

# Fernando L Teixeira

## List of Publications by Citations

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60  
g-index

375  
ext. papers

6,371  
ext. citations

3.3  
avg, IF

6.14  
L-index

#	Paper	IF	Citations
257	Plasmon-enhanced optical absorption and photocurrent in organic bulk heterojunction photovoltaic devices using self-assembled layer of silver nanoparticles. <i>Solar Energy Materials and Solar Cells</i> , <b>2010</b> , 94, 128-132	6.4	175
256	Systematic derivation of anisotropic PML absorbing media in cylindrical and spherical coordinates <b>1997</b> , 7, 371-373		152
255	DeepNIS: Deep Neural Network for Nonlinear Electromagnetic Inverse Scattering. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2019</b> , 67, 1819-1825	4.9	145
254	General closed-form PML constitutive tensors to match arbitrary bianisotropic and dispersive linear media <b>1998</b> , 8, 223-225		136
253	Lattice electromagnetic theory from a topological viewpoint. <i>Journal of Mathematical Physics</i> , <b>1999</b> , 40, 169-187	1.2	136
252	Time-Domain Finite-Difference and Finite-Element Methods for Maxwell Equations in Complex Media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 2150-2166	4.9	134
251	PML-FDTD in cylindrical and spherical grids <b>1997</b> , 7, 285-287		129
250	Finite-difference time-domain simulation of ground penetrating radar on dispersive, inhomogeneous, and conductive soils. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>1998</b> , 36, 1928-1937	8.1	115
249	. <i>Journal of Lightwave Technology</i> , <b>2007</b> , 25, 2757-2765	4	109
248	Analytical derivation of a conformal perfectly matched absorber for electromagnetic waves. <i>Microwave and Optical Technology Letters</i> , <b>1998</b> , 17, 231-236	1.2	99
247	A nonlinear image reconstruction technique for ECT using a combined neural network approach. <i>Measurement Science and Technology</i> , <b>2006</b> , 17, 2097-2103	2	99
246	Differential Forms, Metrics, and the Reflectionless Absorption of Electromagnetic Waves. <i>Journal of Electromagnetic Waves and Applications</i> , <b>1999</b> , 13, 665-686	1.3	85
245	Full time-domain DORT for ultrawideband electromagnetic fields in dispersive, random inhomogeneous media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2006</b> , 54, 2305-2315	4.9	80
244	An iterative ADI-FDTD with reduced splitting error. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2005</b> , 15, 92-94	2.6	76
243	Complex space approach to perfectly matched layers: a review and some new developments. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , <b>2000</b> , 13, 441-455	1	76
242	Geometric finite element discretization of Maxwell equations in primal and dual spaces. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2006</b> , 349, 1-14	2.3	67
241	Space-Frequency Ultrawideband Time-Reversal Imaging. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2008</b> , 46, 1115-1124	8.1	65

