Alvaro Renato Guerra Dias

List of Publications by Year
in descending order

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118 papers	6,326 citations	50170 46 h-index	74018 75 g-index
119 all docs	119 docs citations	119 times ranked	5286 citing authors

#	Article	IF	Citations
1	Impact of heat-moisture treatment and annealing in starches: A review. Carbohydrate Polymers, 2011, 83, 317-328.	5.1	635
2	pH-sensitive films containing anthocyanins extracted from black bean seed coat and red cabbage. LWT - Food Science and Technology, 2017, 80, 492-500.	2.5	236
3	Effect of heat-moisture treatment on rice starch of varying amylose content. Food Chemistry, 2010, 121, 358-365.	4.2	203
4	Molecular structure, functionality and applications of oxidized starches: A review. Food Chemistry, 2017, 221, 1546-1559.	4.2	194
5	Structural, morphological, and physicochemical properties of acetylated high-, medium-, and low-amylose rice starches. Carbohydrate Polymers, 2014, 103, 405-413.	5.1	170
6	Development of oxidised and heatâ€“moisture treated potato starch film. Food Chemistry, 2012, 132, 344-350.	4.2	167
7	Cellulose fibers extracted from rice and oat husks and their application in hydrogel. Food Chemistry, 2017, 221, 153-160.	4.2	157
8	Structure, morphology and functionality of acetylated and oxidised barley starches. Food Chemistry, 2015, 168, 247-256.	4.2	156
9	Effect of single and dual heatâ€“moisture treatments on properties of rice, cassava, and pinhao starches. Carbohydrate Polymers, 2013, 98, 1578-1584.	5.1	147
10	Black bean (Phaseolus vulgaris L.) protein hydrolysates: Physicochemical and functional properties. Food Chemistry, 2017, 214, 460-467.	4.2	139
11	Physicochemical, crystallinity, pasting and morphological properties of bean starch oxidised by different concentrations of sodium hypochlorite. Food Chemistry, 2012, 131, 1255-1262.	4.2	125
12	Antimicrobial electrospun ultrafine fibers from zein containing eucalyptus essential oil/cyclodextrin inclusion complex. International Journal of Biological Macromolecules, 2017, 104, 874-882.	3.6	121
13	Starch hydrogels: The influence of the amylose content and gelatinization method. International Journal of Biological Macromolecules, 2018, 113, 443-449.	3.6	120
14	Acetylated rice starches films with different levels of amylose: Mechanical, water vapor barrier, thermal, and biodegradability properties. Food Chemistry, 2017, 221, 1614-1620.	4.2	116
15	Action of ginger essential oil (Zingiber officinale) encapsulated in proteins ultrafine fibers on the antimicrobial control in situ. International Journal of Biological Macromolecules, 2018, 118, 107-115.	3.6	110
16	Oxidation of potato starch with different sodium hypochlorite concentrations and its effect on biodegradable films. LWT - Food Science and Technology, 2015, 60, 714-720.	2.5	109
17	Ozone oxidation of cassava starch in aqueous solution at different pH. Food Chemistry, 2014, 155, 167-173.	4.2	106
18	Impact of acid and oxidative modifications, single or dual, of sorghum starch on biodegradable films. Food Chemistry, 2017, 214, 53-60.	4.2	105

