

Huaxiang Wang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6602808/huaxiang-wang-publications-by-year.pdf>

Version: 2024-04-25

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

108
papers

887
citations

17
h-index

24
g-index

162
ext. papers

1,159
ext. citations

3
avg, IF

4.26
L-index

#	Paper	IF	Citations
108	Hardware Implementation and Evaluation of Electromagnetic Flow Tomography System for Water-Continuous Flows. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022 , 71, 1-9	5.2	
107	A Regularization-Guided Deep Imaging Method for Electrical Impedance Tomography. <i>IEEE Sensors Journal</i> , 2022 , 1-1	4	2
106	V-Shaped Dense Denoising Convolutional Neural Network for Electrical Impedance Tomography. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022 , 1-1	5.2	1
105	A fast Tikhonov regularization method based on homotopic mapping for electrical resistance tomography.. <i>Review of Scientific Instruments</i> , 2022 , 93, 043709	1.7	0
104	An alternative excitation method for electrical impedance tomography.. <i>Review of Scientific Instruments</i> , 2022 , 93, 044710	1.7	
103	A Fast Barzilai-Borwein Gradient Projection for Sparse Reconstruction Algorithm Based on 3D Modeling: Application to ERT Imaging. <i>IEEE Access</i> , 2021 , 9, 152913-152922	3.5	2
102	Error-constraint Deep Learning Scheme for Electrical Impedance Tomography (EIT). <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021 , 1-1	5.2	3
101	Phase Sensitive Detector for Multi-electrode Electromagnetic Flowmeter 2021 ,		1
100	Exploring Respiratory Motion Tracking Through Electrical Impedance Tomography. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021 , 70, 1-12	5.2	5
99	Improvement of signal processing in Coriolis mass flowmeters for gas-liquid two-phase flow. <i>Frontiers of Information Technology and Electronic Engineering</i> , 2021 , 22, 272-286	2.2	1
98	Measurement of Flow Velocity Using Electrical Resistance Tomography and Cross-Correlation Technique. <i>IEEE Sensors Journal</i> , 2021 , 21, 20714-20721	4	1
97	ECT Image Reconstruction Based on Alternating Direction Approximate Newton Algorithm. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020 , 69, 4873-4886	5.2	10
96	Optimal similarity norm for electrical tomography based on Bregman divergence. <i>Review of Scientific Instruments</i> , 2020 , 91, 033707	1.7	0
95	Electrical Capacitance Tomography Sensor Using Internal Electrodes. <i>IEEE Sensors Journal</i> , 2020 , 20, 3204-3216		5
94	Survey of signal clamping for digital phase sensitive detector. <i>Review of Scientific Instruments</i> , 2020 , 91, 015109	1.7	
93	2-D Median Filter-Based Impulsive Noise Reduction in Multifrequency Phase-sensitive Demodulation of Electrical Impedance Tomography. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020 , 69, 54-64	5.2	4
92	A Dual-Modality Integrated Sensor for Electrical Capacitance Tomography and Electromagnetic Tomography. <i>IEEE Sensors Journal</i> , 2019 , 19, 10016-10026	4	15

