

Gang Li

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

127
papers

950
citations

16
h-index

22
g-index

129
ext. papers

1,157
ext. citations

3
avg, IF

4.53
L-index

#	Paper	IF	Citations
127	A novel algorithm combining oversampling and digital lock-in amplifier of high speed and precision. <i>Review of Scientific Instruments</i> , 2011 , 82, 095106	1.7	35
126	Employment of frame accumulation and shaped function for upgrading low-light-level image detection sensitivity. <i>Optics Letters</i> , 2012 , 37, 1361-3	3	28
125	Multi-pathlength method to improve the spectrometric analysis accuracy based on M + N theory. <i>RSC Advances</i> , 2016 , 6, 38849-38854	3.7	27
124	Calibration set selection method based on the M + N theory: application to non-invasive measurement by dynamic spectrum. <i>RSC Advances</i> , 2016 , 6, 113322-113326	3.7	26
123	A novel combined regularization algorithm of total variation and Tikhonov regularization for open electrical impedance tomography. <i>Physiological Measurement</i> , 2013 , 34, 823-38	2.9	25
122	Effect of antler extract on corticosteroid-induced avascular necrosis of the femoral head in rats. <i>Journal of Ethnopharmacology</i> , 2010 , 127, 124-9	5	25
121	Classification of diabetes and measurement of blood glucose concentration noninvasively using near infrared spectroscopy. <i>Infrared Physics and Technology</i> , 2014 , 67, 574-582	2.7	24
120	A review on M + N theory and its strategies to improve the accuracy of spectrochemical composition analysis of complex liquids. <i>Applied Spectroscopy Reviews</i> , 2020 , 55, 87-104	4.5	23
119	Blood species identification using Near-Infrared diffuse transmitted spectra and PLS-DA method. <i>Infrared Physics and Technology</i> , 2016 , 76, 587-591	2.7	22
118	Discrimination of human and nonhuman blood using visible diffuse reflectance spectroscopy. <i>Analytical Methods</i> , 2014 , 6, 9419-9423	3.2	20
117	Noninvasive hemoglobin measurement using dynamic spectrum. <i>Review of Scientific Instruments</i> , 2017 , 88, 083109	1.7	20
116	Quantitative determination based on the differences between spectra-temperature relationships. <i>Talanta</i> , 2016 , 155, 47-52	6.2	20
115	Composition analysis of scattering liquids based on spatially offset visible-near-infrared spectroscopy. <i>Applied Spectroscopy</i> , 2012 , 66, 1347-52	3.1	19
114	Spectral data quality assessment based on variability analysis: application to noninvasive hemoglobin measurement by dynamic spectrum. <i>Analytical Methods</i> , 2015 , 7, 5565-5573	3.2	17
113	Study on the effect of spectral difference coefficient on the precision of quantitative spectral analysis. <i>Analytical Methods</i> , 2016 , 8, 4648-4658	3.2	17
112	Double-sampling to improve signal-to-noise ratio (SNR) of dynamic spectrum (DS) in full spectral range. <i>Optical and Quantum Electronics</i> , 2014 , 46, 691-698	2.4	16
111	The differential Howland current source with high signal to noise ratio for bioimpedance measurement system. <i>Review of Scientific Instruments</i> , 2014 , 85, 055111	1.7	16

