Jiabin Jia

List of Publications by Year
in descending order

69 papers	1,616 citations	236925 25 h-index	302126 39 g-index
69 all docs	69 docs citations	69 times ranked	1062 citing authors

#	ARTICLE	IF	CITATIONS
1	Position Calibration of a Single Cell Measurement With Electrochemical Impedance Spectroscopy. IEEE Sensors Journal, 2023, 23, 4336-4343.	4.7	4
2	Determination of void fraction in wet-gas vertical flows via differential pressure measurement. Flow Measurement and Instrumentation, 2022, 83, 102080.	2.0	2
3	Error-Constraint Deep Learning Scheme for Electrical Impedance Tomography (EIT). IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	4.7	11
4	Diverse tomography applications. , 2022, , 853-875.		1
5	Multiscale Voltage Reconstruction With Attention-Based Network for Volume Fraction Prediction of Industrial Oilâ€"Water Two-Phase Flow by EIT. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	4.7	6
6	Fast Dual-LiDAR Reconstruction for Dynamic Wind Field Retrieval. Atmosphere, 2022, 13, 905.	2.3	0
7	Flooding Prognostic in Packed Columns Based on Electrical Capacitance Tomography and Convolution Neural Network. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-14.	4.7	1
8	Ultrasonic Testing of Carbon Fiber-Reinforced Polymer Composites. Journal of Sensors, 2022, 2022, 1-20.	1.1	3
9	Preliminary study of CO_2 frost formation during cryogenic carbon capture using tomography analysis. Fuel, 2022, 328, 125271.	6.4	6
10	Efficient Multitask Structure-Aware Sparse Bayesian Learning for Frequency-Difference Electrical Impedance Tomography. IEEE Transactions on Industrial Informatics, 2021, 17, 463-472.	11.3	88
11	A Novel Method for the Image Quality Improvement of Ultrasonic Tomography. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	12
12	Exploring Respiratory Motion Tracking Through Electrical Impedance Tomography. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	4.7	10
13	Shape Reconstruction With Multiphase Conductivity for Electrical Impedance Tomography Using Improved Convolutional Neural Network Method. IEEE Sensors Journal, 2021, 21, 9277-9287.	4.7	38
14	Measuring 3D Cell Culture Viability in Multiple 3D Printed Scaffolds Within a Single Miniature Electrical Impedance Tomography Sensor. Advanced Engineering Materials, 2021, 23, 2100338.	3.5	3
15	Flow regime transition in countercurrent packed column monitored by ECT. Chemical Engineering Journal, 2021, 420, 129841.	12.7	6
16	A Wideband Electrical Impedance Tomography System Based on Sensitive Bioimpedance Spectrum Bandwidth. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 144-154.	4.7	42
17	Development of a Wearable Electrical Impedance Tomographic Sensor for Gesture Recognition With Machine Learning. IEEE Journal of Biomedical and Health Informatics, 2020, 24, 1550-1556.	6.3	34
18	Improved Time-of-Flight Estimation Method for Acoustic Tomography System. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 974-984.	4.7	24

#	Article	IF	Citations
19	Online Time-Resolved Reconstruction Method for Acoustic Tomography System. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4033-4041.	4.7	14
20	Deep Learning Based Cell Imaging with Electrical Impedance Tomography. , 2020, , .		18
21	V-Net Deep Imaging Method for Electrical Resistance Tomography. IEEE Sensors Journal, 2020, 20, 6460-6469.	4.7	46
22	Time Sequence Learning for Electrical Impedance Tomography Using Bayesian Spatiotemporal Priors. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6045-6057.	4.7	52
23	A hybrid Genetic Algorithm and Levenbergâ€"Marquardt (GAâ€"LM) method for cell suspension measurement with electrical impedance spectroscopy. Review of Scientific Instruments, 2020, 91, 124104.	1.3	15
24	Calibrated Frequency-Difference Electrical Impedance Tomography for 3D Tissue Culture Monitoring. IEEE Sensors Journal, 2019, 19, 7813-7821.	4.7	8
25	High Sensitive Capacitive Sensing Method for Thickness Detection of the Water Film on an Insulation Surface. IEEE Access, 2019, 7, 96384-96391.	4.2	6
26	Scaffold-Based 3-D Cell Culture Imaging Using a Miniature Electrical Impedance Tomography Sensor. IEEE Sensors Journal, 2019, 19, 9071-9080.	4.7	30
27	Accelerated Structure-Aware Sparse Bayesian Learning for Three-Dimensional Electrical Impedance Tomography. IEEE Transactions on Industrial Informatics, 2019, 15, 5033-5041.	11.3	92
28	Simulation of Flooding Phenomenon in Packed Column using Electrical Capacitance Tomography. , 2019, , .		1
29	Real-Time Wind Velocity Monitoring Based on Acoustic Tomography. Springer Natural Hazards, 2019, , 135-149.	0.3	0
30	Image Reconstruction in Electrical Impedance Tomography Based on Structure-Aware Sparse Bayesian Learning. IEEE Transactions on Medical Imaging, 2018, 37, 2090-2102.	8.9	158
31	Ultrasonic Transmission Tomography Sensor Design for Bubble Identification in Gas-Liquid Bubble Column Reactors. Sensors, 2018, 18, 4256.	3.8	8
32	Quantification of Gas Distribution and Void Fraction in Packed Bubble Column Using Electrical Resistance Tomography. IEEE Sensors Journal, 2018, 18, 8963-8970.	4.7	10
33	IEEE Access Special Section Editorial: Multiphase Flow Measurement: Techniques and Applications. IEEE Access, 2018, 6, 32673-32675.	4.2	4
34	Liquid distribution and hold-up measurement in counter current flow packed column by electrical capacitance tomography. Chemical Engineering Journal, 2018, 353, 519-532.	12.7	26
35	Electrical impedance tomography for real-time and label-free cellular viability assays of 3D tumour spheroids. Analyst, The, 2018, 143, 4189-4198.	3.5	47
36	Exploring the Potential of Electrical Impedance Tomography for Tissue Engineering Applications. Materials, 2018, 11, 930.	2.9	26

