

Marc Lambert

List of Publications by Year in descending order

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75
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docs citations

75
times ranked

524
citing authors

#	ARTICLE	IF	CITATIONS
1	A New Integral Equation Method to Solve Highly Nonlinear Inverse Scattering Problems. IEEE Transactions on Antennas and Propagation, 2016, 64, 1788-1799.	5.1	81
2	Detection of Defects in Wiring Networks Using Time Domain Reflectometry. IEEE Transactions on Magnetism, 2010, 46, 2998-3001.	2.1	65
3	Shape reconstruction of buried obstacles by controlled evolution of a level set: from a min-max formulation to numerical experimentation. Inverse Problems, 2001, 17, 1087-1111.	2.0	47
4	Adaptive Metamodels for Crack Characterization in Eddy-Current Testing. IEEE Transactions on Magnetism, 2011, 47, 746-755.	2.1	41
5	Multiple-Shape Reconstruction by Means of Multiregion Level Sets. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2330-2342.	6.3	39
6	Shape inversion from TM and TE real data by controlled evolution of level sets. Inverse Problems, 2001, 17, 1585-1595.	2.0	34
7	The retrieval of a buried cylindrical obstacle by a constrained modified gradient method in the H-polarization case and for Maxwellian materials. Inverse Problems, 1998, 14, 1265-1283.	2.0	30
8	Eddy-current evaluation of three-dimensional defects in a metal plate. Inverse Problems, 2002, 18, 1857-1871.	2.0	29
9	Binary-constrained inversion of a buried cylindrical obstacle from complete and phaseless magnetic fields. Inverse Problems, 2000, 16, 563-576.	2.0	27
10	Kriging-based generation of optimal databases as forward and inverse surrogate models. Inverse Problems, 2010, 26, 074012.	2.0	26
11	Solution of Inverse Problems in Nondestructive Testing by a Kriging-Based Surrogate Model. IEEE Transactions on Magnetism, 2012, 48, 495-498.	2.1	26
12	Electromagnetic Modeling of a Damaged Ferromagnetic Metal Tube by a Volume Integral Equation Formulation. IEEE Transactions on Magnetism, 2008, 44, 623-632.	2.1	23
13	A multi-resolution technique based on shape optimization for the reconstruction of homogeneous dielectric objects. Inverse Problems, 2009, 25, 015009.	2.0	21
14	Microwave Breast Imaging With Prior Ultrasound Information. IEEE Open Journal of Antennas and Propagation, 2020, 1, 472-482.	3.7	20
15	Direct sampling method for imaging small dielectric inhomogeneities: analysis and improvement. Inverse Problems, 2018, 34, 095005.	2.0	19
16	Electromagnetic Response of Anisotropic Laminates to Distributed Sources. IEEE Transactions on Antennas and Propagation, 2014, 62, 247-256.	5.1	18
17	Detectability of junctions of underground electrical cables with a ground penetrating radar: Electromagnetic simulation and experimental measurements. Construction and Building Materials, 2018, 158, 1099-1110.	7.2	18
18	Nonlinear inversion of a buried object in transverse electric scattering. Radio Science, 1999, 34, 1361-1371.	1.6	16

