

# Wolfgang Petrich

## List of Publications by Year in descending order

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Version: 2024-02-01

21  
papers

1,587  
citations

623734

14  
h-index

713466

21  
g-index

21  
all docs

21  
docs citations

21  
times ranked

2652  
citing authors

#	ARTICLE	IF	CITATIONS
1	A comparison of random forest and its Gini importance with standard chemometric methods for the feature selection and classification of spectral data. <i>BMC Bioinformatics</i> , 2009, 10, 213.	2.6	804
2	MID-INFRARED AND RAMAN SPECTROSCOPY FOR MEDICAL DIAGNOSTICS. <i>Applied Spectroscopy Reviews</i> , 2001, 36, 181-237.	6.7	131
3	Predicting the early risk of chronic kidney disease in patients with diabetes using real-world data. <i>Nature Medicine</i> , 2019, 25, 57-59.	30.7	120
4	Antemortem Identification of Bovine Spongiform Encephalopathy from Serum Using Infrared Spectroscopy. <i>Analytical Chemistry</i> , 2003, 75, 6673-6678.	6.5	68
5	Quantum cascade laser-based hyperspectral imaging of biological tissue. <i>Journal of Biomedical Optics</i> , 2014, 19, 111607.	2.6	59
6	Multivariate feature selection and hierarchical classification for infrared spectroscopy: serum-based detection of bovine spongiform encephalopathy. <i>Analytical and Bioanalytical Chemistry</i> , 2007, 387, 1801-1807.	3.7	55
7	Disease pattern recognition in infrared spectra of human sera with diabetes mellitus as an example. <i>Applied Optics</i> , 2000, 39, 3372.	2.1	54
8	Biomedical applications of mid-infrared quantum cascade lasers – a review. <i>Analyst, The</i> , 2018, 143, 5888-5911.	3.5	48
9	Continuous glucose monitoring by means of mid-infrared transmission laser spectroscopy in vitro. <i>Analyst, The</i> , 2011, 136, 1192.	3.5	45
10	Correlation between the state of health of blood donors and the corresponding mid-infrared spectra of the serum. <i>Vibrational Spectroscopy</i> , 2002, 28, 117-129.	2.2	34
11	A fast recoiling silk-like elastomer facilitates nanosecond nematocyst discharge. <i>BMC Biology</i> , 2015, 13, 3.	3.8	34
12	Real-time mid-infrared imaging of living microorganisms. <i>Journal of Biophotonics</i> , 2016, 9, 61-66.	2.3	31
13	A Quantitative Look Inside the Body: Minimally Invasive Infrared Analysis in Vivo. <i>Analytical Chemistry</i> , 2014, 86, 10511-10514.	6.5	24
14	Surface-enhanced mid-infrared spectroscopy using a quantum cascade laser. <i>Optics Express</i> , 2015, 23, 5670.	3.4	22
15	Towards a quantum cascade laser-based implant for the continuous monitoring of glucose. <i>Analyst, The</i> , 2018, 143, 6025-6036.	3.5	13
16	On the role of interference in laser-based mid-infrared widefield microspectroscopy. <i>Journal of Biophotonics</i> , 2018, 11, e201800015.	2.3	11
17	Effective Fragment Potential Study of the Influence of Hydration on the Vibrational Spectrum of Glucose. <i>Journal of Physical Chemistry A</i> , 2011, 115, 12373-12379.	2.5	10
18	Fluorescence Properties of Carba Nicotinamide Adenine Dinucleotide for Glucose Sensing. <i>ChemPhysChem</i> , 2012, 13, 1302-1306.	2.1	10

#	ARTICLE	IF	CITATIONS
19	Optical properties of porcine dermis in the mid-infrared absorption band of glucose. <i>Analyst, The</i> , 2017, 142, 1235-1243.	3.5	8
20	Translating vibrational spectroscopy into clinical applications – vision or reality?. <i>Faraday Discussions</i> , 2016, 187, 603-607.	3.2	5
21	A quantum cascade laser-based goniometer for the determination of tissue optical properties in the mid-infrared. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1