240	Dispersion-relation-preserving FDTD algorithms for large-scale three-dimensional problems. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2003</b> , 51, 1818-1828	4.9	65
239	Finite-difference computation of transient electromagnetic waves for cylindrical geometries in complex media. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2000</b> , 38, 1530-1543	8.1	65
238	Metamaterial Blueprints for Reflectionless Waveguide Bends. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2008</b> , 18, 233-235	2.6	57
237	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2002</b> , 40, 178-186	8.1	54
236	A Multimodal Tomography System Based on ECT Sensors. <i>IEEE Sensors Journal</i> , <b>2007</b> , 7, 426-433	4	53
235	Analysis of Directional Logging Tools in Anisotropic and Multieccentric Cylindrically-Layered Earth Formations. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 318-327	4.9	50
234	Ultrawideband Microwave Sensing and Imaging Using Time-Reversal Techniques: A Review. <i>Remote Sensing</i> , <b>2009</b> , 1, 466-495	5	48
233	Mixed Finite-Element Time-Domain Method for Transient Maxwell Equations in Doubly Dispersive Media. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2008</b> , 56, 113-120	4.1	48
232	Cylindrical FDTD Analysis of LWD Tools Through Anisotropic Dipping-Layered Earth Media. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2007</b> , 45, 383-388	8.1	48
231	Fast algorithm for matrix-vector multiply of asymmetric multilevel block-Toeplitz matrices in 3-D scattering. <i>Microwave and Optical Technology Letters</i> , <b>2001</b> , 31, 28-32	1.2	48
230	On causality and dynamic stability of perfectly matched layers for FDTD simulations. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>1999</b> , 47, 775-785	4.1	47
229	Split-field PML implementations for the unconditionally stable LOD-FDTD method. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2006</b> , 16, 398-400	2.6	46
228	Adaptive Electrical Capacitance Volume Tomography. <i>IEEE Sensors Journal</i> , <b>2014</b> , 14, 1253-1259	4	45
227	Nonlinear forward problem solution for electrical capacitance tomography using feed-forward neural network. <i>IEEE Sensors Journal</i> , <b>2006</b> , 6, 441-449	4	45
226	Sensitivity matrix calculation for fast 3-D electrical capacitance tomography (ECT) of flow systems. <i>IEEE Transactions on Magnetics</i> , <b>2004</b> , 40, 1204-1207	2	45
225	On the Sensitivity of Time-Reversal Imaging Techniques to Model Perturbations. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 834-843	4.9	44
224	. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2005</b> , 43, 257-268	8.1	44
223	Electrically small, complementary electric-field-coupled resonator antennas. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 084903	2.5	43

222	Analysis and compensation of numerical dispersion in the FDTD method for layered, anisotropic media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2002</b> , 50, 1174-1184	4.9	43
221	Multispecies ADI-FDTD Algorithm for Nanoscale Three-Dimensional Photonic Metallic Structures. <i>IEEE Photonics Technology Letters</i> , <b>2007</b> , 19, 586-588	2.2	41
220	Frequency dispersion compensation in time reversal techniques for UWB electromagnetic waves. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2005</b> , 2, 233-237	4.1	41
219	An efficient PML implementation for the ADI-FDTD method. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2003</b> , 13, 72-74	2.6	40
218	Differential Forms, Galerkin Duality, and Sparse Inverse Approximations in Finite Element Solutions of Maxwell Equations. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2007</b> , 55, 1359-1368	4.9	39
217	Numerical Mode-Matching Method for Tilted-Coil Antennas in Cylindrically Layered Anisotropic Media With Multiple Horizontal Beds. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2007</b> , 45, 2451-2462	8.1	38
216	A numerical study of time-reversed UWB electromagnetic waves in continuous random media. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2005</b> , 4, 43-46	3.8	38
215	Analysis of tilted-coil eccentric borehole antennas in cylindrical multilayered formations for well-logging applications. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2006</b> , 54, 1058-1064	4.9	36
214	A general approach to extend Berenger's absorbing boundary condition to anisotropic and dispersive media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>1998</b> , 46, 1386-1387	4.9	36
213	Exact charge-conserving scattergather algorithm for particle-in-cell simulations on unstructured grids: A geometric perspective. <i>Computer Physics Communications</i> , <b>2015</b> , 194, 43-53	4.2	35
212	Modeling and investigation of a geometrically complex UWB GPR antenna using FDTD. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2004</b> , 52, 1983-1991	4.9	33
211	A three-dimensional angle-optimized finite-difference time-domain algorithm. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2003</b> , 51, 811-817	4.1	33
210	Toward Multiphase Flow Decomposition Based on Electrical Capacitance Tomography Sensors. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 8027-8036	4	32
209	Improved FDTD subgridding algorithms via digital filtering and domain overriding. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2005</b> , 53, 2938-2951	4.9	32
208	Parallel and Explicit Finite-Element Time-Domain Method for Maxwell's Equations. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2011</b> , 59, 2350-2356	4.9	31
207	Conformal Perfectly Matched Layer for the Mixed Finite Element Time-Domain Method. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2008</b> , 56, 1017-1026	4.9	31
206	Numerical Modeling of Eccentered LWD Borehole Sensors in Dipping and Fully Anisotropic Earth Formations. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2012</b> , 50, 727-735	8.1	30
205	On the degrees of freedom of lattice electrodynamics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2005</b> , 336, 1-7	2.3	30

