Paula Bourke

List of Publications by Year
in descending order

126 papers	10,502 citations	29994 54 h-index	33814 99 g-index
130 all docs	130 docs citations	130 times ranked	7657 citing authors

#	Article	IF	Citations
1	Combination of Green Extraction Techniques and Essential Oils to Develop Active Packaging for Improving the Quality and Shelf Life for Chicken Meat. Food Reviews International, 2023, 39, 3783-3805.	4.3	1
2	Emerging green cell disruption techniques to obtain valuable compounds from macro and microalgae: a review. Critical Reviews in Biotechnology, 2023, 43, 904-919.	5.1	7
3	Plasma-Functionalized Water: from Bench to Prototype for Fresh-Cut Lettuce. Food Engineering Reviews, 2021, 13, 115-135.	3.1	24
4	The effect of atmospheric cold plasma treatment on the antigenic properties of bovine milk casein and whey proteins. Food Chemistry, 2021, 342, 128283.	4.2	58
5	Biomolecules as Model Indicators of In Vitro and In Vivo Cold Plasma Safety. Frontiers in Physics, 2021, 8, .	1.0	1
6	Distinct Chemistries Define the Diverse Biological Effects of Plasma Activated Water Generated with Spark and Glow Plasma Discharges. Applied Sciences (Switzerland), 2021, 11, 1178.	1.3	14
7	Characterization of an atmospheric pressure air plasma device under different modes of operation and their impact on the liquid chemistry. Journal of Applied Physics, 2021, 129, .	1.1	13
8	Available technologies on improving the stability of polyphenols in food processing. Food Frontiers, 2021, 2, 109-139.	3.7	98
9	Combined effect of plasma treatment and equilibrium modified atmosphere packaging on safety and quality of cherry tomatoes. Future Foods, 2021, 3, 100011.	2.4	10
10	Optimizing the application of plasma functionalised water (PFW) for microbial safety in fresh-cut endive processing. Innovative Food Science and Emerging Technologies, 2021, 72, 102745.	2.7	7
11	Combination of Natural Compounds With Novel Non-thermal Technologies for Poultry Products: A Review. Frontiers in Nutrition, 2021, 8, 628723.	1.6	15
12	Cold plasma for insect pest control: <i>Tribolium castaneum</i> mortality and defense mechanisms in response to treatment. Plasma Processes and Polymers, 2021, 18, 2000178.	1.6	10
13	Plasma Treatment of Liquids. , 2021, , 610-634.		2
14	Investigation of a large gap cold plasma reactor for continuous in-package decontamination of fresh strawberries and spinach. Innovative Food Science and Emerging Technologies, 2020, 59, 102229.	2.7	60
15	Deposition of Cell Culture Coatings Using a Cold Plasma Deposition Method. Applied Sciences (Switzerland), 2020, 10, 6670.	1.3	3
16	Effect of atmospheric cold plasma on the functional properties of whole wheat (Triticum aestivum L.) grain and wheat flour. Innovative Food Science and Emerging Technologies, 2020, 66, 102529.	2.7	83
17	Effects of cold plasma on wheat grain microbiome and antimicrobial efficacy against challenge pathogens and their resistance. International Journal of Food Microbiology, 2020, 335, 108889.	2.1	22
18	Assessing the Biological Safety of Atmospheric Cold Plasma Treated Wheat Using Cell and Insect Models. Foods, 2020, 9, 898.	1.9	10

