Pilar Buera

List of Publications by Year
in descending order

89 papers	2,976 citations	136950 32 h-index	182427 51 g-index
96 all docs	96 docs citations	96 times ranked	3320 citing authors

#	Article	IF	Citations
1	Encapsulation of cinnamon and thyme essential oils components (cinnamaldehyde and thymol) in Î²-cyclodextrin: Effect of interactions with water on complex stability. Journal of Food Engineering, 2010, 99, 70-75.	5.2	195
2	Pattern of pH and electrical conductivity upon honey dilution as a complementary tool for discriminating geographical origin of honeys. Food Chemistry, 2007, 101, 695-703.	8.2	138
3	A critical evaluation of fluorescence as a potential marker for the Maillard reaction. Food Chemistry, 2006, 95, 423-430.	8.2	121
4	Glass transition in poly(vinylpyrrolidone): effect of molecular weight and diluents. Biotechnology Progress, 1992, 8, 144-148.	2.6	112
5	Water Activity, Glass Transition and Microbial Stability in Concentrated/Semimoist Food Systems. Journal of Food Science, 1994, 59, 921-927.	3.1	105
6	Propolis encapsulation by spray drying: Characterization and stability. LWT - Food Science and Technology, 2017, 75, 227-235.	5.2	97
7	Effects of carbohydrate crystallization on stability of dehydrated foods and ingredient formulations. Journal of Food Engineering, 2005, 67, 157-165.	5.2	90
8	Effect of storage temperature on starch retrogradation of bread staling. Starch/Staerke, 2011, 63, 587-593.	2.1	86
9	Microstructure affects the rate of chemical, physical and color changes during storage of dried apple discs. Journal of Food Engineering, 2008, 85, 222-231.	5.2	79
10	Glassy state in relation to the thermal inactivation of the enzyme invertase in amorphous dried matrices of trehalose, maltodextrin and PVP. Journal of Food Engineering, 1996, 30, 269-282.	5.2	62
11	APPLICATION of the WLF EQUATION to DESCRIBE the COMBINED EFFECTS of MOISTURE and TEMPERATURE ON NONENZYMATIC BROWNING RATES IN FOOD SYSTEMS. Journal of Food Processing and Preservation, 1993, 17, 31-45.	2.0	58
12	Low temperature thermal properties of Nafion 117 membranes in water and methanol-water mixtures. Journal of Power Sources, 2006, 161, 799-805.	7.8	58
13	Phase solubility studies and stability of cholesterol/Î²â€cyclodextrin inclusion complexes. Journal of the Science of Food and Agriculture, 2011, 91, 2551-2557.	3.5	57
14	Novel trends in cyclodextrins encapsulation. Applications in food science. Current Opinion in Food Science, 2017, 16, 106-113.	8.0	56
15	Protective Role of Trehalose on Thermal Stability of Lactase in Relation to its Glass and Crystal Forming Properties and Effect of Delaying Crystallization. LWT - Food Science and Technology, 1997, 30, 324-329.	5.2	55
16	Waterâ€“solids interactions, matrix structural properties and the rate of non-enzymatic browning. Journal of Food Engineering, 2006, 77, 1108-1115.	5.2	54
17	Vinal gum, a galactomannan from Prosopis ruscifolia seeds: Physicochemical characterization. Food Hydrocolloids, 2015, 51, 495-502.	10.7	53
18	Effect of Salts on the Properties of Aqueous Sugar Systems, in Relation to Biomaterial Stabilization. 1. Water Sorption Behavior and Ice Crystallization/Melting. Cryobiology, 2001, 43, 199-210.	0.7	52

