Laura Otero

List of Publications by Year
in descending order

55 papers	1,884 citations	201575 27 h-index	265120 42 g-index
55 all docs	55 docs citations	55 times ranked	1254 citing authors

#	Article	IF	Citations
1	Effects of Magnetic Fields on Freezing: Application to Biological Products. Comprehensive Reviews in Food Science and Food Safety, 2016, 15, 646-667.	5.9	110
2	Conventional freezing plus high pressureâ€"low temperature treatment: Physical properties, microbial quality and storage stability of beef meat. Meat Science, 2007, 77, 616-625.	2.7	106
3	Modelling heat transfer in high pressure food processing: a review. Innovative Food Science and Emerging Technologies, 2003, 4, 121-134.	2.7	100
4	A neural network approach for thermal/pressure food processing. Journal of Food Engineering, 2004, 62, 89-95.	2.7	89
5	High-pressure shift freezing versus high-pressure assisted freezing: Effects on the microstructure of a food model. Food Hydrocolloids, 2006, 20, 510-522.	5.6	82
6	High-Pressure Shift Freezing. Part 1. Amount of Ice Instantaneously Formed in the Process. Biotechnology Progress, 2000, 16, 1030-1036.	1.3	74
7	Grape Processing by High Hydrostatic Pressure: Effect on Microbial Populations, Phenol Extraction and Wine Quality. Food and Bioprocess Technology, 2015, 8, 277-286.	2.6	71
8	Hyperbaric storage at room temperature for food preservation: A study in strawberry juice. Innovative Food Science and Emerging Technologies, 2012, 15, 14-22.	2.7	65
9	A model to design high-pressure processes towards an uniform temperature distribution. Journal of Food Engineering, 2007, 78, 1463-1470.	2.7	61
10	Contrasting effects of high-pressure-assisted freezing and conventional air-freezing on eggplant tissue microstructure. European Food Research and Technology, 1998, 206, 338-342.	0.6	60
11	Artificial neural networks: a promising tool to design and optimize high-pressure food processes. Journal of Food Engineering, 2005, 69, 299-306.	2.7	60
12	Electromagnetic freezing: Effects of weak oscillating magnetic fields on crab sticks. Journal of Food Engineering, 2017, 200, 87-94.	2.7	57
13	High-pressure-shift freezing: Main factors implied in the phase transition time. Journal of Food Engineering, 2006, 72, 354-363.	2.7	51
14	Soybean Vegetable Protein (Tofu) Preserved with High Pressure. Journal of Agricultural and Food Chemistry, 2000, 48, 2943-2947.	2.4	49
15	Effects of pressure processing on strawberry studied by nuclear magnetic resonance. Innovative Food Science and Emerging Technologies, 2009, 10, 434-440.	2.7	48
16	Some Interrelated Thermophysical Properties of Liquid Water and Ice. I. A User-Friendly Modeling Review for Food High-Pressure Processing. Critical Reviews in Food Science and Nutrition, 2002, 42, 339-352.	5.4	47
17	Grape Processing by High Hydrostatic Pressure: Effect on Use of Non-Saccharomyces in Must Fermentation. Food and Bioprocess Technology, 2016, 9, 1769-1778.	2.6	43
18	Industrial viability of the hyperbaric method to store perishable foods at room temperature. Journal of Food Engineering, 2017, 193, 76-85.	2.7	42