204	Conformal PML-FDTD schemes for electromagnetic field simulations: a dynamic stability study. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2001</b> , 49, 902-907	4.9	29
203	A Comparison Between Electrical Capacitance Tomography and Displacement-Current Phase Tomography. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 8037-8046	4	28
202	Electrical capacitance tomography <b>2015</b> , 3-21		27
201	Three-Dimensional Finite-Volume Analysis of Directional Resistivity Logging Sensors. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2010</b> , 48, 1151-1158	8.1	27
200	An Iterative Unconditionally Stable LOD-FDTD Method. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2008</b> , 18, 76-78	2.6	27
199	Transient analysis of spectrally asymmetric magnetic photonic crystals with ferromagnetic losses. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	27
198	Some remarks on the stability of time-domain electromagnetic simulations. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2004</b> , 52, 895-898	4.9	26
197	Optimization of subgridding schemes for FDTD. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2002</b> , 12, 223-225	2.6	26
196	Stable pseudoanalytical computation of electromagnetic fields from arbitrarily-oriented dipoles in cylindrically stratified media. <i>Journal of Computational Physics</i> , <b>2014</b> , 273, 118-142	4.1	25
195	Imaging and tracking of targets in clutter using differential time-reversal techniques. <i>Waves in Random and Complex Media</i> , <b>2012</b> , 22, 66-108	1.9	25
194	Impedance-matched absorbers and optical pseudo black holes. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2011</b> , 28, 1317	1.7	25
193	Robust computation of dipole electromagnetic fields in arbitrarily anisotropic, planar-stratified environments. <i>Physical Review E</i> , <b>2014</b> , 89, 013312	2.4	24
192	Sparse and explicit FETD via approximate inverse Hodge (mass) matrix. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2006</b> , 16, 348-350	2.6	24
191	Complex Envelope PML-ADI-FDTD Method for Lossy Anisotropic Dielectrics. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2007</b> , 6, 643-646	3.8	24
190	Sensitivity map computation in adaptive electrical capacitance volume tomography with multielectrode excitations. <i>Electronics Letters</i> , <b>2015</b> , 51, 334-336	1.1	22
189	. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2009</b> , 57, 491-498	4.9	22
188	Statistical Stability of Ultrawideband Time-Reversal Imaging in Random Media. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2014</b> , 52, 870-879	8.1	21
187	Axisymmetric charge-conservative electromagnetic particle simulation algorithm on unstructured grids: Application to microwave vacuum electronic devices. <i>Journal of Computational Physics</i> , <b>2017</b> , 346, 295-317	4.1	21

