

# Wouter Saeys

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5195626/publications.pdf>

Version: 2024-02-01

246  
papers

10,151  
citations

41627

51  
h-index

49824

91  
g-index

254  
all docs

254  
docs citations

254  
times ranked

8373  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical damages and packaging methods along the fresh fruit supply chain: A review. <i>Critical Reviews in Food Science and Nutrition</i> , 2023, 63, 10283-10302.	5.4	5
2	Antinutrient to mineral molar ratios of raw common beans and their rapid prediction using near-infrared spectroscopy. <i>Food Chemistry</i> , 2022, 368, 130773.	4.2	10
3	Application of multivariate data analysis for food quality investigations: An example-based review. <i>Food Research International</i> , 2022, 151, 110878.	2.9	22
4	Nondestructive evaluation: detection of external and internal attributes frequently associated with quality and damage. , 2022, , 399-433.		1
5	A fresh look at computer vision for industrial quality control. <i>Quality Engineering</i> , 2022, 34, 152-158.	0.7	6
6	Domain invariant covariate selection (Di-CovSel) for selecting generalized features across domains. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2022, 222, 104499.	1.8	5
7	In ovo sexing of eggs from brown breeds with a gender-specific color using visible-near-infrared spectroscopy: effect of incubation day and measurement configuration. <i>Poultry Science</i> , 2022, 101, 101782.	1.5	17
8	Optical Identification of Fruitfly Species Based on Their Wingbeats Using Convolutional Neural Networks. <i>Frontiers in Plant Science</i> , 2022, 13, .	1.7	4
9	Simulation of light propagation in citrus fruit using monte carlo multi-layered (MCML) method. <i>Journal of Food Engineering</i> , 2021, 291, 110225.	2.7	24
10	Towards in-field insect monitoring based on wingbeat signals: The importance of practice oriented validation strategies. <i>Computers and Electronics in Agriculture</i> , 2021, 180, 105849.	3.7	4
11	Exploring oxygen diffusion and respiration in pome fruit using non-destructive gas in scattering media absorption spectroscopy. <i>Postharvest Biology and Technology</i> , 2021, 173, 111405.	2.9	8
12	Effects of harvest time, fruit size and cultivar on the bulk optical properties of Satsuma mandarin. <i>Postharvest Biology and Technology</i> , 2021, 175, 111412.	2.9	12
13	Bridging the gap between measurement-based and simulation-based metamodels for deriving bulk optical properties from spatially-resolved reflectance profiles: effect of illumination and detection geometry. <i>Optics Express</i> , 2021, 29, 15882.	1.7	7
14	Soil Moisture Levels Affect the Anatomy and Mechanical Properties of Basil Stems ( <i>Ocimum basilicum</i> ) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.8	4
15	Prediction of cooking times of freshly harvested common beans and their susceptibility to develop the hard-to-cook defect using near infrared spectroscopy. <i>Journal of Food Engineering</i> , 2021, 298, 110495.	2.7	11
16	Cost-efficient unsupervised sample selection for multivariate calibration. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2021, 215, 104352.	1.8	4
17	Fluorescence-based discrimination of vegetative cells of bacillus strains from <i>Escherichia coli</i> and <i>Saccharomyces cerevisiae</i> . <i>Biosystems Engineering</i> , 2021, 209, 232-245.	1.9	3
18	Evaluation of MEMS NIR Spectrometers for On-Farm Analysis of Raw Milk Composition. <i>Foods</i> , 2021, 10, 2686.	1.9	10

#	ARTICLE	IF	CITATIONS
19	Measurement of optical properties of fruits and vegetables: A review. <i>Postharvest Biology and Technology</i> , 2020, 159, 111003.	2.9	130
20	Microstructure affects light scattering in apples. <i>Postharvest Biology and Technology</i> , 2020, 159, 110996.	2.9	29
21	Green light induces shade avoidance to alter plant morphology and increases biomass production in <i>Ocimum basilicum</i> L.. <i>Scientia Horticulturae</i> , 2020, 261, 109002.	1.7	27
22	Advancements in SPR biosensing technology: An overview of recent trends in smart layers design, multiplexing concepts, continuous monitoring and in vivo sensing. <i>Analytica Chimica Acta</i> , 2020, 1104, 10-27.	2.6	83
23	Optimisation of a multi-duct cleaning device for rice combine harvesters utilising CFD and experiments. <i>Biosystems Engineering</i> , 2020, 190, 25-40.	1.9	29
24	In-field detection of <i>Alternaria solani</i> in potato crops using hyperspectral imaging. <i>Computers and Electronics in Agriculture</i> , 2020, 168, 105106.	3.7	38
25	Hyperspectral imaging technology for quality and safety evaluation of horticultural products: A review and celebration of the past 20-year progress. <i>Postharvest Biology and Technology</i> , 2020, 170, 111318.	2.9	123
26	Online crop height and density estimation in grain fields using LiDAR. <i>Biosystems Engineering</i> , 2020, 198, 1-14.	1.9	21
27	Influence of Environmental Factors Light, CO <sub>2</sub> , Temperature, and Relative Humidity on Stomatal Opening and Development: A Review. <i>Agronomy</i> , 2020, 10, 1975.	1.3	89
28	Online milk composition analysis with an on-farm near-infrared sensor. <i>Computers and Electronics in Agriculture</i> , 2020, 178, 105734.	3.7	20
29	Fast ingredient quantification in multigrain flour mixes using hyperspectral imaging. <i>Food Control</i> , 2020, 118, 107366.	2.8	8
30	Closing the Phenotyping Gap: High Resolution UAV Time Series for Soybean Growth Analysis Provides Objective Data from Field Trials. <i>Remote Sensing</i> , 2020, 12, 1644.	1.8	32
31	Mid-infrared spectroscopic analysis of raw milk to predict the blood nonesterified fatty acid concentrations in dairy cows. <i>Journal of Dairy Science</i> , 2020, 103, 6422-6438.	1.4	12
32	Time- and spatially-resolved spectroscopy to determine the bulk optical properties of Braeburn™ apples after ripening in shelf life. <i>Postharvest Biology and Technology</i> , 2020, 168, 111233.	2.9	23
33	Milk homogenization monitoring: Fat globule size estimation from scattering spectra of milk. <i>Innovative Food Science and Emerging Technologies</i> , 2020, 60, 102311.	2.7	12
34	Bulk optical properties of citrus tissues and the relationship with quality properties. <i>Postharvest Biology and Technology</i> , 2020, 163, 111127.	2.9	25
35	Robustness control in bilinear modeling based on maximum correntropy. <i>Journal of Chemometrics</i> , 2020, 34, e3215.	0.7	1
36	Multivariate Analysis of Industrial Biorefinery Processes: Strategy for Improved Process Understanding with Case Studies in Fatty Acid Production. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 7732-7745.	1.8	8