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19	A study of acid-catalyzed sucrose hydrolysis in an amorphous polymeric matrix at reduced moisture contents. Food Research International, 1995, 28, 359-365.	6.2	51
20	Empirical and theoretical models of equilibrium and non-equilibrium transition temperatures of supplemented phase diagrams in aqueous systems (IUPAC Technical Report). Pure and Applied Chemistry, 2010, 82, 1065-1097.	1.9	51
21	Formulation and Drying of Alginate Beads for Controlled Release and Stabilization of Invertase. Biomacromolecules, 2011, 12, 3147-3155.	5.4	51
22	State diagrams for improving processing and storage of foods, biological materials, and pharmaceuticals (IUPAC Technical Report). Pure and Applied Chemistry, 2011, 83, 1567-1617.	1.9	50
23	Invertase stability in alginate beads. Food Research International, 2012, 47, 321-330.	6.2	50
24	Non-enzymatic browning kinetics analysed through waterâ€“solids interactions and water mobility in dehydrated potato. Food Chemistry, 2008, 108, 900-906.	8.2	46
25	Modeling temperature dependence of honey viscosity and of related supersaturated model carbohydrate systems. Journal of Food Engineering, 2006, 77, 126-134.	5.2	45
26	Î²-Carotene encapsulation in a mannitol matrix as affected by divalent cations and phosphate anion. International Journal of Pharmaceutics, 2007, 332, 45-54.	5.2	45
27	Effect of salts on the properties of aqueous sugar systems in relation to biomaterial stabilization. Physical Chemistry Chemical Physics, 2002, 4, 533-540.	2.8	43
28	Antioxidant and anti-glycation potential of green pepper (Piper nigrum): Optimization of Î²-cyclodextrin-based extraction by response surface methodology. Food Chemistry, 2020, 316, 126280.	8.2	43
29	Color Formation in Dehydrated Modified Whey Powder Systems As Affected by Compression andTg. Journal of Agricultural and Food Chemistry, 2000, 48, 5263-5268.	5.2	41
30	Glass transition and time-dependent crystallization behavior of dehydration bioprotectant sugars. Carbohydrate Research, 2010, 345, 303-308.	2.3	41
31	Protein deterioration and longevity of quinoa seeds during long-term storage. Food Chemistry, 2010, 121, 952-958.	8.2	36
32	Ball Milling of Amaranth Starch-Enriched Fraction. Changes on Particle Size, Starch Crystallinity, and Functionality as a Function of Milling Energy. Food and Bioprocess Technology, 2014, 7, 2723-2731.	4.7	36
33	Optimization of Î²-cyclodextrin-based extraction of antioxidant and anti-browning activities from thyme leaves by response surface methodology. Food Chemistry, 2018, 265, 86-95.	8.2	35
34	Glass Transition and Thermal Stability of Lactase in Low-Moisture Amorphous Polymeric Matrices. Biotechnology Progress, 1997, 13, 195-199.	2.6	32
35	Degradation of Î²â€carotene in amorphous polymer matrices. Effect of water sorption properties and physical state. Journal of the Science of Food and Agriculture, 2011, 91, 2587-2593.	3.5	30
36	Solubility and Stability of Î²-Cyclodextrinâ€“Terpineol Inclusion Complex as Affected by Water. Food Biophysics, 2011, 6, 274-280.	3.0	29

