Materials Science and Engineering C, 2009, 29, 552-558.	3.8	20
61	Location of O-acetyl groups in the heteropolysaccharide of the cactus Pereskia aculeata. Carbohydrate Research, 1990, 201, 277-284.	1.1	19
62	Wettability effect of graphene-based surfaces on silicon carbide and their influence on hydrophobicity of nanocrystalline cerium oxide films. Journal of Colloid and Interface Science, 2015, 441, 71-77.	5.0	19
63	TEMPO-mediated oxidation on galactomannan: Gal/Man ratio and chain flexibility dependence. Carbohydrate Polymers, 2016, 153, 371-378.	5.1	19
64	Rheological Properties of Butia Pulp. International Journal of Food Engineering, 2006, 2, .	0.7	18
65	Transient and quasi-permanent networks in xyloglucan solutions. Carbohydrate Polymers, 2015, 129, 216-223.	5.1	18
66	Lectins and/or xyloglucans/alginate layers as supports for immobilization of dengue virus particles. Colloids and Surfaces B: Biointerfaces, 2008, 66, 45-52.	2.5	17
67	Influence of two different alcohols in the esterification of fatty acids over layered zinc stearate/palmitate. Bioresource Technology, 2015, 193, 337-344.	4.8	17
68	A comprehensive study of the relation between structural and physical chemical properties of acacia gums. Food Hydrocolloids, 2018, 85, 167-175.	5.6	17
69	A xyloglucan from seeds of the native Brazilian species Hymenaea courbaril for micropropagation of Marubakaido and Jonagored apples. Plant Cell Reports, 2003, 21, 402-407.	2.8	16
70	Propriedades reolÃ³gicas da polpa de manga (Mangifera indica L. cv. Keitt) centrifugada. Ciencia E Agrotecnologia, 2006, 30, 955-960.	1.5	16
71	Preparation of cellulose II and IIII films by allomorphic conversion of bacterial cellulose I pellicles. Materials Science and Engineering C, 2015, 51, 167-173.	3.8	16
72	Evaluation of Castor Oil Cake Starch and Recovered Glycerol and Development of â€œGreenâ€•Composites Based on Those with Plant Fibers. Materials, 2016, 9, 76.	1.3	16

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73	Cellulose Based Cryogels as Adsorbents for Organic Pollutants. Macromolecular Symposia, 2019, 383, 1800013.	0.4	16
74	Physicoâ€“chemical aspects of galactoxyloglucan from the seeds of Hymenaea courbaril and its tetraborate complex. Carbohydrate Polymers, 2003, 54, 287-295.	5.1	15
75	Effect of the oxidation level on the thermogravimetric kinetics of an oxidized galactoxyloglucan from Hymenaea courbaril (JatobÃ¡) seeds. Thermochimica Acta, 2004, 409, 41-47.	1.2	15
76	Chemically sulfated galactomannan from Dimorphandra gardneriana seed: Characterization and toxicity evaluation. Carbohydrate Polymers, 2014, 101, 1013-1017.	5.1	15
77	Agar/galactomannan blends for strawberry (Fragaria x ananassa Duchesne) cv. Pelican micropropagation. Scientia Horticulturae, 2006, 107, 358-364.	1.7	14
78	Characterization of the galactomannans from Parkinsonia aculeata seeds and their application on affinity chromatography. Polimeros, 2006, 16, 99-103.	0.2	14
79	Granules morphology and rheological behavior of green banana (Musa cavendishii) and corn (Zea) Tj ETQq1 1 0.784314 rgBT /Overlock	1.5	14
80	Galactomannan thin films as supports for the immobilization of Concanavalin A and/or dengue viruses. International Journal of Biological Macromolecules, 2012, 50, 88-94.	3.6	14
81	A linear (1 â†' 5)-linked Î±-l-arabinofuranan from the seeds of guapuruvu (Schizolobium parahybum). Carbohydrate Research, 1992, 233, 265-269.	1.1	13
