Maria Rita Sierakowski

List of Publications by Citations

121 papers	3,617 citations	32 h-index	54 g-index
124 ext. papers	3,962 ext. citations	6.3 avg, IF	5.12 L-index

#	Paper	IF	Citations
121	Bacterial cellulose in biomedical applications: A review. *International Journal of Biological Macromolecules*, **2017**, 104, 97-106	7.9	336
120	Starch films reinforced with mineral clay. *Carbohydrate Polymers*, **2003**, 52, 101-110	10.3	325
119	Nanostructural reorganization of bacterial cellulose by ultrasonic treatment. *Biomacromolecules*, **2010**, 11, 1217-24	6.9	161
118	In vitro and in vivo antiviral properties of sulfated galactomannans against yellow fever virus (BeH111 strain) and dengue 1 virus (Hawaii strain). *Antiviral Research*, **2003**, 60, 201-8	10.8	106
117	Production and characterization of nanospheres of bacterial cellulose from Acetobacter xylinum from processed rice bark. *Materials Science and Engineering C*, **2009**, 29, 546-551	8.3	95
116	Amylose contents, rheological properties and gelatinization kinetics of yam (Dioscorea alata) and cassava (Manihot utilissima) starches. *Carbohydrate Polymers*, **2004**, 55, 3-8	10.3	90
115	Bionanocomposites of thermoplastic starch reinforced with bacterial cellulose nanofibres: Effect of enzymatic treatment on mechanical properties. *Carbohydrate Polymers*, **2010**, 80, 866-873	10.3	82
114	The effect of calcium salts on the viscosity and adsorption behavior of xanthan. *Carbohydrate Polymers*, **2011**, 84, 669-676	10.3	74
113	Physico-chemical properties of seed xyloglucans from different sources. *Carbohydrate Polymers*, **2005**, 60, 507-514	10.3	70
112	The influence of layered compounds on the properties of starch/layered compound composites. *Polymer International*, **2003**, 52, 1035-1044	3.3	66
111	Dynamic rheological study of Sterculia striata and karaya polysaccharides in aqueous solution. *Food Hydrocolloids*, **2005**, 19, 861-867	10.6	66
110	Specific modifications of galactomannans. *Carbohydrate Polymers*, **2000**, 42, 51-57	10.3	65
109	Piezoelectric immunochip coated with thin films of bacterial cellulose nanocrystals for dengue detection. *Biosensors and Bioelectronics*, **2017**, 92, 47-53	11.8	61
108	Layer-by-layer polysaccharide-coated liposomes for sustained delivery of epidermal growth factor. *Carbohydrate Polymers*, **2016**, 140, 129-35	10.3	56
107	Influence of green banana pulp on the rheological behaviour and chemical characteristics of emulsions (mayonnaises). *LWT - Food Science and Technology*, **2008**, 41, 1018-1028	5.4	56
106	Microencapsulation of Juçara (Euterpe edulis M.) Pulp by Spray Drying Using Different Carriers and Drying Temperatures. *Drying Technology*, **2015**, 33, 153-161	2.6	54
105	Structural characterization and emulsifying properties of polysaccharides of Acacia mearnsii de Wild gum. *Carbohydrate Polymers*, **2013**, 92, 312-20	10.3	54

