Sergio OthÃ³n Serna-Saldivar

List of Publications by Year
in descending order

129 papers	3,713 citations	147786 31 h-index	175241 52 g-index
129 all docs	129 docs citations	129 times ranked	3483 citing authors

#	Article	IF	Citations
1	Effect of Processing on the Phytochemical Profiles and Antioxidant Activity of Corn for Production of Masa, Tortillas, and Tortilla Chips. Journal of Agricultural and Food Chemistry, 2007, 55, 4177-4183.	5.2	216
2	Inactivation Methods of Trypsin Inhibitor in Legumes: A Review. Journal of Food Science, 2018, 83, 17-29.	3.1	149
3	Phenolic content and antioxidant activity of tortillas produced from pigmented maize processed by conventional nixtamalization or extrusion cooking. Journal of Cereal Science, 2010, 52, 502-508.	3.7	147
4	Microwave and Ultrasound to Enhance Protein Extraction from Peanut Flour under Alkaline Conditions: Effects in Yield and Functional Properties of Protein Isolates. Food and Bioprocess Technology, 2017, 10, 543-555.	4.7	129
5	Dietary Fiber Concentrates from Fruit and Vegetable By-products: Processing, Modification, and Application as Functional Ingredients. Food and Bioprocess Technology, 2018, 11, 1439-1463.	4.7	119
6	Environmentally Friendly Methods for Flavonoid Extraction from Plant Material: Impact of Their Operating Conditions on Yield and Antioxidant Properties. Scientific World Journal, The, 2020, 2020, 1-38.	2.1	96
7	Advances in the Functional Characterization and Extraction Processes of Dietary Fiber. Food Engineering Reviews, 2016, 8, 251-271.	5.9	93
8	Phytochemical analysis of wastewater (nejayote) obtained after lime-cooking of different types of maize kernels processed into masa for tortillas. Journal of Cereal Science, 2010, 52, 410-416.	3.7	86
9	Hydroxycinnamic acids, sugar composition and antioxidant capacity of arabinoxylans extracted from different maize fiber sources. Food Hydrocolloids, 2014, 35, 471-475.	10.7	80
10	Comparative Analyses of Total Phenols, Antioxidant Activity, and Flavonol Glycoside Profile of Cladode Flours from Different Varieties of Opuntia spp.. Journal of Agricultural and Food Chemistry, 2011, 59, 7054-7061.	5.2	78
11	Induction of Apoptosis in Colon Cancer Cells Treated with Isorhamnetin Glycosides from Opuntia Ficus-indica Pads. Plant Foods for Human Nutrition, 2014, 69, 331-336.	3.2	74
12	Improvement of dietary fiber, ferulic acid and calcium contents in pan bread enriched with nejayote food additive from white maize (Zea mays). Journal of Cereal Science, 2014, 60, 264-269.	3.7	66
13	The effect of isorhamnetin glycosides extracted from Opuntia ficus-indica in a mouse model of diet induced obesity. Food and Function, 2015, 6, 805-815.	4.6	66
14	Differences in the dietary fiber content of fruits and their by-products quantified by conventional and integrated AOAC official methodologies. Journal of Food Composition and Analysis, 2018, 67, 77-85.	3.9	64
15	Effect of sodium selenite on isoflavonoid contents and antioxidant capacity of chickpea (Cicer) Tj ETQq1 1 0.784314 rgBT /Overlock 10	8.2	58
16	Nutraceutical profiles of improved blue maize (Zea mays) hybrids for subtropical regions. Field Crops Research, 2013, 141, 69-76.	5.1	56
17	Production of maize tortillas and cookies from nixtamalized flour enriched with anthocyanins, flavonoids and saponins extracted from black bean (Phaseolus vulgaris) seed coats. Food Chemistry, 2016, 192, 90-97.	8.2	50
18	Effect of decortication, germination and extrusion on physicochemical and in vitro protein and starch digestion characteristics of black beans (Phaseolus vulgaris L.). LWT - Food Science and Technology, 2019, 102, 330-337.	5.2	47

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19	Shear-induced enhancement of technofunctional properties of whole grain flours through extrusion. Food Hydrocolloids, 2021, 111, 106400.	10.7	47