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19	Effects of milling on proximate composition, folic acid, fatty acids and technological properties of rice. Journal of Food Composition and Analysis, 2013, 30, 73-79.	1.9	103
20	Development of antimicrobial and antioxidant electrospun soluble potato starch nanofibers loaded with carvacrol. International Journal of Biological Macromolecules, 2019, 139, 1182-1190.	3.6	100
21	Physical modification of starch by heat-moisture treatment and annealing and their applications: A review. Carbohydrate Polymers, 2021, 274, 118665.	5.1	100
22	Cellulose nanocrystals from rice and oat husks and their application in aerogels for food packaging. International Journal of Biological Macromolecules, 2019, 124, 175-184.	3.6	97
23	Production and characterization of encapsulated antioxidative protein hydrolysates from Whitemouth croaker (Micropogonias furnieri) muscle and byproduct. LWT - Food Science and Technology, 2014, 59, 841-848.	2.5	93
24	Ultrafine fibers of zein and anthocyanins as natural pH indicator. Journal of the Science of Food and Agriculture, 2018, 98, 2735-2741.	1.7	88
25	Acetylation of rice starch in an aqueous medium for use in food. LWT - Food Science and Technology, 2015, 62, 1076-1082.	2.5	81
26	Films based on oxidized starch and cellulose from barley. Carbohydrate Polymers, 2015, 133, 644-653.	5.1	80
27	Effects of single and dual physical modifications on pinhÃ£o starch. Food Chemistry, 2015, 187, 98-105.	4.2	80
28	Effects of annealing on the physicochemical properties and enzymatic susceptibility of rice starches with different amylose contents. Food Chemistry, 2010, 123, 711-719.	4.2	77
29	Impact of heat-moisture treatment on rice starch, applied directly in grain paddy rice or in isolated starch. LWT - Food Science and Technology, 2015, 60, 708-713.	2.5	77
30	Dual modification of potato starch: Effects of heat-moisture and high pressure treatments on starch structure and functionalities. Food Chemistry, 2020, 318, 126475.	4.2	72
31	Physicochemical, crystallinity, pasting and thermal properties of heatâ€moistureâ€treated pinhÃ£o starch. Starch/Staerke, 2012, 64, 855-863.	1.1	64
32	Changes in enzymatic activity, technological quality and gamma-aminobutyric acid (GABA) content of wheat flour as affected by germination. LWT - Food Science and Technology, 2018, 90, 483-490.	2.5	64
33	Protein enrichment and its effects on gluten-free bread characteristics. LWT - Food Science and Technology, 2013, 53, 346-354.	2.5	62
34	Starch digestibility and molecular weight distribution of proteins in rice grains subjected to heat-moisture treatment. Food Chemistry, 2017, 219, 260-267.	4.2	62
35	High pressure processing and retrogradation of potato starch: Influence on functional properties and gastro-small intestinal digestion inÂvitro. Food Hydrocolloids, 2018, 75, 131-137.	5.6	60
36	Bacteriocin-like substances of Lactobacillus curvatus P99: characterization and application in biodegradable films for control of Listeria monocytogenes in cheese. Food Microbiology, 2017, 63, 159-163.	2.1	59

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37	Production, Characterization, and Stability of Orange or Eucalyptus Essential Oil/Î²â€€cyclodextrin Inclusion Complex. Journal of Food Science, 2017, 82, 2598-2605.	1.5	58
38	Oxidation of fermented cassava starch using hydrogen peroxide. Carbohydrate Polymers, 2011, 86, 185-191.	5.1	56
39	Pasting, morphological, thermal and crystallinity properties of starch isolated from beans stored under different atmospheric conditions. Carbohydrate Polymers, 2011, 86, 1403-1409.	5.1	55
40	Structural, Thermal, Physical, Mechanical, and Barrier Properties of Chitosan Films with the Addition of Xanthan Gum. Journal of Food Science, 2017, 82, 698-705.	1.5	53
41	Antioxidant ultrafine fibers developed with microalga compounds using a free surface electrospinning. Food Hydrocolloids, 2019, 93, 131-136.	5.6	53
42	Microstructural characteristics and gastro-small intestinal digestion in vitro of potato starch: Effects of refrigerated storage and reheating in microwave. Food Chemistry, 2017, 226, 171-178.	4.2	51
43	Thermal and irradiation resistance of folic acid encapsulated in zein ultrafine fibers or nanocapsules produced by electrospinning and electrospraying. Food Research International, 2019, 124, 137-146.	2.9	51
44	Electrospun potato starch nanofibers for thyme essential oil encapsulation: antioxidant activity and thermal resistance. Journal of the Science of Food and Agriculture, 2020, 100, 4263-4271.	1.7	50
45	Pasting, expansion and textural properties of fermented cassava starch oxidised with sodium hypochlorite. Carbohydrate Polymers, 2011, 84, 268-275.	5.1	49
46	Immobilization of Î±-amylase in ultrafine polyvinyl alcohol (PVA) fibers via electrospinning and their stability on different substrates. International Journal of Biological Macromolecules, 2019, 126, 834-841.	3.6	48
47	Fruit Wastes as Promising Sources of Starch: Extraction, Properties, and Applications. Starch/Staerke, 2020, 72, 1900200.	1.1	48
48	Effects of oxidative treatment on the physicochemical, rheological and functional properties of oat Î²-glucan. Food Chemistry, 2011, 128, 982-987.	4.2	45
49	Electrospinning of native and anionic corn starch fibers with different amylose contents. Food Research International, 2019, 116, 1318-1326.	2.9	42
50	Immobilization of xylanase and xylanaseâ€“Î²-cyclodextrin complex in polyvinyl alcohol via electrospinning improves enzyme activity at a wide pH and temperature range. International Journal of Biological Macromolecules, 2018, 118, 1676-1684.	3.6	41
51	Methods for the Extraction of Roots, Tubers, Pulses, Pseudocereals, and Other Unconventional Starches Sources: A Review. Starch/Staerke, 2020, 72, 1900234.	1.1	41
52	Methods for Extracting Cereal Starches from Different Sources: A Review. Starch/Staerke, 2019, 71, 1900128.	1.1	40
53	Electrosprayed octenyl succinic anhydride starch capsules for rosemary essential oil encapsulation. International Journal of Biological Macromolecules, 2019, 132, 300-307.	3.6	40
54	Mechanical, Barrier and Morphological Properties of Biodegradable Films Based on Muscle and Waste Proteins from the Whitemouth Croaker (M icropogonias furnieri). Journal of Food Processing and Preservation, 2014, 38, 1973-1981.	0.9	38

