

Ozlem Ozgun

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

56

papers

630

citations

13

h-index

22

g-index

77

ext. papers

810

ext. citations

2.9

avg, IF

4.27

L-index

#	Paper	IF	Citations
56	Physics-based modeling of sea clutter phenomenon by a full-wave numerical solver. <i>Wave Motion</i> , 2022 , 109, 102872	1.8	1
55	PETOOOL v2.0: Parabolic Equation Toolbox with evaporation duct models and real environment data. <i>Computer Physics Communications</i> , 2020 , 256, 107454	4.2	10
54	Multiscale Modeling of Thin-Wire Coupling Problems Using Hybridization of Finite Element and Dipole Moment Methods and GPU Acceleration. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , 2020 , 5, 155-166	1.5	
53	A novel CEM technique for modeling electromagnetic scattering from metasurfaces. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , 2020 , 33, e2681	1	1
52	A Domain Decomposition Finite-Element Method for Modeling Electromagnetic Scattering From Rough Sea Surfaces With Emphasis on Near-Forward Scattering. <i>IEEE Transactions on Antennas and Propagation</i> , 2019 , 67, 335-345	4.9	6
51	Coordinate transformation aided finite element method for contour detection of breast tumors in microwave imaging. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018 , 34, e3124	2.6	0
50	Finite Element Modeling of Fringe Fields in Wedge Diffraction Problem. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2017 , 16, 369-372	3.8	2
49	Implementation of coordinate transformations in periodic finite-element method for modeling rough surface scattering problems. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2016 , 26, 322-329	1.5	4
48	New Software Tool (GO+UTD) for Visualization of Wave Propagation [Testing Ourselves]. <i>IEEE Antennas and Propagation Magazine</i> , 2016 , 58, 91-103	1.7	5
47	Transformation Optics-based Computational Materials for Stochastic Electromagnetics 2016 , 241-286		
46	Remesh-Free Shape Optimization by Transformation Optics. <i>IEEE Transactions on Antennas and Propagation</i> , 2016 , 64, 5479-5482	4.9	2
45	Monte Carlo simulations of Helmholtz scattering from randomly positioned array of scatterers by utilizing coordinate transformations in finite element method. <i>Wave Motion</i> , 2015 , 56, 165-182	1.8	2
44	Double-Tip Diffraction Modeling: 2-D Numerical Models versus High-Frequency Asymptotics. <i>IEEE Transactions on Antennas and Propagation</i> , 2015 , 63, 2686-2693	4.9	6
43	. <i>IEEE Antennas and Propagation Magazine</i> , 2015 , 57, 113-118	1.7	6
42	Combining perturbation theory and transformation electromagnetics for finite element solution of Helmholtz-type scattering problems. <i>Journal of Computational Physics</i> , 2014 , 274, 883-897	4.1	6
41	A coordinate transformation approach for efficient repeated solution of Helmholtz equation pertaining to obstacle scattering by shape deformations. <i>Computer Physics Communications</i> , 2014 , 185, 1616-1627	4.2	4
40	Approximation of transformation media-based reshaping action by genetic optimization. <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 117, 597-604	2.6	4

39	Cartesian Grid Mapper: Transformation Media for Modeling Arbitrary Curved Boundaries With Cartesian Grids. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2014 , 13, 1771-1774	3.8	5
38	. <i>IEEE Transactions on Antennas and Propagation</i> , 2014 , 62, 3894-3894	4.9	1
37	Transformation Electromagnetics Based Analysis of Waveguides With Random Rough or Periodic Grooved Surfaces. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2013 , 61, 709-719	4.1	10
36	A Transformation Media Based Approach for Efficient Monte Carlo Analysis of Scattering From Rough Surfaces With Objects. <i>IEEE Transactions on Antennas and Propagation</i> , 2013 , 61, 1352-1362	4.9	16
35	Software metamaterials: Transformation media based multiscale techniques for computational electromagnetics. <i>Journal of Computational Physics</i> , 2013 , 236, 203-219	4.1	15
34	Monte Carlo analysis of ridged waveguides with transformation media. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2013 , 23, 476-481	1.5	3
33	Monte Carlo-Based Characteristic Basis Finite-Element Method (MC-CBFEM) for Numerical Analysis of Scattering From Objects On/Above Rough Sea Surfaces. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2012 , 50, 769-783	8.1	23
32	Transformation-based metamaterials to eliminate the staircasing error in the finite difference time domain method. <i>International Journal of RF and Microwave Computer-Aided Engineering</i> , 2012 , 22, 530-540	1.5	12
31	Comments on ParAFEMCap: A Parallel Adaptive Finite-Element Method for 3-D VLSI Interconnect Capacitance Extraction. <i>IEEE Transactions on Microwave Theory and Techniques</i> , 2012 , 60, 1744-1745	4.1	
30	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2011 , 49, 2887-2899	8.1	24
29	PETOOL: MATLAB-based one-way and two-way split-step parabolic equation tool for radiowave propagation over variable terrain. <i>Computer Physics Communications</i> , 2011 , 182, 2638-2654	4.2	75
28	Numerical Solution of Multi-scale Electromagnetic Boundary Value Problems by Utilizing Transformation-Based Metamaterials. <i>Lecture Notes in Computer Science</i> , 2011 , 11-25	0.9	3
27	Two-way split-step fourier and finite element based parabolic equation propagation tools: Comparisons and calibration 2010 ,		7
26	Finite element/dipole moment method for efficient solution of multiscale electromagnetic problems 2010 ,		4
25	Form Invariance of Maxwell's Equations: The Pathway to Novel Metamaterial Specifications for Electromagnetic Reshaping. <i>IEEE Antennas and Propagation Magazine</i> , 2010 , 52, 51-65	1.7	15
24	Two-way fourier split step algorithm over variable terrain with narrow and wide angle propagators 2010 ,		9
23	Two-way split-step parabolic equation algorithm for tropospheric propagation: Tests and comparisons 2010 ,		6
22	General-Purpose Characteristic Basis Finite Element Method for Multi-Scale Electrostatic and Electromagnetic Problems. <i>Electromagnetics</i> , 2010 , 30, 205-221	0.8	2