20	Polyphenolics and Antioxidant Capacity of White and Blue Corns Processed into Tortillas and Chips. Cereal Chemistry, 2007, 84, 162-168.	2.2	46
21	The dietary fiber profile of fruit peels and functionality modifications induced by high hydrostatic pressure treatments. Food Science and Technology International, 2017, 23, 396-402.	2.2	46
22	Maltose and glucose utilization during fermentation of barley and sorghum lager beers as affected by Î²-amylase or amyloglucosidase addition. Journal of Cereal Science, 2014, 60, 602-609.	3.7	41
23	Functionality and characterization of kafirin-rich protein extracts from different whole and decorticated sorghum genotypes. Journal of Cereal Science, 2016, 70, 57-65.	3.7	41
24	Phenolic compounds, antioxidant capacity and gelling properties of glucoarabinoxylans from three types of sorghum brans. Journal of Cereal Science, 2015, 65, 277-284.	3.7	40
25	In vivo anti-inflammatory effects of isorhamnetin glycosides isolated from Opuntia ficus-indica (L.) Mill cladodes. Industrial Crops and Products, 2015, 76, 803-808.	5.2	40
26	Effect of partial replacement of wheat flour with sprouted chickpea flours with or without selenium on physicochemical, sensory, antioxidant and protein quality of yeast-leavened breads. LWT - Food Science and Technology, 2020, 129, 109517.	5.2	40
27	Bioaccessibility, Intestinal Permeability and Plasma Stability of Isorhamnetin Glycosides from Opuntia ficus-indica (L.). International Journal of Molecular Sciences, 2017, 18, 1816.	4.1	38
28	Cereal Grains. , 0, , .		38
29	Production of bioethanol from steam-flaked sorghum and maize. Journal of Cereal Science, 2009, 50, 131-137.	3.7	37
30	Grain Structure and Grain Chemical Composition. , 2019, , 85-129.		36
31	Fumonisins and their analogues in contaminated corn and its processed foods â€“ a review. Food Additives and Contaminants - Part A Chemistry, Analysis, Control, Exposure and Risk Assessment, 2018, 35, 2183-2203.	2.3	35
32	Effect of traditional nixtamalization on anthocyanin content and profile in Mexican blue maize (Zea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	5.2	34
33	Potential of Triticale as a Substitute for Wheat in Flour Tortilla Production. Cereal Chemistry, 2004, 81, 220-225.	2.2	33
34	Effect of Amyloglucosidase on Wort Composition and Fermentable Carbohydrate Depletion in Sorghum Lager Beers. Journal of the Institute of Brewing, 2004, 110, 124-132.	2.3	33
35	Effect of arabinoxylans and laccase on batter rheology and quality of yeast-leavened gluten-free breads. Journal of Cereal Science, 2017, 73, 10-17.	3.7	33
36	Chemopreventive effects of feruloyl putrescines from wastewater (Nejayote) of lime-cooked white maize (Zea mays). Journal of Cereal Science, 2015, 64, 23-28.	3.7	32

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37	Seleniumâ€Enriched Breads and Their Benefits in Human Nutrition and Health as Affected by Agronomic, Milling, and Baking Factors. Cereal Chemistry, 2015, 92, 134-144.	2.2	32
38	Effect of thermal processing and reducing agents on trypsin inhibitor activity and functional properties of soybean and chickpea protein concentrates. LWT - Food Science and Technology, 2018, 98, 629-634.	5.2	32
39	Physicochemical Changes of Starch in Maize Tortillas During Storage at Room and Refrigeration Temperatures. Starch/Staerke, 2002, 54, 358-363.	2.1	31
40	Effect of Protease Treatment Before Hydrolysis with Î±â€Amylase on the Rate of Starch and Protein Hydrolysis of Maize, Whole Sorghum, and Decorticated Sorghum. Cereal Chemistry, 2007, 84, 607-613.	2.2	30
41	Effect of DHA Containing Oils and Powders on Baking Performance and Quality of White Pan Bread. Plant Foods for Human Nutrition, 2006, 61, 121-129.	3.2	29