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55	Effect of alkali and oxidative treatments on the physicochemical, pasting, thermal and morphological properties of corn starch. Journal of the Science of Food and Agriculture, 2013, 93, 2331-2337.	1.7	36
56	Free and encapsulated orange essential oil into a Î²â€cyclodextrin inclusion complex and zein to delay fungal spoilage in cakes. Journal of Food Processing and Preservation, 2020, 44, e14411.	0.9	35
57	Polysaccharides as wall material for the encapsulation of essential oils by electrospun technique. Carbohydrate Polymers, 2021, 265, 118068.	5.1	35
58	Functional, thermal and rheological properties of oat Î²-glucan modified by acetylation. Food Chemistry, 2015, 178, 243-250.	4.2	32
59	Resistant starch and thermal, morphological and textural properties of heatâ€moisture treated rice starches with highâ€, mediumâ€and lowâ€amylose content. Starch/Staerke, 2012, 64, 45-54.	1.1	31
60	Physically cross-linked aerogels based on germinated and non-germinated wheat starch and PEO for application as water absorbers for food packaging. International Journal of Biological Macromolecules, 2020, 155, 6-13.	3.6	29
61	Aerogels based on corn starch as carriers for pinhÃ£o coat extract (Araucaria angustifolia) rich in phenolic compounds for active packaging. International Journal of Biological Macromolecules, 2021, 169, 362-370.	3.6	28
62	Suitability of starch/carvacrol nanofibers as biopreservatives for minimizing the fungal spoilage of bread. Carbohydrate Polymers, 2021, 252, 117166.	5.1	28
63	Molecular structure and granule morphology of native and heatâ€moistureâ€treated pinhÃ£o starch. International Journal of Food Science and Technology, 2015, 50, 282-289.	1.3	27
64	Physicochemical, pasting, crystallinity, and morphological properties of starches isolated from maize kernels exhibiting different types of defects. Food Chemistry, 2019, 274, 330-336.	4.2	27
65	Morphological, mechanical, barrier and properties of films based on acetylated starch and cellulose from barley. Journal of the Science of Food and Agriculture, 2017, 97, 411-419.	1.7	26
66	Phosphate Fertilizer and Growing Environment Change the Phytochemicals, Oil Quality, and Nutritional Composition of Roundup Ready Genetically Modified and Conventional Soybean. Journal of Agricultural and Food Chemistry, 2017, 65, 2661-2669.	2.4	26
67	The effects of heatâ€“moisture treatment of rice grains before parboiling on viscosity profile and physicochemical properties. International Journal of Food Science and Technology, 2014, 49, 1939-1945.	1.3	24
68	Basil Essential Oil: Methods of Extraction, Chemical Composition, Biological Activities, and Food Applications. Food and Bioprocess Technology, 2022, 15, 1-27.	2.6	24
69	Study of heatâ€“moisture treatment of potato starch granules by chemical surface gelatinization. Journal of the Science of Food and Agriculture, 2017, 97, 3114-3123.	1.7	23
70	Acetylation of barnyardgrass starch with acetic anhydride under iodine catalysis. Food Chemistry, 2015, 178, 236-242.	4.2	21
71	Biocomposite Films Based on Phosphorylated Wheat Starch and Cellulose Nanocrystals from Rice, Oat, and Eucalyptus Husks. Starch/Staerke, 2020, 72, 1900051.	1.1	21
72	Cake of brown, black and red rice: Influence of transglutaminase on technological properties, in vitro starch digestibility and phenolic compounds. Food Chemistry, 2020, 318, 126480.	4.2	21