#	ARTICLE	IF	CITATIONS
19	Single- and Multi-Frequency Direct Sampling Methods in a Limited-Aperture Inverse Scattering Problem. IEEE Access, 2020, 8, 121637-121649.	4.2	16
20	Conductive masses in a half-space Earth in the diffusive regime: fast hybrid modeling of a low-contrast ellipsoid. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 1585-1599.	6.3	14
21	Joint Inversion of Electromagnetic and Acoustic Data With Edge-Preserving Regularization for Breast Imaging. IEEE Transactions on Computational Imaging, 2021, 7, 349-360.	4.4	14
22	Dyad-Based Model of the Electric Field in a Conductive Cylinder at Eddy-Current Frequencies. IEEE Transactions on Magnetics, 2004, 40, 400-409.	2.1	13
23	Electromagnetic scattering by a triaxial homogeneous penetrable ellipsoid: Low-frequency derivation and testing of the localized nonlinear approximation. Radio Science, 2000, 35, 463-481.	1.6	12
24	Fast Calculation of Scattering by 3-D Inhomogeneities in Uniaxial Anisotropic Multilayers. IEEE Transactions on Antennas and Propagation, 2014, 62, 6365-6374.	5.1	12
25	Characterization of a 3D defect using the expected improvement algorithm. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2009, 28, 851-864.	0.9	11
26	Kriging for Eddy-Current Testing Problems. IEEE Transactions on Magnetics, 2010, 46, 3165-3168.	2.1	11
27	Analysis and Improvement of Direct Sampling Method in the Monostatic Configuration. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 1721-1725.	3.1	10
28	Nonlinear inversions of immersed objects using laboratory-controlled data. Inverse Problems, 2004, 20, S81-S98.	2.0	9
29	3-D Eddy-Current Imaging of Metal Tubes by Gradient-Based, Controlled Evolution of Level Sets. IEEE Transactions on Magnetics, 2008, 44, 4721-4729.	2.1	9
30	Reconstruction of faulty wiring networks using reflectometry response and genetic algorithms. International Journal of Applied Electromagnetics and Mechanics, 2011, 35, 39-55.	0.6	9
31	Metamodel-based Markov-Chain-Monte-Carlo parameter inversion applied in eddy current flaw characterization. NDT and E International, 2018, 99, 13-22.	3.7	9
32	Te Scattering By a Cylindrical Dielectric Obstacle Buried in a Half-Space: a H-Field-Based Solution Method. Journal of Electromagnetic Waves and Applications, 1998, 12, 1217-1239.	1.6	8
33	Structure analysis of direct sampling method in 3D electromagnetic inverse problem: near- and far-field configuration. Inverse Problems, 2021, 37, 075002.	2.0	8
34	On novel developments of controlled evolution of level sets in the field of inverse shape problems. Radio Science, 2002, 37, VIC 11-1-VIC 11-9.	1.6	7
35	Eddy-Current Modeling of Ferrite-Cored Probes. AIP Conference Proceedings, 2005, , .	0.4	7
36	WIDEBAND VALIDATION OF A PHASE RETRIEVAL PROCESS APPLIED TO INFRARED PLANAR NEAR-FIELD MEASUREMENTS. Progress in Electromagnetics Research B, 2010, 23, 39-54.	1.0	7

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37	IMAGING OF DEFECTS IN SEVERAL COMPLEX CONFIGURATIONS BY SIMULATION-HELPED PROCESSING OF ULTRASONIC ARRAY DATA. AIP Conference Proceedings, 2010, , .	0.4	6
38	Influence of partially known parameter on flaw characterization in Eddy Current Testing by using a random walk MCMC method based on metamodeling. Journal of Physics: Conference Series, 2014, 542, 012009.	0.4	5
39	Shape inversion from TM and TE real data by controlled evolution of level sets. Inverse Problems, 2002, 18, 279-282.	2.0	4
40	On inverse scattering and imaging solutions for objects buried within uniaxially anisotropic media. , 2015, , .		4
41	Multi-frequency direct sampling method in inverse scattering problem. Journal of Physics: Conference Series, 2017, 904, 012018.	0.4	4
42	Extended Born domain integral models of diffusive fields. IEEE Transactions on Magnetics, 2002, 38, 577-580.	2.1	3
43	MODELLING OF FLAWED RIVETED STRUCTURES FOR EC INSPECTION IN AERONAUTICS. AIP Conference Proceedings, 2008, , .	0.4	3
44	Eddy-Current Modeling of a Continuous Conductivity Profile Resulting From a Diffusion Process. IEEE Transactions on Magnetics, 2011, 47, 2093-2099.	2.1	3
45	Metamodel-Based Nested Sampling for Model Selection in Eddy-Current Testing. IEEE Transactions on Magnetics, 2017, 53, 1-12.	2.1	3
46	Sparse reconstruction algorithms for nonlinear microwave imaging. , 2017, , .		3
47	<title>Multifrequency version of the modified gradient algorithm for reconstruction of complex refractive indices</title>. , 1997, 3171, 76.		2
48	A 3D Model for Eddy Current Inspection in Aeronautics: Application to Riveted Structures. AIP Conference Proceedings, 2007, , .	0.4	2
49	Modelling eddy current testing of ferromagnetic medium. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 245-250.	0.6	2
50	A modified gradient descent reconstruction algorithm for breast cancer detection using Microwave Radar and Digital Breast Tomosynthesis. , 2016, , .		2
51	Sparsity-enforced microwave inverse scattering using soft shrinkage thresholding. , 2016, , .		2
52	41. ARLETT: A Prototype Three-Component Borehole Electromagnetic System. , 1999, , 625-657.		2
53	Group Sparsity Penalized Contrast Source Solution Method for 2-D Non-Linear Inverse Scattering. IEEE Open Journal of Antennas and Propagation, 2022, 3, 48-58.	3.7	2
54	Born-type schemes for the acoustic probing of layered fluid media from time-harmonic planar reflection coefficients at two incidences. Journal of the Acoustical Society of America, 1996, 99, 243-253.	1.1	1