42	Chemopreventive Effects of Free and Bound Phenolics Associated to Steep Waters (Nejayote) Obtained After Nixtamalization of Different Maize Types. Plant Foods for Human Nutrition, 2012, 67, 94-99.	3.2	29
43	Production of ethanol from sweet sorghum bagasse pretreated with different chemical and physical processes and saccharified with fiber degrading enzymes. Bioresource Technology, 2013, 134, 386-390.	9.6	29
44	Effect of processing time, temperature and alkali concentration on yield extraction, structure and gelling properties of corn fiber arabinoxylans. Food Hydrocolloids, 2016, 60, 21-28.	10.7	29
45	Functional and compositional changes of orange peel fiber thermally-treated in a twin extruder. LWT - Food Science and Technology, 2019, 111, 673-681.	5.2	29
46	Effect of Sorghum Decortication and Use of Protease Before Liquefaction with Thermoresistant Î±â€Amylase on Efficiency of Bioethanol Production. Cereal Chemistry, 2008, 85, 792-798.	2.2	28
47	In vivoprotein quality of selected cereal-based staple foods enriched with soybean proteins. Food and Nutrition Research, 2016, 60, 31382.	2.6	28
48	Chickpea (Cicer arietinum L.) sprouts containing supranutritional levels of selenium decrease tumor growth of colon cancer cells xenografted in immune-suppressed mice. Journal of Functional Foods, 2019, 53, 76-84.	3.4	28
49	Effect of Ultrasound Application on Protein Yield and Fate of Alkaloids during Lupin Alkaline Extraction Process. Biomolecules, 2020, 10, 292.	4.0	28
50	Response of recurrent selection on yield, kernel oil content and fatty acid composition of subtropical maize populations. Field Crops Research, 2013, 142, 27-35.	5.1	27
51	Wet-milled chickpea coproduct as an alternative to obtain protein isolates. LWT - Food Science and Technology, 2019, 115, 108468.	5.2	27
52	Legumes Protease Inhibitors as Biopesticides and Their Defense Mechanisms against Biotic Factors. International Journal of Molecular Sciences, 2020, 21, 3322.	4.1	27
53	Corn Oil: Composition, Processing, and Utilization. , 2019, , 593-613.		26
54	Evaluation of the Lime-Cooking and Tortilla Making Properties of Quality Protein Maize Hybrids Grown in Mexico. Plant Foods for Human Nutrition, 2008, 63, 119-125.	3.2	25

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55	Addition of protease during starch liquefaction affects free amino nitrogen, fusel alcohols and ethanol production of fermented maize and whole and decorticated sorghum mashes. Biochemical Engineering Journal, 2012, 67, 1-9.	3.6	25
56	Characterization and Quantitation of Triterpenoid Saponins in Raw and Sprouted Chenopodium berlandieri spp. (Huauzontle) Grains Subjected to Germination with or without Selenium Stress Conditions. Journal of Food Science, 2016, 81, C19-26.	3.1	25
57	Effects of Soybean Fortification on Protein Quality of Tortilla-Based Diets Produced from Regular and Quality Protein Maize. Plant Foods for Human Nutrition, 2004, 59, 45-50.	3.2	24
58	Yield and Textural Characteristics of Panela Cheeses Produced with Dairyâ€Vegetable Protein (Soybean) Tj ETQq0 0 0 rgBT /Overlock 10	3.1	24
59	Evaluation of the functionality of five different soybean proteins in yeast-leavened pan breads. Journal of Cereal Science, 2015, 64, 63-69.	3.7	24
60	Effect of germination with sodium selenite on the isoflavones and cellular antioxidant activity of soybean (Glycine max). LWT - Food Science and Technology, 2018, 93, 64-70.	5.2	24
61	Relationship between hydroxycinnamic profile with gelation capacity and rheological properties of arabinoxylans extracted from different maize fiber sources. Food Hydrocolloids, 2014, 39, 280-285.	10.7	23
62	Effects of parboiling and other hydrothermal treatments on the physical, functional, and nutritional properties of rice and other cereals. Cereal Chemistry, 2018, 95, 79-91.	2.2	23
63	Cell Wall Degrading Enzymes and Proteases Improve Starch Yields of Sorghum and Maize. Starch/Staerke, 2006, 58, 338-344.	2.1	22
