Sara Spilimbergo

List of Publications by Year
in descending order

76 papers	2,943 citations	186265 28 h-index	175258 52 g-index
77 all docs	77 docs citations	77 times ranked	2148 citing authors

#	Article	IF	Citations
1	High pressure carbon dioxide inactivation of microorganisms in foods: The past, the present and the future. International Journal of Food Microbiology, 2007, 117, 1-28.	4.7	465
2	Non-thermal bacterial inactivation with dense CO2. Biotechnology and Bioengineering, 2003, 84, 627-638.	3.3	233
3	Microbial inactivation by high-pressure. Journal of Supercritical Fluids, 2002, 22, 55-63.	3.2	176
4	High pressure carbon dioxide pasteurization of solid foods: Current knowledge and future outlooks. Trends in Food Science and Technology, 2011, 22, 427-441.	15.1	117
5	Exploitation of Îº-carrageenan aerogels as template for edible oleogel preparation. Food Hydrocolloids, 2017, 71, 68-75.	10.7	110
6	Inactivation of bacteria and spores by pulse electric field and high pressure CO2 at low temperature. Biotechnology and Bioengineering, 2003, 82, 118-125.	3.3	108
7	Effects of supercritical CO2 and N2O pasteurisation on the quality of fresh apple juice. Food Chemistry, 2009, 115, 129-136.	8.2	101
8	Enzymatic, physicochemical, nutritional and phytochemical profile changes of apple (Golden Delicious) Tj ETQq0 0 0 rgBT /Overlock 10 T 279-286.	8.2	77
9	Carbon Dioxide Induced Silk Protein Gelation for Biomedical Applications. Biomacromolecules, 2012, 13, 2060-2072.	5.4	74
10	High Pressure Carbon Dioxide pasteurization of coconut water: A sport drink with high nutritional and sensory quality. Journal of Food Engineering, 2015, 145, 73-81.	5.2	69
11	Inactivation of Bacillus subtilis spores by supercritical CO2 treatment. Innovative Food Science and Emerging Technologies, 2003, 4, 161-165.	5.6	68
12	Determination of extracellular and intracellular pH ofBacillus subtilis suspension under CO2 treatment. Biotechnology and Bioengineering, 2005, 92, 447-451.	3.3	65
13	High pressure carbon dioxide pasteurization of fresh-cut carrot. Journal of Supercritical Fluids, 2013, 79, 92-100.	3.2	58
14	Comparison of three types of drying (supercritical CO2, air and freeze) on the quality of dried apple â€“ Quality index approach. LWT - Food Science and Technology, 2018, 94, 64-72.	5.2	52
15	Supercritical fluid extraction of oils from apple seeds: Process optimization, chemical characterization and comparison with a conventional solvent extraction. Innovative Food Science and Emerging Technologies, 2020, 64, 102428.	5.6	51
16	Real-time monitoring of cell membrane modification during supercritical CO2 pasteurization. Journal of Supercritical Fluids, 2009, 48, 93-97.	3.2	49
17	Supercritical gases pasteurization of apple juice. Journal of Supercritical Fluids, 2007, 40, 485-489.	3.2	44
18	Supercritical CO₂ and N₂O pasteurisation of peach and kiwi juice. International Journal of Food Science and Technology, 2010, 45, 1619-1625.	2.7	43

