Donal J O'callaghan

List of Publications by Year
in descending order

62	1,775	185998 28	288905 40
papers	citations	h-index	g-index

65	65	65	1238
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The effects of composition and some processing treatments on the rennet coagulation properties of milk. International Journal of Dairy Technology, 1997, 50, 99-106.	1.3	99
2	Prediction of maturity and sensory attributes of Cheddar cheese using near-infrared spectroscopy. International Dairy Journal, 2005, 15, 701-709.	1.5	80
3	Review of systems for monitoring curd setting during cheesemaking. International Journal of Dairy Technology, 2002, 55, 65-74.	1.3	74
4	Influence of protein concentration on surface composition and physico-chemical properties of spray-dried milk protein concentrate powders. International Dairy Journal, 2015, 51, 34-40.	1.5	65
5	Prediction of Moisture, Fat and Inorganic Salts in Processed Cheese by near Infrared Reflectance Spectroscopy and Multivariate Data Analysis. Journal of Near Infrared Spectroscopy, 2004, 12, 149-157.	0.8	55
6	A novel technique for determining glassâ€“rubber transition in dairy powders. Journal of Food Engineering, 2010, 99, 76-82.	2.7	52
7	Influence of milk proteins on the development of lactose-induced stickiness in dairy powders. International Dairy Journal, 2010, 20, 212-221.	1.5	52
8	Dielectric properties of process cheese from 0.3 to 3GHz. Journal of Food Engineering, 2006, 75, 415-422.	2.7	48
9	Rennet coagulation properties of retentates obtained by ultrafiltration of skim milks heated to different temperatures. International Dairy Journal, 1996, 6, 581-596.	1.5	47
10	The use of a simple empirical method for objective quantification of the stretchability of cheese on cooked pizza pies. Journal of Food Engineering, 1997, 31, 147-161.	2.7	45
11	Process viscometry for the food industry. Trends in Food Science and Technology, 2000, 11, 451-457.	7.8	45
12	On-line prediction of cheese making indices using backscatter of near infrared light. International Dairy Journal, 2008, 18, 120-128.	1.5	45
13	Modelling of sensory and instrumental texture parameters in processed cheese by near infrared reflectance spectroscopy. Journal of Dairy Research, 2006, 73, 58-69.	0.7	44
14	On-line sensing techniques for coagulum setting in renneted milks. Journal of Food Engineering, 2000, 43, 155-165.	2.7	43
15	Development of a light scatter sensor technology for on-line monitoring of milk coagulation and whey separation. Journal of Food Engineering, 2007, 83, 61-67.	2.7	43
16	Effects of Cutting Intensity and Stirring Speed on Syneresis and Curd Losses During Cheese Manufacture. Journal of Dairy Science, 2008, 91, 2575-2582.	1.4	43
17	Physical characteristics of spray-dried dairy powders containing different vegetable oils. Journal of Food Engineering, 2014, 122, 122-129.	2.7	42
18	Effect of Cutting Time, Temperature, and Calcium on Curd Moisture, Whey Fat Losses, and Curd Yield by Response Surface Methodology. Journal of Dairy Science, 2007, 90, 4499-4512.	1.4	41

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19	Modern process control techniques in the production of dried milk products â€“ a review. Dairy Science and Technology, 2005, 85, 335-342.	0.9	39
20	Novel Online Sensor Technology for Continuous Monitoring of Milk Coagulation and Whey Separation in Cheesemaking. Journal of Agricultural and Food Chemistry, 2007, 55, 8836-8844.	2.4	38
21	Effect of increasing the protein-to-fat ratio and reducing fat content on the chemical and physical properties of processed cheese product. Journal of Dairy Science, 2013, 96, 6830-6839.	1.4	38
22	Volatile Release from Whey Protein Isolateâ€“Pectin Multilayer Stabilized Emulsions: Effect of pH, Salt, and Artificial Salivas. Journal of Agricultural and Food Chemistry, 2013, 61, 6231-6239.	2.4	37
23	Milk protein standardization by ultrafiltration for Cheddar cheese manufacture. Journal of Dairy Research, 1996, 63, 281-293.	0.7	34
24	Computer Vision and Color Measurement Techniques for Inline Monitoring of Cheese Curd Syneresis. Journal of Dairy Science, 2007, 90, 3162-3170.	1.4	32
25	A comparison of on-line techniques for determination of curd setting time using cheesemilks under different rates of coagulation. Journal of Food Engineering, 1999, 41, 43-54.	2.7	31
26	Effect of milk fat concentration and gel firmness on syneresis during curd stirring in cheese-making. International Dairy Journal, 2009, 19, 264-268.	1.5	31
27	Assessment of infant formula quality and composition using Vis-NIR, MIR and Raman process analytical technologies. Talanta, 2018, 183, 320-328.	2.9	31
28	Effect of hydrolyzed whey protein on surface morphology, water sorption, and glass transition temperature of a model infant formula. Journal of Dairy Science, 2016, 99, 6961-6972.	1.4	30
29	Application of Mid-Infrared Spectroscopy to the Prediction of Maturity and Sensory Texture Attributes of Cheddar Cheese. Journal of Food Science, 2007, 72, E130-E137.	1.5	29
30	Prediction of processed cheese instrumental texture and meltability by mid-infrared spectroscopy coupled with chemometric tools. Journal of Food Engineering, 2007, 80, 1068-1077.	2.7	26
31	The effect of direct and indirect heat treatment on the attributes of whey protein beverages. International Dairy Journal, 2018, 85, 144-152.	1.5	26
32	Evaluation of on-line optical sensing techniques for monitoring curd moisture content and solids in whey during syneresis. Food Research International, 2010, 43, 177-182.	2.9	22
33	Influence of an exopolysaccharide produced by a starter on milk coagulation and curd syneresis. International Dairy Journal, 2012, 22, 48-57.	1.5	21
34	Water sorption and diffusion properties of spray-dried dairy powders containing intact and hydrolysed whey protein. LWT - Food Science and Technology, 2016, 68, 119-126.	2.5	21
35	Visible-near infrared spectroscopy sensor for predicting curd and whey composition during cheese processing. Sensing and Instrumentation for Food Quality and Safety, 2009, 3, 62-69.	1.5	20
36	The physical nature of stickiness in the spray drying of dairy productsâ€”a review. Dairy Science and Technology, 2013, 93, 331-346.	2.2	19

