

Frans Wj Van Den Berg

List of Publications by Year in descending order

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104
papers

8,160
citations

117625

34
h-index

48315

88
g-index

107
all docs

107
docs citations

107
times ranked

11789
citing authors

#	ARTICLE	IF	CITATIONS
1	Gut Microbiota in Human Adults with Type 2 Diabetes Differs from Non-Diabetic Adults. PLoS ONE, 2010, 5, e9085.	2.5	2,309
2	Review of the most common pre-processing techniques for near-infrared spectra. TrAC - Trends in Analytical Chemistry, 2009, 28, 1201-1222.	11.4	1,894
3	Correlation optimized warping and dynamic time warping as preprocessing methods for chromatographic data. Journal of Chemometrics, 2004, 18, 231-241.	1.3	595
4	Automated alignment of chromatographic data. Journal of Chemometrics, 2006, 20, 484-497.	1.3	246
5	Metabolomic Studies on Geographical Grapes and Their Wines Using ¹ H NMR Analysis Coupled with Multivariate Statistics. Journal of Agricultural and Food Chemistry, 2009, 57, 1481-1490.	5.2	191
6	Quantitatively Different, yet Qualitatively Alike: A Meta-Analysis of the Mouse Core Gut Microbiome with a View towards the Human Gut Microbiome. PLoS ONE, 2013, 8, e62578.	2.5	182
7	¹ H Nuclear Magnetic Resonance-Based Metabolomic Characterization of Wines by Grape Varieties and Production Areas. Journal of Agricultural and Food Chemistry, 2008, 56, 8007-8016.	5.2	148
8	An exploratory chemometric study of ¹ H NMR spectra of table wines. Journal of Chemometrics, 2006, 20, 198-208.	1.3	112
9	Relationship between meat toughness and properties of connective tissue from cows and young bulls heat treated at low temperatures for prolonged times. Meat Science, 2013, 93, 787-795.	5.5	95
10	NMR relaxometry and differential scanning calorimetry during meat cooking. Meat Science, 2006, 74, 684-689.	5.5	93
11	Process Analytical Technology in the food industry. Trends in Food Science and Technology, 2013, 31, 27-35.	15.1	90
12	¹ H NMR-Based Metabolomic Approach for Understanding the Fermentation Behaviors of Wine Yeast Strains. Analytical Chemistry, 2009, 81, 1137-1145.	6.5	84
13	Evidence of vintage effects on grape wines using ¹ H NMR-based metabolomic study. Analytica Chimica Acta, 2009, 648, 71-76.	5.4	81
14	Selection of optimal sensor position in a tubular reactor using robust degree of observability criteria. Chemical Engineering Science, 2000, 55, 827-837.	3.8	76
15	Determination of Dry Matter Content in Potato Tubers by Low-Field Nuclear Magnetic Resonance (LF-NMR). Journal of Agricultural and Food Chemistry, 2010, 58, 10300-10304.	5.2	68
16	Influence of solvent evaporation rate and formulation factors on solid dispersion physical stability. European Journal of Pharmaceutical Sciences, 2011, 44, 610-620.	4.0	68
17	Multivariate data analysis as a tool in advanced quality monitoring in the food production chain. Trends in Food Science and Technology, 2002, 13, 235-244.	15.1	67
18	Metabolomic Insight into Soy Sauce through ¹ H NMR Spectroscopy. Journal of Agricultural and Food Chemistry, 2009, 57, 6862-6870.	5.2	67