91	Electrical Capacitance Tomography Using Incomplete Measurement Set. <i>IEEE Access</i> , 2019 , 7, 79555-79564	5.4	5
90	Second-order sensitivity coefficient based electrical tomography imaging. <i>Chemical Engineering Science</i> , 2019 , 199, 40-49	4.4	6
89	Choquet Integral-Based Fusion of Multiple Patterns for Improving EIT Spatial Resolution. <i>IEEE Transactions on Applied Superconductivity</i> , 2019 , 29, 1-5	1.8	1
88	FPGA Implementation of a Complex Permeability Measurement Instrument 2019 ,		1
87	A Method for Absolute Electrical Impedance Tomography without Measuring Reference Voltages 2019 ,		2
86	Electromagnetic Sensing and Imaging Methods in Industrial Flow Measurements 2019 ,		1
85	Fluidization behavior monitoring of phosphogypsum in cyclone separator using electrical capacitance tomography. <i>Review of Scientific Instruments</i> , 2019 , 90, 105108	1.7	0
84	Sparse defects detection and 3D imaging base on electromagnetic tomography and total variation algorithm. <i>Review of Scientific Instruments</i> , 2019 , 90, 124703	1.7	5
83	Electrical-impedance-tomography imaging based on a new three-dimensional thorax model for assessing the extent of lung injury. <i>AIP Advances</i> , 2019 , 9, 125310	1.5	5
82	Fuzzy optimal solution of electric tomography imaging: Modelling and application. <i>Flow Measurement and Instrumentation</i> , 2018 , 59, 72-78	2.2	4
81	Amplitude demodulation for electrical capacitance tomography based on singular value decomposition. <i>Review of Scientific Instruments</i> , 2018 , 89, 074705	1.7	5
80	Improved PSO ERT image reconstruction algorithm for human lung based on prior knowledge and clustering 2018 ,		2
79	Singular value decomposition based impulsive noise reduction in multi-frequency phase-sensitive demodulation of electrical impedance tomography. <i>Review of Scientific Instruments</i> , 2018 , 89, 064702	1.7	4
78	Further Development in Differential Electrical Capacitance Tomography. <i>IEEE Sensors Journal</i> , 2018 , 18, 9781-9791	4	4
77	An Unsupervised Method for Evaluating Electrical Impedance Tomography Images. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018 , 67, 2796-2803	5.2	7
76	Gamma-ray CT from incomplete projections for two-phase pipe flow. <i>Review of Scientific Instruments</i> , 2017 , 88, 025106	1.7	8
75	Optimal distance of multi-plane sensor in three-dimensional electrical impedance tomography. <i>Computer Assisted Surgery</i> , 2017 , 22, 326-338	1.8	7
74	Patch-based sparse reconstruction for electrical impedance tomography. <i>Sensor Review</i> , 2017 , 37, 257-269	2.1	3

73	Defects detection based on sparse regularization method for electromagnetic tomography (EMT) 2017 ,		1
72	Design of a dual camera children monitoring system based on motion tracking technology 2017 ,		2
71	Early lung cancer identification based on ERT measurements 2017 ,		2
70	A review on image reconstruction algorithms for electrical capacitance/resistance tomography. <i>Sensor Review</i> , 2016 , 36, 429-445	1.4	89
69	The Effects of Fluid Viscosity on the Orifice Rotameter. <i>Measurement Science Review</i> , 2016 , 16, 87-95	1.7	6
68	Modified sparse regularization for electrical impedance tomography. <i>Review of Scientific Instruments</i> , 2016 , 87, 034702	1.7	6
67	Level set based image segmentation for oil film monitoring using ECT 2016 ,		1
66	Accelerated reconstruction of electrical impedance tomography images via patch based sparse representation. <i>Review of Scientific Instruments</i> , 2016 , 87, 114707	1.7	4
65	Electrical Capacitance Tomography With Differential Sensor. <i>IEEE Sensors Journal</i> , 2015 , 15, 5087-5094	4	23
64	Impulsive noise reduction in digital phase-sensitive demodulation by nonlinear filtering. <i>Measurement Science and Technology</i> , 2015 , 26, 075401	2	8
63	Damage detection of CFRP composites using open electrical impedance tomography 2015 ,		3
62	Finite element mesh optimisation for improvement of the sensitivity matrix in electrical resistance tomography. <i>IET Science, Measurement and Technology</i> , 2015 , 9, 792-799	1.5	4
61	Online monitoring of oil film using electrical capacitance tomography and level set method. <i>Review of Scientific Instruments</i> , 2015 , 86, 085106	1.7	6
60	A new linear back projection algorithm to electrical tomography based on measuring data decomposition. <i>Measurement Science and Technology</i> , 2015 , 26, 125402	2	21
59	Application of a high speed ECT system to online monitoring of pneumatic conveying process. <i>Measurement: Journal of the International Measurement Confederation</i> , 2014 , 48, 29-42	4.6	12
58	Data fusion in dual-mode tomography for imaging oil/gas two-phase flow. <i>Flow Measurement and Instrumentation</i> , 2014 , 37, 1-11	2.2	18
57	Classification of normal and cancerous lung tissues by electrical impedance tomography. <i>Bio-Medical Materials and Engineering</i> , 2014 , 24, 2229-41	1	11
56	An effective measured data preprocessing method in electrical impedance tomography. <i>Scientific World Journal, The</i> , 2014 , 2014, 208765	2.2	3