#	ARTICLE	IF	CITATIONS
19	Direct Plasma Deposition of Collagen on 96-Well Polystyrene Plates for Cell Culture. ACS Omega, 2020, 5, 25069-25076.	1.6	3
20	Temperature Stability and Effectiveness of Plasma-Activated Liquids over an 18 Months Period. Water (Switzerland), 2020, 12, 3021.	1.2	26
21	Novel decontamination approaches and their potential application for post-harvest aflatoxin control. Trends in Food Science and Technology, 2020, 106, 489-496.	7.8	48
22	Safety evaluation of plasma-treated lettuce broth using<i>in vitro</i>and<i>in vivo</i>toxicity models. Journal Physics D: Applied Physics, 2020, 53, 274003.	1.3	9
23	Cold Atmospheric Plasma Stimulates Clathrin-Dependent Endocytosis to Repair Oxidised Membrane and Enhance Uptake of Nanomaterial in Glioblastoma Multiforme Cells. Scientific Reports, 2020, 10, 6985.	1.6	23
24	Inactivation Efficacies and Mechanisms of Gas Plasma and Plasma-Activated Water against Aspergillus flavus Spores and Biofilms: a Comparative Study. Applied and Environmental Microbiology, 2020, 86, .	1.4	50
25	The Effect of Plasma Treated Water Unit Processes on the Food Quality Characteristics of Fresh-Cut Endive. Frontiers in Nutrition, 2020, 7, 627483.	1.6	6
26	Plasma activated liquids: New decontamination solutions. Access Microbiology, 2020, 2, .	0.2	0
27	Effect of cold plasma on polyphenol oxidase inactivation in cloudy apple juice and on the quality parameters of the juice during storage. Food Chemistry: X, 2019, 3, 100049.	1.8	52
28	High voltage atmospheric cold air plasma control of bacterial biofilms on fresh produce. International Journal of Food Microbiology, 2019, 293, 137-145.	2.1	56
29	Efficacy of cold plasma functionalised water for improving microbiological safety of fresh produce and wash water recycling. Food Microbiology, 2019, 84, 103226.	2.1	67
30	Improving enzymatic hydrolysis of brewer spent grain with nonthermal plasma. Bioresource Technology, 2019, 282, 520-524.	4.8	27
31	Degradation kinetics of cold plasma-treated antibiotics and their antimicrobial activity. Scientific Reports, 2019, 9, 3955.	1.6	63
32	Investigation of mechanisms involved in germination enhancement of wheat (<i>Triticum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 227 Td and Polymers, 2019, 16, 1800148.	1.6	69
33	Efficacy of Cold Plasma for Direct Deposition of Antibiotics as a Novel Approach for Localized Delivery and Retention of Effect. Frontiers in Cellular and Infection Microbiology, 2019, 9, 428.	1.8	8
34	The Effect of Atmospheric Cold Plasma on Bacterial Stress Responses and Virulence Using Listeria monocytogenes Knockout Mutants. Frontiers in Microbiology, 2019, 10, 2841.	1.5	18
35	An untargeted chemometric evaluation of plasma and ozone processing effect on volatile compounds in orange juice. Innovative Food Science and Emerging Technologies, 2019, 53, 63-69.	2.7	41
36	Shelf-life extension of herring (Clupea harengus) using in-package atmospheric plasma technology. Innovative Food Science and Emerging Technologies, 2019, 53, 85-91.	2.7	90

#	Article	IF	Citations
37	Recent Advances in the Application of Cold Plasma Technology in Foods. Annual Review of Food Science and Technology, 2018, 9, 609-629.	5.1	128
38	Improving microbiological safety and quality characteristics of wheat and barley by high voltage atmospheric cold plasma closed processing. Food Research International, 2018, 106, 509-521.	2.9	104
39	The Potential of Cold Plasma for Safe and Sustainable Food Production. Trends in Biotechnology, 2018, 36, 615-626.	4.9	270
40	Cold Plasmas for Biofilm Control: Opportunities and Challenges. Trends in Biotechnology, 2018, 36, 627-638.	4.9	137
41	Assessment of the disinfection capacity and eco-toxicological impact of atmospheric cold plasma for treatment of food industry effluents. Science of the Total Environment, 2018, 631-632, 298-307.	3.9	55
42	Translation of plasma technology from the lab to the food industry. Plasma Processes and Polymers, 2018, 15, 1700085.	1.6	114
43	Characterising the impact of postâ€treatment storage on chemistry and antimicrobial properties of plasma treated water derived from microwave and DBD sources. Plasma Processes and Polymers, 2018, 15, 1700127.	1.6	38
44	Humic acid and trihalomethane breakdown with potential by-product formations for atmospheric air plasma water treatment. Journal of Industrial and Engineering Chemistry, 2018, 59, 350-361.	2.9	20
45	Understanding the Differences Between Antimicrobial and Cytotoxic Properties of Plasma Activated Liquids. Plasma Medicine, 2018, 8, 299-320.	0.2	19
46	Hydra as a Model for Screening Ecotoxicological Effects of Plasma-Treated Water. Plasma Medicine, 2018, 8, 225-236.	0.2	4
47	Inner surface biofilm inactivation by atmospheric pressure helium porous plasma jet. Plasma Processes and Polymers, 2018, 15, 1800055.	1.6	7
48	Current and Future Technologies for Microbiological Decontamination of Cereal Grains. Journal of Food Science, 2018, 83, 1484-1493.	1.5	64
49	Plasma activated water and airborne ultrasound treatments for enhanced germination and growth of soybean. Innovative Food Science and Emerging Technologies, 2018, 49, 13-19.	2.7	72
50	Safety implications of plasma-induced effects in living cells â€“ a review of <i>in vitro</i> and <i>in vivo</i> findings. Biological Chemistry, 2018, 400, 3-17.	1.2	42
51	Inactivation of Staphylococcus aureus in Foods by Thermal and Nonthermal Control Strategies. , 2018, , 235-255.		2
52	Cold atmospheric plasma is a viable solution for treating orthopedic infection: a review. Biological Chemistry, 2018, 400, 77-86.	1.2	17
53	Hydrogen Peroxide and Beyond-the Potential of High-voltage Plasma-activated Liquids Against Cancerous Cells. Anti-Cancer Agents in Medicinal Chemistry, 2018, 18, 815-823.	0.9	30
54	Characterization of Dielectric Barrier Discharge Atmospheric Air Plasma Treated Chitosan Films. Journal of Food Processing and Preservation, 2017, 41, e12889.	0.9	23