104	Electrospinning of commercial guar-gum: Effects of purification and filtration. *Carbohydrate Polymers*, **2013**, 93, 484-91	10.3	50
103	Nanocomposites coated with xyloglucan for drug delivery: In vitro studies. *International Journal of Pharmaceutics*, **2009**, 367, 204-10	6.5	49
102	Viscometric studies on xanthan and galactomannan systems. *Carbohydrate Polymers*, **1997**, 33, 131-138	10.3	48
101	Complexes of arabinogalactan of Pereskia aculeata and Co2+, Cu2+, Mn2+, and Ni2+. *Bioresource Technology*, **2001**, 76, 29-37	11	48
100	Chemical structure and physical-chemical properties of mucilage from the leaves of Pereskia aculeata. *Food Hydrocolloids*, **2017**, 70, 20-28	10.6	47
99	A rheological description of mixtures of a galactoxyloglucan with high amylose and waxy corn starches. *Carbohydrate Polymers*, **2003**, 51, 25-32	10.3	47
98	Physical and chemical properties of ultrasonically, spray-dried green banana (Musa cavendish) starch. *Journal of Food Engineering*, **2011**, 104, 639-648	6	46
97	Effects of iota-carrageenan on the rheological properties of starches. *Carbohydrate Polymers*, **2006**, 65, 49-57	10.3	44
96	Chitosan and N-carboxymethylchitosan: I. The role of N-carboxymethylation of chitosan in the thermal stability and dynamic mechanical properties of its films. *Polymer International*, **2006**, 55, 961-969	3.3	40
95	Characterization and potential uses of Copaifera langsdorfii seeds and seed oil. *Bioresource Technology*, **2008**, 99, 2659-63	11	39
94	Xyloglucan octasaccharide XXLGol derived from the seeds of hymenaea courbaril acts as a signaling molecule. *Plant Physiology*, **1998**, 116, 1013-21	6.6	38
93	Influence of temperature on the rheological behavior of whole araçá pulp (Psidium cattleianum sabine). *LWT - Food Science and Technology*, **2006**, 39, 427-431	5.4	36
92	Property evaluations of dry-cast reconstituted bacterial cellulose/tamarind xyloglucan biocomposites. *Carbohydrate Polymers*, **2013**, 93, 144-53	10.3	35
91	Microbicidal gentamicin-alginate hydrogels. *Carbohydrate Polymers*, **2018**, 186, 159-167	10.3	33
90	Galactomannans and arabinans from seeds of caesalpiniaceae. *Phytochemistry*, **1998**, 49, 737-743	4	33
89	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	10.3	32
88	An active heparinoid obtained by sulphation of a galactomannan extracted from the endosperm of Senna macranthera seeds. *Carbohydrate Polymers*, **2001**, 46, 165-169	10.3	32
87	Oxidation of cashew tree gum exudate polysaccharide with TEMPO reagent. *Journal of the Brazilian Chemical Society*, **2007**, 18, 85-92	1.5	31

86	Sustainable hydroxypropyl methylcellulose/xyloglucan/gentamicin films with antimicrobial properties. *Carbohydrate Polymers*, **2017**, 165, 285-293	10.3	30
85	Chemical and Functional Characterization of Products Obtained from Yam Tubers. *Starch/Staerke*, **2002**, 54, 476-481	2.3	30
84	Adsorption behavior of oxidized galactomannans onto amino-terminated surfaces and their interaction with bovine serum albumin. *Carbohydrate Polymers*, **2002**, 49, 167-175	10.3	29
83	Bacterial cellulose nanocrystals: impact of the sulfate content on the interaction with xyloglucan. *Cellulose*, **2015**, 22, 1773-1787	5.5	27
82	Structural Studies on Galactomannans From Brazilian Seeds. *Journal of Carbohydrate Chemistry*, **1993**, 12, 753-767	1.7	27
81	Oligosaccharides derived from the xyloglucan isolated from the seeds of Hymenaea courbaril var. stilbocarpa. *International Journal of Biological Macromolecules*, **1995**, 17, 413-5	7.9	26
80	Lysozyme-triggered epidermal growth factor release from bacterial cellulose membranes controlled by smart nanostructured films. *Journal of Pharmaceutical Sciences*, **2014**, 103, 3958-3965	3.9	25
79	Some structural features of a heteropolysaccharide from the leaves of the cactus Pereskia aculeata. *Phytochemistry*, **1987**, 26, 1709-1713	4	24
78	Interfacial properties of cellulose nanoparticles obtained from acid and enzymatic hydrolysis of cellulose. *Cellulose*, **2016**, 23, 2421-2437	5.5	24
77	Influence of mechanical pretreatment to isolate cellulose nanocrystals by sulfuric acid hydrolysis. *International Journal of Biological Macromolecules*, **2019**, 130, 622-626	7.9	24
76	In vitro antiherpetic and antirotaviral activities of a sulfate prepared from Mimosa scabrella galactomannan. *International Journal of Biological Macromolecules*, **2009**, 45, 453-7	7.9	23
75	Tuning Fe3O4 nanoparticle dispersion through pH in PVA/guar gum/electrospun membranes. *Carbohydrate Polymers*, **2015**, 134, 775-83	10.3	22
74	Characterisation of bacterial cellulose partly acetylated by dimethylacetamide/lithium chloride. *Materials Science and Engineering C*, **2011**, 31, 190-197	8.3	22
73	Hydrophilicity improvement of mercerized bacterial cellulose films by polyethylene glycol graft. *International Journal of Biological Macromolecules*, **2016**, 86, 599-605	7.9	21
72	Polyelectrolyte complexes from gum arabic and gelatin: Optimal complexation pH as a key parameter to obtain reproducible microcapsules. *Food Hydrocolloids*, **2015**, 46, 201-207	10.6	21
71	Regeneration of skin tissue promoted by mesenchymal stem cells seeded in nanostructured membrane. *Transplantation Proceedings*, **2014**, 46, 1882-6	1.1	20
70	Caesalpinia ferrea var. ferrea seeds as a new source of partially substituted galactomannan. *Carbohydrate Polymers*, **2010**, 82, 641-647	10.3	20
69	Bioactive nanocomposites of bacterial cellulose and natural hydrocolloids. *Journal of Materials Chemistry B*, **2014**, 2, 7034-7044	7.3	19