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73	Heatâ€moisture treatment of oat grains and its effects on lipase activity and starch properties. Starch/Staerke, 2018, 70, 1700010.	1.1	20
74	Aging Time of Soluble Potato Starch Solutions for Ultrafine Fibers Formation by Electrospinning. Starch/Staerke, 2019, 71, 1800089.	1.1	20
75	Microalgae protein heating in acid/basic solution for nanofibers production by free surface electrospinning. Journal of Food Engineering, 2018, 230, 49-54.	2.7	19
76	Nano-scale polysaccharide materials in food and agricultural applications. Advances in Food and Nutrition Research, 2019, 88, 85-128.	1.5	19
77	The properties of potato and cassava starch films combined with cellulose fibers and/or nanoclay. Starch/Staerke, 2018, 70, 1700115.	1.1	18
78	Postharvest quality and antioxidant activity extension of strawberry fruit using allyl isothiocyanate encapsulated by electrospun zein ultrafine fibers. LWT - Food Science and Technology, 2021, 143, 111087.	2.5	18
79	Characteristics of starch from different bean genotypes and its effect on biodegradable films. Journal of the Science of Food and Agriculture, 2019, 99, 1207-1214.	1.7	17
80	Impact of encapsulated orange essential oil with Î²â€cyclodextrin on technological, digestibility, sensory properties of wheat cakes as well as Aspergillus flavus spoilage. Journal of the Science of Food and Agriculture, 2021, 101, 5599-5607.	1.7	17
81	Effect of processing conditions on some functional characteristics of extrusion-cooked cassava starch/wheat gluten blends. Journal of the Science of Food and Agriculture, 2002, 82, 924-930.	1.7	16
82	OxidaÃ§Ã£o dos amidos de mandioca e de milho comum fermentados: desenvolvimento da propriedade de expansÃ£o. Food Science and Technology, 2007, 27, 794-799.	0.8	16
83	Phosphorylated and Crossâ€Linked Wheat Starches in the Presence of Polyethylene Oxide and Their Application in Biocomposite Films. Starch/Staerke, 2018, 70, 1700192.	1.1	16
84	The effects of acid and oxidative modification on the expansion properties of rice flours with varying levels of amylose. LWT - Food Science and Technology, 2010, 43, 1213-1219.	2.5	15
85	Electrospun Ultrafine Fibers from Black Bean Protein Concentrates and Polyvinyl Alcohol. Food Biophysics, 2019, 14, 446-455.	1.4	15
86	Efeitos de processo de secagem e tempo de armazenamento na qualidade tecnolÃ³gica de trigo. Ciencia E Agrotecnologia, 2010, 34, 1285-1292.	1.5	13
87	Thermal stability, hydrophobicity and antioxidant potential of ultrafine poly (lactic acid)/rice husk lignin fibers. Brazilian Journal of Chemical Engineering, 2021, 38, 133-144.	0.7	13
88	Incorporation of tetraethylorthosilicate (TEOS) in biodegradable films based on bean starch () Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	2.6	12
89	Propriedades de pasta de amidos de arroz nativo e acetilados. Brazilian Journal of Food Technology, 2012, 15, 78-83.	0.8	10
90	Effects of using eolic exhausters as a complement to conventional aeration on the quality of rice stored in metal silos. Journal of Stored Products Research, 2014, 59, 76-81.	1.2	10