#	Article	IF	Citations
55	Achieving reactive species specificity within plasmaâ€activated water through selective generation using air spark and glow discharges. Plasma Processes and Polymers, 2017, 14, 1600207.	1.6	132
56	Atmospheric cold plasma dissipation efficiency of agrochemicals on blueberries. Innovative Food Science and Emerging Technologies, 2017, 44, 235-241.	2.7	197
57	Microbiological interactions with cold plasma. Journal of Applied Microbiology, 2017, 123, 308-324.	1.4	276
58	Characterisation of cold plasma treated beef and dairy lipids using spectroscopic and chromatographic methods. Food Chemistry, 2017, 235, 324-333.	4.2	84
59	Controlling Brochothrix thermosphacta as a spoilage risk using in-package atmospheric cold plasma. Food Microbiology, 2017, 66, 48-54.	2.1	46
60	Optimization of atmospheric air plasma for degradation of organic dyes in wastewater. Water Science and Technology, 2017, 75, 207-219.	1.2	29
61	Fructooligosaccharides integrity after atmospheric cold plasma and high-pressure processing of a functional orange juice. Food Research International, 2017, 102, 282-290.	2.9	60
62	The potential of atmospheric air cold plasma for control of bacterial contaminants relevant to cereal grain production. Innovative Food Science and Emerging Technologies, 2017, 44, 36-45.	2.7	39
63	Efficacy and mechanistic insights into endocrine disruptor degradation using atmospheric air plasma. Chemical Engineering Journal, 2017, 326, 700-714.	6.6	43
64	Effects of dielectric barrier discharge (DBD) generated plasma on microbial reduction and quality parameters of fresh mackerel (Scomber scombrus) fillets. Innovative Food Science and Emerging Technologies, 2017, 44, 117-122.	2.7	140
65	Controlled cytotoxicity of plasma treated water formulated by open-air hybrid mode discharge. Applied Physics Letters, 2017, 110, 264102.	1.5	23
66	Effects of Cold Plasma on Surface, Thermal and Antimicrobial Release Properties of Chitosan Film. Journal of Renewable Materials, 2017, 5, 14-20.	1.1	21
67	Controlling Microbial Safety Challenges of Meat Using High Voltage Atmospheric Cold Plasma. Frontiers in Microbiology, 2016, 7, 977.	1.5	47
68	Principles of Nonthermal Plasma Decontamination. , 2016, , 143-177.		11
69	Demonstrating the Potential of Industrial Scale In-Package Atmospheric Cold Plasma for Decontamination of Cherry Tomatoes. Plasma Medicine, 2016, 6, 397-412.	0.2	49
70	AFLP analysis of genetic diversity and phylogenetic relationships of Brassica oleracea in Ireland. Comptes Rendus - Biologies, 2016, 339, 163-170.	0.1	38
71	Genetic diversity and population structure of Brassica oleracea germplasm in Ireland using SSR markers. Comptes Rendus - Biologies, 2016, 339, 133-140.	0.1	57
72	Atmospheric cold plasma interactions with modified atmosphere packaging inducer gases for safe food preservation. Innovative Food Science and Emerging Technologies, 2016, 38, 384-392.	2.7	60

