## Maria Rita Sierakowski

List of Publications by Year in descending order

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#	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

In vitro and in vivo antiviral properties of sulfated galactomannans against yellow fever virus (BeH111) Tj ETQq0 0 0 rgBT /Overlock 10 T

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 Juçara ( <i>Euterpe edulis</i> 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 araçá pulp (Psidium cattleianum) Tj ETQq1 1 0.	784314 rg 2.5	BT <sub>4</sub> 7verlock
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 reológicas 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 "Green―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	Physico–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 (Jatobá) 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 0.7	'84314 rgl 1.5	3T_/Overlock 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 → 5)-linked α-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 "in situ―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 Cellulose–Gellan–Xyloglucan–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 (barbatimão). Applied Biochemistry and Biotechnology, 1991, 28-29, 353-361.	1.4	9
96	Properties of the seed gum of stryphnodendron barbatiman (BarbatimÃ <b>ë</b> ). 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 reológico de sistemas pécticos 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 <i>N</i> â€Alkylation at the Câ€6 Position of Galactomannan Extracted from <i>Caesalpinia ferrea var. ferrea</i> 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 †Durondeau' 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 REOLÓGICO DE SUCOS COMBINADOS DE FRUTAS VERMELHAS. Revista Brasileira De Tecnologia Agroindustrial, 2011, 5, .	0.1	0