Puyan Mojabi

List of Publications by Year
in descending order

64 **papers**	1,137 **citations**	471509 17 **h-index**	395702 33 **g-index**
64 **all docs**	64 **docs citations**	64 **times ranked**	560 **citing authors**

#	Article	IF	Citations
1	A Combined Inverse Source and Scattering Technique for Dielectric Profile Design to Tailor Electromagnetic Fields. IEEE Transactions on Antennas and Propagation, 2022, 70, 2149-2160.	5.1	1
2	Cascaded Metasurface Design Using Electromagnetic Inversion With Gradient-Based Optimization. IEEE Transactions on Antennas and Propagation, 2022, 70, 2033-2045.	5.1	11
3	Gradient-Based Electromagnetic Inversion for Metasurface Design Using Circuit Models. IEEE Transactions on Antennas and Propagation, 2022, 70, 2046-2058.	5.1	4
4	On the Formulation and Implementation of the Love's Condition Constraint for the Source Reconstruction Method. IEEE Transactions on Antennas and Propagation, 2022, 70, 3613-3627.	5.1	6
5	An Encoder-Only Transformer to Generate Power Patterns from Far-Field Performance Criteria. , 2022, , .		2
6	An Integral Equation Approach Towards the Design of Compact Metasurface Pairs. , 2022, , .		4
7	On the Use of Reconfigurable Space-Time Metasurface Enclosures for Microwave Imaging. IEEE Antennas and Wireless Propagation Letters, 2022, 21, 2196-2200.	4.0	1
8	A Multiplicative Regularizer Augmented With Spatial Priors for Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2021, 69, 606-611.	5.1	5
9	Phaseless Gauss-Newton Inversion for Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2021, 69, 443-456.	5.1	8
10	Phaseless Electromagnetic Inversion for Imaging, Characterization, and Design. , 2021, , .		0
11	On the Use of Absorbing Metasurfaces in Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2021, 69, 9026-9031.	5.1	6
12	Toward an End-to-End Metasurface Design Procedure for Power Pattern Synthesis. , 2021, , .		3
13	On the Importance of the Love's Condition for Inverse Equivalent-Source Metasurface Design. , 2021, , .		3
14	On the Use of Electromagnetic Inversion for Metasurface Design. IEEE Transactions on Antennas and Propagation, 2020, 68, 1812-1824.	5.1	40
15	Incorporating Spatial Priors in Microwave Imaging via Multiplicative Regularization. IEEE Transactions on Antennas and Propagation, 2020, 68, 1107-1118.	5.1	10
16	A Phaseless Gauss-Newton Inversion Algorithm for Imaging and Design. , 2020, , .		1
17	Electromagnetic Inversion With Local Power Conservation for Metasurface Design. IEEE Antennas and Wireless Propagation Letters, 2020, 19, 1291-1295.	4.0	30
18	Electromagnetic Inversion for Noninvasive Specific Absorption Rate Characterization. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology, 2020, 4, 254-259.	3.4	6

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19	On Microwave Breast Imaging with Ultrasound Spatial Priors. , 2020, , .		4
20	On the Numerical Implementation of the Multiplicative Regularization in Microwave Imaging. , 2020, , .		0
21	An Automated Inversion Algorithm for Noninvasive Specific Absorption Rate Characterization. , 2020, , .		0
22	On Microwave Imaging with Absorbing Metasurface Enclosure. , 2020, , .		1
23	Evaluation of an Inversion Algorithm for Noninvasive Specific Absorption Rate Applications. , 2019, , .		2
24	Remote Sensing of Oil Spills in Freezing Environments at the University of Manitoba Sea-ice Environmental Research Facility. , 2018, , .		0
25	On the Use of Electromagnetic Inversion for Near-Field Antenna Measurements: A Review. , 2018, , .		10
26	On the Use of Focused Incident Near-Field Beams in Microwave Imaging. Sensors, 2018, 18, 3127.	3.8	7
27	A Controlled Experiment on Oil Release Beneath Thin Sea Ice and Its Electromagnetic Detection. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 4406-4419.	6.3	18
28	Using the Source Reconstruction Method to Model Incident Fields in Microwave Tomography. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 46-49.	4.0	12
29	Multiplicatively Regularized Source Reconstruction Method for Phaseless Planar Near-Field Antenna Measurements. IEEE Transactions on Antennas and Propagation, 2017, 65, 2020-2031.	5.1	32
30	An Electromagnetic Detection Case Study on Crude Oil Injection in a Young Sea Ice Environment. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 4465-4475.	6.3	17
31	A Capstone Design Project on the Development of a Prototype Near-Field Antenna Measurement System [Education Corner]. IEEE Antennas and Propagation Magazine, 2017, 59, 118-127.	1.4	1
32	An experimental study of microwave remote sensing of oil-contaminated young sea ice. , 2017, , .		1
33	A pendulum-based planar near-field antenna measurement system. , 2016, , .		0
34	Normalized radar cross section analysis of oil-contaminated young Sea ice. , 2016, , .		1
35	Electromagnetic inversion for biomedical imaging, antenna characterization, and sea ice remote sensing applications. , 2016, , .		5
36	A Mathematical Framework to Analyze the Achievable Resolution From Microwave Tomography. IEEE Transactions on Antennas and Propagation, 2016, 64, 1484-1489.	5.1	10