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19	Bootstrap based confidence limits in principal component analysis – A case study. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2013, 120, 97-105.	3.5	64
20	CoMiniGut – a small volume <i>in vitro</i> colon model for the screening of gut microbial fermentation processes. <i>PeerJ</i> , 2018, 6, e4268.	2.0	60
21	Near-Infrared Spectroscopy for Cocrystal Screening. A Comparative Study with Raman Spectroscopy. <i>Analytical Chemistry</i> , 2008, 80, 7755-7764.	6.5	56
22	Competitive Displacement of Sodium Caseinate by Low-Molecular-Weight Emulsifiers and the Effects on Emulsion Texture and Rheology. <i>Langmuir</i> , 2014, 30, 8687-8696.	3.5	56
23	Depth profiling of porcine adipose tissue by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2012, 43, 482-489.	2.5	55
24	Prediction of total fatty acid parameters and individual fatty acids in pork backfat using Raman spectroscopy and chemometrics: Understanding the cage of covariance between highly correlated fat parameters. <i>Meat Science</i> , 2016, 111, 18-26.	5.5	53
25	PARAFASCA: ASCA combined with PARAFAC for the analysis of metabolic fingerprinting data. <i>Journal of Chemometrics</i> , 2008, 22, 114-121.	1.3	52
26	Solvent Diversity in Polymorph Screening. <i>Journal of Pharmaceutical Sciences</i> , 2008, 97, 2145-2159.	3.3	51
27	Particle size dependence of polymorphism in spray-dried mannitol. <i>European Journal of Pharmaceutical Sciences</i> , 2011, 44, 41-48.	4.0	51
28	Quantification of paracetamol through tablet blister packages by Raman spectroscopy and multivariate curve resolution-alternating least squares. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2013, 125, 58-66.	3.5	50
29	Fast and robust discrimination of almonds (<i>Prunus amygdalus</i>) with respect to their bitterness by using near infrared and partial least squares-discriminant analysis. <i>Food Chemistry</i> , 2014, 153, 15-19.	8.2	44
30	Real-time modeling of milk coagulation using in-line near infrared spectroscopy. <i>Journal of Food Engineering</i> , 2012, 108, 345-352.	5.2	41
31	Comparison of PARAFAC2 and MCR-ALS for resolution of an analytical liquid dilution system. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2006, 83, 13-25.	3.5	38
32	Pixel-based analysis of multiple images for the identification of changes: A novel approach applied to unravel proteome patterns of 2D electrophoresis gel images. <i>Proteomics</i> , 2007, 7, 3450-3461.	2.2	38
33	Towards Better Process Understanding: Chemometrics and Multivariate Measurements in Manufacturing of Solid Dosage Forms. <i>Journal of Pharmaceutical Sciences</i> , 2013, 102, 1385-1403.	3.3	38
34	The role of exopolysaccharide-producing cultures and whey protein ingredients in yoghurt. <i>LWT - Food Science and Technology</i> , 2016, 72, 189-198.	5.2	37
35	Comparison of spectroscopy technologies for improved monitoring of cell culture processes in miniature bioreactors. <i>Biotechnology Progress</i> , 2017, 33, 337-346.	2.6	36
36	Biofouling on RO-membranes used for water recovery in the dairy industry. <i>Journal of Water Process Engineering</i> , 2018, 24, 1-10.	5.6	35

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37	Data Pre-processing. , 2009, , 29-50.		34
38	Temperature-induced variation for NIR tensor-based calibration. Chemometrics and Intelligent Laboratory Systems, 2006, 83, 75-82.	3.5	33
39	Optimizing colour quality of modified atmosphere packed sliced meat products by control of critical packaging parameters. Meat Science, 2004, 68, 577-585.	5.5	32
40	Effect of Gel Firmness at Cutting Time, pH, and Temperature on Rennet Coagulation and Syneresis: An in situ ¹ H NMR Relaxation Study. Journal of Agricultural and Food Chemistry, 2010, 58, 513-519.	5.2	32
41	Differences in physicochemical properties of high-moisture extrudates prepared from soy and pea protein isolates. Food Hydrocolloids, 2022, 128, 107540.	10.7	31
42	Direct decomposition of NMR relaxation profiles and prediction of sensory attributes of potato samples. LWT - Food Science and Technology, 2003, 36, 423-432.	5.2	29
43	Initial adhesion of <i>Listeria monocytogenes</i> to solid surfaces under liquid flow. International Journal of Food Microbiology, 2012, 152, 181-188.	4.7	29
44	Use of NIR spectroscopy and chemometrics for on-line process monitoring of ammonia in Low Methoxylated Amidated pectin production. Chemometrics and Intelligent Laboratory Systems, 2005, 76, 149-161.	3.5	28
45	Investigating the fermentation of cocoa by correlating Denaturing Gradient Gel Electrophoresis profiles and Near Infrared spectra. International Journal of Food Microbiology, 2008, 125, 133-140.	4.7	24
46	Changes occurring in potatoes during cooking and reheating as affected by salting and cool or frozen storage – a LF-NMR study. LWT - Food Science and Technology, 2008, 41, 1710-1719.	5.2	20
47	Internal and External Validation Strategies for the Evaluation of Long-Term Effects in NIR Calibration Models. Journal of Agricultural and Food Chemistry, 2011, 59, 1541-1547.	5.2	20
48	A novel image analysis methodology for online monitoring of nucleation and crystal growth during solid state phase transformations. International Journal of Pharmaceutics, 2012, 433, 60-70.	5.2	20
49	Monitoring Process Water Quality Using Near Infrared Spectroscopy and Partial Least Squares Regression with Prediction Uncertainty Estimation. Applied Spectroscopy, 2017, 71, 410-421.	2.2	20
50	Evaluation of a new local modelling approach for large and heterogeneous NIRS data sets. Chemometrics and Intelligent Laboratory Systems, 2010, 101, 87-94.	3.5	19
51	Image analysis for maintenance of coating quality in nickel electroplating baths – Real time control. Analytica Chimica Acta, 2011, 706, 1-7.	5.4	19
52	Selection of Optimal Process Analyzers for Plant-Wide Monitoring. Analytical Chemistry, 2002, 74, 3105-3111.	6.5	17
53	FULL UNIAXIAL COMPRESSION CURVES FOR PREDICTING SENSORY TEXTURE QUALITY OF COOKED POTATOES. Journal of Texture Studies, 2002, 33, 119-134.	2.5	17
54	Quantifying crystalline β -lactose monohydrate in amorphous lactose using terahertz time domain spectroscopy and near infrared spectroscopy. Vibrational Spectroscopy, 2019, 102, 39-46.	2.2	17