#	ARTICLE	IF	CITATIONS
37	Application of near-infrared spectroscopy to predict the cooking times of aged common beans ( <i>Phaseolus vulgaris</i> L.). <i>Journal of Food Engineering</i> , 2020, 284, 110056.	2.7	15
38	Estimation of Particle Size Distribution from Bulk Scattering Spectra: Validation on Monomodal Suspensions. <i>Analytical Chemistry</i> , 2019, 91, 10040-10048.	3.2	7
39	Canopy height measurements and non-destructive biomass estimation of <i>Lolium perenne</i> swards using UAV imagery. <i>Grass and Forage Science</i> , 2019, 74, 356-369.	1.2	44
40	Multivariate calibration of spectroscopic sensors for postharvest quality evaluation: A review. <i>Postharvest Biology and Technology</i> , 2019, 158, 110981.	2.9	98
41	Development and testing of a multi-duct cleaning device for tangential-longitudinal flow rice combine harvesters. <i>Biosystems Engineering</i> , 2019, 182, 95-106.	1.9	30
42	Short communication: Validation of a novel milk progesterone-based tool to monitor luteolysis in dairy cows using cost-effective, on-farm measured data. <i>Journal of Dairy Science</i> , 2019, 102, 9458-9462.	1.4	0
43	Convolutional Neural Networks For Heterogeneous Ingredient Discrimination With Hyperspectral Imaging. , 2019, , .		1
44	Validation of a novel milk progesterone-based tool to monitor luteolysis in dairy cows: Timing of the alerts and robustness against missing values. <i>Journal of Dairy Science</i> , 2019, 102, 11491-11503.	1.4	3
45	Short communication: Sensitivity of estrus alerts and relationship with timing of the luteinizing hormone surge. <i>Journal of Dairy Science</i> , 2019, 102, 1775-1779.	1.4	7
46	Evolution of the bulk optical properties of bovine muscles during wet aging. <i>Meat Science</i> , 2018, 136, 50-58.	2.7	11
47	Online warning systems for individual fattening pigs based on their feeding pattern. <i>Biosystems Engineering</i> , 2018, 173, 143-156.	1.9	23
48	Farm-specific economic value of automatic lameness detection systems in dairy cattle: From concepts to operational simulations. <i>Journal of Dairy Science</i> , 2018, 101, 637-648.	1.4	23
49	Method for short-term prediction of milk yield at the quarter level to improve udder health monitoring. <i>Journal of Dairy Science</i> , 2018, 101, 10327-10336.	1.4	19
50	Chemometrics and hyperspectral imaging applied to assessment of chemical, textural and structural characteristics of meat. <i>Meat Science</i> , 2018, 144, 100-109.	2.7	53
51	A novel system for on-farm fertility monitoring based on milk progesterone. <i>Journal of Dairy Science</i> , 2018, 101, 8369-8382.	1.4	18
52	Estimation of particle size distributions from bulk scattering spectra: sensitivity to distribution type and spectral noise. <i>Optics Express</i> , 2018, 26, 15015.	1.7	16
53	Towards an objective evaluation of persistency of <i>Lolium perenne</i> swards using UAV imagery. <i>Euphytica</i> , 2018, 214, 1.	0.6	14
54	Experimental Validation of Linear and Nonlinear MPC on an Articulated Unmanned Ground Vehicle. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018, 23, 2023-2030.	3.7	65

