Frank Vogt

List of Publications by Year
in descending order

37 papers	357 citations	840776 11 h-index	940533 16 g-index
38 all docs	38 docs citations	38 times ranked	267 citing authors

#	Article	IF	Citations
1	Fourier Transform Infrared (FT-IR) Spectroscopy and Improved Principal Component Regression (PCR) for Quantification of Solid Analytes in Microalgae and Bacteria. Applied Spectroscopy, 2011, 65, 442-453.	2.2	31
2	Spectroscopic classification of 14 different microalga species: first steps towards spectroscopic measurement of phytoplankton biodiversity. Plant Ecology and Diversity, 2009, 2, 155-164.	2.4	27
3	Spectroscopic Imaging for Detection and Discrimination of Different E. Coli Strains. Applied Spectroscopy, 2009, 63, 6-13.	2.2	20
4	Introducing Chemometrics to the Analytical Curriculum: Combining Theory and Lab Experience. Journal of Chemical Education, 2008, 85, 135.	2.3	17
5	Utilizing three-dimensional wavelet transforms for accelerated evaluation of hyperspectral image cubes. Journal of Chemometrics, 2004, 18, 350-362.	1.3	16
6	Recent advancements in chemometrics for smart sensors. Analyst, The, 2004, 129, 492.	3.5	16
7	Impacts of nutrient competition on microalgae biomass production. Journal of Chemometrics, 2014, 28, 448-461.	1.3	16
8	Chemometric Correction of Drift Effects in Optical Spectra. Applied Spectroscopy, 2004, 58, 683-692.	2.2	15
9	A selfâ€guided search for good local minima of the sumâ€ofâ€squaredâ€error in nonlinear least squares regression. Journal of Chemometrics, 2015, 29, 71-79.	1.3	14
10	Influence of Wavelength-Shifted Calibration Spectra on Multivariate Calibration Models. Applied Spectroscopy, 2004, 58, 624-635.	2.2	13
11	Information fusion via constrained principal component regression for robust quantification with incomplete calibrations. Analytica Chimica Acta, 2013, 797, 20-29.	5.4	12
12	Introducing multi-dimensional â€˜hybrid waveletsâ€™ for enhanced evaluation of hyperspectral image cubes and multi-way data sets. Journal of Chemometrics, 2005, 19, 510-520.	1.3	11
13	Quo vadis, chemometrics?. Journal of Chemometrics, 2014, 28, 785-788.	1.3	11
14	Microalgae as embedded environmental monitors. Analytica Chimica Acta, 2017, 954, 1-13.	5.4	11
15	Accelerating the analyses of 3-way and 4-way PARAFAC models utilizing multi-dimensional wavelet compression. Journal of Chemometrics, 2005, 19, 593-606.	1.3	10
16	Trends in Remote Spectroscopic Sensing and Imaging - Experimental Techniques and Chemometric Concepts. Current Analytical Chemistry, 2006, 2, 107-127.	1.2	10
17	Polynomial multivariate least-squares regression for modeling nonlinear data applied to in-depth characterization of chromatographic resolution. Journal of Chemometrics, 2011, 25, 575-585.	1.3	10
18	Introducing nonlinear, multivariate â€˜Predictor Surfacesâ€™ for quantitative modeling of chemical systems with higher-order, coupled predictor variables. Analytica Chimica Acta, 2012, 746, 1-14.	5.4	10

#	Article	IF	Citations
19	Spectroscopic analyses of chemical adaptation processes within microalgal biomass in response to changing environments. Analytica Chimica Acta, 2015, 867, 18-28.	5.4	10
20	<title>Numerical methods for accelerating the PCA of large data sets applied to hyperspectral imaging</title>. , 2002, , .		9
21	Monitoring chemical impacts on cell cultures by means of image analyses. Journal of Chemometrics, 2012, 26, 585-597.	1.3	9
22	Modeling nutrient impacts on microalgae cells via image analyses. Journal of Chemometrics, 2013, 27, 217-219.	1.3	9
23	Realization of discrete (inverse) wavelet transforms in arbitrary dimensions. Journal of Chemometrics, 2005, 19, 575-581.	1.3	7
24	New Approaches for Field Analyses of Cotton Quality by Means of Near-IR Spectroscopy Supported by Chemometrics. Analytical Letters, 2011, 44, 2466-2477.	1.8	7
25	Assessing Impacts of Nutrient Competition on the Chemical Composition of Individual Microalgae Species. Analytical Letters, 2013, 46, 2752-2766.	1.8	6
26	Cellâ€level modeling of nutrient competition on the growth of microalgal biomass. Journal of Chemometrics, 2015, 29, 139-141.	1.3	6
27	Data Filtering in Instrumental Analyses with Applications to Optical Spectroscopy and Chemical Imaging. Journal of Chemical Education, 2011, 88, 1672-1683.	2.3	5
28	Augmenting Spectroscopic Imaging for Analyses of Samples with Complex Surface Topographies. Analytical Chemistry, 2007, 79, 5424-5428.	6.5	4
29	Composing hybrid wavelets for optimum and near-optimum representation and accelerated evaluation ofN-way data sets. Journal of Chemometrics, 2007, 21, 65-75.	1.3	4
30	Accelerating kernel principal component analysis (KPCA) by utilizing twoâ€dimensional wavelet compression: applications to spectroscopic imaging. Journal of Chemometrics, 2008, 22, 510-521.	1.3	3
31	Applied Chemometrics for Scientists (Richard G. Brereton). Journal of Chemical Education, 2007, 84, 1926.	2.3	2
32	Chemometric Modeling of Microalgal Nutrient Sequestration as a Function of Their Chemical Environment. Analytical Letters, 2016, 49, 2043-2051.	1.8	2
33	Modeling Microalgal Biosediment Formation Based on Attenuated Total Reflection Fourier Transform Infrared (ATR FT-IR) Monitoring. Applied Spectroscopy, 2018, 72, 366-377.	2.2	2
34	Modeling the transformation of atmospheric CO2into microalgal biomass. Analyst, The, 2017, 142, 4089-4098.	3.5	1
35	Parallelizing Nonlinear Least-Squares Regression with Application to Analyses of Microalgae. Analytical Letters, 2017, 50, 945-963.	1.8	1
36	Chemometric Modeling of Environmental Impacts on the Chemical Composition and Growth Dynamics of Microalgae Cultures. ACS Symposium Series, 2015, , 311-333.	0.5	0

#	Article	IF	Citations
37	Quantitative modeling of microalgae based sequestration of atmospheric CO2. Analyst, The, 2018, 143, 1042-1045.	3.5	0