Douglas Barbin

List of Publications by Year
in descending order

84 papers	3,222 citations	147801 31 h-index	155660 55 g-index
85 all docs	85 docs citations	85 times ranked	2329 citing authors

#	Article	IF	Citations
1	Identification of coriander oil adulteration using a portable NIR spectrometer. Food Control, 2022, 132, 108536.	5.5	25
2	Fast online estimation of quail eggs freshness using portable NIR spectrometer and machine learning. Food Control, 2022, 131, 108418.	5.5	37
3	Assessment oil composition and species discrimination of Brassicas seeds based on hyperspectral imaging and portable near infrared (NIR) spectroscopy tools and chemometrics. Journal of Food Composition and Analysis, 2022, 107, 104403.	3.9	29
4	Detection of nutshells in cumin powder using NIR hyperspectral imaging and chemometrics tools. Journal of Food Composition and Analysis, 2022, 108, 104407.	3.9	18
5	Near‐infrared techniques for fraud detection in dairy products: A review. Journal of Food Science, 2022, 87, 1943-1960.	3.1	14
6	Data reduction by randomization subsampling for the study of large hyperspectral datasets. Analytica Chimica Acta, 2022, 1209, 339793.	5.4	7
7	Deep computer vision system for cocoa classification. Multimedia Tools and Applications, 2022, 81, 41059-41077.	3.9	17
8	Near infrared techniques applied to analysis of wheat-based products: Recent advances and future trends. Food Control, 2022, 140, 109115.	5.5	10
9	Online measurement of carambola (Averrhoa carambola L.) physicochemical properties and estimation of maturity stages using a portable NIR spectrometer. Scientia Horticulturae, 2022, 304, 111263.	3.6	18
10	Chia (Salvia hispanica) seeds degradation studied by fuzzy-c mean (FCM) and hyperspectral imaging and chemometrics - fatty acids quantification. Scientia Agropecuaria, 2022, 13, 167-174.	1.0	3
11	Near infrared hyperspectral imaging and spectral unmixing methods for evaluation of fiber distribution in enriched pasta. Food Chemistry, 2021, 343, 128517.	8.2	24
12	Shelf life estimation and kinetic degradation modeling of chia seeds (Salvia hispanica) using principal component analysis based on NIR-hyperspectral imaging. Food Control, 2021, 123, 107777.	5.5	23
13	Classification of fermented cocoa beans (cut test) using computer vision. Journal of Food Composition and Analysis, 2021, 97, 103771.	3.9	34
14	Food Quality and NIR Spectroscopy in the Omics Era. , 2021, , 231-243.		2
15	Quality Parameters, Caffeine and Theobromine Contents and Antioxidant Activity of Artisan and Commercial Chocolate from Brazil. Open Access Library Journal (oalib), 2021, 08, 1-18.	0.2	0
16	Evaluation of melon drying using hyperspectral imaging technique in the near infrared region. LWT - Food Science and Technology, 2021, 143, 111092.	5.2	18
17	Incompatibility between sodium caseinate - locust bean gum induced by NaCl and yerba mate extract. International Journal of Biological Macromolecules, 2021, 183, 276-284.	7.5	5
18	Automated Method for Determination of Cheese Meltability by Computer Vision. Food Analytical Methods, 2021, 14, 2630-2641.	2.6	3

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19	On-line monitoring of egg freshness using a portable NIR spectrometer in tandem with machine learning. Journal of Food Engineering, 2021, 306, 110643.	5.2	54
20	On the use of blockchain for agrifood traceability. , 2021, , 279-302.		2
21	Vegetable oils as renewable fuels for power plants based on low and medium speed diesel engines. Journal of the Energy Institute, 2020, 93, 953-961.	5.3	26
22	Multi-target prediction of wheat flour quality parameters with near infrared spectroscopy. Information Processing in Agriculture, 2020, 7, 342-354.	4.1	25
23	Identification of turkey meat and processed products using near infrared spectroscopy. Food Control, 2020, 107, 106816.	5.5	40
24	Portable near-infrared spectroscopy for rapid authentication of adulterated paprika powder. Journal of Food Composition and Analysis, 2020, 87, 103403.	3.9	66
25	Occurrence of wooden breast and white striping in Brazilian slaughtering plants and use of nearâ€infrared spectroscopy and multivariate analysis to identify affected chicken breasts. Journal of Food Science, 2020, 85, 3102-3112.	3.1	17
26	Identification of Copper in Stems and Roots of Jatropha curcas L. by Hyperspectral Imaging. Processes, 2020, 8, 823.	2.8	15
27	Authentication of cocoa (Theobroma cacao) bean hybrids by NIR-hyperspectral imaging and chemometrics. Food Control, 2020, 118, 107445.	5.5	43
28	Determination of pectin content in orange peels by near infrared hyperspectral imaging. Food Chemistry, 2020, 323, 126861.	8.2	45
29	Metal Accumulation by Jatropha curcas L. Adult Plants Grown on Heavy Metal-Contaminated Soil. Plants, 2020, 9, 418.	3.5	18
30	Advantages of Multi-Target Modelling for Spectral Regression. , 2020, , 95-121.		1
31	Present and future of portable/handheld near-infrared spectroscopy in chicken meat industry. NIR News, 2019, 30, 26-29.	0.3	3
32	Computer Vision Classification of Barley Flour Based on Spatial Pyramid Partition Ensemble. Sensors, 2019, 19, 2953.	3.8	36
33	Comparison of rapid techniques for classification of ground meat. Biosystems Engineering, 2019, 183, 151-159.	4.3	49
34	Nontargeted Analytical Methods as a Powerful Tool for the Authentication of Spices and Herbs: A Review. Comprehensive Reviews in Food Science and Food Safety, 2019, 18, 670-689.	11.7	90
35	Identification of fiber added to semolina by near infrared (NIR) spectral techniques. Food Chemistry, 2019, 289, 195-203.	8.2	47
36	Hyperspectral imaging as a powerful tool for identification of papaya seeds in black pepper. Food Control, 2019, 101, 45-52.	5.5	75

