Rainer KÃ¼nnemeyer

List of Publications by Year
in descending order

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70 papers	1,186 citations	430874 18 h-index	414414 32 g-index
71 all docs	71 docs citations	71 times ranked	1055 citing authors

#	Article	IF	Citations
1	Method of Wavelength Selection for Partial Least Squares. Analyst, The, 1997, 122, 1531-1537.	3.5	115
2	Internal Quality Assessment of Mandarin Fruit by vis/NIR Spectroscopy. Journal of Near Infrared Spectroscopy, 2003, 11, 323-332.	1.5	101
3	Light distribution inside mandarin fruit during internal quality assessment by NIR spectroscopy. Postharvest Biology and Technology, 2003, 27, 185-196.	6.0	95
4	Relationship between tissue firmness and optical properties of â€˜Royal Galaâ€™ apples from 400 to 1050nm. Postharvest Biology and Technology, 2014, 94, 89-96.	6.0	76
5	Comparison of hand-held near infrared spectrophotometers for fruit dry matter assessment. Journal of Near Infrared Spectroscopy, 2017, 25, 267-277.	1.5	44
6	Performance of a V-trough photovoltaic/thermal concentrator. Solar Energy, 2014, 101, 19-27.	6.1	40
7	Multispectral scattering imaging and NIR interactance for apple firmness predictions. Postharvest Biology and Technology, 2016, 119, 58-68.	6.0	38
8	Optical full Hadamard matrix multiplexing and noise effects. Applied Optics, 2009, 48, 2078.	2.1	37
9	Potential of Vis-NIR spectroscopy for detection of chilling injury in kiwifruit. Postharvest Biology and Technology, 2020, 164, 111160.	6.0	36
10	A Low-Cost System for the Grading of Kiwifruit. Journal of Near Infrared Spectroscopy, 1999, 7, 9-15.	1.5	34
11	Temperature-dependent optical properties of IntralipidÂ® measured with frequency-domain photon-migration spectroscopy. Journal of Biomedical Optics, 2010, 15, 017003.	2.6	31
12	Oscillator strengths of neutral and singly ionised molybdenum. Journal of Quantitative Spectroscopy and Radiative Transfer, 1983, 29, 507-516.	2.3	26
13	Nutrient quantification in fresh and dried mixtures of ryegrass and clover leaves using laser-induced breakdown spectroscopy. Precision Agriculture, 2018, 19, 823-839.	6.0	26
14	Accelerating Monte Carlo simulations with an NVIDIAÂ® graphics processor. Computer Physics Communications, 2009, 180, 1983-1989.	7.5	22
15	A simple microcontroller based digital lock-in amplifier for the detection of low level optical signals. , 0, , .		21
16	A simple reflectometer for on-farm pasture assessment. Computers and Electronics in Agriculture, 2001, 31, 125-136.	7.7	19
17	Resonant ionisation behaviour of laser-pumped barium vapour. Journal of Physics B: Atomic and Molecular Physics, 1983, 16, L607-L611.	1.6	18
18	Measuring optical temperature coefficients of IntralipidÂ®. Physics in Medicine and Biology, 2007, 52, 2367-2378.	3.0	18

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19	Control, communication and monitoring of intravaginal drug delivery in dairy cows. International Journal of Pharmaceutics, 2004, 282, 35-44.	5.2	17
20	Characterizing liquid turbid media by frequency-domain photon-migration spectroscopy. Journal of Biomedical Optics, 2009, 14, 024041.	2.6	17
21	Classification of recyclables using laser-induced breakdown spectroscopy for waste management. Spectroscopy Letters, 2018, 51, 257-265.	1.0	16
22	USING NEAR-INFRARED (NIR) LIGHT TO ESTIMATE THE SOLUBLE SOLIDS AND DRY MATTER CONTENT OF KIWIFRUIT. Acta Horticulturae, 1998, , 109-114.	0.2	16
23	Time-resolved measurements of population densities in a Sr⁺recombination laser. IEEE Journal of Quantum Electronics, 1987, 23, 2028-2032.	1.9	15
24	Optical properties of healthy and rotten onion flesh from 700 to 1000â€¯nm. Postharvest Biology and Technology, 2018, 140, 1-10.	6.0	15
25	Collisional and radiative processes in a laser-pumped barium vapour. Journal of Physics B: Atomic and Molecular Physics, 1986, 19, 2645-2658.	1.6	14
26	Thermal Stability of Intralipid Optical Phantoms. Applied Spectroscopy, 2013, 67, 993-996.	2.2	14
27	Investigating aquaphotomics for temperature-independent prediction of soluble solids content of pure apple juice. Journal of Near Infrared Spectroscopy, 2020, 28, 103-112.	1.5	14
28	Polarisation and wavelength selective transmission through nanohole structures with multiple grating geometry. Optics Express, 2008, 16, 5832.	3.4	13
29	Range imager performance comparison in homodyne and heterodyne operating modes. , 2009, , .		13
30	Reference-beam storage for long-range low-coherence pulsed Doppler lidar. Applied Optics, 2001, 40, 3076.	2.1	12
31	Time-resolved measurements of excited state densities in a copper vapor laser. IEEE Journal of Quantum Electronics, 1990, 26, 1609-1619.	1.9	10
32	Phase-polarisation contrast for surface plasmon resonance based on low cost grating substrates. Current Applied Physics, 2008, 8, 351-354.	2.4	10
33	Comparison of a dual-laser and a Vis-NIR spectroscopy system for detection of chilling injury in kiwifruit. Postharvest Biology and Technology, 2021, 175, 111418.	6.0	9
34	Radial Excited-State Density Effects In A Small-Bore Copper Vapour Laser. , 1989, 1041, 25.		8
35	Single sideband techniques for laser Doppler velocimeter frequency offset. Optical Engineering, 2003, 42, 3239.	1.0	8
36	Validated simulations of diffuse optical transmission measurements on produce. Computers and Electronics in Agriculture, 2017, 134, 94-101.	7.7	8