110	Accurate NIRS measurement of muscle oxygenation by correcting the influence of a subcutaneous fat layer 1998 ,		16
109	Wavelength selection for portable noninvasive blood component measurement system based on spectral difference coefficient and dynamic spectrum. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018 , 193, 40-46	4.4	16
108	Detection of free hemoglobin in blood products using transmission spectra and fluorescence spectra for quality assurance. <i>Analytical Methods</i> , 2016 , 8, 4239-4244	3.2	15
107	Calibration of diffuse correlation spectroscopy blood flow index with venous-occlusion diffuse optical spectroscopy in skeletal muscle. <i>Journal of Biomedical Optics</i> , 2015 , 20, 125005	3.5	15
106	Digital lock-in algorithm and parameter settings in multi-channel sensor signal detection. <i>Measurement: Journal of the International Measurement Confederation</i> , 2013 , 46, 2519-2524	4.6	14
105	Optimum method of applying and removing a shaped-function signal for low-light-level image detection. <i>Applied Optics</i> , 2013 , 52, 7934-41	1.7	14
104	A review on the strategies for reducing the non-linearity caused by scattering on spectrochemical quantitative analysis of complex solutions. <i>Applied Spectroscopy Reviews</i> , 2020 , 55, 351-377	4.5	14
103	Nondestructive Measurement of Hemoglobin in Blood Bags Based on Multi-Pathlength VIS-NIR Spectroscopy. <i>Scientific Reports</i> , 2018 , 8, 2204	4.9	13
102	Optimum method of image acquisition using sawtooth-shaped-function optical signal to improve grey-scale resolution. <i>Journal of Modern Optics</i> , 2016 , 63, 1539-1543	1.1	13
101	Non-invasive measurement of haemoglobin based on dynamic spectrum method. <i>Transactions of the Institute of Measurement and Control</i> , 2013 , 35, 16-24	1.8	13
100	Uterine electromyogram topography to represent synchronization of uterine contractions. <i>International Journal of Gynecology and Obstetrics</i> , 2007 , 97, 120-4	4	13
99	Dynamic Spectrum for noninvasive blood component analysis and its advances. <i>Applied Spectroscopy Reviews</i> , 2019 , 54, 736-757	4.5	13
98	Effect on measurement accuracy of transillumination using sawtooth-shaped-function optical signal. <i>Review of Scientific Instruments</i> , 2016 , 87, 115106	1.7	12
97	Optimal wavelength selection for visible diffuse reflectance spectroscopy discriminating human and nonhuman blood species. <i>Analytical Methods</i> , 2016 , 8, 381-385	3.2	12
96	Fast digital lock-in amplifier for dynamic spectrum extraction. <i>Journal of Biomedical Optics</i> , 2013 , 18, 57003	3.5	12
95	A method to remove odd harmonic interferences in square wave reference digital lock-in amplifier. <i>Review of Scientific Instruments</i> , 2013 , 84, 025115	1.7	12
94	Preparation of porous TiO ₂ /Ti composite membrane for immunoisolation. <i>Applied Surface Science</i> , 2008 , 255, 2256-2258	6.7	12
93	An artificial-intelligence approach to ECG analysis. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2000 , 19, 95-100		12

92	Noncontact discrimination of animal and human blood with vacuum blood vessel and factors affect the discrimination. <i>Infrared Physics and Technology</i> , 2017 , 81, 210-214	2.7	11
91	Noninvasive hemoglobin measurement based on optimizing Dynamic Spectrum method. <i>Spectroscopy Letters</i> , 2017 , 50, 164-170	1.1	11
90	Dynamic spectrum extraction method based on independent component analysis combined dual-tree complex wavelet transform. <i>RSC Advances</i> , 2017 , 7, 11198-11205	3.7	11
89	Methodological evaluation and comparison of five urinary albumin measurements. <i>Journal of Clinical Laboratory Analysis</i> , 2011 , 25, 324-9	3	11
88	. <i>IEEE Transactions on Magnetics</i> , 2010 , 46, 2635-2638	2	9
87	Norcantharidin combined with ABT-737 for hepatocellular carcinoma: Therapeutic effects and molecular mechanisms. <i>World Journal of Gastroenterology</i> , 2016 , 22, 3962-8	5.6	9
86	Dynamic spectrum nonlinear modeling of VIS & NIR band based on RBF neural network for noninvasive blood component analysis to consider the effects of scattering. <i>Infrared Physics and Technology</i> , 2019 , 96, 77-83	2.7	9
85	M+N theory and UV-Vis-NIR transmission spectroscopy used in quantitative analysis of total bilirubin. <i>Infrared Physics and Technology</i> , 2018 , 94, 65-68	2.7	9
84	The relationship between the perfusion index and precision of noninvasive blood component measurement based on dynamic spectroscopy. <i>Analytical Methods</i> , 2017 , 9, 2578-2584	3.2	8
83	Optimized lighting method of applying shaped-function signal for increasing the dynamic range of LED-multispectral imaging system. <i>Review of Scientific Instruments</i> , 2018 , 89, 025104	1.7	8
82	Wavelength selection method based on test analysis of variance: application to oximetry. <i>Analytical Methods</i> , 2014 , 6, 1082-1089	3.2	8
81	A Multiple Biomedical Signals Synchronous Acquisition Circuit Based on Over-Sampling and Shaped Signal for the Application of the Ubiquitous Health Care. <i>Circuits, Systems, and Signal Processing</i> , 2014 , 33, 3003-3017	2.2	8
80	Pulse wave detection method based on the bio-impedance of the wrist. <i>Review of Scientific Instruments</i> , 2016 , 87, 055001	1.7	8
79	The influence of different integration time on stoichiometric analysis in near infrared grating spectrometers. <i>Infrared Physics and Technology</i> , 2017 , 86, 130-134	2.7	7
78	Use of bi-level pulsed frequency-division excitation for improving blood oxygen saturation precision. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018 , 129, 523-529	4.6	7
77	Optimization of measurement arrangements for magnetic detection electrical impedance tomography. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 444-52	5	7
76	Reduction of package-induced error for the composition analysis of in-package liquid products based on transmission spectrum. <i>RSC Advances</i> , 2017 , 7, 26729-26734	3.7	7
75	Effects of 15 Hz square wave magnetic fields on the voltage-gated sodium and potassium channels in prefrontal cortex pyramidal neurons. <i>International Journal of Radiation Biology</i> , 2017 , 93, 449-455	2.9	6