64	Effect of Protease Addition on Starch Recovery from Steeped Sorghum and Maize. Starch/Staerke, 2004, 56, 371-378.	2.1	21
65	Hydrothermal treatment of maize: Changes in physical, chemical, and functional properties. Food Chemistry, 2018, 263, 225-231.	8.2	21
66	Technological and Engineering Trends for Production of Gluten-Free Beers. Food Engineering Reviews, 2016, 8, 468-482.	5.9	20
67	Commercial Evaluation of a Continuous Micronutrient Fortification Process for Nixtamal Tortillas. Cereal Chemistry, 2008, 85, 746-752.	2.2	19
68	Effect of Germination and UVâ€C Radiation on the Accumulation of Flavonoids and Saponins in Black Bean Seed Coats. Cereal Chemistry, 2014, 91, 276-279.	2.2	19
69	Production of Brewing Worts from Different Types of Sorghum Malts and Adjuncts Supplemented with Î²-Amylase or Amyloglucosidase. Journal of the American Society of Brewing Chemists, 2013, 71, 49-56.	1.1	18
70	Delivery of Flavonoids and Saponins from Black Bean (Phaseolus vulgaris) Seed Coats Incorporated into Whole Wheat Bread. International Journal of Molecular Sciences, 2016, 17, 222.	4.1	17
71	Antimicrobial Activity of Rhoeo discolor Phenolic Rich Extracts Determined by Flow Cytometry. Molecules, 2015, 20, 18685-18703.	3.8	16
72	Optimization of wheat sprouting for production of selenium enriched kernels using response surface methodology and desirability function. LWT - Food Science and Technology, 2016, 65, 1080-1086.	5.2	16

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73	Fatty acid composition and proximate analysis of improved highâ€oil corn double haploid hybrids adapted to subtropical areas. Cereal Chemistry, 2019, 96, 182-192.	2.2	16
74	Effects of fermentation with probiotics on anti-nutritional factors and proximate composition of lupin (Lupinus mutabilis sweet).. LWT - Food Science and Technology, 2020, 130, 109658.	5.2	16
75	Effect of a Cell-Wall-Degrading Enzyme Complex on Starch Recovery and Steeping Requirements of Sorghum and Maize. Cereal Chemistry, 2003, 80, 148-153.	2.2	15
76	Detrimental effect of increasing sugar concentrations on ethanol production from maize or decorticated sorghum mashes fermented with Saccharomyces cerevisiae or Zymomonas mobilis. Biotechnology Letters, 2011, 33, 301-307.	2.2	15
77	Fate of free amino nitrogen during liquefaction and yeast fermentation of maize and sorghums differing in endosperm texture. Food and Bioproducts Processing, 2013, 91, 46-53.	3.6	15
78	Development and Structure of the Corn Kernel. , 2019, , 147-163.		15
79	Underutilized Mexican Plants: Screening of Antioxidant and Antiproliferative Properties of Mexican Cactus Fruit Juices. Plants, 2021, 10, 368.	3.5	15
80	Methods for the Modification and Evaluation of Cereal Proteins for the Substitution of Wheat Gluten in Dough Systems. Foods, 2021, 10, 118.	4.3	14
81	Understanding the functionality and manufacturing of nixtamalized maize products. Journal of Cereal Science, 2021, 99, 103205.	3.7	14
82	Effects of Limeâ€Cooking on Carotenoids Present in Masa and Tortillas Produced from Different Types of Maize. Cereal Chemistry, 2014, 91, 508-512.	2.2	13
83	In Vitro Fecal Fermentation of High Pressure-Treated Fruit Peels Used as Dietary Fiber Sources. Molecules, 2019, 24, 697.	3.8	13
84	Effect of sodium selenite addition and sponge dough fermentation on selenomethionine generation during production of yeast-leavened breads. Journal of Cereal Science, 2013, 58, 164-169.	3.7	12
85	Addition of Sodium Stearoyl Lactylate to Corn and Sorghum Starch Extrudates Enhances the Performance of Pregelatinized Beer Adjuncts. Cereal Chemistry, 2015, 92, 88-92.	2.2	12
86	Nutrition and Fortification of Corn and Wheat Tortillas. , 2015, , 29-63.		11
87	Evaluation of the Functionality of Five Different Soybean Proteins in Hotâ€Press Wheat Flour Tortillas. Cereal Chemistry, 2015, 92, 98-104.	2.2	11