#	ARTICLE	IF	CITATIONS
55	Cross-polarized VNIR hyperspectral reflectance imaging for non-destructive quality evaluation of dried banana slices, drying process monitoring and control. <i>Journal of Food Engineering</i> , 2018, 238, 85-94.	2.7	26
56	On the Comparison of Model-Based and Model-Free Controllers in Guidance, Navigation and Control of Agricultural Vehicles. <i>Studies in Fuzziness and Soft Computing</i> , 2018, , 49-73.	0.6	9
57	Automatically measured variables related to tenderness of hoof placement and weight distribution are valuable indicators for lameness in dairy cows. <i>Applied Animal Behaviour Science</i> , 2017, 189, 13-22.	0.8	11
58	Assessment of bruise volumes in apples using X-ray computed tomography. <i>Postharvest Biology and Technology</i> , 2017, 128, 24-32.	2.9	55
59	Automatic cow lameness detection with a pressure mat: Effects of mat length and sensor resolution. <i>Computers and Electronics in Agriculture</i> , 2017, 134, 172-180.	3.7	14
60	Glare based apple sorting and iterative algorithm for bruise region detection using shortwave infrared hyperspectral imaging. <i>Postharvest Biology and Technology</i> , 2017, 130, 103-115.	2.9	50
61	Determining lambâ€™s lettuce postharvest age based on visible/near-infrared reflectance spectroscopy. <i>Acta Horticulturae</i> , 2017, , 9-16.	0.1	2
62	Measuring colour of vine tomatoes using hyperspectral imaging. <i>Postharvest Biology and Technology</i> , 2017, 129, 79-89.	2.9	32
63	Soil-Bacterium Compatibility Model as a Decision-Making Tool for Soil Bioremediation. <i>Environmental Science &amp; Technology</i> , 2017, 51, 1605-1615.	4.6	16
64	Mathematical characterization of the milk progesterone profile as a leg up to individualized monitoring of reproduction status in dairy cows. <i>Theriogenology</i> , 2017, 103, 44-51.	0.9	18
65	Effect of maturation on the bulk optical properties of apple skin and cortex in the 500â€™1850Ånm wavelength range. <i>Journal of Food Engineering</i> , 2017, 214, 79-89.	2.7	57
66	Competitive inhibition assay for the detection of progesterone in dairy milk using a fiber optic SPR biosensor. <i>Analytica Chimica Acta</i> , 2017, 950, 1-6.	2.6	48
67	Anisotropic light propagation in bovine muscle tissue depends on the initial fiber orientation, muscle type and wavelength. <i>Optics Express</i> , 2017, 25, 22082.	1.7	12
68	Supporting the Development and Adoption of Automatic Lameness Detection Systems in Dairy Cattle: Effect of System Cost and Performance on Potential Market Shares. <i>Animals</i> , 2017, 7, 77.	1.0	8
69	Active Infrared Thermography for Seal Contamination Detection in Heat-Sealed Food Packaging. <i>Journal of Imaging</i> , 2016, 2, 33.	1.7	12
70	Augmented design and analysis of computer experiments: a novel tolerance embedded global optimization approach applied to SWIR hyperspectral illumination design. <i>Optics Express</i> , 2016, 24, 29380.	1.7	3
71	Near-infrared bulk optical properties of goat wound tissue and human serum: consequences for an implantable optical glucose sensor. <i>Journal of Biophotonics</i> , 2016, 9, 1033-1043.	1.1	2
72	Measuring the drinking behaviour of individual pigs housed in group using radio frequency identification (RFID). <i>Animal</i> , 2016, 10, 1557-1566.	1.3	48

#	ARTICLE	IF	CITATIONS
73	Environmental and cow-related factors affect cow locomotion and can cause misclassification in lameness detection systems. <i>Animal</i> , 2016, 10, 1533-1541.	1.3	14
74	A discrete element approach for modelling bendable crop stems. <i>Computers and Electronics in Agriculture</i> , 2016, 124, 141-149.	3.7	35
75	Cross-polarised VNIR hyperspectral reflectance imaging system for agrifood products. <i>Biosystems Engineering</i> , 2016, 151, 152-157.	1.9	9
76	Development of a visco-elastoplastic contact force model and its parameter determination for apples. <i>Postharvest Biology and Technology</i> , 2016, 120, 157-166.	2.9	28
77	Effect of side-wings on draught: The case of Ethiopian ard plough (maresha). <i>Computers and Electronics in Agriculture</i> , 2016, 127, 131-140.	3.7	4
78	Methods to construct feeding visits from RFID registrations of growing-finishing pigs at the feed trough. <i>Computers and Electronics in Agriculture</i> , 2016, 128, 9-19.	3.7	31
79	A mobile, in-situ soil bin test facility to investigate the performance of maresha plough. <i>Biosystems Engineering</i> , 2016, 149, 38-50.	1.9	0
80	An automated imaging BRDF polarimeter for fruit quality inspection. <i>Proceedings of SPIE</i> , 2016, , .	0.8	2
81	Monte Carlo Modeling of Light Transfer in Food. <i>Contemporary Food Engineering</i> , 2016, , 79-109.	0.2	1
82	Spatially Resolved Spectroscopic Technique for Measuring Optical Properties of Food. <i>Contemporary Food Engineering</i> , 2016, , 159-185.	0.2	1
83	Parameter estimation of rheological models for biological materials. <i>AIP Conference Proceedings</i> , 2016, , .	0.3	0
84	Recent Applications of near Infrared Hyperspectral Imaging for Quality Inspection in the Potato Sector. <i>NIR News</i> , 2016, 27, 11-14.	1.6	2
85	Light distribution and thermal effects in the rat brain under optogenetic stimulation. <i>Journal of Biophotonics</i> , 2016, 9, 576-585.	1.1	32
86	Three-dimensional microscale modelling of $\text{CO}_2$ transport and light propagation in tomato leaves enlightens photosynthesis. <i>Plant, Cell and Environment</i> , 2016, 39, 50-61.	2.8	84
87	Non-destructive detection of blackspot in potatoes by Vis-NIR and SWIR hyperspectral imaging. <i>Food Control</i> , 2016, 70, 229-241.	2.8	96
88	A discrete element approach for modelling the compression of crop stems. <i>Computers and Electronics in Agriculture</i> , 2016, 123, 80-88.	3.7	45
89	Modelling of thermal processes during extrusion based densification of agricultural biomass residues. <i>Applied Energy</i> , 2016, 184, 1316-1331.	5.1	18
90	Real-time pixel based early apple bruise detection using short wave infrared hyperspectral imaging in combination with calibration and glare correction techniques. <i>Food Control</i> , 2016, 66, 215-226.	2.8	86

