Jitendra Paliwal

List of Publications by Year
in descending order

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103	3,307	109264	161767
papers	citations	35 h-index	54 g-index

103	103	103	2142
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Detection of insect-damaged wheat kernels using near-infrared hyperspectral imaging. Journal of Stored Products Research, 2009, 45, 151-158.	1.2	196
2	Feasibility of near-infrared hyperspectral imaging to differentiate Canadian wheat classes. Biosystems Engineering, 2008, 101, 50-57.	1.9	156
3	Hyperspectral imaging to classify and monitor quality of agricultural materials. Journal of Stored Products Research, 2015, 61, 17-26.	1.2	143
4	Identification of insect-damaged wheat kernels using short-wave near-infrared hyperspectral and digital colour imaging. Computers and Electronics in Agriculture, 2010, 73, 118-125.	3.7	136
5	Near-infrared spectroscopy and imaging in food quality and safety. Sensing and Instrumentation for Food Quality and Safety, 2007, 1, 193-207.	1.5	135
6	Cereal Grain and Dockage Identification using Machine Vision. Biosystems Engineering, 2003, 85, 51-57.	1.9	117
7	Classification of cereal grains using wavelet, morphological, colour, and textural features of non-touching kernel images. Biosystems Engineering, 2008, 99, 330-337.	1.9	115
8	Comparison of Partial Least Squares Regression (PLSR) and Principal Components Regression (PCR) Methods for Protein and Hardness Predictions using the Near-Infrared (NIR) Hyperspectral Images of Bulk Samples of Canadian Wheat. Food and Bioprocess Technology, 2015, 8, 31-40.	2.6	106
9	Identification of wheat classes using wavelet features from near infrared hyperspectral images of bulk samples. Biosystems Engineering, 2009, 102, 115-127.	1.9	97
10	Review Paper (AEâ€”Automation and Emerging Technologies). Biosystems Engineering, 2000, 77, 119-128.	0.4	90
11	AEâ€”Automation and Emerging Technologies. Biosystems Engineering, 2001, 79, 361-370.	0.4	83
12	Fungal Detection in Wheat Using Near-Infrared Hyperspectral Imaging. Transactions of the ASABE, 2007, 50, 2171-2176.	1.1	78
13	Fungal Damage Detection in Wheat Using Short-Wave Near-Infrared Hyperspectral and Digital Colour Imaging. International Journal of Food Properties, 2012, 15, 11-24.	1.3	74
14	Discrimination of gluten-free oats from contaminants using near infrared hyperspectral imaging technique. Food Control, 2017, 80, 197-203.	2.8	62
15	Automatic classification of non-touching cereal grains in digital images using limited morphological and color features. Computers and Electronics in Agriculture, 2013, 90, 99-105.	3.7	60
16	Pulse Flour Characteristics from a Wheat Flour Miller's Perspective: A Comprehensive Review. Comprehensive Reviews in Food Science and Food Safety, 2019, 18, 775-797.	5.9	60
17	Evaluation of variations in the shape of grain types using principal components analysis of the elliptic Fourier descriptors. Computers and Electronics in Agriculture, 2012, 80, 63-70.	3.7	58
18	Wavelet Analysis of Signals in Agriculture and Food Quality Inspection. Food and Bioprocess Technology, 2010, 3, 2-12.	2.6	57