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37	A Micro EIT Sensor for Real-Time and Non-Destructive 3-D Cultivated Cell Imaging. IEEE Sensors Journal, 2018, 18, 5402-5412.	4.7	28
38	A novel multi-electrode sensing strategy for electrical capacitance tomography with ultra-low dynamic range. Flow Measurement and Instrumentation, 2017, 53, 67-79.	2.0	42
39	An Image Reconstruction Algorithm for Electrical Impedance Tomography Using Adaptive Group Sparsity Constraint. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2295-2305.	4.7	77
40	A Novel Three-Phase Compact Saturated-Core Fault Current Limiter. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	5
41	Real-time temperature field measurement based on acoustic tomography. Measurement Science and Technology, 2017, 28, 074002.	2.6	30
42	A multi-frequency electrical impedance tomography system for real-time 2D and 3D imaging. Review of Scientific Instruments, 2017, 88, 085110.	1.3	75
43	Image Reconstruction for Electrical Impedance Tomography Using Enhanced Adaptive Group Sparsity With Total Variation. IEEE Sensors Journal, 2017, 17, 5589-5598.	4.7	29
44	Electrical Resistance Tomography Sensor for Highly Conductive Oil-Water Two-Phase Flow Measurement. IEEE Sensors Journal, 2017, 17, 8224-8233.	4.7	27
45	Development and Analysis of Bridge-Type Saturated-Core Fault Current Limiter. IEEE Transactions on Magnetics, 2017, 53, 1-5.	2.1	5
46	A Miniature Electrical Impedance Tomography Sensor and 3-D Image Reconstruction for Cell Imaging. IEEE Sensors Journal, 2017, 17, 514-523.	4.7	75
47	Image reconstruction algorithm for electrical impedance tomography based on block sparse Bayesian learning. , 2017, , .		7
48	Imaging cell-drug response in 3D bioscaffolds by electrical impedance tomography. , 2017, , .		2
49	Correlation of Volume Ratio and Normalized Permittivity in Particle Mixture. IEEE Access, 2017, 5, 15875-15882.	4.2	2
50	Simulation study of scaffold 3D cell culture imaging using a miniature planar EIT sensor. , 2017, , .		0
51	Comparison of regularisation methods in image reconstruction for micro-bioimpedance tomography. , 2017, , .		1
52	3D image reconstruction on a miniature planar EIT sensor using sparsity with median filter. , 2017, , .		6
53	Nonlinear temperature field reconstruction using acoustic tomography. , 2017, , .		10
54	Design and fabrication of microelectrodes for electrical impedance tomography of cell spheroids. , 2016, , .		5

#	Article	IF	Citations
55	Correlation analysis of solid particles' permittivity and composition using electrical capacitance tomography and Maxwell Garnett formula. , 2016, , .		2
56	Effect of packing and liquid conductivity on gas distribution and holdup in reaction column. , 2016, , .		0
57	Measurement of vertical oil-in-water two-phase flow using dual-modality ERTâ€"EMF system. Flow Measurement and Instrumentation, 2015, 46, 255-261.	2.0	36
58	A faster measurement strategy of electrical capacitance tomography using less sensing data. , 2015, , .		8
59	Evaluation of EIT systems and algorithms for handling full void fraction range in two-phase flow measurement. Measurement Science and Technology, 2015, 26, 015305.	2.6	26
60	Imaging of gasâ€"liquid annular flows for underbalanced drilling using electrical resistance tomography. Flow Measurement and Instrumentation, 2015, 46, 319-326.	2.0	13
61	A new visualisation and measurement technology for water continuous multiphase flows. Flow Measurement and Instrumentation, 2015, 46, 204-212.	2.0	44
62	Automated Horizontal Slurry Flow Regime Recognition Using Statistical Analysis of the ERT Signal. Procedia Engineering, 2015, 102, 821-830.	1.2	6
63	Online conductivity calibration methods for EIT gas/oil in water flow measurement. Flow Measurement and Instrumentation, 2015, 46, 213-217.	2.0	12
64	Void fraction measurement of gasâ€"liquid two-phase flow from differential pressure. Flow Measurement and Instrumentation, 2015, 41, 75-80.	2.0	46
65	Effect of structured packing on EIT image reconstruction. , 2014, , .		25
66	An immune-algorithm-based dead-time elimination PWM control strategy in a single-phase inverter. , 2013, , .		2
67	Measurement of air distribution and void fraction of an upwards airâ€"water flow using electrical resistance tomography and a wire-mesh sensor. Measurement Science and Technology, 2013, 24, 035403.	2.6	37
68	An optimisation method for the over-zero switching scheme. Flow Measurement and Instrumentation, 2012, 27, 47-52.	2.0	6
69	A novel tomographic sensing system for high electrically conductive multiphase flow measurement. Flow Measurement and Instrumentation, 2010, 21, 184-190.	2.0	75