#	ARTICLE	IF	CITATIONS
91	Detection of red and bicoloured apples on tree with an RGB-D camera. Biosystems Engineering, 2016, 146, 33-44.	1.9	111
92	Estimation of the prior storage period of lamb's lettuce based on visible/near infrared reflectance spectroscopy. Postharvest Biology and Technology, 2016, 113, 95-105.	2.9	10
93	Computational optimization of the configuration of a spatially resolved spectroscopy sensor for milk analysis. Analytica Chimica Acta, 2016, 917, 53-63.	2.6	12
94	Robust Trajectory Tracking Error Model-Based Predictive Control for Unmanned Ground Vehicles. IEEE/ASME Transactions on Mechatronics, 2016, 21, 806-814.	3.7	166
95	Bulk Optical Properties of Potato Flesh in the 500-1900nm Range. Food and Bioprocess Technology, 2016, 9, 463-470.	2.6	42
96	Selection of the most informative near infrared spectroscopy wavebands for continuous glucose monitoring in human serum. Talanta, 2016, 146, 155-165.	2.9	52
97	Texture Quality Analysis of Rainbow Trout Using Hyperspectral Imaging Method. International Journal of Food Properties, 2016, 19, 974-983.	1.3	10
98	PREDICTING STORED PERIOD AND SHELF LIFE POTENTIAL OF LAMB'S LETTUCE USING VIS/NIR REFLECTANCE SPECTROSCOPY. Acta Horticulturae, 2015, , 207-213.	0.1	2
99	Lameness Detection in Dairy Cows: Part 1. How to Distinguish between Non-Lame and Lame Cows Based on Differences in Locomotion or Behavior. Animals, 2015, 5, 838-860.	1.0	84
100	Estimation of bulk optical properties of turbid media from hyperspectral scatter imaging measurements: metamodeling approach. Optics Express, 2015, 23, 26049.	1.7	10
101	Robust metamodel-based inverse estimation of bulk optical properties of turbid media from spatially resolved diffuse reflectance measurements. Optics Express, 2015, 23, 27880.	1.7	10
102	Lameness Detection in Dairy Cows: Part 2. Use of Sensors to Automatically Register Changes in Locomotion or Behavior. Animals, 2015, 5, 861-885.	1.0	68
103	Dynamic noise corrected hyperspectral radiometric calibration in the SWIR range using a supercontinuum laser. , 2015, , .		1
104	Illumination system development using design and analysis of computer experiments. Proceedings of SPIE, 2015, , .	0.8	1
105	Multivariate calibration of NIR spectroscopic sensors for continuous glucose monitoring. TrAC - Trends in Analytical Chemistry, 2015, 67, 147-158.	5.8	100
106	Effect of ultrasonic homogenization on the Vis/NIR bulk optical properties of milk. Colloids and Surfaces B: Biointerfaces, 2015, 126, 510-519.	2.5	53
107	Robust Tube-Based Decentralized Nonlinear Model Predictive Control of an Autonomous Tractor-Trailer System. IEEE/ASME Transactions on Mechatronics, 2015, 20, 447-456.	3.7	70
108	Multispectral detection of floral buds for automated thinning of pear. Computers and Electronics in Agriculture, 2015, 113, 93-103.	3.7	10

#	ARTICLE	IF	CITATIONS
109	Visible and near-infrared bulk optical properties of raw milk. <i>Journal of Dairy Science</i> , 2015, 98, 6727-6738.	1.4	67
110	Variables of gait inconsistency outperform basic gait variables in detecting mildly lame cows. <i>Livestock Science</i> , 2015, 177, 125-131.	0.6	17
111	Optimal Illumination-Detection Distance and Detector Size for Predicting Braeburn Apple Maturity from Vis/NIR Laser Reflectance Measurements. <i>Food and Bioprocess Technology</i> , 2015, 8, 2123-2136.	2.6	34
112	Detection of seal contamination in heat sealed food packaging based on active infrared thermography. , 2015, , .		0
113	Review: Quantifying animal feeding behaviour with a focus on pigs. <i>Physiology and Behavior</i> , 2015, 138, 37-51.	1.0	59
114	Discrete element modelling of bendable tubes. <i>International Journal of Mechanical Sciences</i> , 2015, 94-95, 75-83.	3.6	11
115	Hazelnut Quality Sorting Using High Dynamic Range Short-Wave Infrared Hyperspectral Imaging. <i>Food and Bioprocess Technology</i> , 2015, 8, 1593-1604.	2.6	39
116	Modeling the propagation of light in realistic tissue structures with MMC-fpf: a meshed Monte Carlo method with free phase function. <i>Optics Express</i> , 2015, 23, 17467.	1.7	66
117	A high contrast 400-2500 nm hyperspectral checkerboard consisting of Acktar material cut with a femto second laser. , 2015, , .		1
118	Towards agrobots: Identification of the yaw dynamics and trajectory tracking of an autonomous tractor. <i>Computers and Electronics in Agriculture</i> , 2015, 115, 78-87.	3.7	60
119	A cross-polarized freeform illumination design for glare reduction in fruit quality inspection. , 2015, , .		0
120	Towards Agrobots: Trajectory Control of an Autonomous Tractor Using Type-2 Fuzzy Logic Controllers. <i>IEEE/ASME Transactions on Mechatronics</i> , 2015, 20, 287-298.	3.7	83
121	Learning in Centralized Nonlinear Model Predictive Control: Application to an Autonomous Tractor-Trailer System. <i>IEEE Transactions on Control Systems Technology</i> , 2015, 23, 197-205.	3.2	92
122	Mechanical analysis of the bending behaviour of plant stems. <i>Biosystems Engineering</i> , 2015, 129, 87-99.	1.9	40
123	DETERMINING STORED PERIOD OF LAMB'S LETTUCE USING VIS/NIR REFLECTANCE SPECTROSCOPY. <i>Acta Horticulturae</i> , 2015, , 187-194.	0.1	1
124	Non-Destructive Evaluation. , 2014, , 363-385.		2
125	Range measurements of a High Frequency Radio Frequency Identification (HF RFID) system for registering feeding patterns of growingâ€“finishing pigs. <i>Computers and Electronics in Agriculture</i> , 2014, 108, 209-220.	3.7	22
126	Ex vivo optical characterization of in vivo grown tissues on dummy sensor implants using double integrating spheres measurement. , 2014, , .		1