82	Evaluation of the complexes of galactomannan of Leucaena leucocephala and Co2+, Mn2+ , Ni2+ and Zn2+. Journal of the Brazilian Chemical Society, 2000, 11, 224-231.	0.6	13
83	Thin films of xyloglucans for BSA adsorption. Materials Science and Engineering C, 2009, 29, 631-637.	3.8	12
84	Nanocapsule of cationic liposomes obtained using â€œin situâ€•acrylic acid polymerization: Stability, surface charge and biocompatibility. Colloids and Surfaces B: Biointerfaces, 2011, 87, 267-272.	2.5	12
85	Polysaccharide depolymerization from TEMPO-catalysis: Effect of TEMPO concentration. Carbohydrate Polymers, 2017, 170, 140-147.	5.1	12
86	Salt-induced thermal gelation of xyloglucan in aqueous media. Carbohydrate Polymers, 2019, 223, 115083.	5.1	12
87	Beneficial Roles of Cellulose Patch-Mediated Cell Therapy in Myocardial Infarction: A Preclinical Study. Cells, 2021, 10, 424.	1.8	12
88	Highly uneven distribution of O-acetyl groups in the acidic d-xylan of Mimosa scabrella (bracatinga). Carbohydrate Research, 1989, 193, 23-31.	1.1	11
89	Equilibrium studies of galactomannan of Cassia fastuosa and Leucaena leucocephala and Cu2+ using potentiometry and EPR spectroscopy. Carbohydrate Polymers, 1998, 35, 13-20.	5.1	11
90	Rheological properties of emulsions stabilized by green banana (Musa cavendishii) pulp fitted by power law model. Brazilian Archives of Biology and Technology, 2009, 52, 1541-1553.	0.5	11

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91	Characterisation of ultra-thin films of oxidised bacterial cellulose for enhanced anchoring and build-up of polyelectrolyte multilayers. Colloid and Polymer Science, 2014, 292, 97-105.	1.0	11
92	Dynamic rheological properties of Yam starch/hectorite composite gels. Polymer International, 2005, 54, 814-822.	1.6	10
93	Rheological behavior of borate complex and polysaccharides. Materials Science and Engineering C, 2009, 29, 607-612.	3.8	10
94	Nanostructured Celluloseâ€“Gellanâ€“Xyloglucanâ€“Lysozyme Dressing Seeded with Mesenchymal Stem Cells for Deep Second-Degree Burn Treatment. International Journal of Nanomedicine, 2021, Volume 16, 833-850.	3.3	10
95	Seed gum ofStryphnodendron barbatiman (barbatimÃ£o). Applied Biochemistry and Biotechnology, 1991, 28-29, 353-361.	1.4	9
96	Properties of the seed gum of stryphnodendron barbatiman (BarbatimÃo). Applied Biochemistry and Biotechnology, 1992, 34-35, 349-357.	1.4	9
97	Polysaccharides from the seeds of Senna multijuga. International Journal of Biological Macromolecules, 1995, 17, 409-412.	3.6	9
98	Xyloglucan gelation induced by enzymatic degalactosylation; kinetics and the effect of the molar mass. Carbohydrate Polymers, 2017, 174, 517-523.	5.1	9
99	Effect of adding galactomannans on some physical and chemical properties of hyaluronic acid. International Journal of Biological Macromolecules, 2020, 144, 527-535.	3.6	9
100	Assembling of xyloglucans and lectin onto si wafers and onto amino-terminated surfaces. Journal of the Brazilian Chemical Society, 2007, 18, 1017-1023.	0.6	9
101	Blends of agar/galactomannan for Marubakaido apple rootstock shoot proliferation. Polimeros, 2005, 15, 146-150.	0.2	8
102	Comportamento reolÃ³gico de sistemas pÃ©cticos de polpas de frutas vermelhas. Food Science and Technology, 2009, 29, 225-231.	0.8	8