68	Specific modification of xyloglucan from Hymenaea courbaril seeds. *Materials Science and Engineering C*, **2009**, 29, 552-558	8.3	19
67	Rheological study of ternary mixtures and pectic gels of red fruit pulps. *International Journal of Food Science and Technology*, **2007**, 42, 629-639	3.8	18
66	Physicochemical and in vitro biocompatibility of films combining reconstituted bacterial cellulose with arabinogalactan and xyloglucan. *Carbohydrate Polymers*, **2016**, 151, 889-898	10.3	17
65	Chemical, physico-chemical and cytotoxicity characterisation of xyloglucan from Guibourtia hymenifolia (Moric.) J. Leonard seeds. *Food Hydrocolloids*, **2011**, 25, 1242-1250	10.6	17
64	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	3.8	17
63	Lectins and/or xyloglucans/alginate layers as supports for immobilization of dengue virus particles. *Colloids and Surfaces B: Biointerfaces*, **2008**, 66, 45-52	6	17
62	Location of O-acetyl groups in the heteropolysaccharide of the cactus Pereskia aculeata. *Carbohydrate Research*, **1990**, 201, 277-284	2.9	17
61	Influence of two different alcohols in the esterification of fatty acids over layered zinc stearate/palmitate. *Bioresource Technology*, **2015**, 193, 337-44	11	16
60	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, 71-7	9.3	16
59	TEMPO-mediated oxidation on galactomannan: Gal/Man ratio and chain flexibility dependence. *Carbohydrate Polymers*, **2016**, 153, 371-378	10.3	16
58	Transient and quasi-permanent networks in xyloglucan solutions. *Carbohydrate Polymers*, **2015**, 129, 216-23	10.3	15
57	A xyloglucan from seeds of the native Brazilian species Hymenaea courbaril for micropropagation of Marubakaido and Jonagored apples. *Plant Cell Reports*, **2003**, 21, 402-7	5.1	15
56	Fe (III) - Galactomannan Solid and Aqueous Complexes: Potentiometric, EPR Spectroscopy and Thermal Data. *Journal of the Brazilian Chemical Society*, **2001**, 12, 791-798	1.5	15
55	Sensory Evaluation and Rheological Behavior of Commercial Mayonnaise. *International Journal of Food Engineering*, **2007**, 3,	1.9	14
54	Propriedades reol□gicas da polpa de manga (Mangifera indica L. cv. Keitt) centrifugada. *Ciencia E Agrotecnologia*, **2006**, 30, 955-960	1.6	14
53	Effect of the oxidation level on the thermogravimetric kinetics of an oxidized galactoxyloglucan from Hymenaea courbaril (Jatob□) seeds. *Thermochimica Acta*, **2004**, 409, 41-47	2.9	14
52	Physico□hemical aspects of galactoxyloglucan from the seeds of Hymenaea courbaril and its tetraborate complex. *Carbohydrate Polymers*, **2003**, 54, 287-295	10.3	14
51	Chemically sulfated galactomannan from Dimorphandra gardneriana seed: characterization and toxicity evaluation. *Carbohydrate Polymers*, **2014**, 101, 1013-7	10.3	13