#	Article	IF	Citations
73	Evaluation of plasma, highâ€pressure and ultrasound processing on the stability of fructooligosaccharides. International Journal of Food Science and Technology, 2016, 51, 2034-2040.	1.3	25
74	Cytotoxic and mutagenic potential of solutions exposed to cold atmospheric plasma. Scientific Reports, 2016, 6, 21464.	1.6	115
75	Assessing stress responses to atmospheric cold plasma exposure using<i>Escherichia coli</i>knock-out mutants. Journal of Applied Microbiology, 2016, 121, 352-363.	1.4	18
76	Pesticide degradation in water using atmospheric air cold plasma. Journal of Water Process Engineering, 2016, 9, 225-232.	2.6	165
77	1H NMR spectroscopy and chemometrics evaluation of non-thermal processing of orange juice. Food Chemistry, 2016, 204, 102-107.	4.2	68
78	Mechanisms of Inactivation by High-Voltage Atmospheric Cold Plasma Differ for Escherichia coli and Staphylococcus aureus. Applied and Environmental Microbiology, 2016, 82, 450-458.	1.4	295
79	Application of phosphorescent oxygen sensors in in-package dielectric barrier discharge plasma environment. Innovative Food Science and Emerging Technologies, 2016, 33, 234-239.	2.7	9
80	Cold plasma inactivation of internalised bacteria and biofilms for Salmonella enterica serovar Typhimurium, Listeria monocytogenes and Escherichia coli. International Journal of Food Microbiology, 2015, 210, 53-61.	2.1	153
81	Generation of In-Package Cold Plasma and Efficacy Assessment Using Methylene Blue. Plasma Chemistry and Plasma Processing, 2015, 35, 1043-1056.	1.1	42
82	Assessing bacterial recovery and efficacy of cold atmospheric plasma treatments. Food and Bioproducts Processing, 2015, 96, 154-160.	1.8	21
83	Dielectric barrier discharge atmospheric air plasma treatment of high amylose corn starch films. LWT - Food Science and Technology, 2015, 63, 1076-1082.	2.5	86
84	Characterization of dielectric barrier discharge atmospheric air cold plasma treated gelatin films. Food Packaging and Shelf Life, 2015, 6, 61-67.	3.3	34
85	Effects of atmospheric cold plasma and ozone on prebiotic orange juice. Innovative Food Science and Emerging Technologies, 2015, 32, 127-135.	2.7	165
86	Cold Plasma Inactivation of Bacterial Biofilms and Reduction of Quorum Sensing Regulated Virulence Factors. PLoS ONE, 2015, 10, e0138209.	1.1	124
87	Dielectric Barrier Discharge Atmospheric Cold Plasma for Inactivation of Pseudomonas aeruginosa Biofilms. Plasma Medicine, 2014, 4, 137-152.	0.2	45
88	Quantitative Assessment of Blood Coagulation by Cold Atmospheric Plasma. Plasma Medicine, 2014, 4, 153-163.	0.2	31
89	Surface, Thermal and Antimicrobial Release Properties of Plasma-Treated Zein Films. Journal of Renewable Materials, 2014, 2, 77-84.	1.1	44
90	Bacterial inactivation by high-voltage atmospheric cold plasma: influence of process parameters and effects on cell leakage and DNA. Journal of Applied Microbiology, 2014, 116, 784-794.	1.4	166

#	Article	IF	Citations
91	In-package atmospheric pressure cold plasma treatment of cherry tomatoes. Journal of Bioscience and Bioengineering, 2014, 118, 177-182.	1.1	236
92	In situ production of human Î² defensin-3 in lager yeasts provides bactericidal activity against beer-spoiling bacteria under fermentation conditions. Journal of Applied Microbiology, 2014, 116, 368-379.	1.4	5
93	In-package nonthermal plasma degradation of pesticides on fresh produce. Journal of Hazardous Materials, 2014, 271, 33-40.	6.5	129
94	Atmospheric cold plasma inactivation of Escherichia coli, Salmonella enterica serovar Typhimurium and Listeria monocytogenes inoculated on fresh produce. Food Microbiology, 2014, 42, 109-116.	2.1	341
95	In-package atmospheric pressure cold plasma treatment of strawberries. Journal of Food Engineering, 2014, 125, 131-138.	2.7	306
96	Characterization of polylactic acid films for food packaging as affected by dielectric barrier discharge atmospheric plasma. Innovative Food Science and Emerging Technologies, 2014, 21, 107-113.	2.7	121
97	Applications of cold plasma technology in food packaging. Trends in Food Science and Technology, 2014, 35, 5-17.	7.8	393
98	Inducing a Dielectric Barrier Discharge Plasma Within a Package. IEEE Transactions on Plasma Science, 2014, 42, 2368-2369.	0.6	16
99	Physicochemical characterization of plasma-treated sodium caseinate film. Food Research International, 2014, 66, 438-444.	2.9	84
100	Post-discharge gas composition of a large-gap DBD in humid air by UVâ€“Vis absorption spectroscopy. Plasma Sources Science and Technology, 2014, 23, 065033.	1.3	119
101	Influence of high voltage atmospheric cold plasma process parameters and role of relative humidity on inactivation of Bacillus atrophaeus spores inside a sealed package. Journal of Hospital Infection, 2014, 88, 162-169.	1.4	139
102	Zein film: Effects of dielectric barrier discharge atmospheric cold plasma. Journal of Applied Polymer Science, 2014, 131, .	1.3	74
103	Cold Plasma in Modified Atmospheres for Post-harvest Treatment of Strawberries. Food and Bioprocess Technology, 2014, 7, 3045-3054.	2.6	147
104	Atmospheric cold plasma inactivation of <i>Escherichia coli</i> in liquid media inside a sealed package. Journal of Applied Microbiology, 2013, 114, 778-787.	1.4	201
105	Analysis of antibiotic resistance patterns and detection of mecA gene in Staphylococcus aureus isolated from packaged hamburger. Meat Science, 2012, 90, 759-763.	2.7	30
106	Ozone Processing of Fluid Foods. , 2012, , 225-261.		19
107	Assessment of Morphological Variation in Irish Brassica oleracea Species. Journal of Agricultural Science, 2012, 4, .	0.1	9
108	Assessing the microbial oxidative stress mechanism of ozone treatment through the responses of Escherichia coli mutants. Journal of Applied Microbiology, 2011, 111, 136-144.	1.4	41

