Ling Lin

List of Publications by Year
in descending order

115 papers	1,147 citations	430874 18 h-index	580821 25 g-index
116 all docs	116 docs citations	116 times ranked	466 citing authors

#	Article	IF	Citations
1	A novel algorithm combining oversampling and digital lock-in amplifier of high speed and precision. Review of Scientific Instruments, 2011, 82, 095106.	1.3	48
2	Kennard-Stone combined with least square support vector machine method for noncontact discriminating human blood species. Infrared Physics and Technology, 2017, 86, 116-119.	2.9	42
3	Employment of frame accumulation and shaped function for upgrading low-light-level image detection sensitivity. Optics Letters, 2012, 37, 1361.	3.3	35
4	Multi-pathlength method to improve the spectrometric analysis accuracy based on "M + N" theory. RSC Advances, 2016, 6, 38849-38854.	3.6	35
5	Electrochemical performance of a three-layer electrode based on Bi nanoparticles, multi-walled carbon nanotube composites for simultaneous Hg(II) and Cu(II) detection. Chinese Chemical Letters, 2020, 31, 2752-2756.	9.0	35
6	Calibration set selection method based on the "M + N" theory: application to non-invasive measurement by dynamic spectrum. RSC Advances, 2016, 6, 113322-113326.	3.6	33
7	A review on M‰+‰N theory and its strategies to improve the accuracy of spectrochemical composition analysis of complex liquids. Applied Spectroscopy Reviews, 2020, 55, 87-104.	6.7	32
8	Classification of diabetes and measurement of blood glucose concentration noninvasively using near infrared spectroscopy. Infrared Physics and Technology, 2014, 67, 574-582.	2.9	30
9	Noninvasive hemoglobin measurement using dynamic spectrum. Review of Scientific Instruments, 2017, 88, 083109.	1.3	28
10	Dynamic Spectrum for noninvasive blood component analysis and its advances. Applied Spectroscopy Reviews, 2019, 54, 736-757.	6.7	23
11	Quantitative determination based on the differences between spectra-temperature relationships. Talanta, 2016, 155, 47-52.	5.5	22
12	A review on the strategies for reducing the non-linearity caused by scattering on spectrochemical quantitative analysis of complex solutions. Applied Spectroscopy Reviews, 2020, 55, 351-377.	6.7	22
13	Composition Analysis of Scattering Liquids Based on Spatially Offset Visible-Near-Infrared Spectroscopy. Applied Spectroscopy, 2012, 66, 1347-1352.	2.2	21
14	Double-sampling to improve signal-to-noise ratio (SNR) of dynamic spectrum (DS) in full spectral range. Optical and Quantum Electronics, 2014, 46, 691-698.	3.3	21
15	Spectral data quality assessment based on variability analysis: application to noninvasive hemoglobin measurement by dynamic spectrum. Analytical Methods, 2015, 7, 5565-5573.	2.7	21
16	Wavelength selection for portable noninvasive blood component measurement system based on spectral difference coefficient and dynamic spectrum. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 193, 40-46.	3.9	21
17	Study on the effect of spectral difference coefficient on the precision of quantitative spectral analysis. Analytical Methods, 2016, 8, 4648-4658.	2.7	20
18	A method to remove odd harmonic interferences in square wave reference digital lock-in amplifier. Review of Scientific Instruments, 2013, 84, 025115.	1.3	19

