

Antonello Tamburrino

List of Publications by Year in descending order

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all docs

102
docs citations

102
times ranked

1148
citing authors

#	ARTICLE	IF	CITATIONS
1	Pulsed Eddy-Current Based Giant Magnetoresistive System for the Inspection of Aircraft Structures. IEEE Transactions on Magnetics, 2010, 46, 910-917.	2.1	106
2	A new non-iterative inversion method for electrical resistance tomography. Inverse Problems, 2002, 18, 1809-1829.	2.0	103
3	Genetically Engineered Plasmonic Nanoarrays. Nano Letters, 2012, 12, 2037-2044.	9.1	102
4	Rotating Field EC-GMR Sensor for Crack Detection at Fastener Site in Layered Structures. IEEE Sensors Journal, 2015, 15, 463-470.	4.7	63
5	Differential Vulnerability of Retinal Layers to Early Age-Related Macular Degeneration: Evidence by SD-OCT Segmentation Analysis. , 2014, 55, 560.		54
6	On the local minima problem in conductivity imaging via a quadratic approach. Inverse Problems, 1997, 13, 1547-1568.	2.0	46
7	Fast methods for quantitative eddy-current tomography of conductive materials. IEEE Transactions on Magnetics, 2006, 42, 2017-2028.	2.1	44
8	Circuits/fields coupling and multiply connected domains in integral formulations. IEEE Transactions on Magnetics, 2002, 38, 581-584.	2.1	42
9	Far field microwave NDE of composite structures using time reversal mirror. NDT and E International, 2018, 93, 7-17.	3.7	42
10	3D EC-GMR sensor system for detection of subsurface defects at steel fastener sites. NDT and E International, 2012, 50, 20-28.	3.7	41
11	Coupled Three Dimensional Numerical Calculation of Forces and Stresses on the End Windings of Large Turbo Generators via Integral Formulation. IEEE Transactions on Magnetics, 2012, 48, 875-878.	2.1	38
12	Enhancement of Microwave Imaging Using a Metamaterial Lens. IEEE Sensors Journal, 2019, 19, 4962-4971.	4.7	36
13	Numerical models of volumetric insulating cracks in eddy-current testing with experimental validation. IEEE Transactions on Magnetics, 2006, 42, 1568-1576.	2.1	34
14	Surface integral formulations for the design of plasmonic nanostructures. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 2314.	1.5	32
15	A Fast 3-D Multipole Method for Eddy-Current Computation. IEEE Transactions on Magnetics, 2004, 40, 1290-1293.	2.1	30
16	Monotonicity based imaging methods for elliptic and parabolic inverse problems. Journal of Inverse and Ill-Posed Problems, 2006, 14, 633-642.	1.0	28
17	Solution and Extension of a New Benchmark Problem for Eddy-Current Nondestructive Testing. IEEE Transactions on Magnetics, 2015, 51, 1-7.	2.1	23
18	A Broadband Volume Integral Formulation Based on Edge-Elements for Full-Wave Analysis of Lossy Interconnects. IEEE Transactions on Antennas and Propagation, 2006, 54, 2977-2989.	5.1	22

#	ARTICLE	IF	CITATIONS
19	A Novel Technique for Evaluating the Effective Permittivity of Inhomogeneous Interconnects Based on the Monotonicity Property. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2016, 6, 1417-1427.	2.5	22
20	Fast numerical techniques for electromagnetic nondestructive evaluation. Nondestructive Testing and Evaluation, 2009, 24, 165-194.	2.1	21
21	Multi-frequency identification of defects in conducting media. Inverse Problems, 2008, 24, 035011.	2.0	20
22	Non-iterative imaging method for experimental data inversion in eddy current tomography. NDT and E International, 2012, 47, 26-34.	3.7	20
23	Three dimensional finite elements modeling of superconductors. IEEE Transactions on Magnetics, 2000, 36, 1276-1279.	2.1	18
24	A fast 3D eddy current integral formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2001, 20, 317-331.	0.9	18
25	Automatic Treatment of Multiply Connected Regions in Integral Formulations. IEEE Transactions on Magnetics, 2010, 46, 2791-2794.	2.1	18
26	Monotonicity based imaging method for time-domain eddy current problems. Inverse Problems, 2017, 33, 125007.	2.0	18
27	Recent developments of a monotonicity imaging method for magnetic induction tomography in the small skin-depth regime. Inverse Problems, 2010, 26, 074016.	2.0	17
28	Magneto-resistive Sensor With Magnetic Balance Measurement for Inspection of Defects Under Magnetically Permeable Fasteners. IEEE Sensors Journal, 2016, 16, 2331-2338.	4.7	14
29	Volume Integral Formulation for the Calculation of Material Independent Modes of Dielectric Scatterers. IEEE Transactions on Antennas and Propagation, 2018, 66, 2505-2514.	5.1	14
30	A decay time approach for linear measurement of electrical conductivity. NDT and E International, 2019, 102, 169-174.	3.7	14
31	Concrete rebars inspection by eddy current testing. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 333-339.	0.6	12
32	Monotonicity Principle in tomography of nonlinear conducting materials [*] . Inverse Problems, 2021, 37, 045012.	2.0	12
33	Interpolating wavelets for the solution of Maxwell equations in the time domain. IEEE Transactions on Magnetics, 1998, 34, 2775-2778.	2.1	11
34	Adaptive Wavelets for Characterizing Magnetic Flux Leakage Signals from Pipeline inspection. , 2006, , .		11
35	Fast methods for shape reconstruction in Electrical Resistance Tomography. NDT and E International, 2012, 46, 32-40.	3.7	11
36	A Frequency Stable Volume Integral Equation Method for Anisotropic Scatterers. IEEE Transactions on Antennas and Propagation, 2017, 65, 1224-1235.	5.1	11