55	Liquid Film Thickness Estimation using Electrical Capacitance Tomography. <i>Measurement Science Review</i> , 2014 , 14, 8-15	1.7	28
54	Fusion of ERT images based on Dempster-Shafer's evidence theory. <i>Transactions of Tianjin University</i> , 2013 , 19, 404-412	2.9	
53	Thermodynamic Model and Dynamic Temperature Compensation in Positive-Pressure-Based Sonic Nozzle Gas Flow Standard. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2013 , 62, 1154-1165	5.2	19
52	Fuzzy clustering based ET image fusion. <i>Information Fusion</i> , 2013 , 14, 487-497	16.7	26
51	Hilbert-Huang Transform-Based Electrostatic Signal Analysis of Ring-Shape Electrodes With Different Widths. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2012 , 61, 1209-1217	5.2	18
50	Fast reconstruction of electrical resistance tomography (ERT) images based on the projected CG method. <i>Flow Measurement and Instrumentation</i> , 2012 , 27, 37-46	2.2	9
49	Reconstruction of electrical impedance tomography (EIT) images based on the expectation maximum (EM) method. <i>ISA Transactions</i> , 2012 , 51, 808-20	5.5	20
48	Application of electrical resistance tomography in bubble columns for volume fraction measurement 2012 ,		2
47	EIT imaging fused with CT slice 2012 ,		1
46	Clustering mechanism for electric tomography imaging. <i>Science China Information Sciences</i> , 2012 , 55, 2849-2864	3.4	7
45	ITERATIVE FILTERING RECONSTRUCTION ALGORITHM FOR GAMMA COMPUTERIZED TOMOGRAPHY: APPLICATION TO TWO-PHASE FLOW VISUALIZATION. <i>Instrumentation Science and Technology</i> , 2012 , 40, 1-16	1.4	
44	A shrinkage-thresholding method for the inverse problem of Electrical Resistance Tomography 2012 ,		3
43	Electrical capacitance tomography using an accelerated proximal gradient algorithm. <i>Review of Scientific Instruments</i> , 2012 , 83, 043704	1.7	13
42	Image reconstruction based on L1 regularization and projection methods for electrical impedance tomography. <i>Review of Scientific Instruments</i> , 2012 , 83, 104707	1.7	26
41	The dynamic compensation of temperature sensors in sonic nozzle airflow standard facilities based on method of positive pressure 2012 ,		7
40	Research on improved genetic algorithm for low-dimensional and multimodal function optimization 2011 ,		3
39	Image reconstruction of electrical resistance tomography based on image fusion 2011 ,		2
38	Mesh Wire Tomography combined with a modified sensitivity map 2011 ,		6