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37	Staff perceptions of higher education science and engineering learning communities. Research in Science and Technological Education, 2008, 26, 279-294.	2.5	7
38	Estimation of transient surge energy transferred with associated time delays for individual components of surge protector circuits. IET Power Electronics, 2015, 8, 685-692.	2.1	7
39	Investigations of optical geometry and sample positioning in NIRS transmittance for detecting vascular browning in apples. Computers and Electronics in Agriculture, 2018, 155, 32-40.	7.7	7
40	Visible/Near Infrared Hyperspectral Imaging via Spatial Illumination Source Modulation. Journal of Near Infrared Spectroscopy, 2007, 15, 395-399.	1.5	6
41	Temperature dependence of near-infrared spectra of whole blood. Journal of Biomedical Optics, 2008, 13, 034016.	2.6	6
42	A spatially resolved transmittance spectroscopy system for detecting internal rots in onions. Postharvest Biology and Technology, 2020, 163, 111141.	6.0	6
43	Correction of Temperature Variation with Independent Water Samples to Predict Soluble Solids Content of Kiwifruit Juice Using NIR Spectroscopy. Molecules, 2022, 27, 504.	3.8	6
44	Comparison of Hadamard imaging and compressed sensing for low resolution hyperspectral imaging. , 2008, , .		5
45	Investigation of failure patterns of desktop computer power supplies using a lightning surge simulator and the generation of a database for a comprehensive surge propagation study. , 2010, , .		5
46	Radially symmetric excitation and collection optics for flow cytometric sorting of aspherical cells. , 1997, 29, 363-370.		4
47	Electronically controlled, intravaginal drug delivery. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2004, 218, 1409-1415.	2.4	4
48	Reference beam method for source modulated Hadamard multiplexing. , 2008, , .		4
49	An Optimised Six-Wavelength Model for Predicting Kiwifruit Dry Matter. Journal of Near Infrared Spectroscopy, 2015, 23, 103-109.	1.5	4
50	Identification of Contamination Levels and the Microstructure of Metal Injection Moulded Titanium. Key Engineering Materials, 0, 704, 161-169.	0.4	4
51	Validated multi-wavelength simulations of light transport in healthy onion. Computers and Electronics in Agriculture, 2018, 146, 22-30.	7.7	4
52	Amplified reference pulse storage for low-coherence pulsed Doppler lidar. Applied Optics, 2006, 45, 8346.	2.1	3
53	Polarization tunable selective polariton generator. Applied Physics Letters, 2009, 94, 101111.	3.3	3
54	A power-saving modulation technique for time-of-flight range imaging sensors. Proceedings of SPIE, 2011, , .	0.8	3

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55	Laser-induced breakdown spectroscopy analysis of sodium in pelletised pasture samples. , 2015, , .		3
56	Non-destructive detection of chilling injury in kiwifruit using a dual-laser scanning system with a principal component analysis - back propagation neural network. Journal of Near Infrared Spectroscopy, 2022, 30, 67-73.	1.5	3
57	Numerical simulation of surge protection circuits and experimental verification using a lightning surge simulator. , 2012, , .		2
58	Selective Surface Sintering Using a Laser-Induced Breakdown Spectroscopy System. Journal of Spectroscopy, 2017, 2017, 1-11.	1.3	2
59	Interactions of Linearly Polarized and Unpolarized Light on Kiwifruit Using Aquaphotomics. Molecules, 2022, 27, 494.	3.8	2
60	<title>On-line milk spectrometry: analysis of bovine milk composition</title>. , 2005, 5852, 698.		1
61	Low cost optical particle detection for lab on chip systems based on DVD technology. Proceedings of SPIE, 2007, , .	0.8	1
62	Computer vision and image processing at the University of Waikato. , 2010, , .		1
63	Development of a multispectral imaging system for apple firmness prediction. , 2015, , .		1
64	Fruit orientation in NIR transmission for vascular browning in apples. , 2017, , .		1
65	Considerations Needed for Sensing Mineral Nutrient Levels in Pasture Using a Benchtop Laser-Induced Breakdown Spectroscopy System. Smart Sensors, Measurement and Instrumentation, 2019, , 387-421.	0.6	1
66	<title>New optical configuration for flow cytometric sorting of aspherical cells</title>. , 1997, , .		0
67	<title>Fluorescence photon migration techniques for the on-farm measurement of somatic cell count in fresh cow's milk</title>. , 2005, , .		0
68	Interferometric surface plasmon resonance based on low-cost grating substrates. , 2007, , .		0
69	Design considerations of selective polariton generators for multi-state plasmonic devices. Proceedings of SPIE, 2008, , .	0.8	0
70	Considerations needed for sensing mineral nutrient levels in fresh pasture using LIBS. , 2017, , .		0