Ioannis T Rekanos

List of Publications by Year
in descending order

52 papers	1,205 citations	430874 18 h-index	377865 34 g-index
55 all docs	55 docs citations	55 times ranked	939 citing authors

#	Article	IF	Citations
1	Detection of explosive lung and bowel sounds by means of fractal dimension. IEEE Signal Processing Letters, 2003, 10, 311-314.	3.6	121
2	Shape Reconstruction of a Perfectly Conducting Scatterer Using Differential Evolution and Particle Swarm Optimization. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 1967-1974.	6.3	103
3	Neural-network-based inverse-scattering technique for online microwave medical imaging. IEEE Transactions on Magnetics, 2002, 38, 1061-1064.	2.1	87
4	Thinned Planar Array Design Using Boolean PSO With Velocity Mutation. IEEE Transactions on Magnetics, 2009, 45, 1490-1493.	2.1	66
5	Reconstruction of One-Dimensional Dielectric Scatterers Using Differential Evolution and Particle Swarm Optimization. IEEE Geoscience and Remote Sensing Letters, 2009, 6, 671-675.	3.1	54
6	Automatic P Phase Picking Using Maximum Kurtosis and<tex>$\kappa$$</tex>-Statistics Criteria. IEEE Geoscience and Remote Sensing Letters, 2004, 1, 147-151.	3.1	49
7	Microwave imaging in the time domain of buried multiple scatterers by using an FDTD-based optimization technique. IEEE Transactions on Magnetics, 2003, 39, 1381-1384.	2.1	45
8	TIME-DOMAIN INVERSE SCATTERING USING LAGRANGE MULTIPLIERS: AN ITERATIVE FDTD-BASED OPTIMIZATION TECHNIQUE. Journal of Electromagnetic Waves and Applications, 2003, 17, 271-289.	1.6	45
9	Inverse scattering using the finite-element method and a nonlinear optimization technique. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 336-344.	4.6	42
10	Two-Dimensional Microwave Imaging Based on Hybrid Scatterer Representation and Differential Evolution. IEEE Transactions on Antennas and Propagation, 2010, 58, 3289-3298.	5.1	41
11	Pareto Optimal Design of Dual-Band Base Station Antenna Arrays Using Multi-Objective Particle Swarm Optimization With Fitness Sharing. IEEE Transactions on Magnetics, 2009, 45, 1522-1525.	2.1	37
12	An Auxiliary Differential Equation Method for FDTD Modeling of Wave Propagation in Cole-Cole Dispersive Media. IEEE Transactions on Antennas and Propagation, 2010, 58, 3666-3674.	5.1	36
13	An iterative kurtosis-based technique for the detection of nonstationary bioacoustic signals. Signal Processing, 2006, 86, 3787-3795.	3.7	34
14	Microwave imaging using the finite-element method and a sensitivity analysis approach. IEEE Transactions on Medical Imaging, 1999, 18, 1108-1114.	8.9	30
15	A new heuristic diffraction coefficient for lossy dielectric wedges at normal incidence. IEEE Antennas and Wireless Propagation Letters, 2002, 1, 165-168.	4.0	28
16	FDTD Modeling of Wave Propagation in Cole-Cole Media With Multiple Relaxation Times. IEEE Antennas and Wireless Propagation Letters, 2010, 9, 67-69.	4.0	27
17	Impedance inversion in eddy current testing of layered planar structures via neural networks. NDT and E International, 1997, 30, 69-74.	3.7	22
18	FDTD Schemes for Wave Propagation in Davidson-Cole Dispersive Media Using Auxiliary Differential Equations. IEEE Transactions on Antennas and Propagation, 2012, 60, 1467-1478.	5.1	20