186	Dual imaging modality of granular flow based on ECT sensors. <i>Granular Matter</i> , <b>2008</b> , 10, 75-80	2.6	21
185	Finite Volume Modeling of Borehole Electromagnetic Logging in 3-D Anisotropic Formations Using Coupled Scalar-Vector Potentials. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2007</b> , 6, 549-552	3.8	21
184	Closed-Form Metamaterial Blueprints for Electromagnetic Masking of Arbitrarily Shaped Convex PEC Objects. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2007</b> , 6, 163-164	3.8	20
183	FSS-Based Fully Reconfigurable Resorber With Enhanced Absorption Bandwidth and Simplified Bias Network. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2020</b> , 68, 7370-7381	4.9	20
182	Ultra-wideband microwave imaging of breast cancer tumors via Bayesian inverse scattering. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 064701	2.5	19
181	Surface Plasmon Coplanar Waveguides: Mode Characteristics and Mode Conversion Losses. <i>IEEE Photonics Technology Letters</i> , <b>2009</b> , 21, 630-632	2.2	19
180	Modeling of EM logging tools in arbitrary 3-D borehole geometries using PML-FDTD. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2005</b> , 2, 78-81	4.1	19
179	Unified analysis of perfectly matched layers using differential forms. <i>Microwave and Optical Technology Letters</i> , <b>1999</b> , 20, 124-126	1.2	19
178	LATTICE MAXWELL'S EQUATIONS (Invited Paper). <i>Progress in Electromagnetics Research</i> , <b>2014</b> , 148, 113-128	3.8	18
177	A finite-difference time-domain algorithm optimized for arbitrary propagation angles. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2003</b> , 51, 2456-2463	4.9	18
176	Symmetric source implementation for the ADI-FDTD method. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2005</b> , 53, 1562-1565	4.9	18
175	Wide-Angle Broadband Resorber for Switchable and Conformal Application. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2021</b> , 69, 1205-1216	4.1	18
174	ELECTRICAL CAPACITANCE VOLUME TOMOGRAPHY: A COMPARISON BETWEEN 12- AND 24-CHANNELS SENSOR SYSTEMS. <i>Progress in Electromagnetics Research M</i> , <b>2015</b> , 41, 73-84	0.6	17
173	A new full-vectorial FD-BPM scheme: application to the analysis of magneto-optic and nonlinear saturable media. <i>Journal of Lightwave Technology</i> , <b>2005</b> , 23, 2579-2585	4	17
172	On aspects of the physical realizability of perfectly matched absorbers for electromagnetic waves. <i>Radio Science</i> , <b>2003</b> , 38, n/a-n/a	1.4	17
171	Local, Explicit, and Charge-Conserving Electromagnetic Particle-In-Cell Algorithm on Unstructured Grids. <i>IEEE Transactions on Plasma Science</i> , <b>2016</b> , 44, 1353-1362	1.3	17
170	Velocity Profiling of Multiphase Flows Using Capacitive Sensor Sensitivity Gradient. <i>IEEE Sensors Journal</i> , <b>2016</b> , 1-1	4	17
169	Time-reversal techniques for MISO and MIMO wireless communication systems. <i>Radio Science</i> , <b>2012</b> , 47, n/a-n/a	1.4	16

168	Photonic crystals with a degenerate band edge: Field enhancement effects and sensitivity analysis. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	16
167	Stable evaluation of Green's functions in cylindrically stratified regions with uniaxial anisotropic layers. <i>Journal of Computational Physics</i> , <b>2016</b> , 325, 174-200	4.1	16
166	Performance Analysis and Dynamic Evolution of Deep Convolutional Neural Network for Electromagnetic Inverse Scattering. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2019</b> , 18, 2259-2263 <sup>3.8</sup>	3.8	15
165	Causal-Path Local Time-Stepping in the discontinuous Galerkin method for Maxwell's equations. <i>Journal of Computational Physics</i> , <b>2014</b> , 256, 678-695	4.1	15
164	Bayesian compressive sensing for ultrawideband inverse scattering in random media. <i>Inverse Problems</i> , <b>2014</b> , 30, 114017	2.3	15
163	Application of the Modal CFS-PML-FDTD to the Analysis of Magnetic Photonic Crystal Waveguides. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2011</b> , 21, 179-181	2.6	15
162	Grid-dispersion error reduction for broadband FDTD electromagnetic simulations. <i>IEEE Transactions on Magnetics</i> , <b>2004</b> , 40, 1440-1443	2	15
161	Sparse matrix/canonical grid method applied to 3-D dense medium simulations. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2003</b> , 51, 48-58	4.9	15
160	. <i>IEEE Transactions on Antennas and Propagation</i> , <b>1994</b> , 42, 47-53	4.9	15
159	An Efficient Rescaled Formulation for Tensor Green's Function Computation in Cylindrical Multilayered Media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2015</b> , 63, 5677-5685	4.9	14
158	Highly efficient holograms based on c-Si metasurfaces in the visible range. <i>Optics Express</i> , <b>2018</b> , 26, 9573-9583	3.9	14
157	GPR SIGNAL ENHANCEMENT USING SLIDING-WINDOW SPACE-FREQUENCY MATRICES. <i>Progress in Electromagnetics Research</i> , <b>2014</b> , 145, 1-10	3.8	14
156	Anisotropic-medium PML for vector FETD with modified basis functions. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2006</b> , 54, 20-27	4.9	14
155	Exploiting the Maxwell-Wagner-Sillars Effect for Displacement-Current Phase Tomography of Two-Phase Flows. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 7317-7324	4	13
154	Enhancing Resolution of Electrical Capacitive Sensors for Multiphase Flows by Fine-Stepped Electronic Scanning of Synthetic Electrodes. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2019</b> , 68, 462-473	5.2	13
153	Differential form approach to the analysis of electromagnetic cloaking and masking. <i>Microwave and Optical Technology Letters</i> , <b>2007</b> , 49, 2051-2053	1.2	13
152	An approach for automatic grid generation in three-dimensional FDTD simulations of complex geometries. <i>IEEE Antennas and Propagation Magazine</i> , <b>2002</b> , 44, 75-80	1.7	13
151	Inverse Normalization Method for Cross-Sectional Imaging and Velocimetry of Two-Phase Flows Based on Electrical Capacitance Tomography <b>2018</b> , 2, 1-4		13