#	Article	IF	Citations
19	High power ultrasound combined with supercritical carbon dioxide for the drying and microbial inactivation of coriander. Journal of CO2 Utilization, 2018, 24, 516-521.	6.8	38
20	Supercritical carbon dioxide combined with high power ultrasound: An effective method for the pasteurization of coconut water. Journal of Supercritical Fluids, 2014, 92, 257-263.	3.2	37
21	E: Food Engineering & Physical Properties. Effect of Supercritical Carbon Dioxide Pasteurization on Natural Microbiota, Texture, and Microstructure of Freshâ€Cut Coconut. Journal of Food Science, 2012, 77, E137-43.	3.1	35
22	Supercritical Carbon Dioxide Processing of Dry Cured Ham Spiked with Listeria monocytogenes: Inactivation Kinetics, Color, and Sensory Evaluations. Food and Bioprocess Technology, 2013, 6, 1164-1174.	4.7	35
23	Optimization of supercritical carbon dioxide treatment for the inactivation of the natural microbial flora in cubed cooked ham. International Journal of Food Microbiology, 2013, 161, 189-196.	4.7	34
24	High pressure carbon dioxide combined with high power ultrasound pasteurization of fresh cut carrot. Journal of Supercritical Fluids, 2015, 105, 170-178.	3.2	34
25	Effects of Pasteurization on Volatile Compounds and Sensory Properties of Coconut (Cocos nucifera) Tj ETQq1 1 0.784314 rgBT /Ove 2015, 8, 1393-1404.	4.7	32
26	Impact of high-pressure carbon dioxide on polyphenoloxidase activity and stability of fresh apple juice. LWT - Food Science and Technology, 2017, 85, 363-371.	5.2	32
27	Inactivation of Salmonella , Listeria monocytogenes and Escherichia coli O157:H7 inoculated on coriander by freeze-drying and supercritical CO 2 drying. Innovative Food Science and Emerging Technologies, 2018, 47, 180-186.	5.6	30
28	High-pressure CO2 inactivation and induced damage on Saccharomyces cerevisiae evaluated by flow cytometry. Process Biochemistry, 2010, 45, 647-654.	3.7	28
29	Dry acellular oesophageal matrix prepared by supercritical carbon dioxide. Journal of Supercritical Fluids, 2016, 115, 33-41.	3.2	28
30	Supercritical carbon dioxide combined with high power ultrasound as innovate drying process for chicken breast. Journal of Supercritical Fluids, 2019, 147, 24-32.	3.2	28
31	Terminal Sterilization of BisGMA-TEGDMA Thermoset Materials and Their Bioactive Surfaces by Supercritical CO₂. Biomacromolecules, 2012, 13, 1152-1160.	5.4	26
32	High-Power Ultrasound Assisted High-Pressure Carbon Dioxide Pasteurization of Fresh-Cut Coconut: a Microbial and Physicochemical Study. Food and Bioprocess Technology, 2015, 8, 2368-2382.	4.7	25
33	Effect of high-pressure gases on phase behaviour of solid lipids. Journal of Supercritical Fluids, 2006, 38, 289-294.	3.2	24
34	Research Note: Microbial inactivation of raw chicken meat by supercritical carbon dioxide treatment alone and in combination with fresh culinary herbs. Poultry Science, 2020, 99, 536-545.	3.4	24
35	Stochastic Modeling of S. cerevisiae Inactivation by Supercritical CO2. Biotechnology Progress, 2005, 21, 1461-1465.	2.6	22
36	Microbial inactivation efficiency of supercritical CO₂ drying process. Drying Technology, 2018, 36, 2016-2021.	3.1	22

#	ARTICLE	IF	CITATIONS
37	Optimization of the supercritical CO2 pasteurization process for the preservation of high nutritional value of pomegranate juice. Journal of Supercritical Fluids, 2020, 164, 104914.	3.2	22
38	Intracellular pH measurement during high-pressure CO2 pasteurization evaluated by cell fluorescent staining. Journal of Supercritical Fluids, 2010, 53, 185-191.	3.2	20
39	Porous poly(<scp>D</scp>,<scp>L</scp>â€lactic acid) foams with tunable structure and mechanical anisotropy prepared by supercritical carbon dioxide. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 99B, 338-349.	3.4	19
40	Comparison of quantitative PCR and flow cytometry as cellular viability methods to study bacterial membrane permeabilization following supercritical CO2 treatment. Microbiology (United Kingdom), 2013, 159, 1056-1066.	1.8	19
41	Supercritical CO2 Induces Marked Changes in Membrane Phospholipids Composition in Escherichia coli K12. Journal of Membrane Biology, 2014, 247, 469-477.	2.1	19
42	Inactivation of mushroom polyphenoloxidase in model systems exposed to high-pressure carbon dioxide. Journal of Supercritical Fluids, 2016, 107, 669-675.	3.2	18
43	Accurate flow cytometric monitoring of Escherichia coli subpopulations on solid food treated with high pressure carbon dioxide. Journal of Applied Microbiology, 2014, 117, 440-450.	3.1	17
44	A combined high pressure carbon dioxide and high power ultrasound treatment for the microbial stabilization of cooked ham. Journal of Food Engineering, 2016, 174, 47-55.	5.2	17
45	On-line color monitoring of solid foods during supercritical CO2 pasteurization. Journal of Food Engineering, 2012, 110, 80-85.	5.2	16
46	In Situ Raman Analysis of CO2â€"Assisted Drying of Fruit-Slices. Foods, 2017, 6, 37.	4.3	16
47	Kinetic Analysis of Microorganisms Inactivation in Apple Juice by High Pressure Carbon Dioxide. International Journal of Food Engineering, 2006, 2, .	1.5	14
48	High pressure gases: Role of dynamic intracellular pH in pasteurization. Biotechnology and Bioengineering, 2011, 108, 1211-1214.	3.3	14
49	Validation of a mathematical model for predicting high pressure carbon dioxide inactivation kinetics of Escherichia coli spiked on fresh cut carrot. Journal of Supercritical Fluids, 2014, 85, 17-23.	3.2	14
50	Non-thermal pasteurization of apples in syrup with dense phase carbon dioxide. Journal of Food Engineering, 2017, 207, 18-23.	5.2	14
51	Bacterial inactivation on solid food matrices through supercritical CO2: A correlative study. Journal of Food Engineering, 2014, 120, 146-157.	5.2	12
52	Application of culture-independent methods for monitoring Listeria monocytogenes inactivation on food products. Process Biochemistry, 2015, 50, 188-193.	3.7	12
53	In situ Raman quantification of the dissolution kinetics of carbon dioxide in liquid solutions during a dense phase and ultrasound treatment for the inactivation of Saccharomyces cerevisiae. Journal of Supercritical Fluids, 2016, 111, 104-111.	3.2	12
54	Challenging chemical and quality changes of supercritical Co2 dried apple during long-term storage. LWT - Food Science and Technology, 2019, 110, 132-141.	5.2	12

