Dong Liu

List of Publications by Year
in descending order

41 papers	**992** citations	489802 **18** h-index	488211 **31** g-index
41 all docs	**41** docs citations	**41** times ranked	**564** citing authors

#	Article	IF	Citations
1	Structural engineering from an inverse problems perspective. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, 20210526.	1.0	9
2	Simultaneous Shape and Permittivity Reconstruction in ECT With Sparse Representation: Two-Phase Distribution Imaging. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-14.	2.4	18
3	Shape-Driven EIT Reconstruction Using Fourier Representations. IEEE Transactions on Medical Imaging, 2021, 40, 481-490.	5.4	19
4	An Efficient Quasi-Newton Method for Nonlinear Inverse Problems via Learned Singular Values. IEEE Signal Processing Letters, 2021, 28, 748-752.	2.1	7
5	Learning and correcting non-Gaussian model errors. Journal of Computational Physics, 2021, 432, 110152.	1.9	10
6	Supershape augmented reconstruction method for electrical impedance tomography. , 2021, , .		2
7	Shape and topology optimization in electrical impedance tomography via moving morphable components method. Structural and Multidisciplinary Optimization, 2021, 64, 585-598.	1.7	5
8	Non-cooperative finite element games. Applied Numerical Mathematics, 2021, 167, 273-280.	1.2	0
9	Supershape Recovery From Electrical Impedance Tomography Data. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	12
10	Supershape Augmented Reconstruction Method Based on Boolean Operations in Electrical Impedance Tomography. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	2.4	2
11	Nonstationary Shape Estimation in Electrical Impedance Tomography Using a Parametric Level Set-Based Extended Kalman Filter Approach. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 1894-1907.	2.4	40
12	An overview of 38 least squaresâ€"based frameworks for structural damage tomography. Structural Health Monitoring, 2020, 19, 215-239.	4.3	11
13	Invisibility and indistinguishability in structural damage tomography. Measurement Science and Technology, 2020, 31, 024001.	1.4	5
14	CT Image-Guided Electrical Impedance Tomography for Medical Imaging. IEEE Transactions on Medical Imaging, 2020, 39, 1822-1832.	5.4	35
15	B-Spline Level Set Method for Shape Reconstruction in Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2020, 39, 1917-1929.	5.4	29
16	Shape-Driven Difference Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2020, 39, 3801-3812.	5.4	18
17	Multiphase Conductivity Imaging With Electrical Impedance Tomography and B-Spline Level Set Method. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 9634-9644.	2.4	15
18	Shape Reconstruction Using Boolean Operations in Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2020, 39, 2954-2964.	5.4	36

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19	Optimizing Electrode Positions in 2-D Electrical Impedance Tomography Using Deep Learning. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 6030-6044.	2.4	27
20	Self-filtering electrical area sensors emerging from deep learning. Measurement Science and Technology, 2020, 31, 065107.	1.4	2
21	Applying a joint geophysical inversion approach for medical imaging. , 2020, , .		0
22	A Parametric Level Set-Based Approach to Difference Imaging in Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2019, 38, 145-155.	5.4	57
23	Less is often more: Applied inverse problems using hp-forward models. Journal of Computational Physics, 2019, 399, 108949.	1.9	16
24	A Moving Morphable Components Based Shape Reconstruction Framework for Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2019, 38, 2937-2948.	5.4	44
25	B-Spline-Based Sharp Feature Preserving Shape Reconstruction Approach for Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2019, 38, 2533-2544.	5.4	41
26	A Statistical Shape-Constrained Reconstruction Framework for Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2019, 38, 2400-2410.	5.4	49
27	Damage Tomography as a State Estimation Problem: Crack Detection Using Conductive Area Sensors. , 2019, 3, 1-4.		11
28	Stacked Elasticity Imaging Approach for Visualizing Defects in the Presence of Background Inhomogeneity. Journal of Engineering Mechanics - ASCE, 2019, 145, 06018006.	1.6	5
29	Dominant-Current Deep Learning Scheme for Electrical Impedance Tomography. IEEE Transactions on Biomedical Engineering, 2019, 66, 2546-2555.	2.5	109
30	A Parametric Level Set Method for Electrical Impedance Tomography. IEEE Transactions on Medical Imaging, 2018, 37, 451-460.	5.4	70
31	An Automatic Detection of the ROI Using Otsu Thresholding in Nonlinear Difference EIT Imaging. IEEE Sensors Journal, 2018, 18, 5133-5142.	2.4	29
32	Coupled digital image correlation and quasi-static elasticity imaging of inhomogeneous orthotropic composite structures. Inverse Problems, 2018, 34, 124005.	1.0	17
33	A Parametric Level set Method for Imaging Multiphase Conductivity Using Electrical Impedance Tomography. IEEE Transactions on Computational Imaging, 2018, 4, 552-561.	2.6	41
34	Three Dimensional Simulation of Electrical Impedance Tomography for Imaging Vocal Folds Within the Human Neck. Journal of Medical Imaging and Health Informatics, 2017, 7, 1509-1516.	0.2	0
35	A dynamic oppositional biogeography-based optimization approach for time-varying electrical impedance tomography. Physiological Measurement, 2016, 37, 820-842.	1.2	12
36	Nonlinear Difference Imaging Approach to Three-Dimensional Electrical Impedance Tomography in the Presence of Geometric Modeling Errors. IEEE Transactions on Biomedical Engineering, 2016, 63, 1956-1965.	2.5	56

#	Article	IF	Citations
37	A nonlinear approach to difference imaging in EIT; assessment of the robustness in the presence of modelling errors. Inverse Problems, 2015, 31, 035012.	1.0	51
38	Multi-phase flow monitoring with electrical impedance tomography using level set based method. Nuclear Engineering and Design, 2015, 289, 108-116.	0.8	25
39	Estimation of conductivity changes in a region of interest with electrical impedance tomography. Inverse Problems and Imaging, 2015, 9, 211-229.	0.6	43
40	Estimation of void boundaries in flow field using expectation–maximization algorithm. Chemical Engineering Science, 2011, 66, 355-374.	1.9	8
41	Probabilistic cracking prediction via deep learned electrical tomography. Structural Health Monitoring, 0, , 147592172110372.	4.3	6