74	Improving the quantitative analysis accuracy of bagged liquid components with strong scattering by multi-pathlength data fusion. <i>Infrared Physics and Technology</i> , 2019 , 99, 39-44	2.7	6
73	Non-linearity correction in NIR absorption spectra by grouping modeling according to the content of analyte. <i>Scientific Reports</i> , 2018 , 8, 8564	4.9	6
72	Influence of water on noninvasive hemoglobin measurement by Dynamic Spectrum. <i>Analytical Methods</i> , 2013 , 5, 4660	3.2	6
71	Improving the analysis accuracy of components in blood by SSP-MCSD and multi-mode spectral data fusion. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020 , 228, 117778	4.4	6
70	Heterogeneity Detection Method for Transmission Multispectral Imaging Based on Contour and Spectral Features. <i>Sensors</i> , 2019 , 19,	3.8	6
69	An Optimizing Dynamic Spectrum Differential Extraction Method for Noninvasive Blood Component Analysis. <i>Applied Spectroscopy</i> , 2020 , 74, 23-33	3.1	6
68	Identification of blood species based on diffuse reflectance and transmission joint spectra with machine learning method. <i>Infrared Physics and Technology</i> , 2018 , 88, 200-205	2.7	6
67	Employment of the appropriate range of sawtooth-shaped-function illumination intensity to improve the image quality. <i>Optik</i> , 2018 , 175, 189-196	2.5	6
66	Suppression of inter-device variation for component analysis of turbid liquids based on spatially resolved diffuse reflectance spectroscopy. <i>Review of Scientific Instruments</i> , 2017 , 88, 033104	1.7	5
65	A Dynamic Spectrum extraction method for extracting blood scattering information - Dual-position extraction method. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019 , 221, 116965	4.4	5
64	Combined effects of PPG preprocess and dynamic spectrum extraction on predictive performance of non-invasive detection of blood components based on dynamic spectrum. <i>Infrared Physics and Technology</i> , 2018 , 92, 436-442	2.7	5
63	Principal frequency component analysis based on modulate chopper technique used in diffuse reflectance spectroscopy measurement. <i>Applied Optics</i> , 2018 , 57, 1043-1049	1.7	5
62	Employment of sawtooth-shaped-function excitation signal and oversampling for improving resistance measurement accuracy. <i>Review of Scientific Instruments</i> , 2016 , 87, 105104	1.7	5
61	Optimization of a digital lock-in algorithm with a square-wave reference for frequency-divided multi-channel sensor signal detection. <i>Review of Scientific Instruments</i> , 2016 , 87, 085102	1.7	5
60	Dual-Mean Extraction Method of Dynamic Spectrum for Suppressing Random Noise and Coarse Error. <i>IEEE Access</i> , 2019 , 7, 168681-168687	3.5	5
59	Evaluation of measurement and stimulation patterns in open electrical impedance tomography with scanning electrode. <i>Medical and Biological Engineering and Computing</i> , 2015 , 53, 589-97	3.1	4
58	Improving the spectral measurement accuracy based on temperature distribution and spectra-temperature relationship. <i>Infrared Physics and Technology</i> , 2018 , 90, 87-94	2.7	4
57	Classification of Heterogeneity on Multi-Spectral Transmission Image Based on Modulation-Demodulation-Frame Accumulation and Pattern Recognition. <i>IEEE Access</i> , 2019 , 7, 97732-97744	3.5	4