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37	Monotonicity principle in pulsed eddy current testing and its application to defect sizing. , 2017, , .		11
38	Macroscopic electrodynamic modelling of superconductors. Cryogenics, 2000, 40, 671-676.	1.7	10
39	A communications theory approach for electromagnetic inverse problems. IEEE Transactions on Magnetism, 2000, 36, 1136-1139.	2.1	10
40	Fast computational methods for large-scale eddy-current computation. IEEE Transactions on Magnetism, 2002, 38, 529-532.	2.1	10
41	Three-Dimensional Computation of Magnetic Fields in Hysteretic Media With Time-Periodic Sources. IEEE Transactions on Magnetism, 2014, 50, 53-56.	2.1	10
42	A Fast ECT Measurement Method for the Thickness of Metallic Plates. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-12.	4.7	10
43	A differential formulation based on a perturbative approach to solve the ECT inverse problem. Computer Methods in Applied Mechanics and Engineering, 1999, 169, 407-424.	6.6	9
44	Analysis methodologies and experimental benchmarks for eddy current testing. IEEE Transactions on Magnetism, 2005, 41, 1380-1383.	2.1	9
45	Regularization and numerical optimization of a fast eddy current imaging method. IEEE Transactions on Magnetism, 2006, 42, 1179-1182.	2.1	9
46	Magnetoquasistatic resonances of small dielectric objects. Physical Review Research, 2020, 2, .	3.6	9
47	Non-linear inverse resistivity profiling using wavelets. IEEE Transactions on Magnetism, 1998, 34, 2920-2923.	2.1	8
48	A FFT integral formulation using edge-elements for Eddy Current Testing. International Journal of Applied Electromagnetics and Mechanics, 2000, 11, 141-162.	0.6	8
49	Electrical resistance tomography: complementarity and quadratic models. Inverse Problems, 2000, 16, 1585-1618.	2.0	8
50	Reconstruction techniques for electrical resistance tomography. IEEE Transactions on Magnetism, 2000, 36, 1132-1135.	2.1	8
51	Phenomenological approaches based on an integral formulation for forward and inverse problems in eddy current testing. International Journal of Applied Electromagnetics and Mechanics, 2001, 12, 115-137.	0.6	8
52	Electromagnetic inspection of concrete rebars. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 389-398.	0.9	8
53	Linearized Fluid Model for Plasmon Oscillations in Metallic Nanoparticles. IEEE Transactions on Magnetism, 2008, 44, 822-825.	2.1	8
54	Design of a Real-Time Eddy Current Tomography System. IEEE Transactions on Magnetism, 2017, 53, 1-8.	2.1	8

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55	Three-Dimensional Defect Localization From Time-of-Flight/Eddy Current Testing Data. IEEE Transactions on Magnetics, 2004, 40, 1148-1151.	2.1	7
56	An Efficient Numerical Model For a Magnetic Core Eddy-Current Probe. IEEE Transactions on Magnetics, 2008, 44, 1306-1309.	2.1	7
57	Numerical Modeling for the Analysis of Plasmon Oscillations in Metallic Nanoparticles. IEEE Transactions on Antennas and Propagation, 2010, 58, 2920-2933.	5.1	7
58	Optimization of coil design for eddy current testing of multi-layer structures. International Journal of Applied Electromagnetics and Mechanics, 2016, 52, 315-322.	0.6	7
59	The monotonicity principle for magnetic induction tomography. Inverse Problems, 2021, 37, 095003.	2.0	7
60	A quadratic approach for the reconstruction of conductivity profiles using eddy currents. IEEE Transactions on Magnetics, 1996, 32, 1310-1313.	2.1	6
61	Identification of the Bâ€“H curve from external measurements using complementary formulations. Physica B: Condensed Matter, 2000, 275, 228-232.	2.7	5
62	A Fast Computation Method for the Analysis of an Array of Metallic Nanoparticles. IEEE Transactions on Magnetics, 2009, 45, 1618-1621.	2.1	5
63	ECT benchmark results for 3D defect signatures in industrial applications. NDT and E International, 2011, 44, 376-386.	3.7	5
64	Efficient Numerical Solution of Magnetic Field Problems in Presence of Hysteretic Media for Nondestructive Evaluation. IEEE Transactions on Magnetics, 2013, 49, 3167-3170.	2.1	5
65	Time-of-Flight Measurements from Eddy Current Tests. AIP Conference Proceedings, 2003, , .	0.4	4
66	Numerical modelling of the interaction of nanoparticles with electromagnetic waves. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2007, 26, 586-599.	0.9	4
67	Numerical modeling for plasmonics. International Journal of Applied Electromagnetics and Mechanics, 2011, 35, 79-91.	0.6	4
68	A Benchmark Problem for Eddy Current Nondestructive Evaluation. IEEE Transactions on Magnetics, 2014, 50, 1053-1056.	2.1	4
69	EC-GMR array with rotating current excitation for multilayered riveted structures inspection. , 2015, , .		4
70	Speedup of Magnetic-Electric Matrices Assembly Computation by Means of a Multi-GPUs Environment. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	4
71	NDE of composite structures using microwave time reversal imaging. AIP Conference Proceedings, 2016, , .	0.4	4
72	Micromagnetic measurements of ferromagnetic materials: Validation of a 3D numerical model. NDT and E International, 2019, 104, 77-89.	3.7	4