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19	Digital lock-in algorithm and parameter settings in multi-channel sensor signal detection. Measurement: Journal of the International Measurement Confederation, 2013, 46, 2519-2524.	5.0	18
20	Optimum method of applying and removing a shaped-function signal for low-light-level image detection. Applied Optics, 2013, 52, 7934.	1.8	18
21	Effect on measurement accuracy of transillumination using sawtooth-shaped-function optical signal. Review of Scientific Instruments, 2016, 87, 115106.	1.3	17
22	Detection of free hemoglobin in blood products using transmission spectra and fluorescence spectra for quality assurance. Analytical Methods, 2016, 8, 4239-4244.	2.7	17
23	<i>In situ</i> detection of heavy metal ions in sewage with screen-printed electrode-based portable electrochemical sensors. Analyst, The, 2021, 146, 5610-5618.	3.5	17
24	Noninvasive hemoglobin measurement based on optimizing Dynamic Spectrum method. Spectroscopy Letters, 2017, 50, 164-170.	1.0	16
25	Nondestructive Measurement of Hemoglobin in Blood Bags Based on Multi-Pathlength VIS-NIR Spectroscopy. Scientific Reports, 2018, 8, 2204.	3.3	16
26	â€œSynergy effectâ€•and its application in LED-multispectral imaging for improving image quality. Optics Communications, 2019, 438, 6-12.	2.1	16
27	Fast digital lock-in amplifier for dynamic spectrum extraction. Journal of Biomedical Optics, 2013, 18, 057003.	2.6	15
28	Non-invasive measurement of haemoglobin based on dynamic spectrum method. Transactions of the Institute of Measurement and Control, 2013, 35, 16-24.	1.7	15
29	Wavelength selection method based on test analysis of variance: application to oximetry. Analytical Methods, 2014, 6, 1082-1089.	2.7	15
30	Optimum method of image acquisition using sawtooth-shaped-function optical signal to improve grey-scale resolution. Journal of Modern Optics, 2016, 63, 1539-1543.	1.3	15
31	Modulating effects of onâ€•line low frequency electromagnetic fields on hippocampal longâ€•term potentiation in young male Spragueâ€•Dawley rat. Journal of Neuroscience Research, 2018, 96, 1775-1785.	2.9	15
32	Noninvasive human red blood cell counting based on dynamic spectrum. Infrared Physics and Technology, 2021, 113, 103604.	2.9	15
33	Dynamic spectrum extraction method based on independent component analysis combined dual-tree complex wavelet transform. RSC Advances, 2017, 7, 11198-11205.	3.6	12
34	Epithelium-Penetrable Nanoplatform with Enhanced Antibiotic Internalization for Management of Bacterial Keratitis. Biomacromolecules, 2021, 22, 2020-2032.	5.4	12
35	The relationship between the perfusion index and precision of noninvasive blood component measurement based on dynamic spectroscopy. Analytical Methods, 2017, 9, 2578-2584.	2.7	11
36	An Optimizing Dynamic Spectrum Differential Extraction Method for Noninvasive Blood Component Analysis. Applied Spectroscopy, 2020, 74, 23-33.	2.2	11