150	A Robust Mode-Matching Algorithm for the Analysis of Triaxial Well-Logging Tools in Anisotropic Geophysical Formations. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2017</b> , 55, 2534-2545	8.1	12
149	Differential Forms in Lattice Field Theories: An Overview. <i>ISRN Mathematical Analysis</i> , <b>2013</b> , 2013, 1-16		12
148	Mixed $\text{E}^{\text{h}}$ Finite Elements for Solving 1-D, 2-D, and 3-D Time-Harmonic Maxwell Curl Equations. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2007</b> , 17, 313-315	2.6	12
147	Split-field and anisotropic-medium PML-FDTD implementations for inhomogeneous media. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2002</b> , 50, 30-35	4.1	12
146	Acceleration of Electrical Capacitance Volume Tomography Imaging by Fourier-Based Sparse Representations. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 9649-9659	4	12
145	Study of time-reversal-based signal processing applied to polarimetric GPR detection of elongated targets. <i>Journal of Applied Geophysics</i> , <b>2017</b> , 139, 257-268	1.7	11
144	Relativistic extension of a charge-conservative finite element solver for time-dependent Maxwell-Vlasov equations. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 013109	2.1	11
143	Application of time-reversal-based processing techniques to enhance detection of GPR targets. <i>Journal of Applied Geophysics</i> , <b>2017</b> , 146, 80-94	1.7	11
142	. <i>Journal of Lightwave Technology</i> , <b>2009</b> , 27, 4241-4249	4	11
141	Frozen Modes in Parallel-Plate Waveguides Loaded With Magnetic Photonic Crystals. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2007</b> , 55, 2631-2641	4.1	11
140	Toward Electrical Capacitance Tomography of Water-Dominated Multiphase Vertical Flows. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 10041-10048	4	11
139	Equalized Time Reversal Beamforming for Frequency-Selective Indoor MISO Channels. <i>IEEE Access</i> , <b>2017</b> , 5, 3944-3957	3.5	10
138	Perfectly reflectionless omnidirectional absorbers and electromagnetic horizons. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2015</b> , 32, 1645	1.7	10
137	Analysis of deep-subwavelength Au and Ag slit transmittances at terahertz frequencies. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2016</b> , 33, 1355	1.7	10
136	Complex-plane generalization of scalar Levin transforms: A robust, rapidly convergent method to compute potentials and fields in multi-layered media. <i>Journal of Computational Physics</i> , <b>2014</b> , 269, 403-422	4.1	10
135	Electric-field-coupled resonators as metamaterial loadings for waveguide miniaturization. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 214901	2.5	10
134	FDTD simulation of MWD electromagnetic tools in large-contrast geophysical formations. <i>IEEE Transactions on Magnetics</i> , <b>2004</b> , 40, 1456-1459	2	10
133	Numerical modeling of ultrawide-band dielectric horn antennas using FDTD. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2004</b> , 52, 1318-1323	4.9	10