103	Sodium Borohydride as a Protective Agent for the Alkaline Treatment of Sisal Fibers for Polymer Composites. Composite Interfaces, 2011, 18, 407-418.	1.3	8
104	Nanometric organisation in blends of gellan/xyloglucan hydrogels. Carbohydrate Polymers, 2014, 114, 48-56.	5.1	8
105	Spherical aggregates obtained from N-carboxymethylation and acetylation of chitosan. Colloid and Polymer Science, 2008, 286, 1387-1394.	1.0	7
106	Oxidation and Nâ€Alkylation at the Câ€6 Position of Galactomannan Extracted from Caesalpinia ferrea var. ferrea Seeds. Macromolecular Symposia, 2011, 299-300, 66-73.	0.4	7
107	Self-assembled polystyrene/xyloglucan nanospheres from spin coating evaporating mixtures. Carbohydrate Polymers, 2011, 84, 126-132.	5.1	7
108	Comparison between the interactions of the cationic surfactant DODAB with xanthan and galactomannan. Carbohydrate Polymers, 2015, 115, 478-484.	5.1	7

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109	Engineered biomarkers for leprosy diagnosis using labeled and label-free analysis. Talanta, 2018, 187, 165-171.	2.9	7
110	Poly(ethylene oxide)-polyelectrolyte blends: viscometric and thermal analysis behaviour. Polymer International, 2000, 49, 81-87.	1.6	6
111	Agar/galactomannan gels applied to shoot regeneration from tobacco leaves. Biologia Plantarum, 2007, 51, 173-176.	1.9	6
112	Micropropagation of â€˜Durondeauâ€™ pear in modified-gelled medium. In Vitro Cellular and Developmental Biology - Plant, 2006, 42, 287-290.	0.9	5
113	Dewetting pattern and stability of thin xyloglucan films adsorbed on silicon and mica. Colloids and Surfaces B: Biointerfaces, 2009, 70, 174-180.	2.5	5
114	The novel use of sodium borohydride as a protective agent for the chemical treatment of vegetable fibers. Fibers and Polymers, 2012, 13, 641-646.	1.1	5
115	Polysaccharides from Chorisia speciosa St. Hil. Progress in Biotechnology, 1996, 14, 549-559.	0.2	4
116	Galactomannanâ€Alginate Synergism Applied in Albumin Encapsulation. Macromolecular Symposia, 2011, 299-300, 99-106.	0.4	4
117	Rheological description of the interaction of xyloglucan and starches: effect of the amylose content in starches. CYTA - Journal of Food, 2015, 13, 235-242.	0.9	4
118	Time-dependent viscometry study of endoglucanase action on xyloglucan: A real-time approach. International Journal of Biological Macromolecules, 2015, 81, 461-466.	3.6	4
119	Effect of Heat Treatment on Pectic Fractions and Apparent Viscosity of Whole Blackberry (Rubus spp.) Pulp. International Journal of Food Engineering, 2008, 4, .	0.7	2
120	AFM characterization of spin coated carboxylated polystyrene nanospheres/xyloglucan layers on mica and silicon. Carbohydrate Polymers, 2013, 93, 240-245.	5.1	1
121	Chitosan-coated microvesicles: Effect of polysaccharide-phospholipid affinity on decafluorobutane dissolution. Carbohydrate Polymers, 2016, 153, 169-175.	5.1	1
122	Efeito das xiloglucanas de sementes e derivados no crescimento de <i>Arabidopsis thaliana. </i>. Ciencia Florestal, 2009, 18, 315-320.	0.1	1
123	Surface Electrostatic Interactions: Effect of Protein Purification in a Thin Polysaccharide Film Adsorbed on a Solid Support. ACS Symposium Series, 2010, , 121-130.	0.5	0
124	ESTUDO DO COMPORTAMENTO REOLÃ“GICO DE SUCOS COMBINADOS DE FRUTAS VERMELHAS. Revista Brasileira De Tecnologia Agroindustrial, 2011, 5, .	0.1	0