56	Synchronous acquisition of multi-channel signals by single-channel ADC based on square wave modulation. <i>Review of Scientific Instruments</i> , 2017 , 88, 085108	1.7	4
55	A New Electrode Mode for Magnetic Detection Electrical Impedance Tomography: Computer Simulation Study. <i>IEEE Transactions on Magnetics</i> , 2012 , 48, 2543-2550	2	4
54	An improved device for bioimpedance deviation measurements based on 4-electrode half bridge. <i>Review of Scientific Instruments</i> , 2016 , 87, 105107	1.7	4
53	Improve the precision of platelet spectrum quantitative analysis based on "M+N" theory. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022 , 264, 120291	4.4	4
52	New method of extracting information of arterial oxygen saturation based on [P]. <i>Review of Scientific Instruments</i> , 2017 , 88, 043107	1.7	3
51	Non-destructive analysis for the in-flexible-containers liquid composition based on WTFE-NPLS method. <i>Infrared Physics and Technology</i> , 2019 , 99, 277-283	2.7	3
50	Transmission versus reflection spectroscopy for discrimination of human and nonhuman blood. <i>Infrared Physics and Technology</i> , 2019 , 99, 1-4	2.7	3
49	Detection of heterogeneity on multi-spectral transmission image based on multiple types of pseudo-color maps. <i>Infrared Physics and Technology</i> , 2020 , 106, 103285	2.7	3
48	Image quality assessment metric for frame accumulated image. <i>Review of Scientific Instruments</i> , 2018 , 89, 013703	1.7	3
47	A method to eliminate the influence of incident light variations in spectral analysis. <i>Review of Scientific Instruments</i> , 2018 , 89, 063103	1.7	3
46	Improving heterogeneous classification accuracy based on the MDFAT and the combination feature information of multi-spectral transmission images. <i>Infrared Physics and Technology</i> , 2019 , 102, 102992	2.7	3
45	An efficient optimization method to improve the measuring accuracy of oxygen saturation by using triangular wave optical signal. <i>Review of Scientific Instruments</i> , 2017 , 88, 093103	1.7	3
44	Fast demodulation algorithm for multi-wavelength LED frequency-division modulation transmission hyperspectral imaging. <i>Optik</i> , 2020 , 202, 163110	2.5	3
43	The effect of spectral photoplethysmography amplification and its application in dynamic spectrum for effective noninvasive detection of blood components. <i>Optics and Laser Technology</i> , 2021 , 133, 106515	4.2	3
42	Repair of osteonecrosis of the femoral head : 3D printed Cervi cornus Colla deproteinized bone scaffolds. <i>Der Orthopade</i> , 2019 , 48, 213-223	1.9	2
41	Recognition of Heterogeneous Edges in Multiwavelength Transmission Images Based on the Weighted Constraint Decision Method. <i>Applied Spectroscopy</i> , 2020 , 74, 883-893	3.1	2
40	Magnetic detection electrical impedance tomography with total variation regularization. <i>Bio-Medical Materials and Engineering</i> , 2014 , 24, 2857-64	1	2
39	Fill light for grayscale superresolution. <i>Optical Engineering</i> , 2013 , 52, 073105	1.1	2

38	Effect of Deep Brain Stimulation on Neural Activity of Subthalamic Nucleus in Rats*. <i>Progress in Biochemistry and Biophysics</i> , 2009 , 36, 1049-1055		2
37	A Fusion Method in Frequency Domain for Multi-Wavelength Transmission Image. <i>IEEE Access</i> , 2019 , 7, 168371-168381	3.5	2
36	A Single-Channel Amplifier for Simultaneously Monitoring Impedance Respiration Signal and ECG Signal. <i>Circuits, Systems, and Signal Processing</i> , 2021 , 40, 559-571	2.2	2
35	Cuff-less continuous blood pressure measurement based on multiple types of information fusion. <i>Biomedical Signal Processing and Control</i> , 2021 , 68, 102549	4.9	2
34	Dual-mode spectrum of transmission and fluorescence using single ultraviolet LED light source and their application in analyzing total bilirubin in serum. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022 , 264, 120305	4.4	2
33	Improving the nondestructive analysis accuracy of liquids in a flexible container based on the multi-pathlength spectrum method. <i>Review of Scientific Instruments</i> , 2019 , 90, 056101	1.7	1
32	Determine the significant digit of spectral data and reduce its redundant digits to eliminate the chance correlation problem based on the Kalami slicing method. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2019 , 187, 1-5	3.8	1
31	The nonlinear variation regularization algorithm for the magnetic resonance electrical impedance tomography. <i>International Journal of Imaging Systems and Technology</i> , 2015 , 25, 68-76	2.5	1
30	Monte Carlo simulation of photon migration in multi-component media. <i>Optical and Quantum Electronics</i> , 2015 , 47, 1919-1931	2.4	1
29	Systematic Proportional Method for Improving the Measurement Accuracy of Passive Sensor Measurement System. <i>IEEE Access</i> , 2020 , 8, 3980-3986	3.5	1
28	Modification method to reduce the impact of blood vessel on noncontact discrimination of human blood based on M+N theory. <i>Infrared Physics and Technology</i> , 2018 , 88, 119-122	2.7	1
27	An in Vivo Acquisition Device for Near Infrared Blood Spectra 2007 ,		1
26	Quantitative analysis of urea in serum by synchronous modulation and demodulation fluorescence spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021 , 120645	4.4	1
25	Effects of 50 Hz Magnetic Fields With Different Intensities Exposure on Delayed Rectifier Potassium Channel of Neurons*. <i>Progress in Biochemistry and Biophysics</i> , 2012 , 39, 458-463		1
24	Effects of 50 Hz Magnetic Fields With Different Intensities Exposure on Transient Outward Potassium Channel of Cortical Neurons*. <i>Progress in Biochemistry and Biophysics</i> , 2011 , 38, 1036-1042		1
23	Optimizing Monte Carlo simulation for detecting the internal information in a fat muscle media. <i>Optical and Quantum Electronics</i> , 2016 , 48, 1	2.4	1
22	Determination of photon quantity in Monte Carlo simulation. <i>Optical and Quantum Electronics</i> , 2016 , 48, 1	2.4	1
21	Image Enhancement via Indented Frame Over Fusion. <i>IEEE Access</i> , 2019 , 7, 181092-181099	3.5	1