#	Article	IF	Citations
55	Supercritical CO₂ for the drying and microbial inactivation of appleâ€™s slices. Drying Technology, 2021, 39, 259-267.	3.1	12
56	Quality Attributes of Fresh-Cut Coconut after Supercritical Carbon Dioxide Pasteurization. Journal of Chemistry, 2013, 2013, 1-9.	1.9	11
57	A hybrid process for increasing the shelf life of elderberry juice. Journal of Supercritical Fluids, 2018, 140, 406-414.	3.2	11
58	A Study about the Effects of Supercritical Carbon Dioxide Drying on Apple Pieces. International Journal of Electrical Energy, 2018, , 186-190.	0.4	11
59	Mathematical Modeling of Yeast Inactivation of Freshly Squeezed Apple Juice under High-Pressure Carbon Dioxide. Critical Reviews in Food Science and Nutrition, 2010, 51, 91-97.	10.3	10
60	Partial permeabilisation and depolarization of Salmonella enterica Typhimurium cells after treatment with pulsed electric fields and high pressure carbon dioxide. Process Biochemistry, 2014, 49, 2055-2062.	3.7	10
61	Supercritical CO2 Drying of Red Bell Pepper. Food and Bioprocess Technology, 2020, 13, 753-763.	4.7	10
62	Yeast Inactivation in Fresh Apple Juice by High Pressure Nitrous Oxide. International Journal of Food Engineering, 2007, 3, .	1.5	9
63	Pressure-induced pH changes in aqueous solutions â€“ On-line measurement and semi-empirical modelling approach. Journal of Supercritical Fluids, 2011, 56, 6-13.	3.2	9
64	High pressure carbon dioxide on pork raw meat: Inactivation of mesophilic bacteria and effects on colour properties. Journal of Food Engineering, 2015, 156, 55-58.	5.2	8
65	In situ Raman-analysis of supercritical carbon dioxide drying applied to acellular esophageal matrix. Journal of Supercritical Fluids, 2017, 128, 194-199.	3.2	8
66	Real time intracellular pH dynamics in Listeria innocua under CO2 and N2O pressure. Journal of Supercritical Fluids, 2011, 58, 385-390.	3.2	7
67	Milk pasteurization at low temperature under N2O pressure. Journal of Food Engineering, 2011, 105, 193-195.	5.2	7
68	Preservation over time of dried acellular esophageal matrix. Biomedical Physics and Engineering Express, 2018, 4, 065021.	1.2	7
69	Microbial inactivation and drying of strawberry slices by supercritical CO2. Journal of Supercritical Fluids, 2022, 180, 105430.	3.2	7
70	Effect of denseâ€phase <scp>CO</scp>₂ on polyphenoloxidase in model solutions. International Journal of Food Science and Technology, 2014, 49, 1238-1241.	2.7	6
71	Effect of CO2 Preservation Treatments on the Sensory Quality of Pomegranate Juice. Molecules, 2020, 25, 5598.	3.8	5
72	Treating micro-organisms with high pressure. Industrial Chemistry Library, 2001, 9, 626-640.	0.1	3

#	Article	IF	Citations
73	Supercritical Fluid Pasteurization and Food Safety. RSC Green Chemistry, 2018, , 153-195.	0.1	3
74	Inactivation of foodborne pathogens on leek and alfalfa seeds with supercritical carbon dioxide. Journal of Supercritical Fluids, 2022, 180, 105433.	3.2	3
75	Optimization of the Appearance Quality in CO2 Processed Ready-to-Eat Carrots through Image Analysis. Foods, 2021, 10, 2999.	4.3	3
76	High-Pressure Processing of Foods toward Their Industrialization and Commercialization: An Up-to-Date Overview. Functional Foods & Nutraceuticals Series, 2015, , 427-454.	0.1	2