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37	Portable NIR Spectrometer for Prediction of Palm Oil Acidity. Journal of Food Science, 2019, 84, 406-411.	3.1	30
38	Prediction of pH and color in pork meat using VIS-NIR Near-infrared Spectroscopy (NIRS). Food Science and Technology, 2019, 39, 88-92.	1.7	14
39	Computer vision system and near-infrared spectroscopy for identification and classification of chicken with wooden breast, and physicochemical and technological characterization. Infrared Physics and Technology, 2019, 96, 303-310.	2.9	55
40	IdentificaÃ§Ã£o de adulteraÃ§Ã£o de produtos processados de carne bovina por equipamento portÃ¡til de infravermelho prÃ³ximo (NIR). Revista Dos Trabalhos De IniciaÃ§Ã£o CientÃfica Da UNICAMP, 2019, , .	0.0	0
41	Compositional analysis of semolina with added fibers by near infrared spectroscopy (NIR). Revista Dos Trabalhos De IniciaÃ§Ã£o CientÃfica Da UNICAMP, 2019, , .	0.0	0
42	Classification and compositional characterization of different varieties of cocoa beans by near infrared spectroscopy and multivariate statistical analyses. Journal of Food Science and Technology, 2018, 55, 2457-2466.	2.8	41
43	Use of burdock root flour as a prebiotic ingredient in cookies. LWT - Food Science and Technology, 2018, 90, 540-546.	5.2	38
44	Predicting the ripening of papaya fruit with digital imaging and random forests. Computers and Electronics in Agriculture, 2018, 145, 76-82.	7.7	121
45	<b>Investigation of NIR spectra pre-processing methods combined with multivariate regression for determination of moisture in powdered industrial egg. Acta Scientiarum - Technology, 2018, 40, 30133.	0.4	2
46	Predicting poultry meat characteristics using an enhanced multi-target regression method. Biosystems Engineering, 2018, 171, 193-204.	4.3	27
47	Classification of Chicken Parts Using a Portable Near-Infrared (NIR) Spectrophotometer and Machine Learning. Applied Spectroscopy, 2018, 72, 1774-1780.	2.2	48
48	Machine Learning Applied to Near-Infrared Spectra for Chicken Meat Classification. Journal of Spectroscopy, 2018, 2018, 1-12.	1.3	27
49	Fuzzy approach for classification of pork into quality grades: coping with unclassifiable samples. Computers and Electronics in Agriculture, 2018, 150, 455-464.	7.7	4
50	Computer vision system for characterization of pasta (noodle) composition. Journal of Electronic Imaging, 2018, 27, 1.	0.9	6
51	Near-infrared spectroscopy as a rapid method for evaluation physicochemical changes of stored soybeans. Journal of Stored Products Research, 2017, 73, 1-6.	2.6	43
52	Implications of Non-Equilibrium States and Glass Transitions in Frozen and Dried Fish and Meat Products. , 2017, , 325-348.		3
53	BATATAS CHIPS: CARACTERÃSTICAS DE EMBALAGEM, TECNOLÃ"GICAS E DE IMAGEM. Revista Agrotecnologia - Agrotec, 2017, 8, 61.	0.1	1
54	Heat pump for thermal power production in dairy farm. Engenharia Agricola, 2016, 36, 779-791.	0.7	6