#	Article	IF	Citations
19	AEâ€”Automation and Emerging Technologies. Biosystems Engineering, 2002, 82, 151-159.	1.9	53
20	Comparison of a Neural Network and a Non-parametric Classifier for Grain Kernel Identification. Biosystems Engineering, 2003, 85, 405-413.	1.9	53
21	Pathogenetic process monitoring and early detection of pear black spot disease caused by Alternaria alternata using hyperspectral imaging. Postharvest Biology and Technology, 2019, 154, 96-104.	2.9	53
22	Detection of midge-damaged wheat kernels using short-wave near-infrared hyperspectral and digital colour imaging. Biosystems Engineering, 2010, 105, 380-387.	1.9	51
23	Computational Fluid Dynamics in Drying Process Modellingâ€”a Technical Review. Food and Bioprocess Technology, 2018, 11, 271-292.	2.6	49
24	Classification of Fungal Infected Wheat Kernels Using Near-Infrared Reflectance Hyperspectral Imaging and Support Vector Machine. Transactions of the ASABE, 2007, 50, 1779-1785.	1.1	48
25	GRAIN KERNEL IDENTIFICATION USING KERNEL SIGNATURE. Transactions of the American Society of Agricultural Engineers, 1999, 42, 1921-1924.	0.9	47
26	A Fourier analysis based algorithm to separate touching kernels in digital images. Biosystems Engineering, 2011, 108, 66-74.	1.9	47
27	AEâ€”Automation and Emerging Technologies. Biosystems Engineering, 2001, 79, 159-166.	0.4	45
28	Detection of Sprouted and Midgeâ€Damaged Wheat Kernels Using Nearâ€Infrared Hyperspectral Imaging. Cereal Chemistry, 2009, 86, 256-260.	1.1	44
29	Identification of wheat classes at different moisture levels using near-infrared hyperspectral images of bulk samples. Sensing and Instrumentation for Food Quality and Safety, 2011, 5, 1-9.	1.5	44
30	Grain bin monitoring via electromagnetic imaging. Computers and Electronics in Agriculture, 2015, 119, 133-141.	3.7	43
31	Single kernel wheat hardness estimation using near infrared hyperspectral imaging. Infrared Physics and Technology, 2019, 98, 250-255.	1.3	42
32	A decision-fusion strategy for fruit quality inspection using hyperspectral imaging. Biosystems Engineering, 2012, 111, 118-125.	1.9	41
33	Wheat Class Identification Using Thermal Imaging. Food and Bioprocess Technology, 2010, 3, 450-460.	2.6	40
34	Effects of extrusion conditions and nitrogen injection on physical, mechanical, and microstructural properties of red lentil puffed snacks. Food and Bioproducts Processing, 2020, 121, 143-153.	1.8	39
35	Industrial scale electromagnetic grain bin monitoring. Computers and Electronics in Agriculture, 2017, 136, 210-220.	3.7	38
36	Early detection of chilling injury in green bell peppers by hyperspectral imaging and chemometrics. Postharvest Biology and Technology, 2020, 162, 111100.	2.9	34

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37	New Method for Accurate Determination of Polyphenol Oxidase Activity Based on Reduction in SERS Intensity of Catechol. Journal of Agricultural and Food Chemistry, 2018, 66, 11180-11187.	2.4	32
38	Assessment of Fusarium and Deoxynivalenol Using Optical Methods. Food and Bioprocess Technology, 2017, 10, 34-50.	2.6	30
39	Recent applications of novel laser techniques for enhancing agricultural production. Laser Physics, 2021, 31, 053001.	0.6	29
40	Detection and continuous monitoring of localised high-moisture regions in a full-scale grain storage bin using electromagnetic imaging. Biosystems Engineering, 2017, 163, 37-49.	1.9	26
41	Spectral Data Compression and Analyses Techniques to Discriminate Wheat Classes. Transactions of the ASABE, 2006, 49, 1607-1612.	1.1	25
42	Physical and microstructural quality of extruded snacks made from blends of barley and green lentil flours. Cereal Chemistry, 2022, 99, 1112-1123.	1.1	23
43	Drying Characteristics and Moisture Diffusivity of Distillers' Spent Grains Dried in Superheated Steam. Drying Technology, 2015, 33, 2012-2018.	1.7	22
44	X-Ray microtomography imaging of red lentil puffed snacks: Processing conditions, microstructure and texture. Food Research International, 2021, 140, 109996.	2.9	22
45	Non-Destructive Estimation of Physicochemical Properties and Detection of Ripeness Level of Apples Using Machine Vision. International Journal of Fruit Science, 2022, 22, 628-645.	1.2	21
46	Generalisation Performance of Artificial Neural Networks for Near Infrared Spectral Analysis. Biosystems Engineering, 2006, 94, 7-18.	1.9	20
47	Assessment of mechanical damage to flaxseeds using radiographic imaging and tomography. Smart Agricultural Technology, 2022, 2, 100057.	3.1	20
48	Effect of temperature and velocity of superheated steam on initial condensation of distillersâ€™ spent grain pellets during drying. Drying Technology, 2017, 35, 182-192.	1.7	19
49	Grating-Stabilized External Cavity Diode Lasers for Raman Spectroscopyâ€”A Review. Applied Spectroscopy Reviews, 2012, 47, 116-143.	3.4	18
50	Three-dimensional CFD modelling of superheated steam drying of a single distillersâ€™ spent grain pellet. Journal of Food Engineering, 2017, 212, 121-135.	2.7	18
51	Examination of wheat kernels for the presence of Fusarium damage and mycotoxins using near-infrared hyperspectral imaging. Measurement Food, 2021, 4, 100011.	0.8	18
52	Estimation of different ripening stages of Fuji apples using image processing and spectroscopy based on the majority voting method. Computers and Electronics in Agriculture, 2020, 176, 105643.	3.7	17
53	Early Detection of Excess Nitrogen Consumption in Cucumber Plants Using Hyperspectral Imaging Based on Hybrid Neural Networks and the Imperialist Competitive Algorithm. Agronomy, 2021, 11, 575.	1.3	17
54	A unified heuristic approach to simultaneously detect fusarium and ergot damage in wheat. Measurement Food, 2022, 7, 100043.	0.8	17