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37	A two-position spectral modeling method to increase the robustness of NIR analysis model. Infrared Physics and Technology, 2020, 104, 103053.	2.9	11
38	Bioadhesive glycosylated nanoformulations for extended trans-corneal drug delivery to suppress corneal neovascularization. Journal of Materials Chemistry B, 2021, 9, 4190-4200.	5.8	11
39	Pulse wave detection method based on the bio-impedance of the wrist. Review of Scientific Instruments, 2016, 87, 055001.	1.3	10
40	Dynamic spectrum nonlinear modeling of VIS & NIR band based on RBF neural network for noninvasive blood component analysis to consider the effects of scattering. Infrared Physics and Technology, 2019, 96, 77-83.	2.9	10
41	Broadening the bands for improving the accuracy of noninvasive blood component analysis. Infrared Physics and Technology, 2020, 111, 103506.	2.9	10
42	Detection of heterogeneity in multi-spectral transmission image based on spatial pyramid matching model and deep learning. Optics and Lasers in Engineering, 2020, 134, 106272.	3.8	10
43	Influence of water on noninvasive hemoglobin measurement by Dynamic Spectrum. Analytical Methods, 2013, 5, 4660.	2.7	9
44	Optimization of a digital lock-in algorithm with a square-wave reference for frequency-divided multi-channel sensor signal detection. Review of Scientific Instruments, 2016, 87, 085102.	1.3	9
45	Optimized lighting method of applying shaped-function signal for increasing the dynamic range of LED-multispectral imaging system. Review of Scientific Instruments, 2018, 89, 025104.	1.3	9
46	Classification of Heterogeneity on Multi-Spectral Transmission Image Based on Modulation-Demodulation-Frame Accumulation and Pattern Recognition. IEEE Access, 2019, 7, 97732-97744.	4.2	9
47	A high-efficiency acquisition method of LED-multispectral images based on frequency-division modulation and RGB camera. Optics Communications, 2021, 480, 126492.	2.1	9
48	A Multiple Biomedical Signals Synchronous Acquisition Circuit Based on Over-Sampling and Shaped Signal for the Application of the Ubiquitous Health Care. Circuits, Systems, and Signal Processing, 2014, 33, 3003-3017.	2.0	8
49	Employment of the appropriate range of sawtooth-shaped-function illumination intensity to improve the image quality. Optik, 2018, 175, 189-196.	2.9	8
50	Use of bi-level pulsed frequency-division excitation for improving blood oxygen saturation precision. Measurement: Journal of the International Measurement Confederation, 2018, 129, 523-529.	5.0	8
51	Improving the analysis accuracy of components in blood by SSP-MCSD and multi-mode spectral data fusion. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 228, 117778.	3.9	8
52	Noninvasive detection and analysis of human globulin based on dynamic spectrum. Analytica Chimica Acta, 2022, 1191, 339298.	5.4	8
53	Noninvasive blood glucose detection system based on dynamic spectrum and â€œM+Nâ€³ theory. Analytica Chimica Acta, 2022, 1201, 339635.	5.4	8
54	Reduction of package-induced error for the composition analysis of in-package liquid products based on transmission spectrum. RSC Advances, 2017, 7, 26729-26734.	3.6	7

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55	Improving heterogeneous classification accuracy based on the MDFAT and the combination feature information of multi-spectral transmission images. Infrared Physics and Technology, 2019, 102, 102992.	2.9	7
56	A Dynamic Spectrum extraction method for extracting blood scattering information â€" Dual-position extraction method. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 221, 116965.	3.9	7
57	Dual-Mean Extraction Method of Dynamic Spectrum for Suppressing Random Noise and Coarse Error. IEEE Access, 2019, 7, 168681-168687.	4.2	7
58	The effect of spectral photoplethysmography amplification and its application in dynamic spectrum for effective noninvasive detection of blood components. Optics and Laser Technology, 2021, 133, 106515.	4.6	7
59	Design of Submillimeter Magnetic Stimulation Instrumentation and Its Targeted Inhibitory Effect on Rat Model of Epilepsy. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	7
60	Cuff-less continuous blood pressure measurement based on multiple types of information fusion. Biomedical Signal Processing and Control, 2021, 68, 102549.	5.7	7
61	A New Electrode Mode for Magnetic Detection Electrical Impedance Tomography: Computer Simulation Study. IEEE Transactions on Magnetics, 2012, 48, 2543-2550.	2.1	6
62	Suppression of inter-device variation for component analysis of turbid liquids based on spatially resolved diffuse reflectance spectroscopy. Review of Scientific Instruments, 2017, 88, 033104.	1.3	6
63	Synchronous acquisition of multi-channel signals by single-channel ADC based on square wave modulation. Review of Scientific Instruments, 2017, 88, 085108.	1.3	6
64	Reducing the spectral nonlinearity error caused by varying integration time. Infrared Physics and Technology, 2018, 94, 48-54.	2.9	6
65	Fast demodulation algorithm for multi-wavelength LED frequency-division modulation transmission hyperspectral imaging. Optik, 2020, 202, 163110.	2.9	6
66	Exploring the formâ€•And timeâ€•dependent effect of lowâ€•frequency electromagnetic fields on maintenance of hippocampal longâ€•term potentiation. European Journal of Neuroscience, 2020, 52, 3166-3180.	2.6	6
67	Principal frequency component analysis based on modulate chopper technique used in diffuse reflectance spectroscopy measurement. Applied Optics, 2018, 57, 1043.	1.8	6
68	An improved device for bioimpedance deviation measurements based on 4-electrode half bridge. Review of Scientific Instruments, 2016, 87, 105107.	1.3	5
69	A Preprocessing Algorithm Based on Heterogeneity Detection for Transmitted Tissue Image. Eurasip Journal on Wireless Communications and Networking, 2019, 2019, .	2.4	5
70	A Single-Channel Amplifier for Simultaneously Monitoring Impedance Respiration Signal and ECG Signal. Circuits, Systems, and Signal Processing, 2021, 40, 559-571.	2.0	5
71	Clinical Efficacy of Infantile Massage in the Treatment of Infant Functional Constipation: A Meta-Analysis. Frontiers in Public Health, 2021, 9, 663581.	2.7	5
72	Employment of sawtooth-shaped-function excitation signal and oversampling for improving resistance measurement accuracy. Review of Scientific Instruments, 2016, 87, 105104.	1.3	5