#	Article	IF	Citations
19	Ice VI freezing of meat: supercooling and ultrastructural studies. Meat Science, 2004, 66, 709-718.	2.7	41
20	Optimization of an artificial neural network for thermal/pressure food processing: Evaluation of training algorithms. Computers and Electronics in Agriculture, 2007, 56, 101-110.	3.7	40
21	Hyperbaric cold storage versus conventional refrigeration for extending the shelf-life of hake loins. Innovative Food Science and Emerging Technologies, 2017, 41, 19-25.	2.7	35
22	The effects of high hydrostatic pressure at subzero temperature on the quality of ready-to-eat cured beef carpaccio. Meat Science, 2012, 92, 575-581.	2.7	31
23	Evaluation of the thermophysical properties of tylose gel under pressure in the phase change domain. Food Hydrocolloids, 2006, 20, 449-460.	5.6	29
24	A Model for Real Thermal Control in High-Pressure Treatment of Foods. Biotechnology Progress, 2002, 18, 904-908.	1.3	28
25	Effect of hyperbaric storage at room temperature on color degradation of strawberry juice. Journal of Food Engineering, 2016, 169, 141-148.	2.7	28
26	Effects of static magnetic fields on supercooling and freezing kinetics of pure water and 0.9% NaCl solutions. Journal of Food Engineering, 2018, 217, 34-42.	2.7	28
27	Pressure-shift nucleation: A potential tool for freeze concentration of fluid foods. Innovative Food Science and Emerging Technologies, 2012, 13, 86-99.	2.7	27
28	High-Presssure Shift Freezing. Part 2. Modeling of Freezing Times for a Finite Cylindrical Model. Biotechnology Progress, 2000, 16, 1037-1043.	1.3	25
29	Liquid Water-Ice I Phase Diagrams under High Pressure: Sodium Chloride and Sucrose Models for Food Systems. Biotechnology Progress, 2008, 21, 439-445.	1.3	25
30	Experimental determination of the amount of ice instantaneously formed in high-pressure shift freezing. Journal of Food Engineering, 2009, 95, 670-676.	2.7	25
31	Assessment of cell damage in high-pressure-shift frozen broccoli: comparison with market samples. European Food Research and Technology, 2006, 224, 101-107.	1.6	24
32	Ice content and temperature determination from ultrasonic measurements in partially frozen foods. Journal of Food Engineering, 2008, 88, 272-279.	2.7	24
33	Effect of hyperbaric storage at room temperature on pectin methylesterase activity and serum viscosity of strawberry juice. Innovative Food Science and Emerging Technologies, 2015, 30, 170-176.	2.7	24
34	High-pressure shift freezing: recrystallization during storage. European Food Research and Technology, 2008, 227, 1367-1377.	1.6	21
35	The Initial Freezing Temperature of Foods at High Pressure. Critical Reviews in Food Science and Nutrition, 2008, 48, 328-340.	5.4	18
36	Hyperbaric storage at room temperature: Effect of pressure level and storage time on the natural microbiota of strawberry juice. Innovative Food Science and Emerging Technologies, 2016, 33, 154-161.	2.7	18

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37	Effects of the application of static magnetic fields during potato freezing. Journal of Food Engineering, 2022, 316, 110838.	2.7	18
38	Effect of hyperbaric storage at room temperature on the volatile profile of strawberry juice. LWT - Food Science and Technology, 2015, 62, 906-914.	2.5	16
39	Detection of Iberian ham aroma by a semiconductor multisensorial system. Meat Science, 2003, 65, 1175-1185.	2.7	14
40	Modeling Thermophysical Properties of Food Under High Pressure. Critical Reviews in Food Science and Nutrition, 2010, 50, 344-368.	5.4	14
41	Kinetics of thermal and high-pressure inactivation of avocado polygalacturonase. Innovative Food Science and Emerging Technologies, 2014, 26, 51-58.	2.7	14
42	Orange juice pvT-properties for high pressure processing and modeling purposes: Importance of soluble solids concentration. Food Research International, 2012, 46, 83-91.	2.9	13
43	Specific volume and compressibility measurements of tomato paste at moderately high pressure as a function of temperature. Journal of Food Engineering, 2011, 103, 251-257.	2.7	11
44	Electromagnetic Freezing in a Widespread Frequency Range of Alternating Magnetic Fields. Food Engineering Reviews, 2019, 11, 93-103.	3.1	11
45	Modelling industrial scale high-pressure-low-temperature processes. Journal of Food Engineering, 2007, 83, 136-141.	2.7	10
46	Effect of the frequency of weak oscillating magnetic fields on supercooling and freezing kinetics of pure water and 0.9% NaCl solutions. Journal of Food Engineering, 2020, 273, 109822.	2.7	10
47	Hyperbaric Storage at Room Temperature for Fruit Juice Preservation. Beverages, 2019, 5, 49.	1.3	9
48	Is my food safe? â€“ AI-based classification of lentil flour samples with trace levels of gluten or nuts. Food Chemistry, 2022, 386, 132832.	4.2	9
49	Thermal expansion coefficient and specific heat capacity from sound velocity measurements in tomato paste from 0.1 up to 350MPa and as a function of temperature. Journal of Food Engineering, 2011, 104, 341-347.	2.7	7
50	Prediction of ice content in biological model solutions when frozen under high pressure. Biotechnology Progress, 2009, 25, 454-460.	1.3	6
51	High-Pressure Freezing. , 2014, , 515-538.		5
52	Single-digit ppm quantification of melamine in powdered milk driven by computer vision. Food Control, 2022, 131, 108424.	2.8	5
53	High-Pressure Freezing. , 2005, , 627-652.		3
54	Hyperbaric Storage of Atlantic Razor Clams: Effect of the Storage Conditions. Food and Bioprocess Technology, 2021, 14, 530-541.	2.6	2

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55	Evaluation of the effects of weak oscillating magnetic fields applied during freezing on systems of different complexity. International Journal of Food Engineering, 2020, 16, .	0.7	1