37	Image reconstruction based on 11 regularization for electrical impedance tomography (EIT) 2011 ,		1
36	Electrical Capacitance Tomography for Sensors of Square Cross Sections Using Calderon's Method. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2011 , 60, 900-907	5.2	46
35	Two-Phase Flow Regime Identification Based on Cross-Entropy and Information Extension Methods for Computerized Tomography. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2011 , 60, 488-495	5.2	11
34	Computed tomography using level set method and algebraic reconstruction technique. <i>Transactions of Tianjin University</i> , 2011 , 17, 418-423	2.9	
33	Image reconstruction based on expectation maximization method for electrical impedance tomography (EIT) 2011 ,		2
32	A modified conjugate gradient method based on the Tikhonov system for computerized tomography (CT). <i>ISA Transactions</i> , 2011 , 50, 256-61	5.5	7
31	An image reconstruction algorithm based on preconditioned LSQR for 3D EIT 2011 ,		3
30	A high-performance digital system for electrical capacitance tomography. <i>Measurement Science and Technology</i> , 2011 , 22, 055503	2	58
29	Hilbert-Huang transform based electrostatic signal analysis for characterization of dilute gas-solid two-phase flow 2011 ,		2
28	The experimental research of vortex flowmeter in vertical upward oil-gas-water three-phase flow 2010 ,		2
27	An Iterative Reconstruction Technique for Multiphase Flow CT System 2010 ,		1
26	Electrical resistance tomography(ERT) by using an ECT sensor 2010 ,		3
25	3D modelling of the human thorax for ventilation distribution measured through electrical impedance tomography. <i>Measurement Science and Technology</i> , 2010 , 21, 115801	2	8
24	Cyclostationarity in electrical resistance tomography data from gas/liquid two-phase flow 2010 ,		4
23	Time series of EIT measurements and images during lung ventilation based on principal component analysis. <i>Transactions of Tianjin University</i> , 2010 , 16, 366-372	2.9	1
22	An unsupervised grid-based approach for clustering analysis. <i>Science China Information Sciences</i> , 2010 , 53, 1345-1357	3.4	11
21	Application of electrical resistance tomography for slug flow measurement in gas/liquid flow of horizontal pipe 2009 ,		2
20	Independent component analysis of the interface fluctuations of gas/liquid two-phase flow 2009 ,		1

19	Independent component analysis of interface fluctuation of gas/liquid two-phase flows □ experimental study. <i>Flow Measurement and Instrumentation</i> , 2009 , 20, 220-229	2.2	7
18	An image reconstruction algorithm of EIT based on pulmonary prior information. <i>Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities</i> , 2009 , 4, 121-126		1
17	Lung ventilation functional monitoring based on electrical impedance tomography. <i>Transactions of Tianjin University</i> , 2009 , 15, 7-12	2.9	6
16	New progress of the digital electrical capacitance tomography system for gas/liquid two phase flow 2009 ,		1
15	A Novel Digital Lock-in Amplifier with Dual Channels 2009 ,		3
14	An integrated ECT/ERT dual modality sensor 2009 ,		17
13	A Specific Data Acquisition Scheme for Electrical Tomography 2008 ,		21
12	Digital signal processing in electrical capacitance tomography 2008 ,		2
11	Digital phase-sensitive demodulation in electrical capacitance tomography system 2008 ,		4
10	An Evaluation Method for Reconstructed Images in Electrical Tomography 2008 ,		4
9	A preconditioned hybrid reconstruction algorithm for electrical impedance tomography 2008 ,		1
8	A hybrid reconstruction algorithm for electrical impedance tomography. <i>Measurement Science and Technology</i> , 2007 , 18, 813-818	2	20
7	Total Variation Regularization Used in Electrical Capacitance Tomography. <i>AIP Conference Proceedings</i> , 2007 ,	0	1
6	Electrical impedance tomography with square sensor. <i>AIP Conference Proceedings</i> , 2007 ,	0	2
5	Linearized solution to electrical impedance tomography based on the Schur conjugate gradient method. <i>Measurement Science and Technology</i> , 2007 , 18, 3373-3383	2	20
4	Vulcanization Control of Rubber Fender Based on Neural Network PID Method 2007 ,		1
3	A Novel ECT System Based on FPGA and DSP 2007 ,		6
2	Development of single drive electrode electrical resistance tomography system. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2006 , 55, 1208-1214	5.2	12

- 1 A pre-iteration method for the inverse problem in electrical impedance tomography. *IEEE Transactions on Instrumentation and Measurement*, **2004**, 53, 1093-1096

5.2 52