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73	Considering blood scattering effect in noninvasive optical detection of blood components using dynamic spectrum along with time varying filter based empirical mode decomposition. Biomedical Signal Processing and Control, 2022, 71, 103266.	5.7	5
74	Quantitative analysis of urea in serum by synchronous modulation and demodulation fluorescence spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 268, 120645.	3.9	5
75	New method of extracting information of arterial oxygen saturation based on â˜	? |. Review of Scientific Instruments, 2017, 88, 043107.	1.3	4
76	Note: Demodulation of spectral signal modulated by optical chopper with unstable modulation frequency. Review of Scientific Instruments, 2017, 88, 106104.	1.3	4
77	An efficient optimization method to improve the measuring accuracy of oxygen saturation by using triangular wave optical signal. Review of Scientific Instruments, 2017, 88, 093103.	1.3	4
78	A method to eliminate the influence of incident light variations in spectral analysis. Review of Scientific Instruments, 2018, 89, 063103.	1.3	4
79	Effect of priming low-frequency magnetic fields on zero-Mg^{2+} -induced epileptiform discharges in rat hippocampal slices. Epilepsy Research, 2020, 167, 106464.	1.6	4
80	Recognition of Heterogeneous Edges in Multiwavelength Transmission Images Based on the Weighted Constraint Decision Method. Applied Spectroscopy, 2020, 74, 883-893.	2.2	4
81	A two-dimensional sample screening method based on data quality and variable correlation. Analytica Chimica Acta, 2022, 1203, 339700.	5.4	4
82	A high-efficiency acquisition method of LED multispectral images using Gray code based square wave frequency division modulation. , 2022, 126, 103507.		4
83	A calibration set selection method fusing multi-component based on Euclidean distance in spectral analysis of complex solution. Infrared Physics and Technology, 2022, 123, 104116.	2.9	4
84	A method for obtaining dynamic spectrum based on the proportion of multi-wavelength PPG waveform and applying it to noninvasive detection of human platelet content. Analytical and Bioanalytical Chemistry, 2022, 414, 5967-5977.	3.7	4
85	Assessment of spatial information for hyperspectral imaging of lesion. Proceedings of SPIE, 2016, , .	0.8	3
86	Image quality assessment metric for frame accumulated image. Review of Scientific Instruments, 2018, 89, 013703.	1.3	3
87	A Fusion Method in Frequency Domain for Multi-Wavelength Transmission Image. IEEE Access, 2019, 7, 168371-168381.	4.2	3
88	A Bioadhesive Nanoplatform Enhances the Permeation of Drugs Used to Treat Diabetic Macular Edema. ACS Applied Bio Materials, 2020, 3, 2314-2324.	4.6	3
89	Methods to improve the accuracy of spectrophotometer determination of serum creatinine. Infrared Physics and Technology, 2022, 121, 104016.	2.9	3
90	A crosstalk correction method to improve multi-wavelength LEDs imaging quality based on color camera and frame accumulation. Signal Processing: Image Communication, 2022, 102, 116624.	3.2	3