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37	Landfast First-Year Snow-Covered Sea Ice Reconstruction via Electromagnetic Inversion. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 2414-2428.	4.9	10
38	Multiplicatively regularized source reconstruction method for phaseless near-field antenna measurements. , 2015, , .		0
39	On the achievable resolution from microwave tomography. , 2015, , .		0
40	Balanced inversion of simulated bistatic radar cross-section data for remote sensing of snow-covered sea ice. Remote Sensing Letters, 2015, 6, 399-408.	1.4	0
41	Inversion-Based Sensitivity Analysis of Snow-Covered Sea Ice Electromagnetic Profiles. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 3643-3655.	4.9	8
42	Nonlinear Inversion of Microwave Scattering Data for Snow-Covered Sea-Ice Dielectric Profile Reconstruction. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 209-213.	3.1	10
43	THE EFFECT OF ANTENNA INCIDENT FIELD DISTRIBUTION ON MICROWAVE TOMOGRAPHY RECONSTRUCTION. Progress in Electromagnetics Research, 2014, 145, 153-161.	4.4	9
44	Use of Wirtinger calculus in Gauss-Newton inversion of microwave tomography data. , 2014, , .		2
45	Use of synthesized fields in microwave tomography inversion. , 2014, , .		0
46	Enhancement of Gaussâ€"Newton Inversion Method for Biological Tissue Imaging. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 3424-3434.	4.6	64
47	Evaluation of a microwave tomography system for animal tissue imaging. , 2012, , .		1
48	Enhancement of near-field probing in a microwave tomography system. , 2012, , .		1
49	Microwave tomography techniques and algorithms: A review. , 2012, , .		21
50	The University of Manitoba Microwave Imaging Repository: A Two-Dimensional Microwave Scattering Database for Testing Inversion and Calibration Algorithms [Measurements Corner]. IEEE Antennas and Propagation Magazine, 2011, 53, 126-133.	1.4	21
51	Analysis of Incident Field Modeling and Incident/Scattered Field Calibration Techniques in Microwave Tomography. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 900-903.	4.0	85
52	A Novel Microwave Tomography System Using a Rotatable Conductive Enclosure. IEEE Transactions on Antennas and Propagation, 2011, 59, 1597-1605.	5.1	22
53	A Prescaled Multiplicative Regularized Gauss-Newton Inversion. IEEE Transactions on Antennas and Propagation, 2011, 59, 2954-2963.	5.1	35
54	A Multiplicative Regularized Gaussâ€"Newton Inversion for Shape and Location Reconstruction. IEEE Transactions on Antennas and Propagation, 2011, 59, 4790-4802.	5.1	42

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55	A Multiprobe-Per-Collector Modulated Scatterer Technique for Microwave Tomography. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 1445-1448.	4.0	10
56	A Wideband Microwave Tomography System With a Novel Frequency Selection Procedure. IEEE Transactions on Biomedical Engineering, 2010, 57, 894-904.	4.2	121
57	Comparison of TE and TM Inversions in the Framework of the Gauss-Newton Method. IEEE Transactions on Antennas and Propagation, 2010, 58, 1336-1348.	5.1	26
58	On Super-Resolution With an Experimental Microwave Tomography System. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 393-396.	4.0	64
59	Biomedical microwave inversion in conducting cylinders of arbitrary shapes. , 2009, , .		5
60	Enhancement of the Krylov Subspace Regularization for Microwave Biomedical Imaging. IEEE Transactions on Medical Imaging, 2009, 28, 2015-2019.	8.9	27
61	Overview and Classification of Some Regularization Techniques for the Gauss-Newton Inversion Method Applied to Inverse Scattering Problems. IEEE Transactions on Antennas and Propagation, 2009, 57, 2658-2665.	5.1	100
62	Comparison of an Enhanced Distorted Born Iterative Method and the Multiplicative-Regularized Contrast Source Inversion method. IEEE Transactions on Antennas and Propagation, 2009, 57, 2341-2351.	5.1	82
63	Microwave Biomedical Imaging Using the Multiplicative Regularized Gauss--Newton Inversion. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 645-648.	4.0	98
64	ADAPTING THE NORMALIZED CUMULATIVE PERIODOGRAM PARAMETER-CHOICE METHOD TO THE TIKHONOV REGULARIZATION OF 2-D/TM ELECTROMAGNETIC INVERSE SCATTERING USING BORN ITERATIVE METHOD. Progress in Electromagnetics Research M, 2008, 1, 111-138.	0.9	11