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55	Flavor Release Measurement from Gum Model System. <i>Journal of Agricultural and Food Chemistry</i> , 2004, 52, 8119-8126.	5.2	16
56	Water mobility in the endosperm of high beta-glucan barley mutants as studied by nuclear magnetic resonance imaging. <i>Magnetic Resonance Imaging</i> , 2007, 25, 425-432.	1.8	16
57	Chemical imaging and solid state analysis at compact surfaces using UV imaging. <i>International Journal of Pharmaceutics</i> , 2014, 477, 527-535.	5.2	16
58	Solvent subset selection for polymorph screening. <i>Journal of Chemometrics</i> , 2008, 22, 621-631.	1.3	15
59	Dynamic visualization and microstructure of syneresis of cheese curd during mechanical treatment. <i>International Dairy Journal</i> , 2011, 21, 711-717.	3.0	15
60	Quantitative determination of mold growth and inhibition by multispectral imaging. <i>Food Control</i> , 2015, 55, 82-89.	5.5	15
61	Multi-way based calibration transfer between two Raman spectrometers. <i>Analyst, The</i> , 2010, 135, 1382.	3.5	14
62	Moving from recipe-driven to measurement-based cleaning procedures: Monitoring the Cleaning-In-Place process of whey filtration units by ultraviolet spectroscopy and chemometrics. <i>Journal of Food Engineering</i> , 2014, 126, 82-88.	5.2	14
63	A process analytical approach for quality control of dapivirine in HIV preventive vaginal rings by Raman spectroscopy. <i>Journal of Raman Spectroscopy</i> , 2014, 45, 149-156.	2.5	14
64	Bacterial Flow Cytometry and Imaging as Potential Process Monitoring Tools for Industrial Biotechnology. <i>Fermentation</i> , 2020, 6, 10.	3.0	14
65	Calibration transfer for excitation-emission fluorescence measurements. <i>Analytica Chimica Acta</i> , 2011, 705, 81-87.	5.4	13
66	Investigation of Consecutive Fouling and Cleaning Cycles of Ultrafiltration Membranes Used for Whey Processing. <i>International Journal of Food Engineering</i> , 2014, 10, 367-381.	1.5	12
67	Monitoring fermentation processes using in-process measurements of different orders. <i>Journal of Chemical Technology and Biotechnology</i> , 2015, 90, 244-254.	3.2	12
68	Detecting variation in ultrafiltrated milk permeates - Infrared spectroscopy signatures and external factor orthogonalization. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2010, 104, 243-248.	3.5	11
69	Inline UV-Vis spectroscopy to monitor and optimize cleaning-in-place (CIP) of whey filtration plants. <i>LWT - Food Science and Technology</i> , 2017, 75, 164-170.	5.2	11
70	Chemical characterization by gas chromatography-mass spectrometry and inductively coupled plasma-optical emission spectroscopy of membrane permeates from an industrial dairy ingredient production used as process water. <i>Journal of Dairy Science</i> , 2018, 101, 135-146.	3.4	11
71	Current Advances and Future Trends in Characterizing Poorly Water-soluble Drugs Using Spectroscopic, Imaging and Data Analytical Techniques. <i>Current Pharmaceutical Design</i> , 2014, 20, 436-453.	1.9	11
72	Determination of an acceptable level of spectral data compression by Discrete Wavelet Transforms. <i>Analytica Chimica Acta</i> , 2010, 668, 137-142.	5.4	10