#	Article	IF	Citations
19	A combined finite element-nonlinear conjugate gradient spatial method for the reconstruction of unknown scatterer profiles. IEEE Transactions on Magnetics, 1998, 34, 2829-2832.	2.1	19
20	Approximation of Grünwald–Letnikov Fractional Derivative for FDTD Modeling of Cole–Cole Media. IEEE Transactions on Magnetics, 2014, 50, 181-184.	2.1	19
21	Inverse scattering of dielectric cylinders by using radial basis function neural networks. Radio Science, 2001, 36, 841-849.	1.6	18
22	Time–frequency analysis of transient dispersive waves: A comparative study. Applied Acoustics, 2007, 68, 296-309.	3.3	18
23	FDTD Modeling of Havriliak-Negami Media. IEEE Microwave and Wireless Components Letters, 2012, 22, 49-51.	3.2	18
24	An inverse scattering approach based on the differential E-formulation. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1456-1461.	6.3	17
25	Microdamage evaluation in human trabecular bone based on nonlinear ultrasound vibro-modulation (NUVM). Journal of Biomechanics, 2009, 42, 581-586.	2.1	17
26	An inverse scattering technique for microwave imaging of binary objects. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 1439-1441.	4.6	16
27	On-line inverse scattering of conducting cylinders using radial basis-function neural networks. Microwave and Optical Technology Letters, 2001, 28, 378-380.	1.4	14
28	Inverse scattering in the time domain: an iterative method using an FDTD sensitivity analysis scheme. IEEE Transactions on Magnetics, 2002, 38, 1117-1120.	2.1	14
29	Time-Domain Microwave Imaging of Inhomogeneous Debye Dispersive Scatterers. IEEE Transactions on Antennas and Propagation, 2012, 60, 1197-1202.	5.1	14
30	Efficient Metafilm/Metasurface Characterization for Obliquely Incident TE Waves via Surface Susceptibility Models. IEEE Transactions on Magnetics, 2012, 48, 367-370.	2.1	12
31	An iterative numerical method for inverse scattering problems. Radio Science, 1999, 34, 1401-1412.	1.6	11
32	Solving Inverse Scattering Problems Based on Truncated Cosine Fourier and Cubic B-Spline Expansions. IEEE Transactions on Antennas and Propagation, 2012, 60, 5914-5923.	5.1	11
33	A Convolutional PML Scheme for the Efficient Modeling of Graphene Structures Through the ADE-FDTD Technique. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	11
34	Microwave imaging: inversion of scattered near-field measurements. IEEE Transactions on Magnetics, 2001, 37, 3294-3297.	2.1	10
35	Errata to "A new heuristic diffraction coefficient for lossy dielectric wedges at normal incidence". IEEE Antennas and Wireless Propagation Letters, 2002, 1, 219-219.	4.0	10
36	EMI Reduction and ICs Optimal Arrangement Inside High-Speed Networking Equipment Using Particle Swarm Optimization. IEEE Transactions on Electromagnetic Compatibility, 2008, 50, 586-596.	2.2	9

#	Article	IF	Citations
37	Change Point Detection in Time Series Using Higher-Order Statistics: A Heuristic Approach. Mathematical Problems in Engineering, 2013, 2013, 1-10.	1.1	9
38	FDTD Method for Wave Propagation in Havriliakâ€"Negami Media Based on Fractional Derivative Approximation. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	9
39	EMC Analysis of High-Speed On-Chip Interconnects via a Mixed Quasi-Static Finite Differenceâ€"FEM Technique. IEEE Transactions on Magnetics, 2007, 43, 1365-1368.	2.1	7
40	Electromagnetic field inversion using the Quickprop method. IEEE Transactions on Magnetics, 1997, 33, 1872-1875.	2.1	6
41	Convergence enhancement for the vector finite element modeling of microwaves and antennas via differential evolution. AEU - International Journal of Electronics and Communications, 2006, 60, 428-434.	2.9	4
42	Shape design of cylindrical probe coils for the induction of specified eddy current distributions. IEEE Transactions on Magnetics, 1999, 35, 1797-1800.	2.1	3
43	Design of 3-pole PCS-type monoblock filter using an equivalent circuit approach. AEU - International Journal of Electronics and Communications, 2006, 60, 638-646.	2.9	3
44	Estimation of the Parameters of Lorentz Dispersive Media Using a Time-Domain Inverse Scattering Technique. IEEE Transactions on Magnetics, 2012, 48, 219-222.	2.1	3
45	Beam Propagation Method Based on the Iterated Crankâ€"Nicolson Scheme for Solving Large-Scale Wave Propagation Problems. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	3
46	Semi-Local Approximation of Fractional Derivatives in FDTD Modeling of Coleâ€"Cole Media: A Questionable Approach. IEEE Antennas and Wireless Propagation Letters, 2012, 11, 740-743.	4.0	2
47	Design and optimization of uniplanar EBG structures. International Journal of Applied Electromagnetics and Mechanics, 2012, 39, 615-621.	0.6	2
48	Electromagnetic field inversion based on generalised radial basis functions. International Journal of Applied Electromagnetics and Mechanics, 1998, 9, 291-302.	0.6	1
49	Estimation of the parameters of 2D Debye dispersive media using a time-domain inverse scattering technique. , 2011, , .		1
50	Comments on â€œFractional Derivative Based FDTD Modeling of Transient Wave Propagation in Havriliakâ€"Negami Mediaâ€. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 4188-4190.	4.6	1
51	A general computer simulation method for a 3-D received signal level in wideband mobile communications. Microwave and Optical Technology Letters, 2002, 32, 119-122.	1.4	0
52	FDTD method for wave propagation in Havriliak-Negami media based on fractional derivative approximation. , 2016, , .		0