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55	Shape reconstruction of buried obstacles by controlled evolution of a level set: from a min-max formulation to numerical experimentation. Inverse Problems, 2001, 17, 2017-2022.	2.0	1
56	Shared issues of wavefield inversion and illustrations in 3-D diffusive electromagnetics. Comptes Rendus Physique, 2005, 6, 618-625.	0.9	1
57	Combination of Maximin and Kriging Prediction Methods for Eddy-Current Testing Database Generation. Journal of Physics: Conference Series, 2010, 255, 012003.	0.4	1
58	Particle optimization with metamodel for crack characterization. , 2010, , .		1
59	Recent progress in wiring networks diagnosis for automotive applications. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2011, 30, 1148-1161.	0.9	1
60	Soft Shrinkage Thresholding Algorithm for Nonlinear Microwave Imaging. Journal of Physics: Conference Series, 2016, 756, 012011.	0.4	1
61	A wavelet-based contrast source inversion method. , 2021, , .		1
62	Use of sparsity in nonlinear electromagnetic imaging: wavelet-based contrast source method. , 2021, , .		1
63	Stochastic Matrices and Lp Norms : New Algorithms for Solving Ill-conditioned Linear Systems of Equations. ESAIM: Proceedings and Surveys, 2007, 18, 70-86.	0.4	0
64	Eddy-current testing with the Expected Improvement optimization algorithm. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1750-1755.	0.4	0
65	Inverse problem characterization using an adaptive database. , 2010, , .		0
66	On a new stable modeling of dyadic Green's functions of electrically uniaxial planar-layered media. , 2011, , .		0
67	Cognitive kriging metamodels for forest characterization and target detection. , 2014, , .		0
68	MUSIC imaging method for electromagnetic inspection of composite multi-layers. , 2015, , .		0
69	Sparsity reconstruction algorithm for nonlinear microwave problems. , 2016, , .		0
70	Analysis of Kirchhoff Migration and Direct Sampling Method within Far-Field Approximation: From the Multi-Static to the Mono-Static Configuration. , 2018, , .		0
71	On the Characterization of Objects in Shallow Water Using Rigorous Inversion Methods. , 2001, , 127-147.		0
72	Ultrasonic array reconstruction methods for the localization and the characterization of defects in complex NDT configurations. Springer Proceedings in Physics, 2009, , 377-385.	0.2	0

#	ARTICLE	IF	CITATIONS
73	A new optimization method for solving electromagnetic inverse scattering problems. , 2016, , .		0
74	Introduction to Inverse Scattering in Acoustics and Elasticity. , 0, , 413-430.		0