#	Article	IF	Citations
109	Quantitative assessment of the shelf life of ozonated apple juice. European Food Research and Technology, 2011, 232, 469-477.	1.6	31
110	Inactivation of Escherichia coli by ozone treatment of apple juice at different pH levels. Food Microbiology, 2010, 27, 835-840.	2.1	55
111	Ozone inactivation of acid stressed Listeria monocytogenes and Listeria innocua in orange juice using a bubble column. Food Control, 2010, 21, 1723-1730.	2.8	30
112	Effect of ultrasonic processing on food enzymes of industrial importance. Trends in Food Science and Technology, 2010, 21, 358-367.	7.8	339
113	Safety and Quality Assessment during the Ozonation of Cloudy Apple Juice. Journal of Food Science, 2010, 75, M437-43.	1.5	40
114	Ozone Processing for Food Preservation: An Overview on Fruit Juice Treatments. Ozone: Science and Engineering, 2010, 32, 166-179.	1.4	71
115	Antimicrobial activity of plant essential oils using food model media: Efficacy, synergistic potential and interactions with food components. Food Microbiology, 2009, 26, 142-150.	2.1	427
116	The antimicrobial efficacy and structure activity relationship of novel carbohydrate fatty acid derivatives against Listeria spp. and food spoilage microorganisms. International Journal of Food Microbiology, 2009, 128, 440-445.	2.1	73
117	Extrinsic control parameters for ozone inactivation of<i>Escherichia coli</i>using a bubble column. Journal of Applied Microbiology, 2009, 107, 830-837.	1.4	22
118	<i>In vitro</i>antimicrobial activity and mechanism of action of novel carbohydrate fatty acid derivatives against<i>Staphylococcus aureus</i>and MRSA. Journal of Applied Microbiology, 2009, 108, 2152-61.	1.4	24
119	Impact of plant essential oils on microbiological, organoleptic and quality markers of minimally processed vegetables. Innovative Food Science and Emerging Technologies, 2009, 10, 195-202.	2.7	88
120	Inactivation of Escherichia coli in orange juice using ozone. Innovative Food Science and Emerging Technologies, 2009, 10, 551-557.	2.7	103
121	The effects of acid adaptation on Escherichia coli inactivation using power ultrasound. Innovative Food Science and Emerging Technologies, 2009, 10, 486-490.	2.7	88
122	Application of Natural Antimicrobials for Food Preservation. Journal of Agricultural and Food Chemistry, 2009, 57, 5987-6000.	2.4	618
123	Synthesis and antimicrobial evaluation of carbohydrate and polyhydroxylated non-carbohydrate fatty acid ester and ether derivatives. Carbohydrate Research, 2008, 343, 2557-2566.	1.1	53
124	The antimicrobial efficacy of plant essential oil combinations and interactions with food ingredients. International Journal of Food Microbiology, 2008, 124, 91-97.	2.1	689
125	Efficacy of Plant Essential Oils against Foodborne Pathogens and Spoilage Bacteria Associated with Ready-to-Eat Vegetables: Antimicrobial and Sensory Screening. Journal of Food Protection, 2008, 71, 1846-1854.	0.8	111
126	Effects of packaging type, gas atmosphere and storage temperature on survival and growth of Listeria spp. in shredded dry coleslaw and its components. International Journal of Food Science and Technology, 2004, 39, 509-523.	1.3	19