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37	Amaranth Milling Strategies and Fraction Characterization by FT-IR. Food and Bioprocess Technology, 2014, 7, 711-718.	4.7	29
38	Influence of ligand structure and water interactions on the physical properties of Î²-cyclodextrins complexes. Food Chemistry, 2012, 132, 2030-2036.	8.2	27
39	Carotenoid and color changes in traditionally flaked and extruded products. Food Chemistry, 2017, 229, 640-645.	8.2	27
40	Water-dependent thermal transitions in quinoa embryos. Thermochimica Acta, 2006, 448, 117-122.	2.7	26
41	Phase solubility studies of terpineol with Î²-cyclodextrins and stability of the freeze-dried inclusion complex. Procedia Food Science, 2011, 1, 355-362.	0.6	26
42	Stabilization of refrigerated avocado pulp: Effect of Allium and Brassica extracts on enzymatic browning. LWT - Food Science and Technology, 2015, 61, 89-97.	5.2	26
43	Effects of relative humidity on enzyme activity immobilized in solâ€“gel-derived silica nanocomposites. Enzyme and Microbial Technology, 2008, 42, 583-588.	3.2	24
44	Water content effect on the chromatic attributes of dehydrated strawberries during storage, as evaluated by image analysis. LWT - Food Science and Technology, 2013, 52, 157-162.	5.2	24
45	Influence of water activity and temperature on the accumulation of zearalenone in corn. International Journal of Food Microbiology, 1988, 6, 1-8.	4.7	23
46	Colour and surface fluorescence development and their relationship with Maillard reaction markers as influenced by structural changes during cornflakes production. Food Chemistry, 2012, 135, 1685-1691.	8.2	22
47	Betanin loaded nanocarriers based on quinoa seed 11S globulin. Impact on the protein structure and antioxidant activity. Food Hydrocolloids, 2019, 87, 880-890.	10.7	22
48	Structure/Function Relationships of Several Biopolymers as Related to Invertase Stability in Dehydrated Systems. Biomacromolecules, 2008, 9, 741-747.	5.4	21
49	Thermal properties of phosphoric acid-doped polybenzimidazole membranes in water and methanolâ€“water mixtures. Journal of Power Sources, 2010, 195, 6389-6397.	7.8	19
50	Assessing Changes in Enriched Maize Flour Formulations After Extrusion by Means of FTIR, XRD, and Chemometric Analysis. Food and Bioprocess Technology, 2018, 11, 1586-1595.	4.7	19
51	Microstructural characteristics and physical properties of corn-based extrudates affected by the addition of millet, sorghum, quinoa and canary seed flour. Food Structure, 2020, 25, 100140.	4.5	19
52	Integrated approach for interpreting browning rate dependence with relative humidity in dehydrated fruits. LWT - Food Science and Technology, 2011, 44, 963-968.	5.2	18
53	Î²-Cyclodextrin modifications as related to enzyme stability in dehydrated systems: Supramolecular transitions and molecular interactions. Carbohydrate Polymers, 2011, 83, 203-209.	10.2	18
54	Glass Transition Temperatures and Fermentative Activity of Heat-Treated Commercial Active Dry Yeasts. Biotechnology Progress, 2000, 16, 163-168.	2.6	17

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55	Advances in the study of the kinetics of color and fluorescence development in concentrated milk systems. Journal of Food Engineering, 2010, 101, 59-66.	5.2	17
56	Formation of complexes between hematite nanoparticles and a non-conventional galactomannan gum. Toward a better understanding on interaction processes. Science of the Total Environment, 2015, 532, 556-563.	8.0	16
57	Electrolyte effects on amorphous and supercooled sugar systems. Journal of Non-Crystalline Solids, 2008, 354, 1760-1767.	3.1	15
58	Sucrose hydrolysis in a glassy starch matrix. LWT - Food Science and Technology, 1995, 28, 245-248.	5.2	14
59	Cornflake Production Process: State Diagram and Water Mobility Characteristics. Food and Bioprocess Technology, 2014, 7, 2902-2911.	4.7	14
60	Physical and mechanical properties of maize extrudates as affected by the addition of chia and quinoa seeds and antioxidants. Journal of Food Engineering, 2015, 167, 139-146.	5.2	14
61	Temperature influence on Penicillium citrinum Thom growth and citrinin accumulation kinetics. International Journal of Food Microbiology, 1988, 7, 115-122.	4.7	12
62	The effect of MgCl2 on the kinetics of the Maillard reaction in both aqueous and dehydrated systems. Food Chemistry, 2010, 118, 103-108.	8.2	12
63	Proton mobility for the description of dynamic aspects of freeze-dried fruits. Journal of Food Engineering, 2014, 125, 44-50.	5.2	12
64	Components interactions and changes at molecular level in maize flour-based blends as affected by the extrusion process. A multi-analytical approach. Journal of Cereal Science, 2021, 99, 103186.	3.7	12
65	The kinetics of colour and fluorescence development in concentrated milk systems. International Dairy Journal, 2007, 17, 907-915.	3.0	11
66	Analysis of molecular mobility in corn and quinoa flours through 1H NMR and its relationship with water distribution, glass transition and enthalpy relaxation. Food Chemistry, 2022, 373, 131422.	8.2	11
67	Evaluation of Structural Shrinkage on Freeze-Dried Fruits by Image Analysis: Effect of Relative Humidity and Heat Treatment. Food and Bioprocess Technology, 2014, 7, 2618-2626.	4.7	10
68	Encapsulation and Stabilization of Î²-Carotene in Amaranth Matrices Obtained by Dry and Wet Assisted Ball Milling. Food and Bioprocess Technology, 2017, 10, 512-521.	4.7	10
69	Nonenzymatic Nonoxidative Browning in Hydrolyzed Shelf-stable Concentrated Cheese Whey. Journal of Food Science, 1990, 55, 697-700.	3.1	9
70	Heat-induced changes in dairy products containing sucrose. Food Chemistry, 2010, 118, 67-73.	8.2	9
71	Stimulating effect of sorbitol and xylitol on germination and growth of some xerophilic fungi. Food Microbiology, 2011, 28, 1463-1467.	4.2	8
72	Physicochemical, thermal and rheological properties of isolated Argentina quinoa starch. LWT - Food Science and Technology, 2021, 135, 110113.	5.2	8