20	New strategy of sample set division in spectroscopy analysis. <i>Infrared Physics and Technology</i> , 2021 , 117, 103824	2.7	1
19	A novel method for selecting the set optimal wavelength combination in multi-spectral transmission image. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021 , 261, 120080	4.4	1
18	Blood hyperviscosity identification with reflective spectroscopy of tongue tip based on principal component analysis combining artificial neural network. <i>BioMedical Engineering OnLine</i> , 2018 , 17, 60	4.1	0
17	Analysis of serum total bilirubin content based on dual-position joint spectrum of "M plus N" theory and the logarithmic method.. <i>Analytical and Bioanalytical Chemistry</i> , 2022 , 414, 2397	4.4	0
16	Towards robust reduction of nonlinear errors in dynamic spectrum spectroscopy for effective noninvasive optical detection of blood components. <i>Infrared Physics and Technology</i> , 2022 , 121, 104049	2.7	0
15	Noninvasive detection and analysis of human globulin based on dynamic spectrum.. <i>Analytica Chimica Acta</i> , 2022 , 1191, 339298	6.6	0
14	Employment of image oversampling and downsampling techniques for improving grayscale resolution. <i>Optical and Quantum Electronics</i> , 2021 , 53, 1	2.4	0
13	Noninvasive blood glucose detection system based on dynamic spectrum and "M+N" theory.. <i>Analytica Chimica Acta</i> , 2022 , 1201, 339635	6.6	0
12	A two-dimensional sample screening method based on data quality and variable correlation.. <i>Analytica Chimica Acta</i> , 2022 , 1203, 339700	6.6	0
11	A feasibility study on improving the non-invasive detection accuracy of bottled Shuanghuanglian oral liquid using near infrared spectroscopy.. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022 , 274, 121120	4.4	0
10	Application of multi-wavelength dual-position absorption spectrum to improve the accuracy of leukocyte spectral quantitative analysis based on "M+N" theory.. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022 , 276, 121199	4.4	0
9	Heterogeneity classification based on hyperspectral transmission imaging and multivariate data analysis. <i>Infrared Physics and Technology</i> , 2022 , 104180	2.7	0
8	Reduction of the influence of film thickness on diffuse reflectance spectroscopy measurement of the tongue. <i>Review of Scientific Instruments</i> , 2019 , 90, 013109	1.7	
7	Coding method for the study of the intrinsic mechanism of spectral analysis. <i>Analytical Methods</i> , 2015 , 7, 3988-3992	3.2	
6	Improved method on image detection at low light level using a sinusoidal-shaped-function signal. <i>Journal of Modern Optics</i> , 2015 , 62, 1527-1534	1.1	
5	Improving the Model Migration Ability by a Hyperspectral Method With a High Spatial Resolution. <i>IEEE Access</i> , 2019 , 7, 171260-171271	3.5	
4	Higher precision integer operations instead of floating-point operations in computers or microprocessors. <i>Review of Scientific Instruments</i> , 2021 , 92, 025104	1.7	
3	A combined multi-pathlength and wavelength optimization method for accurate detection of platelet count. <i>Infrared Physics and Technology</i> , 2022 , 104174	2.7	

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| 2 | Method of carrier frequency arrangement for suppressing the adjacent channel interference caused by camera nonlinearity during LED-multispectral imaging.. <i>Applied Optics</i> , 2022 , 61, 3240-3246 | 1.7 |
| 1 | "Two-dimensional Terraced Compression method" and its application in contour detection of transmission image.. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022 , 278, 121307 | 4.4 |