Jiajia Rao

List of Publications by Year
in descending order

86	6,218	71102 41	69250 77
papers	citations	h-index	g-index

87	87	87	5396
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Traditional fermented soybean products: processing, flavor formation, nutritional and biological activities. Critical Reviews in Food Science and Nutrition, 2022, 62, 1971-1989.	10.3	77
2	Plant proteins from green pea and chickpea: Extraction, fractionation, structural characterization and functional properties. Food Hydrocolloids, 2022, 123, 107165.	10.7	85
3	Design, synthesis and characterization of lysozymeâ€“gentisic acid dual-functional conjugates with antibacterial/antioxidant activities. Food Chemistry, 2022, 370, 131032.	8.2	15
4	Structure characteristics and functionality of water-soluble fraction from high-intensity ultrasound treated pea protein isolate. Food Hydrocolloids, 2022, 125, 107409.	10.7	46
5	One-step extraction of oat protein by choline chloride-alcohol deep eutectic solvents: Role of chain length of dihydric alcohol. Food Chemistry, 2022, 376, 131943.	8.2	17
6	Modification of Î²-lactoglobulin by phenolic conjugations: Protein structural changes and physicochemical stabilities of stripped hemp oil-in-water emulsions stabilized by the conjugates. Food Hydrocolloids, 2022, 128, 107578.	10.7	10
7	Statistical evaluation to validate matrix-matched calibration for standardized beany odor compound quantitation in yellow pea flour using HS-SPME-GC-MS. Food and Function, 2022, 13, 3968-3981.	4.6	7
8	Nutraceutical potential of industrial hemp (<i>Cannabis sativa</i> L.) extracts: physicochemical stability and bioaccessibility of cannabidiol (CBD) nanoemulsions. Food and Function, 2022, 13, 4502-4512.	4.6	10
9	Maximizing the applicability of continuous wave (CW) Electron Paramagnetic Resonance (EPR): what more can we do after a century?. Journal of Magnetic Resonance Open, 2022, 10-11, 100060.	1.1	3
10	Modification of physicochemical, functional properties, and digestibility of macronutrients in common bean (Phaseolus vulgaris L.) flours by different thermally treated whole seeds. Food Chemistry, 2022, 382, 132570.	8.2	13
11	Effect of high oleic soybean oil oleogels on the properties of doughs and corresponding bakery products. JAOCS, Journal of the American Oil Chemists' Society, 2022, 99, 1071-1083.	1.9	9
12	Unraveling the mechanism by which high intensity ultrasound improves the solubility of commercial pea protein isolates. Food Hydrocolloids, 2022, 131, 107823.	10.7	31
13	Structural, and functional properties of phosphorylated pea protein isolate by simplified co-spray drying process. Food Chemistry, 2022, 393, 133441.	8.2	3
14	Uncovering aroma boundary compositions of barley malts by untargeted and targeted flavoromics with HS-SPME-GC-MS/olfactometry. Food Chemistry, 2022, 394, 133541.	8.2	27
15	Structure and functionality of oat protein extracted by choline chlorideâ€'dihydric alcohol deep eutectic solvent and its water binary mixtures. Food Hydrocolloids, 2021, 112, 106330.	10.7	38
16	Impact of defatting treatment and oat varieties on structural, functional properties, and aromatic profile of oat protein. Food Hydrocolloids, 2021, 112, 106368.	10.7	60
17	Toward a comprehensive understanding of ultracentrifugal milling on the physicochemical properties and aromatic profile of yellow pea flour. Food Chemistry, 2021, 345, 128760.	8.2	29
18	Improving the functionality of pea protein isolate through co-spray drying with emulsifying salt or disaccharide. Food Hydrocolloids, 2021, 113, 106534.	10.7	18