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73	Inhibition of trehalose crystallization by cytoplasmic yeast components. Cryobiology, 2006, 52, 157-160.	0.7	7
74	Exploring differential scanning calorimetry as a tool for evaluating freezing stress sensitivity in Baker's yeasts. Thermochimica Acta, 2007, 465, 67-72.	2.7	7
75	Polyethylene glycolâ€based low generation dendrimers functionalized with Î²â€cyclodextrin as cryoâ€• and dehydroâ€protectant of catalase formulations. Biotechnology Progress, 2013, 29, 786-795.	2.6	6
76	The complex dependence of non-enzymatic browning development on processing conditions in maize snacks. LWT - Food Science and Technology, 2021, 147, 111636.	5.2	6
77	Interpretation of the color due to the ubiquitous nonenzymatic browning phenomena in foods. Color Research and Application, 2021, 46, 446-455.	1.6	5
78	Impact of Starch Gelatinization on the Kinetics of Maillard Reaction in Freeze-Dried Potato Systems. Food and Bioprocess Technology, 2012, 5, 2428-2434.	4.7	4
79	Stabilization of Refrigerated Avocado Pulp: Chemometrics-Assessed Antibrowning Allium and Brassica Extracts as Effective Lipid Oxidation Retardants. Food and Bioprocess Technology, 2017, 10, 1142-1153.	4.7	4
80	Evaluation of SIMCA and PLS algorithms to detect adulterants in canola oil by FTâ€IR. International Journal of Food Science and Technology, 2021, 56, 2596-2603.	2.7	4
81	The relationship between antibrowning, anti-radical and reducing capacity of Brassica and Allium extracts. International Journal of Food Studies, 2014, 3, .	0.8	4
82	Impact of supramolecular interactions of dextranâ€Î²â€cyclodextrin polymers on invertase activity in freezeâ€dried systems. Biotechnology Progress, 2015, 31, 791-798.	2.6	3
83	Non-enzymatic browning kinetics in sucrose-glycine aqueous and dehydrated model systems in presence of MgCl2. Food Research International, 2018, 114, 97-103.	6.2	3
84	Thermal transitions and enthalpic relaxations as related to the stability of microencapsulated paprika powders. Journal of Food Engineering, 2019, 245, 88-95.	5.2	3
85	Flour from 'fruits and vegetables' waste with addition of a Southâ€American pepper (Capsicum) Tj ETQq1 1 0.784314 rgBT /Overlock 1 55, 1230-1237.	2.7	3
86	Opacity Studies in Dehydrated Fruits in Relation to Proton Mobility and Supramolecular Aspects. Food and Bioprocess Technology, 2016, 9, 1674-1680.	4.7	2
87	Toasting Time and Cooking Formulation Affect Browning Reaction Products Development in Corn Flakes. Cereal Chemistry, 2017, 94, 380-384.	2.2	2
88	Impact of protective agents and drying methods on desiccation tolerance of Salix nigra L. seeds. Plant Physiology and Biochemistry, 2014, 82, 262-269.	5.8	1
89	Pronase hydrolysis as a pretreatment for quantifying Maillard intermediates during toasting of cornflakes. International Journal of Food Studies, 2016, 5, .	0.8	1