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37	The effect of protein profile and preheating on denaturation of whey proteins and development of viscosity in milk protein beverages during heat treatment. International Journal of Dairy Technology, 2020, 73, 494-501.	1.3	18
38	Prediction of Inorganic Salt and Moisture Content of Process Cheese Using Dielectric Spectroscopy. International Journal of Food Properties, 2005, 8, 543-557.	1.3	17
39	Application of Image Texture Analysis for Online Determination of Curd Moisture and Whey Solids in a Laboratoryâ€Scale Stirred Cheese Vat. Journal of Food Science, 2008, 73, E250-8.	1.5	17
40	Effects of hydrolysis on solid-state relaxation and stickiness behavior of sodium caseinate-lactose powders. Journal of Dairy Science, 2012, 95, 2270-2281.	1.4	17
41	Effects of milk composition, stir-out time, and pressing duration on curd moisture and yield. Journal of Dairy Science, 2011, 94, 2673-2679.	1.4	16
42	Prediction of sensory textural properties from rheological analysis for process cheeses varying in emulsifying salt, protein and moisture contents. Journal of the Science of Food and Agriculture, 2007, 87, 641-650.	1.7	15
43	Validation of a curd-syneresis sensor over a range of milk composition and process parameters. Journal of Dairy Science, 2009, 92, 5386-5395.	1.4	15
44	Preliminary evaluation of endogenous milk fluorophores as tracer molecules for curd syneresis. Journal of Dairy Science, 2011, 94, 5350-5358.	1.4	15
45	A comparison of pilot-scale supersonic direct steam injection to conventional steam infusion and tubular heating systems for the heat treatment of protein-enriched skim milk-based beverages. Innovative Food Science and Emerging Technologies, 2019, 52, 282-290.	2.7	15
46	COMPARISON OF MATHEMATICAL MODELS APPLIED TO THE RENNET COAGULATION OF SKIM MILKS. Journal of Texture Studies, 1996, 26, 607-634.	1.1	12
47	Correlation Between Process Cheese Meltability Determined by Sensory Analysis, Computer Vision Method and Olson and Price Test. International Journal of Food Properties, 2005, 8, 267-275.	1.3	12
48	Evaluation of Models for Temperatureâ€Dependent Viscosity Changes in Dairy Protein Beverage Formulations During Thermal Processing. Journal of Food Science, 2018, 83, 937-945.	1.5	12
49	Measurement of syneretic properties of rennet-induced curds and impact of factors such as concentration of milk: A review. Trends in Food Science and Technology, 2019, 91, 530-540.	7.8	12
50	Investigation of an inâ€line prototype fluorescence and infrared backscatter sensor to monitor rennetâ€induced coagulation of skim milk at different protein concentrations. International Journal of Food Science and Technology, 2020, 55, 175-182.	1.3	12
51	A THREE-POINT BENDING TEST FOR PREDICTION OF SENSORY TEXTURE IN PROCESSED CHEESE. Journal of Texture Studies, 2007, 38, 438-456.	1.1	11
52	Development of chemometric models using Vis-NIR and Raman spectral data fusion for assessment of infant formula storage temperature and time. Innovative Food Science and Emerging Technologies, 2021, 67, 102551.	2.7	10
53	In-line viscometry in the dairy processing industry. International Journal of Dairy Technology, 1995, 48, 44-49.	1.3	8
54	Evaluation of a vat wall-mounted image capture system using image processing techniques to monitor curd moisture during syneresis with temperature treatments. Journal of Food Engineering, 2010, 99, 257-262.	2.7	8

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55	Comparison between red-green-blue imaging and visible-near infrared reflectance as potential process analytical tools for monitoring syneresis. Journal of Dairy Science, 2010, 93, 1882-1889.	1.4	8
56	Kinetics of moisture loss during stirring of cheese curds produced from standardised milks of cows on pasture or indoor feeding systems. International Journal of Dairy Technology, 2018, 71, 663-672.	1.3	6
57	The use of colour parameters derived from an online fibre-optic sensor to monitor curd syneresis during cheese making. Journal of Food Engineering, 2009, 94, 1-6.	2.7	5
58	The potential for scale economies in milk powder processing: an Irish case study. International Journal of Dairy Technology, 2014, 67, 129-134.	1.3	4
59	Monitoring Gel Formation in Cheese Manufacture. , 2022, , 238-244.		2
60	Fluorescence-based analyser as a rapid tool for determining soluble protein content in dairy ingredients and infant milk formula. Innovative Food Science and Emerging Technologies, 2019, 52, 75-79.	2.7	1
61	Information management systems for dairy factory laboratories. International Journal of Dairy Technology, 1992, 45, 107-112.	1.3	0
62	Light Sidescatter Measurements of Cheese Whey. , 2008, , .		0