#	ARTICLE	IF	CITATIONS
127	Flexible tool for simulating the bulk optical properties of polydisperse spherical particles in an absorbing host: experimental validation. <i>Optics Express</i> , 2014, 22, 20223.	1.7	26
128	Dependent scattering in Intralipid® phantoms in the 600-1850 nm range. <i>Optics Express</i> , 2014, 22, 6086.	1.7	51
129	Optical identification of bumblebee species: Effect of morphology on wingbeat frequency. <i>Computers and Electronics in Agriculture</i> , 2014, 109, 94-100.	3.7	18
130	Measurement of the optical properties of rat brain tissue using contact spatially resolved spectroscopy. <i>Proceedings of SPIE</i> , 2014, , .	0.8	2
131	Early warnings from automatic milk yield monitoring with online synergistic control. <i>Journal of Dairy Science</i> , 2014, 97, 3371-3381.	1.4	24
132	Performance evaluation of preprocessing techniques utilizing expert information in multivariate calibration. <i>Talanta</i> , 2014, 121, 105-112.	2.9	21
133	Binary classification of chalcone derivatives with LDA or KNN based on their antileishmanial activity and molecular descriptors selected using the Successive Projections Algorithm feature-selection technique. <i>European Journal of Pharmaceutical Sciences</i> , 2014, 51, 189-195.	1.9	21
134	Spatially resolved diffuse reflectance in the visible and near-infrared wavelength range for non-destructive quality assessment of Braeburn™ apples. <i>Postharvest Biology and Technology</i> , 2014, 91, 39-48.	2.9	71
135	Comparison of Visible-Near Infrared and Short Wave Infrared hyperspectral imaging for the evaluation of rainbow trout freshness. <i>Food Research International</i> , 2014, 56, 25-34.	2.9	36
136	Optical properties-microstructure-texture relationships of dried apple slices: Spatially resolved diffuse reflectance spectroscopy as a novel technique for analysis and process control. <i>Innovative Food Science and Emerging Technologies</i> , 2014, 21, 160-168.	2.7	24
137	Contactless and non-destructive differentiation of microstructures of sugar foams by hyperspectral scatter imaging. <i>Innovative Food Science and Emerging Technologies</i> , 2014, 24, 131-137.	2.7	19
138	Site-Specific Plant Condition Monitoring Through Hyperspectral Alternating Least Squares Unmixing. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2014, 7, 3606-3618.	2.3	10
139	Reprint of "Optical properties-microstructure-texture relationships of dried apple slices: Spatially resolved diffuse reflectance spectroscopy as a novel technique for analysis and process control". <i>Innovative Food Science and Emerging Technologies</i> , 2014, 24, 145-153.	2.7	7
140	Vis/NIR spectroscopic measurement of selected soil fertility parameters of Cuban agricultural Cambisols. <i>Biosystems Engineering</i> , 2014, 125, 105-121.	1.9	31
141	Nondestructive Measurement of Fruit and Vegetable Quality. <i>Annual Review of Food Science and Technology</i> , 2014, 5, 285-312.	5.1	151
142	Simulation of grain-straw separation by Discrete Element Modeling with bendable straw particles. <i>Computers and Electronics in Agriculture</i> , 2014, 101, 24-33.	3.7	86
143	Modeling contact interactions between triangulated rounded bodies for the discrete element method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014, 277, 219-238.	3.4	26
144	Validation of a High Frequency Radio Frequency Identification (HF RFID) system for registering feeding patterns of growing-finishing pigs. <i>Computers and Electronics in Agriculture</i> , 2014, 102, 10-18.	3.7	69