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55	Modeling of effective moisture diffusivity and activation energy of distillers' spent grain pellets with solubles during superheated steam drying. Biomass and Bioenergy, 2018, 116, 39-48.	2.9	16
56	A comparative study on the effect of superheated steam and hot air drying on microstructure of distillers' spent grain pellets using X-ray micro-computed tomography. Journal of Food Engineering, 2019, 241, 127-135.	2.7	15
57	Principal component analysis of lipid and protein oxidation products and their impact on color stability in bison longissimus lumborum and psoas major muscles. Meat Science, 2021, 178, 108523.	2.7	15
58	A novel, invariant elliptic Fourier coefficient based classification of cereal grains. Biosystems Engineering, 2012, 111, 422-428.	1.9	14
59	Compaction and relaxation characteristics of single compacts produced from distillerâ€™s spent grain. Journal of Food Engineering, 2013, 116, 260-266.	2.7	13
60	Analysis of the Disintegration of Distiller's Spent Grain Compacts as Affected by Drying in Superheated Steam. Drying Technology, 2014, 32, 1060-1070.	1.7	13
61	Machine vision based automatic separation of touching convex shaped objects. Computers in Industry, 2012, 63, 723-730.	5.7	12
62	Bison muscle discrimination and color stability prediction using near-infrared hyperspectral imaging. Biosystems Engineering, 2021, 209, 1-13.	1.9	12
63	Three dimensional radio-frequency electromagnetic imaging of an in-bin grain conditioning process. Computers and Electronics in Agriculture, 2019, 167, 105059.	3.7	11
64	Classification of Cereal Grains Using a Flatbed Scanner. , 0, , .		10
65	Shell thickness-dependent Au@Ag nanorods aggregates for rapid detection of thiram. Journal of Food Measurement and Characterization, 2022, 16, 1448-1458.	1.6	10
66	FEASIBILITY OF A MACHINE-VISION-BASED GRAIN CLEANER. Applied Engineering in Agriculture, 2004, 20, 245-248.	0.3	9
67	Non-uniform system response detection for hyperspectral imaging systems. Infrared Physics and Technology, 2015, 73, 263-268.	1.3	8
68	Effect of Solubles on Disintegration of Distiller's Spent Grain Compacts During Superheated Steam Drying. Drying Technology, 2015, 33, 671-683.	1.7	8
69	Protein-Starch Interactions in Cereal Grains and Pulses. , 2019, , 446-452.		8
70	Three dimensional characterization of micronized soybean seeds using X-ray microtomography. Food and Bioproducts Processing, 2021, 127, 388-397.	1.8	8
71	Quality Evaluation of Wheat. , 2008, , 351-376.		7
72	Classification of pulse flours using near-infrared hyperspectral imaging. LWT - Food Science and Technology, 2022, 154, 112799.	2.5	7