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19	Microencapsulation of hemp seed oil by pea protein isolateâ^'sugar beet pectin complex coacervation: Influence of coacervation pH and wall/core ratio. Food Hydrocolloids, 2021, 113, 106423.	10.7	28
20	Physicochemical property changes and aroma differences of fermented yellow pea flours: role of <i>Lactobacilli</i> and fermentation time. Food and Function, 2021, 12, 6950-6963.	4.6	16
21	Emerging applications of site-directed spin labeling electron paramagnetic resonance (SDSL-EPR) to study food protein structure, dynamics, and interaction. Trends in Food Science and Technology, 2021, 109, 37-50.	15.1	8
22	Modification of pulse proteins for improved functionality and flavor profile: A comprehensive review. Comprehensive Reviews in Food Science and Food Safety, 2021, 20, 3036-3060.	11.7	38
23	Ferreting out the secrets of industrial hemp protein as emerging functional food ingredients. Trends in Food Science and Technology, 2021, 112, 1-15.	15.1	63
24	Maillard-driven chemistry to tune the functionality of pea protein: Structure characterization, site-specificity, and aromatic profile. Trends in Food Science and Technology, 2021, 114, 658-671.	15.1	25
25	Comparison of the Proximate Compositions, Nutritional Minerals, Pasting Properties, and Aroma Differences of Flours from Selected Yellow Pea Cultivars Grown across the Northern Great Plains. ACS Food Science & Technology, 2021, 1, 1529-1537.	2.7	2
26	In situ monitoring of protein transfer into nanoscale channels. Cell Reports Physical Science, 2021, 2, 100576.	5.6	12
27	Plant-based food hydrogels: Constitutive characteristics, formation, and modulation. Current Opinion in Colloid and Interface Science, 2021, 56, 101505.	7.4	18
28	The viability of complex coacervate encapsulated probiotics during simulated sequential gastrointestinal digestion affected by wall materials and drying methods. Food and Function, 2021, 12, 8907-8919.	4.6	11
29	Phenolic compounds in germinated cereal and pulse seeds: Classification, transformation, and metabolic process. Critical Reviews in Food Science and Nutrition, 2020, 60, 740-759.	10.3	61
30	Phase behavior and complex coacervation of concentrated pea protein isolate-beet pectin solution. Food Chemistry, 2020, 307, 125536.	8.2	67
31	Formation, characterization, and potential food application of rice bran wax oleogels: Expeller-pressed corn germ oil versus refined corn oil. Food Chemistry, 2020, 309, 125704.	8.2	62
32	Optimization and validation of in-situ derivatization and headspace solid-phase microextraction for gas chromatographyâ€"mass spectrometry analysis of 3-MCPD esters, 2-MCPD esters and glycidyl esters in edible oils via central composite design. Food Chemistry, 2020, 307, 125542.	8.2	20
33	Changes in odor characteristics of pulse protein isolates from germinated chickpea, lentil, and yellow pea: Role of lipoxygenase and free radicals. Food Chemistry, 2020, 314, 126184.	8.2	67
34	Clove oil-in-water nanoemulsion: Mitigates growth of Fusarium graminearum and trichothecene mycotoxin production during the malting of Fusarium infected barley. Food Chemistry, 2020, 312, 126120.	8.2	29
35	Phase behavior, thermodynamic and microstructure of concentrated pea protein isolate-pectin mixture: Effect of pH, biopolymer ratio and pectin charge density. Food Hydrocolloids, 2020, 101, 105556.	10.7	68
36	Alginate-based double-network hydrogel improves the viability of encapsulated probiotics during simulated sequential gastrointestinal digestion: Effect of biopolymer type and concentrations. International Journal of Biological Macromolecules, 2020, 165, 1675-1685.	7.5	51