50	Rheological Properties of Butia Pulp. *International Journal of Food Engineering*, **2006**, 2,	1.9	13
49	Characterization of the galactomannans from Parkinsonia aculeata seeds and their application on affinity chromatography. *Polimeros*, **2006**, 16, 99-103	1.6	13
48	A linear (1 -ϭ)-linked ⍈-arabinofuranan from the seeds of guapuruvu (Schizolobium parahybum). *Carbohydrate Research*, **1992**, 233, 265-269	2.9	13
47	Galactomannan thin films as supports for the immobilization of Concanavalin A and/or dengue viruses. *International Journal of Biological Macromolecules*, **2012**, 50, 88-94	7.9	12
46	Thin films of xyloglucans for BSA adsorption. *Materials Science and Engineering C*, **2009**, 29, 631-637	8.3	12
45	Nanocapsule of cationic liposomes obtained using "in situ" acrylic acid polymerization: stability, surface charge and biocompatibility. *Colloids and Surfaces B: Biointerfaces*, **2011**, 87, 267-72	6	12
44	Agar/galactomannan blends for strawberry (Fragaria x ananassa Duchesne) cv. Pelican micropropagation. *Scientia Horticulturae*, **2006**, 107, 358-364	4.1	12
43	Cellulose Based Cryogels as Adsorbents for Organic Pollutants. *Macromolecular Symposia*, **2019**, 383, 1800013	0.8	11
42	Highly uneven distribution of O-acetyl groups in the acidic d-xylan of Mimosa scabrella (bracatinga). *Carbohydrate Research*, **1989**, 193, 23-31	2.9	11
41	A comprehensive study of the relation between structural and physical chemical properties of acacia gums. *Food Hydrocolloids*, **2018**, 85, 167-175	10.6	10
40	Granules morphology and rheological behavior of green banana (Musa cavendishii) and corn (Zea mays) starch gels. *Ciencia E Agrotecnologia*, **2007**, 31, 1443-1448	1.6	10
39	Dynamic rheological properties of Yam starch/hectorite composite gels. *Polymer International*, **2005**, 54, 814-822	3.3	10
38	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	1.5	10
37	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	2.4	9
36	Rheological behavior of borate complex and polysaccharides. *Materials Science and Engineering C*, **2009**, 29, 607-612	8.3	9
35	Equilibrium studies of galactomannan of Cassia fastuosa and Leucaena leucocephala and Cu2+ using potentiometry and EPR spectroscopy. *Carbohydrate Polymers*, **1998**, 35, 13-20	10.3	9
34	Polysaccharides from the seeds of Senna multijuga. *International Journal of Biological Macromolecules*, **1995**, 17, 409-12	7.9	9
33	Seed gum ofStryphnodendron barbatiman (barbatimϭ). *Applied Biochemistry and Biotechnology*, **1991**, 28-29, 353-361	3.2	9