21	Iterative leap-field domain decomposition method: a domain decomposition finite element algorithm for 3D electromagnetic boundary value problems. <i>IET Microwaves, Antennas and Propagation</i> , 2010 , 4, 543	1.6	4
20	PO-based characteristic basis finite element method (CBFEM-PO) A parallel, iteration-free domain decomposition algorithm using perfectly matched layers for large-scale electromagnetic scattering problems. <i>Microwave and Optical Technology Letters</i> , 2010 , 52, 1053-1060	1.2	4
19	Domain compression via anisotropic metamaterials designed by coordinate transformations. <i>Journal of Computational Physics</i> , 2010 , 229, 921-932	4.1	13
18	Form-Invariance of Maxwell's Equations in Waveguide Cross-Section Transformations. <i>Electromagnetics</i> , 2009 , 29, 353-376	0.8	12
17	Multilevel Characteristic Basis Finite-Element Method (ML-CBFEM) An Efficient Version of a Domain Decomposition Algorithm for Large-Scale Electromagnetic Problems. <i>IEEE Transactions on Antennas and Propagation</i> , 2009 , 57, 3381-3387	4.9	6
16	Parallelized Characteristic Basis Finite Element Method (CBFEM-MPI) A non-iterative domain decomposition algorithm for electromagnetic scattering problems. <i>Journal of Computational Physics</i> , 2009 , 228, 2225-2238	4.1	11
15	CBFEM-MPI: A Parallelized Version of Characteristic Basis Finite Element Method for Extraction of 3-D Interconnect Capacitances. <i>IEEE Transactions on Advanced Packaging</i> , 2009 , 32, 164-174		6
14	Recursive Two-Way Parabolic Equation Approach for Modeling Terrain Effects in Tropospheric Propagation. <i>IEEE Transactions on Antennas and Propagation</i> , 2009 , 57, 2706-2714	4.9	56
13	Finite Element Analysis of Electromagnetic Scattering Problems via Iterative Leap-Field Domain Decomposition Method. <i>Journal of Electromagnetic Waves and Applications</i> , 2008 , 22, 251-266	1.3	17
12	Characteristic Basis Finite Element Method (CBFEM) A non-iterative domain decomposition finite element algorithm for solving electromagnetic scattering problems 2008 ,		1
11	Efficient finite element solution of low-frequency scattering problems via anisotropic metamaterial layers. <i>Microwave and Optical Technology Letters</i> , 2008 , 50, 639-646	1.2	8
10	Correction to Non-Maxwellian Locally-Conformal PML Absorbers for Finite Element Mesh Truncation [Mar 07 931-937]. <i>IEEE Transactions on Antennas and Propagation</i> , 2007 , 55, 1472-1472	4.9	
9	Utilization of Anisotropic Metamaterial Layers in Waveguide Miniaturization and Transitions. <i>IEEE Microwave and Wireless Components Letters</i> , 2007 , 17, 754-756	2.6	46
8	Multicenter perfectly matched layer implementation for finite element mesh truncation. <i>Microwave and Optical Technology Letters</i> , 2007 , 49, 827-832	1.2	4
7	Forward backward domain decomposition method for finite element solution of electromagnetic boundary value problems. <i>Microwave and Optical Technology Letters</i> , 2007 , 49, 2582-2590	1.2	8
6	Electromagnetic metamorphosis: Reshaping scatterers via conformal anisotropic metamaterial coatings. <i>Microwave and Optical Technology Letters</i> , 2007 , 49, 2386-2392	1.2	43
5	Near-field performance analysis of locally-conformal perfectly matched absorbers via Monte Carlo simulations. <i>Journal of Computational Physics</i> , 2007 , 227, 1225-1245	4.1	25
4	Non-Maxwellian Locally-Conformal PML Absorbers for Finite Element Mesh Truncation. <i>IEEE Transactions on Antennas and Propagation</i> , 2007 , 55, 931-937	4.9	45

3	Locally-conformal perfectly matched layer implementation for finite element mesh truncation. <i>Microwave and Optical Technology Letters</i> , 2006 , 48, 1836-1839	1.2	5
2	Design of dual-frequency probe-fed microstrip antennas with genetic optimization algorithm. <i>IEEE Transactions on Antennas and Propagation</i> , 2003 , 51, 1947-1954	4.9	22
1	MATLAB [®] -based Finite Element Programming in Electromagnetic Modeling		5