88	Production of Lager Beers from Different Types of Sorghum Malts and Adjuncts Supplemented with Î²-Amylase or Amyloglucosidase. Journal of the American Society of Brewing Chemists, 2013, 71, 208-213.	1.1	10
89	Release of potentially fermentable sugars during dilute acid treatments of Bermuda grass NK37 (Cynodon dactylon)for second-generation ethanol production. Journal of Chemical Technology and Biotechnology, 2014, 89, 1941-1947.	3.2	10
90	Effect of the Use of Thermoplastic Extruded Corn or Sorghum Starches on the Brewing Performance of Lager Beers. Journal of the American Society of Brewing Chemists, 2015, 73, 318-322.	1.1	10

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91	Physicochemical, functional properties, and digestion of isolated starches from pigmented chickpea (Cicer arietinumL.) cultivars. Starch/Staerke, 2017, 69, 1600152.	2.1	10
92	Phenolic Compounds and Antioxidant Activity of Extruded Nixtamalized Corn Flour and Tortillas Enriched with Sorghum Bran. Cereal Chemistry, 2017, 94, 277-283.	2.2	10
93	Ferulic, p-coumaric, diferulic and triferulic acids contents of corn tortillas prepared with extruded corn flour and enriched with sorghum (Sorghum bicolor (L.) Moench) bran. Journal of Food Measurement and Characterization, 2018, 12, 1633-1640.	3.2	10
94	Selenium in Germinated Chickpea (Cicer arietinum L.) Increases the Stability of Its Oil Fraction. Plants, 2019, 8, 113.	3.5	10
95	Improved extraction of the natural anticancerigen pristimerin from Mortonia greggii root bark using green solvents and aqueous two-phase systems. Separation and Purification Technology, 2019, 211, 667-672.	7.9	10
96	Functionality and Organoleptic Properties of Maize Tortillas Enriched with Five Different Soybean Proteins. Cereal Chemistry, 2015, 92, 341-349.	2.2	9
97	Malting Sorghum with Aspergillus Oryzae Enhances Gluten-Free Wort Yield and Extract. Journal of the American Society of Brewing Chemists, 2017, 75, 116-121.	1.1	9
98	Food Uses of Lime-Cooked Corn With Emphasis in Tortillas and Snacks. , 2019, , 469-500.		9
99	Extruded chickpea flour sequentially treated with alcalase and Î±â€amylase produces dry instant beverage powders with enhanced yield and nutritional properties. International Journal of Food Science and Technology, 2021, 56, 5178-5189.	2.7	9
100	Selenized chickpea sourdoughs for the enrichment of breads. LWT - Food Science and Technology, 2021, 150, 112082.	5.2	9
101	Assessment of the quality of fresh nixtamalized maize doughs with different degrees of cooking and milling: A comparison of Mixolab and RVA analyses. Journal of Cereal Science, 2021, 102, 103321.	3.7	9
102	Changes in the structure and gelling properties of maize fiber arabinoxylans after their pilot scale extraction and spray-drying. Journal of Cereal Science, 2016, 70, 275-281.	3.7	8
103	Assessment of the technoâ€functionality, starch digestion rates and protein quality of rice flourâ€“whey protein instant powders produced in a twin extruder. International Journal of Food Science and Technology, 2020, 55, 878-890.	2.7	8
104	Industrial Production of Maize Tortillas and Snacks. , 2015, , 247-281.		7
105	Influence of Excipients and Spray Drying on the Physical and Chemical Properties of Nutraceutical Capsules Containing Phytochemicals from Black Bean Extract. Molecules, 2015, 20, 21626-21635.	3.8	7
106	Minor Constituents and Phytochemicals of the Kernel. , 2019, , 369-403.		7
107	Evaluation of the quality of nixtamalized maize flours for tortilla production with a new Mixolab protocol. Cereal Chemistry, 2020, 97, 527-539.	2.2	7
108	Functional Effects of Soybean Concentrates Obtained from Sprouted Seeds Enriched in Selenium in Wheat Breadmaking. Cereal Chemistry, 2017, 94, 740-745.	2.2	6