32	Properties of the seed gum of Strypnodendron barbatiman (barbatimao). *Applied Biochemistry and Biotechnology*, **1992**, 34-35, 349-57	3.2	9
31	Assembling of xyloglucans and lectin onto si wafers and onto amino-terminated surfaces. *Journal of the Brazilian Chemical Society*, **2007**, 18, 1017-1023	1.5	9
30	Evaluation of Castor Oil Cake Starch and Recovered Glycerol and Development of "Green" Composites Based on Those with Plant Fibers. *Materials*, **2016**, 9,	3.5	9
29	Xyloglucan gelation induced by enzymatic degalactosylation; kinetics and the effect of the molar mass. *Carbohydrate Polymers*, **2017**, 174, 517-523	10.3	8
28	Preparation of cellulose II and IIII films by allomorphic conversion of bacterial cellulose I pellicles. *Materials Science and Engineering C*, **2015**, 51, 167-73	8.3	8
27	Polysaccharide depolymerization from TEMPO-catalysis: Effect of TEMPO concentration. *Carbohydrate Polymers*, **2017**, 170, 140-147	10.3	7
26	Salt-induced thermal gelation of xyloglucan in aqueous media. *Carbohydrate Polymers*, **2019**, 223, 115083	10.3	7
25	Oxidation and N-Alkylation at the C-6 Position of Galactomannan Extracted from Caesalpinia ferrea var. ferrea Seeds. *Macromolecular Symposia*, **2011**, 299-300, 66-73	0.8	7
24	Sodium Borohydride as a Protective Agent for the Alkaline Treatment of Sisal Fibers for Polymer Composites. *Composite Interfaces*, **2011**, 18, 407-418	2.3	7
23	Blends of agar/galactomannan for Marubakaido apple rootstock shoot proliferation. *Polimeros*, **2005**, 15, 146-150	1.6	7
22	Comparison between the interactions of the cationic surfactant DODAB with xanthan and galactomannan. *Carbohydrate Polymers*, **2015**, 115, 478-84	10.3	6
21	Nanometric organisation in blends of gellan/xyloglucan hydrogels. *Carbohydrate Polymers*, **2014**, 114, 48-56	10.3	6
20	Poly(ethylene oxide)/polyelectrolyte blends: viscometric and thermal analysis behaviour. *Polymer International*, **2000**, 49, 81-87	3.3	6
19	Effect of adding galactomannans on some physical and chemical properties of hyaluronic acid. *International Journal of Biological Macromolecules*, **2020**, 144, 527-535	7.9	6
18	The novel use of sodium borohydride as a protective agent for the chemical treatment of vegetable fibers. *Fibers and Polymers*, **2012**, 13, 641-646	2	5
17	Dewetting pattern and stability of thin xyloglucan films adsorbed on silicon and mica. *Colloids and Surfaces B: Biointerfaces*, **2009**, 70, 174-80	6	5
16	Self-assembled polystyrene/xyloglucan nanospheres from spin coating evaporating mixtures. *Carbohydrate Polymers*, **2011**, 84, 126-132	10.3	5
15	Spherical aggregates obtained from N-carboxymethylation and acetylation of chitosan. *Colloid and Polymer Science*, **2008**, 286, 1387-1394	2.4	5

14	Time-dependent viscometry study of endoglucanase action on xyloglucan: A real-time approach. *International Journal of Biological Macromolecules*, **2015**, 81, 461-6	7.9	4
13	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	1.8	4
12	Galactomannan-Alginate Synergism Applied in Albumin Encapsulation. *Macromolecular Symposia*, **2011**, 299-300, 99-106	0.8	4
11	Agar/galactomannan gels applied to shoot regeneration from tobacco leaves. *Biologia Plantarum*, **2007**, 51, 173-176	2.1	4
10	Engineered biomarkers for leprosy diagnosis using labeled and label-free analysis. *Talanta*, **2018**, 187, 165-171	6.2	4
9	Rheological description of the interaction of xyloglucan and starches: effect of the amylose content in starches. *CYTA - Journal of Food*, **2015**, 13, 235-242	2.3	3
8	Comportamento reol□gico de sistemas p□ticos de polpas de frutas vermelhas. *Food Science and Technology*, **2009**, 29, 225-231	2	3
7	Micropropagation of □Durondeau□pear in modified-gelled medium. *In Vitro Cellular and Developmental Biology - Plant*, **2006**, 42, 287-290	2.3	3
6	Polysaccharides from Chorisia speciosa St. Hil. *Progress in Biotechnology*, **1996**, 14, 549-559		3
5	Effect of Heat Treatment on Pectic Fractions and Apparent Viscosity of Whole Blackberry (Rubus spp.) Pulp. *International Journal of Food Engineering*, **2008**, 4,	1.9	2
4	Nanostructured Cellulose-Gellan-Xyloglucan-Lysozyme Dressing Seeded with Mesenchymal Stem Cells for Deep Second-Degree Burn Treatment. *International Journal of Nanomedicine*, **2021**, 16, 833-850	7.3	2
3	AFM characterization of spin coated carboxylated polystyrene nanospheres/xyloglucan layers on mica and silicon. *Carbohydrate Polymers*, **2013**, 93, 240-5	10.3	1
2	Chitosan-coated microvesicles: Effect of polysaccharide-phospholipid affinity on decafluorobutane dissolution. *Carbohydrate Polymers*, **2016**, 153, 169-175	10.3	0
1	Surface Electrostatic Interactions: Effect of Protein Purification in a Thin Polysaccharide Film Adsorbed on a Solid Support. *ACS Symposium Series*, **2010**, 121-130	0.4	