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73	Non destructive evaluation in the time domain. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 1999, 18, 422-435.	0.9	3
74	A novel technique based on integral formulation to treat the motion in the analysis of electric machinery. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 637-643.	0.6	3
75	Application of n-Fold Rotational Symmetries to Eddy Currents Integral Model in the Time Domain. IEEE Transactions on Magnetics, 2020, 56, 1-4.	2.1	3
76	A novel integral formulation for the solution of maxwell equations. IEEE Transactions on Magnetics, 2003, 39, 1578-1581.	2.1	2
77	Numerical modelling of volumetric defects. International Journal of Applied Electromagnetics and Mechanics, 2004, 19, 345-349.	0.6	2
78	Electromagnetic transient studies in the ITER tokamak. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 65-71.	0.6	2
79	Modelling eddy current testing of ferromagnetic medium. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 245-250.	0.6	2
80	Computation of end-winding inductances of rotating electrical machinery through three-dimensional magnetostatic integral FEM formulation. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 1539-1551.	0.9	2
81	Optimization of coil design for near uniform interrogating field generation. , 2015, , .		2
82	A Fast Matrix Compression Method for Large Scale Numerical Modelling of Rotationally Symmetric 3D Passive Structures in Fusion Devices. Energies, 2022, 15, 3214.	3.1	2
83	Homogenization technique for interconnect modeling based on the monotonicity property. , 2014, , .		1
84	Image processing algorithms for automated analysis of GMR data from inspection of multilayer structures. , 2015, , .		1
85	Homogenization technique for transmission lines based on the Monotonicity property. , 2015, , .		1
86	Automated detection of retinal layers from OCT spectral-domain images of healthy eyes. Journal of Modern Optics, 2015, 62, 1865-1878.	1.3	1
87	Model-based study for evaluating the sensitivity of eddy current GMR probe inspection of multilayer structures. AIP Conference Proceedings, 2017, , .	0.4	1
88	Efficient numerical evaluation of the electromagnetic scattering from arbitrarily-shaped objects by using the Dirichlet-to-Neumann map. , 2017, , .		1
89	Numerical Solution of Electromagnetic Scattering Problems Based on the Dirichlet-to-Neumann Map. , 2018, , .		1
90	Efficient Near-Field Analysis of the Electromagnetic Scattering Based on the Dirichlet-to-Neumann Map. Applied Sciences (Switzerland), 2019, 9, 4179.	2.5	1

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91	Permeability invariance transformation for inspection of magnetized steel rivets. International Journal of Applied Electromagnetics and Mechanics, 2019, 59, 1357-1364.	0.6	1
92	Application of Dirichlet-to-Neumann Map Boundary Condition for Low-Frequency Electromagnetic Problems. IEEE Transactions on Magnetics, 2020, 56, 1-8.	2.1	1
93	Efficient modeling of the skin-effect in low frequency regime. , 2007, , .		0
94	Interfaces removal for time-of-flight eddy current testing: The planar geometry case. International Journal of Applied Electromagnetics and Mechanics, 2007, 25, 307-312.	0.6	0
95	Interface Removal for Planar Geometries: The Vector Case. AIP Conference Proceedings, 2007, , .	0.4	0
96	Plasmonic, Carbon Nanotube and Conventional nano-interconnects: a comparison of propagation properties. , 2008, , .		0
97	Differential geometry based model for eddy current inspection of U-bend sections in steam generator tubes. AIP Conference Proceedings, 2017, , .	0.4	0
98	Optimal Homogeneous Transmission Line Model for Graphene Interconnects. , 2019, , .		0
99	Erratum to "Application of Dirichlet-to-Neumann Map Boundary Condition for Low Frequency Electromagnetic Problems" [Nov 20 Art. no. 7401308]. IEEE Transactions on Magnetics, 2021, 57, 1-1.	2.1	0
100	Genetically Engineered Plasmonic Nano-Arrays. , 2012, , .		0
101	Eddy Current Tomography. , 2019, , 757-779.		0