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73	Development of a Novel Image Analysis and Classification Algorithms to Separate Tubers from Clods and Stones. Potato Research, 2022, 65, 707-728.	1.2	7
74	Thermo-Physical Properties of Distillersâ€™ Spent Grain Pellets at Different Moisture Contents and Condensed Distillersâ€™ Soluble Concentrations. Food and Bioprocess Technology, 2017, 10, 175-185.	2.6	6
75	Development of Cellular High-Protein Foods: Third-Generation Yellow Pea and Red Lentil Puffed Snacks. Foods, 2022, 11, 38.	1.9	6
76	Near-infrared hyperspectral imaging for quality analysis of agricultural and food products. , 2010, , .		5
77	Assessment of Mung Bean Quality Through Single Kernel Characterization. Food and Bioprocess Technology, 2017, 10, 2156-2164.	2.6	5
78	Application of Vis-NIR and SWIR spectroscopy for the segregation of bison muscles based on their color stability. Meat Science, 2022, 188, 108774.	2.7	5
79	Physicochemical, nutritional and functional properties of chickpea (Cicer arietinum) and navy bean (Phaseolus vulgaris) flours from different mills. European Food Research and Technology, 0, , 1.	1.6	5
80	Classification of Wheat Kernels Using Near-Infrared Reflectance Hyperspectral Imaging. , 2010, , 449-470.		4
81	A multimodal spectrometer for Raman scattering and near-infrared absorption measurement. Vibrational Spectroscopy, 2014, 74, 13-19.	1.2	4
82	Analysing the effect of particle size on the disintegration of distiller's spent grain compacts while drying in superheated steam medium. Biosystems Engineering, 2015, 134, 105-116.	1.9	4
83	Effects of Seed Moisture Conditioning and Mechanical Scouring Pre-Treatments on Roller-Milled Green Lentil (Lens culinaris) and Chickpea (Cicer arietinum) Flours. Food and Bioprocess Technology, 2022, 15, 1311-1326.	2.6	4
84	Metaheuristic algorithms in visible and near infrared spectra to detect excess nitrogen content in tomato plants. Journal of Near Infrared Spectroscopy, 2022, 30, 197-207.	0.8	4
85	Wheat Quality Evaluation. , 2016, , 385-412.		3
86	Computational modelling of superheated steam drying of compacted distillersâ€™ spent grain coated with solubles. Food and Bioproducts Processing, 2019, 116, 63-77.	1.8	3
87	Effect of Superheated Steam- and Hot Air-Assisted Processing on Functional and Nutritional Properties of Yellow Peas. Food and Bioprocess Technology, 2021, 14, 1684-1699.	2.6	3
88	Impact of milling on the functional and physicochemical properties of green lentil and yellow pea flours. Cereal Chemistry, 2022, 99, 218-229.	1.1	3
89	Non-Destructive Quality Monitoring of Flaxseed During Storage. Journal of Food Measurement and Characterization, 2022, 16, 3640-3650.	1.6	3
90	Design and evaluation of a visible-to-near-infrared electronic slitless spectrograph. Measurement Science and Technology, 2006, 17, 2698-2704.	1.4	2

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91	Non-destructive and rapid discrimination of hard-to-cook beans using hyperspectral imaging. Canadian Biosystems Engineering / Le Genie Des Biosystems Au Canada, 2018, , 7.1-7.8.	0.3	2
92	Algorithm development for grain kernel identification. , 0, , .		1
93	Near-infrared spectroscopy: Applications in the grain industry. , 2006, , .		1
94	Grain bin monitoring via microwave imaging. , 2014, , .		1
95	Detection of Fusarium on Wheat using near infrared hyperspectral imaging. , 2016, , .		1
96	Thermo-Physical Characterization of Kraft Lignin Mixed with Bio-Plasticizers: A Valorization Approach. Transactions of the ASABE, 2020, 63, 1193-1206.	1.1	1
97	Potential of near-infrared hyperspectral reflectance imaging for screening of farm feed contamination. , 2005, , .		0
98	Near Infrared Hyperspectral Imaging for Nondestructive Measurement of Strawberry Quality. , 2010, , .		0
99	Near-Infrared (NIR) Hyperspectral Imaging - An Emerging Analytical Tool for Classification of Western Canadian Wheat Classes from Different Locations and Crop Years. , 2010, , .		0
100	Identification of Classes and Moisture Contents for Location-specific and Crop year-specific Wheat Samples Using the Near-Infrared (NIR) Hyperspectral Imaging. , 2010, , .		0
101	Neural network prediction of wheat classes and moisture contents using near-infrared (NIR) hyperspectral images of bulk samples from different growing locations and crop years. , 2011, , .		0
102	Grain bin storage monitoring via microwave imaging. , 2013, , .		0
103	Towards Machine Vision Based Grain Classification: Challenges and Future Prospects. , 2015, , .		0