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73	Expansion profiles of wheat doughs fermented by seven commercial baker's yeasts. <i>Journal of Cereal Science</i> , 2013, 58, 318-323.	3.7	10
74	Exploring Process Dynamics by near Infrared Spectroscopy in Lactic Fermentations. <i>Journal of Near Infrared Spectroscopy</i> , 2016, 24, 443-451.	1.5	10
75	Peer Reviewed: How to Choose the Right Process Analyzer. <i>Analytical Chemistry</i> , 2002, 74, 368 A-373 A.	6.5	8
76	Protein residual fouling identification on UF membranes using ATR-FT-IR and multivariate curve resolution. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2015, 144, 39-47.	3.5	8
77	Monitoring an enzyme purification process using on-line and in-line NIR measurements. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2014, 132, 30-38.	3.5	7
78	Detecting Blending End-Point Using Mean Squares Successive Difference Test and Near-Infrared Spectroscopy. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 2541-2549.	3.3	7
79	Confidence limits for contribution plots in multivariate statistical process control using bootstrap estimates. <i>Analytica Chimica Acta</i> , 2016, 908, 75-84.	5.4	7
80	Monitoring oxidative quality of pork scratchings, peanuts, oatmeal and muesli by sensor array. <i>Journal of the Science of Food and Agriculture</i> , 2005, 85, 206-212.	3.5	6
81	Multi-way analysis for investigation of industrial pectin using an analytical liquid dilution system. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2006, 84, 9-20.	3.5	6
82	Achieving bilinearity in non-bilinear augmented first order kinetic data applying calibration transfer. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2012, 115, 1-8.	3.5	6
83	Investigation of UF and MF Membrane Residual Fouling in Full-Scale Dairy Production Using FT-IR to Quantify Protein and Fat. <i>International Journal of Food Engineering</i> , 2015, 11, 1-15.	1.5	6
84	Water mobility and microstructure of acidified milk model gels with added whey protein ingredients. <i>Food Hydrocolloids</i> , 2022, 127, 107548.	10.7	6
85	Process analyzer location and performance assessment for optimal process monitoring. <i>AIChE Journal</i> , 2001, 47, 2503-2514.	3.6	5
86	Comparison of bootstrap and asymptotic confidence limits for control charts in batch MSPC strategies. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2013, 127, 102-111.	3.5	5
87	Fast-track to A Solid Dispersion Formulation Using Multi-way Analysis of Complex Interactions. <i>Journal of Pharmaceutical Sciences</i> , 2013, 102, 904-914.	3.3	5
88	Quality assessment of boar semen by multivariate analysis of flow cytometric data. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2015, 142, 219-230.	3.5	5
89	Multilevel Modeling for Data Mining of Downstream Bio-Industrial Processes. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2016, 154, 62-71.	3.5	5
90	Modeling of the Flux Decline in a Continuous Ultrafiltration System with Multiblock Partial Least Squares. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 10690-10698.	3.7	4

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91	Tutorial " applying extreme value theory to characterize food" processing systems. Journal of Chemometrics, 2017, 31, e2896.	1.3	4
92	Vibrational Spectroscopy in Food Processing. , 2017, , 582-589.		4
93	Mid-Infrared Spectroscopy and Multivariate Analysis to Characterize <i>Lactobacillus acidophilus</i> Fermentation Processes. Applied Spectroscopy, 2019, 73, 1087-1098.	2.2	4
94	NIR Data Exploration and Regression by Chemometrics" A Primer. , 2021, , 127-189.		4
95	BIOPRO World Talent Campus: A week of real world challenge for biotechnology post-graduate students. Education for Chemical Engineers, 2018, 25, 1-8.	4.8	3
96	Estimating the structure of sarcoplasmic proteins extracted from pork tenderloin thawed by a high-voltage electrostatic field. Journal of Food Science and Technology, 2020, 57, 1574-1578.	2.8	3
97	Warping: Investigation of NMR Pre-processing and Correction. Special Publication - Royal Society of Chemistry, 2005, , 131-138.	0.0	3
98	Calibration Transfer Methods. , 2009, , 105-118.		2
99	Subspace methods for dynamic model estimation in PAT applications. Journal of Chemometrics, 2012, 26, 435-441.	1.3	2
100	A statistical strategy to assess cleaning level of surfaces using fluorescence spectroscopy and Wilks' ratio. Chemometrics and Intelligent Laboratory Systems, 2017, 165, 11-21.	3.5	2
101	UV spectroscopy as a quantitative monitoring tool in a dairy side-stream fractionation process. Chemometrics and Intelligent Laboratory Systems, 2022, 225, 104561.	3.5	2
102	A generalized image analytical algorithm for investigating tablet disintegration. International Journal of Pharmaceutics, 2022, 623, 121847.	5.2	2
103	Influence of Reduced Cleaning-In-Place on Aged Membranes during Ultrafiltration of Whey. International Journal of Food Engineering, 2015, 11, 447-455.	1.5	1
104	Weighted PARAFAC and Nonlinear Regression for Handling Intensity Changes in Fluorescence Spectroscopy Caused by pH Fluctuations. Applied Spectroscopy, 2016, 70, 1739-1750.	2.2	1