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91	Analysis of serum total bilirubin content based on dual-position joint spectrum of â€œM plus Nâ€•theory and the logarithmic method. Analytical and Bioanalytical Chemistry, 2022, 414, 2397-2408.	3.7	3
92	Apply a new characteristic wavelength screening method to improving the spectral quantitative analysis precision of multiple immune cell types. Infrared Physics and Technology, 2022, 123, 104140.	2.9	3
93	â€œTerrace compression methodâ€•and its application in heterogeneity contour detection of transmission images. Optics Communications, 2022, 514, 128114.	2.1	3
94	Application of multi-wavelength dual-position absorption spectrum to improve the accuracy of leukocyte spectral quantitative analysis based on â€œMÂ+ÂNâ€•theory. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 276, 121199.	3.9	3
95	â€œTwo-dimensional Terraced Compression methodâ€œ and its application in contour detection of transmission image. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 278, 121307.	3.9	3
96	Fill light for grayscale superresolution. Optical Engineering, 2013, 52, 073105.	1.0	2
97	Evaluation of dynamic spectrum extraction method based on salami slicing method. Infrared Physics and Technology, 2020, 111, 103551.	2.9	2
98	Dynamic Spectrum and BP Neural Network for Non-invasive Hemoglobin Measurement. Lecture Notes in Computer Science, 2010, , 67-74.	1.3	2
99	Heterogeneity classification based on hyperspectral transmission imaging and multivariate data analysis. Infrared Physics and Technology, 2022, , 104180.	2.9	2
100	Optimizing Monte Carlo simulation for detecting the internal information in a fatâ€“muscle media. Optical and Quantum Electronics, 2016, 48, 1.	3.3	1
101	Improving the nondestructive analysis accuracy of liquids in a flexible container based on the multi-pathlength spectrum method. Review of Scientific Instruments, 2019, 90, 056101.	1.3	1
102	Employment of image oversampling and downsampling techniques for improving grayscale resolution. Optical and Quantum Electronics, 2021, 53, 1.	3.3	1
103	Modeling with Multiple Correlated Spectral Data Based on Approximating the Nonlinear Spectrum Induced by Scattering. Applied Spectroscopy, 2021, 75, 000370282110365.	2.2	1
104	A novel method for selecting the set optimal wavelength combination in multi-spectral transmission image. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 261, 120080.	3.9	1
105	Towards robust reduction of nonlinear errors in dynamic spectrum spectroscopy for effective noninvasive optical detection of blood components. Infrared Physics and Technology, 2022, 121, 104049.	2.9	1
106	Extracting Lip Parameters in Speech Synthesis System Driven by Visual-Speech. , 0, , .		0
107	Characteristics of transient outward potassium channel exposed to 3 mT static magnetic field. Transactions of Tianjin University, 2009, 15, 319-323.	6.4	0
108	Reduction of the influence of film thickness on diffuse reflectance spectroscopy measurement of the tongue. Review of Scientific Instruments, 2019, 90, 013109.	1.3	0

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109	Improving the Model Migration Ability by a Hyperspectral Method With a High Spatial Resolution. IEEE Access, 2019, 7, 171260-171271.	4.2	0
110	Higher precision integer operations instead of floating-point operations in computers or microprocessors. Review of Scientific Instruments, 2021, 92, 025104.	1.3	0
111	Exploring the Inhibitory Effect of Low-frequency Magnetic Fields on Epileptiform Discharges in Juvenile Rat Hippocampus. Neuroscience, 2021, 467, 1-15.	2.3	0
112	Multiple Absorption Spectra Modeling Method for Improving Model Stability in Spectral Analysis. , 2019, , .		0
113	Single-Channel Grayscale Processing Algorithm for Transmission Tissue Images Based on Heterogeneity Detection. Lecture Notes in Electrical Engineering, 2020, , 520-528.	0.4	0
114	Method of carrier frequency arrangement for suppressing the adjacent channel interference caused by camera nonlinearity during LED-multispectral imaging. Applied Optics, 2022, 61, 3240.	1.8	0
115	LED multispectral imaging based on frequency-division modulation of square wave and synchronous triggering. Optik, 2022, 261, 169209.	2.9	0