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109	Effect of Maize Starch Substitution on Physicochemical and Sensory Attributes of Gluten-Free Cookies Produced from Nixtamalized Flour. Journal of Food Processing, 2017, 2017, 1-6.	2.0	6
110	Comparison of Physicochemical, Functional and Nutritional Properties between Proteins of Soybean and a Novel Mixture of Soybean-Maize. Applied Sciences (Switzerland), 2020, 10, 6998.	2.5	6
111	Generation of a Mixolab Profile After the Evaluation of the Functionality of Different Commercial Wheat Flours for Hotâ€Press Tortilla Production. Cereal Chemistry, 2014, 91, 139-145.	2.2	5
112	Optimized and Scalable Green Extraction of Pristimerin, an Anticancerigen from Mortonia greggii, by Ethanolâ€“Phosphate Aqueous Two-Phase Systems. Industrial & Engineering Chemistry Research, 2021, 60, 5403-5410.	3.7	5
113	Characterization, functional and biological value of protein-enriched defatted meals from sacha inchi (Plukenetia volubilis) and chocho (Lupinus mutabilis). Journal of Food Measurement and Characterization, 2021, 15, 5071-5077.	3.2	5
114	Food-Grade Corn Quality for Lime-Cooked Tortillas and Snacks. , 2015, , 227-246.		4
115	Effect of processing on the hydroxycinnamic acids, flavones, and cellular antioxidant activity of tortillas supplemented with sorghum bran. Cereal Chemistry, 2020, 97, 382-393.	2.2	4
116	Bioconversion into ethanol of decorticated red sorghum (Sorghum bicolor L. Moench) supplemented with its phenolic extract or spent bran. Biotechnology Letters, 2012, 34, 97-102.	2.2	3
117	Formulation of Zero-Trans Crystalized Fats Produced from Palm Stearin and High Oleic Safflower Oil Blends. Journal of Food Quality, 2017, 2017, 1-8.	2.6	3
118	Comparative analysis of technoâ€functional properties, starch digestion and protein quality of pigmented chickpea flours. International Journal of Food Science and Technology, 2019, 54, 2288-2299.	2.7	3
119	Use of Aspergillus oryzae during sorghum malting to enhance yield and quality of gluten-free lager beers. Bioresources and Bioprocessing, 2020, 7, .	4.2	3
120	Comparison of Regular and Selenium-Enriched Tortillas Produced from Sprouted Corn Kernels. Plant Foods for Human Nutrition, 2022, 77, 226-232.	3.2	3
121	Characterization of a Mixture of Oca (Oxalis tuberosa) and Oat Extrudate Flours: Antioxidant and Physicochemical Attributes. Journal of Food Quality, 2019, 2019, 1-10.	2.6	2
122	Effects of Post Anthesis Foliar Application of Sodium Selenite to Soybeans (Glycine max): Lipid Composition and Oil Stability. Biomolecules, 2019, 9, 772.	4.0	2
123	Physicochemical characterization of the anatomical structures of teosinte (Zea mays subsp. mexicana) covered caryopses.. Journal of Cereal Science, 2021, , 103353.	3.7	2
124	Dietary Fiber and Cancer. Food Engineering Series, 2020, , 241-276.	0.7	2
125	Effect of soybean bagasse addition on texture, sensory properties, and protein quality of maize tortillas. Cereal Chemistry, 2019, 96, 283-291.	2.2	1
126	Effects of Ecklonia arborea or Silvetia compressa algae intake on serum lipids and hepatic fat accumulation in Wistar rats fed hyperlipidic diets. Algal Research, 2020, 49, 101946.	4.6	1

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127	Textural and rheological properties of soybean oil organogels structured with polyglycerol and propylene glycol esters during storage. Grasas Y Aceites, 2022, 73, e443.	0.9	1
128	Nonâ€conventional fermentation at laboratory scale of cocoa beans: Using probiotic microorganisms and substitution of mucilage by fruit pulps. International Journal of Food Science and Technology, 2022, 57, 4307-4315.	2.7	1
129	Comparative lactic acid fermentation with five Lactobacillus strains of supernatants made of extruded and saccharified chickpea flour. International Journal of Food Science and Technology, 0, , .	2.7	1