#	ARTICLE	IF	CITATIONS
145	Distributed nonlinear model predictive control of an autonomous tractorâ€“trailer system. <i>Mechatronics</i> , 2014, 24, 926-933.	2.0	76
146	Understanding near infrared radiation propagation in pig skin reflectance measurements. <i>Innovative Food Science and Emerging Technologies</i> , 2014, 22, 137-146.	2.7	16
147	Bulk compression characteristics of straw and hay. <i>Biosystems Engineering</i> , 2014, 118, 194-202.	1.9	38
148	Nonlinear modeling and identification of an autonomous tractorâ€“trailer system. <i>Computers and Electronics in Agriculture</i> , 2014, 106, 1-10.	3.7	42
149	Using Experimental Data Designs and Multivariate Modeling to Assess the Effect of Glycated Serum Protein Concentration on Glucose Prediction from Near-Infrared Spectra of Human Serum. <i>Applied Spectroscopy</i> , 2014, 68, 398-405.	1.2	10
150	Study of polymer concentration and evaporation time as phase inversion parameters for polysulfone-based SRNF membranes. <i>Journal of Membrane Science</i> , 2013, 442, 196-205.	4.1	170
151	Double integrating sphere measurements for estimating optical properties of pig subcutaneous adipose tissue. <i>Innovative Food Science and Emerging Technologies</i> , 2013, 19, 218-226.	2.7	44
152	Optical coherence tomography visualizes microstructure of apple peel. <i>Postharvest Biology and Technology</i> , 2013, 78, 123-132.	2.9	66
153	Evaluation of Fourier transform-NIR spectroscopy for integrated external and internal quality assessment of Valencia oranges. <i>Journal of Food Composition and Analysis</i> , 2013, 31, 144-154.	1.9	62
154	Adaptive Neuro-Fuzzy Control of a Spherical Rolling Robot Using Sliding-Mode-Control-Theory-Based Online Learning Algorithm. <i>IEEE Transactions on Cybernetics</i> , 2013, 43, 170-179.	6.2	154
155	Robust calibrations on reduced sample sets for API content prediction in tablets: Definition of a cost-effective NIR model development strategy. <i>Analytica Chimica Acta</i> , 2013, 761, 62-70.	2.6	15
156	Hyperspectral waveband selection for automatic detection of floral pear buds. <i>Precision Agriculture</i> , 2013, 14, 86-98.	3.1	12
157	Moving horizon estimation and nonlinear model predictive control for autonomous agricultural vehicles. <i>Computers and Electronics in Agriculture</i> , 2013, 98, 25-33.	3.7	66
158	Microstructureâ€“texture relationships of aerated sugar gels: Novel measurement techniques for analysis and control. <i>Innovative Food Science and Emerging Technologies</i> , 2013, 18, 202-211.	2.7	50
159	Optical properties of pig skin epidermis and dermis estimated with double integrating spheres measurements. <i>Innovative Food Science and Emerging Technologies</i> , 2013, 20, 343-349.	2.7	27
160	Exploration of measurement variation of gait variables for early lameness detection in cattle using the GAITWISE. <i>Livestock Science</i> , 2013, 156, 88-95.	0.6	36
161	Feasibility of Vis/NIR spectroscopy for detection of flaws in hazelnut kernels. <i>Journal of Food Engineering</i> , 2013, 118, 1-7.	2.7	37
162	Efficient use of pure component and interferent spectra in multivariate calibration. <i>Analytica Chimica Acta</i> , 2013, 778, 15-23.	2.6	20

#	ARTICLE	IF	CITATIONS
163	Particle swarm optimization and genetic algorithm as feature selection techniques for the <sc>QSAR</sc> modeling of imidazo[1,5- $\epsilon$ ]pyrido[3,2- $\epsilon$ ]pyrazines, inhibitors of phosphodiesterase 10<sc>A</sc>. Chemical Biology and Drug Design, 2013, 82, 685-696.	1.5	15
164	Spatially resolved spectroscopy for nondestructive quality measurements of Braeburn apples cultivated in sub-fertilization condition. Proceedings of SPIE, 2013, , .	0.8	2
165	Alternating least-squares unmixing for the extraction of sub-pixel information from agricultural areas. , 2013, , .		1
166	Supercontinuum laser based optical characterization of Intralipid <sup>®</sup> phantoms in the 500-2250 nm range. Optics Express, 2013, 21, 32450.	1.7	103
167	Metamodeling approach for efficient estimation of optical properties of turbid media from spatially resolved diffuse reflectance measurements. Optics Express, 2013, 21, 32630.	1.7	26
168	Apple ripeness detection using hyperspectral laser scatter imaging. , 2013, , .		4
169	Sliding mode type-2 fuzzy control of robotic arm using ellipsoidal membership functions. , 2013, , .		1
170	Modeling and identification of the yaw dynamics of an autonomous tractor. , 2013, , .		13
171	Optical coherence tomography (OCT), space-resolved reflectance spectroscopy (SRS) and time-resolved reflectance spectroscopy (TRS): principles and applications to food microstructures. , 2013, , 132-162.		4
172	Estimation of Pear Ripeness by Hyperspectral Laser Scatter Imaging. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 160-165.	0.4	2
173	High-Speed Adaptive Nonlinear Predictive Control for Autonomous Tractor Navigation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 135-140.	0.4	3
174	Task and Motion Planning for Apple Harvesting Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 247-252.	0.4	34
175	Advanced Control of Combine Harvesters. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 1-5.	0.4	7
176	Powerful eyes for agricultural and food robots. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 218-222.	0.4	1
177	Hyperspectral image deblurring with PCA and total variation. , 2013, , .		16
178	Moving horizon observation for autonomous operation of agricultural vehicles. , 2013, , .		2
179	A flexible tool for simulating the bulk optical properties of polydisperse suspensions of spherical particles in an absorbing host medium. Proceedings of SPIE, 2012, , .	0.8	2
180	Extended adding-doubling method for fluorescent applications. Optics Express, 2012, 20, 17856.	1.7	22