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91	Effect of carvacrol encapsulation in starchâ€based nanofibers: Thermal resistance and antioxidant and antimicrobial properties. Journal of Food Processing and Preservation, 2021, 45, e15409.	0.9	10
92	Production of gluten free bread with flour and chia seeds (Salvia hispÃ¢nica L). Food Bioscience, 2021, 43, 101294.	2.0	10
93	Risk assessment of in vitro cytotoxicity, antioxidant and antimicrobial activities of Mentha piperita L. essential oil. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2022, 85, 230-242.	1.1	10
94	Starch and flour from defective rice kernels and their physicochemical properties. Starch/Staerke, 2014, 66, 729-737.	1.1	9
95	Impact of Wheat (Triticum aestivum L.) Germination Process on Starch Properties for Application in Films. Starch/Staerke, 2019, 71, 1800262.	1.1	9
96	Characteristics of Modified Carioca Bean Starch upon Single and Dual Annealing, Heatâ€Moistureâ€Treatment, and Sonication. Starch/Staerke, 2019, 71, 1800173.	1.1	9
97	Physicochemical properties and silicon content in wheat flour treated with diatomaceous earth and conventionally stored. Journal of Stored Products Research, 2011, 47, 316-320.	1.2	8
98	Effect of debranning process on deoxynivalenol content in wholeâ€wheat flours. Cereal Chemistry, 2019, 96, 717-724.	1.1	8
99	Umidade de colheita, mÃ©todos de secagem e tempo de armazenamento na qualidade tecnolÃ³gica de grÃ£os de trigo (cv. 'Embrapa 16'). Ciencia Rural, 2009, 39, 25-30.	0.3	8
100	Carioca bean starch upon synergic modification: characteristics and films properties. Journal of the Science of Food and Agriculture, 2021, 101, 253-261.	1.7	7
101	Electrospun Starch Nanofibers as a Delivery Carrier for Carvacrol as Antiâ€Glioma Agent. Starch/Staerke, 2022, 74, 2100115.	1.1	7
102	Aâ€and Bâ€type starch granules from wheat exhibiting weak, medium, and strong gluten: An investigation of physicochemical, morphological, and in vitro digestion properties. Cereal Chemistry, 2021, 98, 547-556.	1.1	7
103	Physicochemical properties of nanocomposite films made from sorghumâ€oxidized starch and nanoclay. Starch/Staerke, 2017, 69, 1700079.	1.1	6
104	Aerogels from Native and Anionic Corn Starches Loaded with PinhÃ£o (Araucaria angustifolia) Coat Extract: Antiâ€Tumor Activity in C6 Rat Glioma Cells and In Vitro Digestibility. Starch/Staerke, 2020, 72, 1900280.	1.1	6
105	Germinated Wheat Starch as a Substrate to Produce Cyclodextrins: Application in Inclusion Complex to Improve the Thermal Stability of Orange Essential Oil. Starch/Staerke, 2020, 72, 1900083.	1.1	5
106	Effect of Physical Pretreatments on the Hydrolysis Kinetic, Structural, and Thermal Properties of PinhÃ£o Starch Nanocrystals. Starch/Staerke, 2021, 73, 2000008.	1.1	5
107	Multivariate optimization results in an edible extract from Ilex paraguariensis unexplored residues with a high amount of phenolic compounds. Journal of Environmental Science and Health - Part B Pesticides, Food Contaminants, and Agricultural Wastes, 2022, 57, 23-38.	0.7	4
108	Expansion of rice flour treated with lactic acid and sodium bisulphite. LWT - Food Science and Technology, 2010, 43, 326-330.	2.5	3

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109	Antimicrobial properties of PLA membranes loaded with pink pepper (Schinus terebinthifolius Raddi) essential oil applied in simulated cream cheese packaging. Food Biophysics, 0, , .	1.4	3
110	Functional, physiological, and rheological properties of oat Î²-glucan oxidized with hydrogen peroxide under soft conditions. Journal of Food Processing and Preservation, 2017, 41, e13169.	0.9	2
111	Antimicrobial activity of 3-(p-chlorophenyl)thio citronellal against planktonic and biofilm Staphylococcus aureus cells and its application in biodegradable films. Food Packaging and Shelf Life, 2019, 22, 100375.	3.3	2
112	Crosslinked electrospun polyvinyl alcoholâ€based containing immobilized Î±â€amilase for food application. Journal of Food Processing and Preservation, 2020, 44, e14427.	0.9	2
113	Production and Optimization of Ultrafine Fiber from Yam Starch by Electrospinning Method Using Multivariate Analysis. Starch/Staerke, 2021, 73, 2000174.	1.1	2
114	Application of Films Based on Chitosan and Xanthan Gum in Refrigerated Fish Conservation. Brazilian Archives of Biology and Technology, 0, 63, .	0.5	2
115	Different reaction times for phosphorylation of sorghum flour (Sorghum bicolor): Physicochemical evaluation and application in the formulation of gluten-free cakes. Food Bioscience, 2021, , 101441.	2.0	2
116	Multivariate Analysis as Tool for Optimization of Anthocyanins Extraction from Jambolan (Syzygium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.3	2
117	CHAPTER 4. Relation between Structural Anisotropy in Natural Fibres and Mechanical Properties in Composites. RSC Green Chemistry, 2012, , 63-85.	0.0	1
118	Deoxynivalenol content, phenolic compounds, and antioxidant activity of wheat flour after debranning process. Pesquisa Agropecuaria Brasileira, 0, 55, .	0.9	1