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37	Effects of ethanol modified supercritical carbon dioxide extraction and particle size on the physical, chemical, and functional properties of yellow pea flour. Cereal Chemistry, 2020, 97, 1133-1147.	2.2	13
38	Size-Tunable Metalâ€“Organic Framework-Coated Magnetic Nanoparticles for Enzyme Encapsulation and Large-Substrate Biocatalysis. ACS Applied Materials & Interfaces, 2020, 12, 41794-41801.	8.0	47
39	Conjugation of Pea Protein Isolate via Maillard-Driven Chemistry with Saccharide of Diverse Molecular Mass: Molecular Interactions Leading to Aggregation or Glycation. Journal of Agricultural and Food Chemistry, 2020, 68, 10157-10166.	5.2	20
40	Combining solid dispersion-based spray drying with cyclodextrin to improve the functionality and mitigate the beany odor of pea protein isolate. Carbohydrate Polymers, 2020, 245, 116546.	10.2	21
41	Occurrence and preventive strategies to control mycotoxins in cerealâ€based food. Comprehensive Reviews in Food Science and Food Safety, 2020, 19, 928-953.	11.7	82
42	Identification of extraction pH and cultivar associated aromatic compound changes in spray dried pea protein isolate using untargeted and targeted metabolomic approaches. Journal of Agriculture and Food Research, 2020, 2, 100032.	2.5	19
43	Physicochemical and structural properties of proteins extracted from dehulled industrial hempseeds: Role of defatting process and precipitation pH. Food Hydrocolloids, 2020, 108, 106065.	10.7	38
44	Physicochemical properties and aroma profiles of flaxseed proteins extracted from whole flaxseed and flaxseed meal. Food Hydrocolloids, 2020, 104, 105731.	10.7	55
45	Physical properties and cookie-making performance of oleogels prepared with crude and refined soybean oil: a comparative study. Food and Function, 2020, 11, 2498-2508.	4.6	39
46	Viability of <i>Lactobacillus rhamnosus</i> GG microencapsulated in alginate/chitosan hydrogel particles during storage and simulated gastrointestinal digestion: role of chitosan molecular weight. Soft Matter, 2020, 16, 1877-1887.	2.7	35
47	Effect of alkaline extraction pH on structure properties, solubility, and beany flavor of yellow pea protein isolate. Food Research International, 2020, 131, 109045.	6.2	138
48	The impact of hempseed dehulling on chemical composition, structure properties and aromatic profile of hemp protein isolate. Food Hydrocolloids, 2020, 106, 105889.	10.7	69
49	Enzyme Immobilization on Graphite Oxide (GO) Surface via One-Pot Synthesis of GO/Metalâ€“Organic Framework Composites for Large-Substrate Biocatalysis. ACS Applied Materials & Interfaces, 2020, 12, 23119-23126.	8.0	45
50	Functionality and structure of yellow pea protein isolate as affected by cultivars and extraction pH. Food Hydrocolloids, 2020, 108, 106008.	10.7	116
51	Unlocking the potential of minimally processed corn germ oil and high oleic soybean oil to prepare oleogels for bakery application. Food and Function, 2020, 11, 10329-10340.	4.6	7
52	A sulfonated mesoporous silica nanoparticle for enzyme protection against denaturants and controlled release under reducing conditions. Journal of Colloid and Interface Science, 2019, 556, 292-300.	9.4	12
53	Genotype x Environmental Effects on Yielding Ability and Seed Chemical Composition of Industrial Hemp (<i>Cannabis sativa</i> L.) Varieties Grown in North Dakota, USA. JAOCS, Journal of the American Oil Chemists' Society, 2019, 96, 1417-1425.	1.9	44
54	Gum Arabic-Mediated Synthesis of Glyco-pea Protein Hydrolysate via Maillard Reaction Improves Solubility, Flavor Profile, and Functionality of Plant Protein. Journal of Agricultural and Food Chemistry, 2019, 67, 10195-10206.	5.2	46