#	ARTICLE	IF	CITATIONS
181	A robust on-line learning algorithm for type-2 fuzzy neural networks and its experimental evaluation on an autonomous tractor. , 2012, , .		1
182	Intelligent control of a tractor-implement system using type-2 fuzzy neural networks. , 2012, , .		10
183	Neuro-Fuzzy Control with a Novel Training Method Based-on Sliding Mode Control Theory: Application to Tractor Dynamics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 889-894.	0.4	2
184	Velocity Control of a Spherical Rolling Robot Using a Grey-PID Type Fuzzy Controller With an Adaptive Step Size. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 863-868.	0.4	13
185	Differentiation of microstructures of sugar foams by means of spatially resolved spectroscopy. Proceedings of SPIE, 2012, , .	0.8	4
186	CUTTING EDGE TECHNOLOGIES IN POSTHARVEST RESEARCH: JOURNEY TO THE CENTRE OF THE FRUIT. Acta Horticulturae, 2012, , 173-180.	0.1	1
187	Modeling and control of a spherical rolling robot: a decoupled dynamics approach. Robotica, 2012, 30, 671-680.	1.3	86
188	High-speed moving horizon estimation based on automatic code generation. , 2012, , .		42
189	A multilayer Monte Carlo method with free phase function choice. Proceedings of SPIE, 2012, , .	0.8	4
190	Supercontinuum laser based double-integrating-sphere system for measuring optical properties of highly dense turbid media in the 1300-2350nm region with high sensitivity. Proceedings of SPIE, 2012, , .	0.8	3
191	Prediction of $\tilde{\text{Nules Clementine}}^{\text{TM}}$ mandarin susceptibility to rind breakdown disorder using Vis/NIR spectroscopy. Postharvest Biology and Technology, 2012, 74, 1-10.	2.9	46
192	LiDaR sensing to monitor straw output quality of a combine harvester. Computers and Electronics in Agriculture, 2012, 85, 40-44.	3.7	14
193	NIR Spectroscopy Applications for Internal and External Quality Analysis of Citrus Fruit – A Review. Food and Bioprocess Technology, 2012, 5, 425-444.	2.6	371
194	Decomposition of absorption spectra of multi-layered biological materials by spatially-resolved spectroscopy and parallel factor analysis. Procedia Food Science, 2011, 1, 528-535.	0.6	0
195	Mid-infrared spectrometry of milk for dairy metabolomics: A comparison of two sampling techniques and effect of homogenization. Analytica Chimica Acta, 2011, 705, 88-97.	2.6	48
196	Pixel Selection for Near-Infrared Chemical Imaging (NIR-CI) Discrimination Between Fish and Terrestrial Animal Species in Animal Protein By-Product Meals. Applied Spectroscopy, 2011, 65, 771-781.	1.2	14
197	Visible and near-infrared spectroscopic analysis of raw milk for cow health monitoring: Reflectance or transmittance?. Journal of Dairy Science, 2011, 94, 5315-5329.	1.4	115
198	Food Quality Control by Combining Light Propagation Models with Multiple vis/NIR Reflectance Measurements. NIR News, 2011, 22, 14-16.	1.6	3

#	ARTICLE	IF	CITATIONS
199	Prediction of optimal cooking time for boiled potatoes by hyperspectral imaging. <i>Journal of Food Engineering</i> , 2011, 105, 617-624.	2.7	70
200	The potential of spatially resolved spectroscopy for monitoring angiogenesis in the chorioallantoic membrane. <i>Biotechnology Progress</i> , 2011, 27, 1785-1792.	1.3	5
201	Beer quality screening by FT-IR spectrometry: Impact of measurement strategies, data pre-processings and variable selection algorithms. <i>Journal of Food Engineering</i> , 2011, 106, 188-198.	2.7	28
202	A Stochastic MPC approach to controlling biological variable processes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2010, 43, 73-78.	0.4	0
203	The Importance of Choosing the Right Validation Strategy in Inverse Modelling. <i>Journal of Near Infrared Spectroscopy</i> , 2010, 18, 231-237.	0.8	18
204	Postharvest quality of apple predicted by NIR-spectroscopy: Study of the effect of biological variability on spectra and model performance. <i>Postharvest Biology and Technology</i> , 2010, 55, 133-143.	2.9	227
205	Identification of the cleaning process on combine harvesters, Part II: A fuzzy model for prediction of the sieve losses. <i>Biosystems Engineering</i> , 2010, 106, 97-102.	1.9	23
206	Fault diagnostic systems for agricultural machinery. <i>Biosystems Engineering</i> , 2010, 106, 26-36.	1.9	29
207	Fuzzy control of the cleaning process on a combine harvester. <i>Biosystems Engineering</i> , 2010, 106, 103-111.	1.9	67
208	Optical Characterization of Biological Material: A Multiscale Approach. , 2010, , .		0
209	Throughput control on a combine harvester using Model-based Predictive Control. , 2010, , .		1
210	Scattering Correction by Use of a Priori Information. <i>Applied Spectroscopy</i> , 2010, 64, 795-804.	1.2	12
211	Non-destructive measurement of firmness and soluble solids content in bell pepper using NIR spectroscopy. <i>Journal of Food Engineering</i> , 2009, 94, 267-273.	2.7	63
212	Estimation of the crop density of small grains using LiDAR sensors. <i>Biosystems Engineering</i> , 2009, 102, 22-30.	1.9	96
213	Hyperspectral waveband selection for on-line measurement of grain cleanness. <i>Biosystems Engineering</i> , 2009, 104, 1-7.	1.9	65
214	Application of Visible and Near-Infrared Reflectance Spectroscopy (Vis/NIRS) to Determine Carotenoid Contents in Banana ( <i>Musa</i> spp.) Fruit Pulp. <i>Journal of Agricultural and Food Chemistry</i> , 2009, 57, 1742-1751.	2.4	97
215	Potential applications of functional data analysis in chemometrics. <i>Journal of Chemometrics</i> , 2008, 22, 335-344.	0.7	44
216	High-performance flow control for site-specific application of liquid manure. <i>Biosystems Engineering</i> , 2008, 99, 22-34.	1.9	12