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55	Quality Evaluation of Pizzas. , 2016, , 465-485.		3
56	Digital image analyses as an alternative tool for chicken quality assessment. Biosystems Engineering, 2016, 144, 85-93.	4.3	52
57	Influence of plant densities and fertilization on maize grains by near-infrared spectroscopy. Spectroscopy Letters, 2016, 49, 73-79.	1.0	16
58	VISâ€"NIR spectroscopy as a process analytical technology for compositional characterization of film biopolymers and correlation with their mechanical properties. Materials Science and Engineering C, 2015, 56, 274-279.	7.3	10
59	Prediction of chicken quality attributes by near infrared spectroscopy. Food Chemistry, 2015, 168, 554-560.	8.2	75
60	Application of infrared spectral techniques on quality and compositional attributes of coffee: An overview. Food Research International, 2014, 61, 23-32.	6.2	182
61	Tenderness prediction in porcine longissimus dorsi muscles using instrumental measurements along with NIR hyperspectral and computer vision imagery. Innovative Food Science and Emerging Technologies, 2013, 20, 335-342.	5.6	32
62	NIR hyperspectral imaging as non-destructive evaluation tool for the recognition of fresh and frozenâ€"thawed porcine longissimus dorsi muscles. Innovative Food Science and Emerging Technologies, 2013, 18, 226-236.	5.6	90
63	Non-destructive determination of chemical composition in intact and minced pork using near-infrared hyperspectral imaging. Food Chemistry, 2013, 138, 1162-1171.	8.2	224
64	Grape seed characterization by NIR hyperspectral imaging. Postharvest Biology and Technology, 2013, 76, 74-82.	6.0	77
65	Prediction of water and protein contents and quality classification of Spanish cooked ham using NIR hyperspectral imaging. Journal of Food Engineering, 2013, 117, 272-280.	5.2	85
66	Non-destructive assessment of microbial contamination in porcine meat using NIR hyperspectral imaging. Innovative Food Science and Emerging Technologies, 2013, 17, 180-191.	5.6	121
67	Potential of hyperspectral imaging and pattern recognition for categorization and authentication of red meat. Innovative Food Science and Emerging Technologies, 2012, 16, 316-325.	5.6	116
68	Meat Quality Evaluation by Hyperspectral Imaging Technique: An Overview. Critical Reviews in Food Science and Nutrition, 2012, 52, 689-711.	10.3	239
69	Predicting quality and sensory attributes of pork using near-infrared hyperspectral imaging. Analytica Chimica Acta, 2012, 719, 30-42.	5.4	222
70	Near-infrared hyperspectral imaging for grading and classification of pork. Meat Science, 2012, 90, 259-268.	5.5	206
71	Hyperspectral Imagingâ€"A New Era of Applications in Non-Destructive Sensing of Meat Quality. NIR News, 2012, 23, 9-14.	0.3	17
72	Portable forced-air tunnel evaluation for cooling products inside cold storage rooms. International Journal of Refrigeration, 2012, 35, 202-208.	3.4	7

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73	IMPROVEMENT OF FUNCTIONAL PROPERTIES OF RAPESEED PROTEIN CONCENTRATES PRODUCED VIA ALCOHOLIC PROCESSES BY THERMAL AND MECHANICAL TREATMENTS. Journal of Food Processing and Preservation, 2011, 35, 369-375.	2.0	21
74	Convective heat transfer coefficients evaluation for a portable forced air tunnel. Applied Thermal Engineering, 2010, 30, 229-233.	6.0	14
75	AVALIAÇÃƒO DA ESTABILIDADE DE SOLUÇÃ•ES MODELO (CMC-SACAROSE) EM RECONGELAMENTOS. Boletim Centro De Pesquisa De Processamento De Alimentos, 2010, 28, .	0.2	0
76	Processo de congelamento em tÃºnel portÃ¡til com convecÃ§Ã£o forÃ§ada por exaustÃ£o e insuflaÃ§Ã£o para paletes. Food Science and Technology, 2009, 29, 667-675.	1.7	3
77	Comparison of the Effects of Air Flow and Product Arrangement on Freezing Process by Convective Heat Transfer Coefficient Measurement. , 0, , .		1
78	Safety and Quality in the Agricultural Product Chain in Brazil. , 0, , .		0
79	Computer vison for classification and quality analysis of food.. , 0, , .		0
80	ClassificaÃ§Ã£o de carnes de aves e autenticaÃ§Ã£o de produtos processados por equipamento portÃ¡til de infravermelho prÃ³ximo (NIR). , 0, , .		0
81	AnÃ¡lise multivariada de espectroscopia por infravermelho prÃ³ximo (NIR) em fibras. , 0, , .		0
82	CaracterizaÃ§Ã£o de qualidade do Ã³leo de dendÃª por mÃ©todos Ã³pticos nÃ£o destrutivos. , 0, , .		0
83	CaracterizaÃ§Ã£o tecnolÃ³gica de massa seca tipo Fettucine, adicionada de diferentes tipos de fibras. , 0, , .		0
84	Muffin with pumpkin flour: technological, sensory and nutritional quality. Brazilian Journal of Food Technology, 0, 24, .	0.8	4