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55	Effect of germination time on antioxidative activity and composition of yellow pea soluble free and polar soluble bound phenolic compounds. Food and Function, 2019, 10, 6840-6850.	4.6	10
56	Improving Antioxidant Activity of Î²-Lactoglobulin by Nature-Inspired Conjugation with Gentisic Acid. Journal of Agricultural and Food Chemistry, 2019, 67, 11741-11751.	5.2	25
57	The structural modification of pea protein concentrate with gum Arabic by controlled Maillard reaction enhances its functional properties and flavor attributes. Food Hydrocolloids, 2019, 92, 30-40.	10.7	114
58	Pea protein isolate-gum Arabic Maillard conjugates improves physical and oxidative stability of oil-in-water emulsions. Food Chemistry, 2019, 285, 130-138.	8.2	163
59	A combination of monoacylglycerol crystalline network and hydrophilic antioxidants synergistically enhances the oxidative stability of gelled algae oil. Food and Function, 2019, 10, 315-324.	4.6	17
60	Effect of germination on the chemical composition, thermal, pasting, and moisture sorption properties of flours from chickpea, lentil, and yellow pea. Food Chemistry, 2019, 295, 579-587.	8.2	107
61	Enhancement of antifungal and mycotoxin inhibitory activities of food-grade thyme oil nanoemulsions with natural emulsifiers. Food Control, 2019, 106, 106709.	5.5	48
62	Influence of nonionic and ionic surfactants on the antifungal and mycotoxin inhibitory efficacy of cinnamon oil nanoemulsions. Food and Function, 2019, 10, 2817-2827.	4.6	34
63	Physical properties, antifungal and mycotoxin inhibitory activities of five essential oil nanoemulsions: Impact of oil compositions and processing parameters. Food Chemistry, 2019, 291, 199-206.	8.2	123
64	Effect of chitosan coatings on physical stability, antifungal and mycotoxin inhibitory activities of lecithin stabilized cinnamon oil-in-water emulsions. LWT - Food Science and Technology, 2019, 106, 98-104.	5.2	32
65	HS-SPME-GC-MS/olfactometry combined with chemometrics to assess the impact of germination on flavor attributes of chickpea, lentil, and yellow pea flours. Food Chemistry, 2019, 280, 83-95.	8.2	122
66	Solid dispersion-based spray-drying improves solubility and mitigates beany flavour of pea protein isolate. Food Chemistry, 2019, 278, 665-673.	8.2	106
67	Improving the Efficacy of Essential Oils as Antimicrobials in Foods: Mechanisms of Action. Annual Review of Food Science and Technology, 2019, 10, 365-387.	9.9	172
68	Influence of oil phase composition on the antifungal and mycotoxin inhibitory activity of clove oil nanoemulsions. Food and Function, 2018, 9, 2872-2882.	4.6	51
69	Pea protein isolateâ€"high methoxyl pectin soluble complexes for improving pea protein functionality: Effect of pH, biopolymer ratio and concentrations. Food Hydrocolloids, 2018, 80, 245-253.	10.7	166
70	How Do Enzymes Orient When Trapped on Metalâ€"Organic Framework (MOF) Surfaces?. Journal of the American Chemical Society, 2018, 140, 16032-16036.	13.7	138
71	Inversion of Polymeric Micelles Probed by Spin Labeled Peptide Incorporation and Electron Paramagnetic Resonance. Journal of Physical Chemistry C, 2018, 122, 25692-25699.	3.1	13
72	Chitosan coatings on lecithin stabilized emulsions inhibit mycotoxin production by Fusarium pathogens. Food Control, 2018, 92, 276-285.	5.5	13

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73	Improvement of the Antioxidative Activity of Soluble Phenolic Compounds in Chickpea by Germination. Journal of Agricultural and Food Chemistry, 2018, 66, 6179-6187.	5.2	38
74	Probing the structural basis and adsorption mechanism of an enzyme on nano-sized protein carriers. Nanoscale, 2017, 9, 3512-3523.	5.6	34
75	Lipid oxidation in base algae oil and water-in-algae oil emulsion: Impact of natural antioxidants and emulsifiers. Food Research International, 2016, 85, 162-169.	6.2	34
76	Structure-relaxation mechanism for the response of T4 lysozyme cavity mutants to hydrostatic pressure. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2437-46.	7.1	36
77	Optimization of lipid nanoparticle formation for beverage applications: Influence of oil type, cosolvents, and cosurfactants on nanoemulsion properties. Journal of Food Engineering, 2013, 118, 198-204.	5.2	45
78	Technological advances in site-directed spin labeling of proteins. Current Opinion in Structural Biology, 2013, 23, 725-733.	5.7	262
79	Nutraceutical nanoemulsions: influence of carrier oil composition (digestible <i>versus</i>) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 2013, 93, 3175-3183.	3.5	105
80	Impact of lemon oil composition on formation and stability of model food and beverage emulsions. Food Chemistry, 2012, 134, 749-757.	8.2	100
81	Lemon oil solubilization in mixed surfactant solutions: Rationalizing microemulsion & nanoemulsion formation. Food Hydrocolloids, 2012, 26, 268-276.	10.7	134
82	Food-grade microemulsions and nanoemulsions: Role of oil phase composition on formation and stability. Food Hydrocolloids, 2012, 29, 326-334.	10.7	163
83	Formation of Flavor Oil Microemulsions, Nanoemulsions and Emulsions: Influence of Composition and Preparation Method. Journal of Agricultural and Food Chemistry, 2011, 59, 5026-5035.	5.2	203
84	Food-Grade Nanoemulsions: Formulation, Fabrication, Properties, Performance, Biological Fate, and Potential Toxicity. Critical Reviews in Food Science and Nutrition, 2011, 51, 285-330.	10.3	1,237
85	Food-grade microemulsions, nanoemulsions and emulsions: Fabrication from sucrose monopalmitate & lemon oil. Food Hydrocolloids, 2011, 25, 1413-1423.	10.7	212
86	Stabilization of Phase Inversion Temperature Nanoemulsions by Surfactant Displacement. Journal of Agricultural and Food Chemistry, 2010, 58, 7059-7066.	5.2	170