#	ARTICLE	IF	CITATIONS
217	Cruise control on a combine harvester using model-based predictive control. <i>Biosystems Engineering</i> , 2008, 99, 47-55.	1.9	18
218	An automatic depth control system for shallow slurry injection, Part 2: Control design and field validation. <i>Biosystems Engineering</i> , 2008, 99, 161-170.	1.9	11
219	Infrared laser sensor for depth measurement to improve depth control in intra-row mechanical weeding. <i>Biosystems Engineering</i> , 2008, 100, 309-320.	1.9	7
220	Identification of the cleaning process on combine harvesters. Part I: A fuzzy model for prediction of the material other than grain (MOC) content in the grain bin. <i>Biosystems Engineering</i> , 2008, 101, 42-49.	1.9	34
221	Autopilot for a combine harvester. <i>Computers and Electronics in Agriculture</i> , 2008, 63, 57-64.	3.7	27
222	Time-resolved and continuous wave NIR reflectance spectroscopy to predict soluble solids content and firmness of pear. <i>Postharvest Biology and Technology</i> , 2008, 47, 68-74.	2.9	145
223	Optical properties of apple skin and flesh in the wavelength range from 350 to 2200 nm. <i>Applied Optics</i> , 2008, 47, 908.	2.1	134
224	Increasing Robustness against Changes in the Interferent Structure by Incorporating Prior Information in the Augmented Classical Least-Squares Framework. <i>Analytical Chemistry</i> , 2008, 80, 4951-4959.	3.2	40
225	Near infrared reflectance spectroscopy as a tool for the in-line determination of the moisture concentration in extruded semolina pasta. <i>Biosystems Engineering</i> , 2007, 97, 313-321.	1.9	25
226	A genetic input selection methodology for identification of the cleaning process on a combine harvester, Part II: Selection of relevant input variables for identification of material other than grain (MOC) content in the grain bin. <i>Biosystems Engineering</i> , 2007, 98, 297-303.	1.9	22
227	An automatic depth control system for shallow manure injection, Part 1: Modelling of the depth control system. <i>Biosystems Engineering</i> , 2007, 98, 146-154.	1.9	12
228	A genetic input selection methodology for identification of the cleaning process on a combine harvester, Part I: Selection of relevant input variables for identification of the sieve losses. <i>Biosystems Engineering</i> , 2007, 98, 166-175.	1.9	22
229	Positioning and tuning of viscous damper on flexible structure. <i>Journal of Sound and Vibration</i> , 2007, 304, 845-862.	2.1	17
230	Combination of chemometric tools and image processing for bruise detection on apples. <i>Computers and Electronics in Agriculture</i> , 2007, 56, 1-13.	3.7	109
231	Nondestructive measurement of fruit and vegetable quality by means of NIR spectroscopy: A review. <i>Postharvest Biology and Technology</i> , 2007, 46, 99-118.	2.9	1,718
232	Optimizing the tuning parameters of least squares support vector machines regression for NIR spectra. <i>Journal of Chemometrics</i> , 2006, 20, 184-192.	0.7	36
233	Near Infrared Spectroscopy for Agricultural Materials: An Instrument Comparison. <i>Journal of Near Infrared Spectroscopy</i> , 2005, 13, 87-97.	0.8	64
234	Comparison of Transflectance and Reflectance to Analyse Hog Manures. <i>Journal of Near Infrared Spectroscopy</i> , 2005, 13, 99-107.	0.8	17

#	ARTICLE	IF	CITATIONS
235	Potential for Onsite and Online Analysis of Pig Manure using Visible and Near Infrared Reflectance Spectroscopy. Biosystems Engineering, 2005, 91, 393-402.	1.9	401
236	An Automatic Depth Control System for Online Measurement of Spatial Variation in Soil Compaction, Part 1: Sensor Design for Measurement of Frame Height Variation from Soil Surface. Biosystems Engineering, 2004, 89, 139-150.	1.9	38
237	An Automatic Depth Control System for Online Measurement of Spatial Variation in Soil Compaction, Part 2: Modelling of the Depth Control System. Biosystems Engineering, 2004, 89, 267-280.	1.9	12
238	An Automatic Depth Control System for Online Measurement of Spatial Variation in Soil Compaction, Part 3: Design of Depth Control System. Biosystems Engineering, 2004, 89, 59-67.	1.9	8
239	Potential for On-Site Analysis of Hog Manure Using a Visual and near Infrared Diode Array Reflectance Spectrometer. Journal of Near Infrared Spectroscopy, 2004, 12, 299-309.	0.8	40
240	Hyperspectral imaging for textile sorting in the visible–near infrared range. Journal of Spectral Imaging, 0, , .	0.0	13
241	Design and analysis of computer experiments for efficient model-based active thermography in the agro-food sector. , 0, , .		0
242	Semi-supervised learning of hyperspectral image segmentation applied to vine tomatoes and table grapes. Journal of Spectral Imaging, 0, 7, .	0.0	1
243	SHORT COMMUNICATION: Validation of a novel milk progesterone based tool to monitor luteolysis in dairy cows. Performance on cost-effective, on-farm measured data. , 0, , .		1
244	Hyperspectral system trade-offs for illumination, hardware and analysis methods: a case study of seed mix ingredient discrimination. Journal of Spectral Imaging, 0, , .	0.0	2
245	Digital twins in quality engineering. Quality Engineering, 0, , 1-5.	0.7	6
246	A feasibility study on nondestructive classification of frozen Atlantic salmon ( <i>Salmo salar</i> ) fillets based on temperature history at the logistics using NIR spectroscopy. Journal of Food Science, 0, , .	1.5	1