132	A Nodal Continuous-Discontinuous Galerkin Time-Domain Method for Maxwell's Equations. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2015</b> , 63, 3081-3093	4.1	9
131	Relevance Vector Machine Image Reconstruction Algorithm for Electrical Capacitance Tomography With Explicit Uncertainty Estimates. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 4925-4939	4	9
130	Trade-Offs for Unconditional Stability in the Finite-Element Time-Domain Method. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2014</b> , 24, 361-363	2.6	9
129	A Small-Perturbation Automatic-Differentiation Method for Determining Uncertainty in Computational Electromagnetics. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2012</b> , 60, 5305-5314	4.9	9
128	An equivalent electric field source for wideband FDTD simulations of waveguide discontinuities. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2003</b> , 13, 27-29	2.6	9
127	Extension of the PML absorbing boundary condition to 3D spherical coordinates: scalar case. <i>IEEE Transactions on Magnetics</i> , <b>1998</b> , 34, 2680-2683	2	9
126	Displacement-Current Phase Tomography for Water-Dominated Two-Phase Flow Velocimetry. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 1563-1571	4	9
125	Semianalytical Model for Design and Analysis of Grating-Assisted Radiation Emission of Quantum Emitters in Hyperbolic Metamaterials. <i>ACS Photonics</i> , <b>2018</b> , 5, 1951-1959	6.3	8
124	Tensor Green's function evaluation in arbitrarily anisotropic, layered media using complex-plane Gauss-Laguerre quadrature. <i>Physical Review E</i> , <b>2014</b> , 89, 053303	2.4	8
123	Numerical study of photonic crystals with a split band edge: Polarization dependence and sensitivity analysis. <i>Physical Review A</i> , <b>2008</b> , 78,	2.6	8
122	Accurate interfacing of heterogeneous structured FDTD grid components. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2006</b> , 54, 1826-1835	4.9	8
121	Lattice models for large-scale simulations of coherent wave scattering. <i>Physical Review E</i> , <b>2004</b> , 69, 016701	4.1	8
120	Geometric Aspects of the Simplicial Discretization of Maxwell's Equations. <i>Progress in Electromagnetics Research</i> , <b>2001</b> , 32, 171-188	3.8	8
119	Constitutive parameter retrieval for uniaxial metamaterials with spatial dispersion. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	8
118	Unconditionally Stable One-Step Leapfrog ADI-FDTD for Dispersive Media. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2019</b> , 67, 2829-2834	4.9	7
117	Cross-Plane Acquisitions in Electrical Capacitance Volume Tomography. <i>IEEE Sensors Journal</i> , <b>2019</b> , 19, 8767-8774	4	7
116	Interference-nulling time-reversal beamforming for mm-Wave massive MIMO systems <b>2015</b> ,		7
115	Locally-Conformal FDTD for Anisotropic Conductive Interfaces. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2010</b> , 58, 3658-3665	4.9	7

114	B-spline basis functions for moment-method analysis of axisymmetric reflector antennas. <i>Microwave and Optical Technology Letters</i> , <b>1997</b> , 14, 188-191	1.2	7
113	Domain-overriding and digital filtering for 3-D FDTD subgridded simulations. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2006</b> , 16, 10-12	2.6	7
112	Model Order Reduction of Electromagnetic Particle-in-Cell Kinetic Plasma Simulations via Proper Orthogonal Decomposition. <i>IEEE Transactions on Plasma Science</i> , <b>2019</b> , 47, 5239-5250	1.3	7
111	Multifunctional Frequency Selective Resorber With Dual Mode and Continuous Tunability. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2021</b> , 69, 5704-5715	4.9	7
110	Electronic Scanning Strategies in Adaptive Electrical Capacitance Volume Tomography: Tradeoffs and Prospects. <i>IEEE Sensors Journal</i> , <b>2020</b> , 1-1	4	6
109	Computation of Tensor Green's Functions in Uniaxial Planar-Stratified Media With a Rescaled Equivalent Boundary Approach. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 1863-1873	4.9	6
108	Experimental Demonstration of Statistical Stability in Ultrawideband Time-Reversal Imaging. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2014</b> , 11, 29-33	4.1	6
107	A Comparative Analysis of Krylov Solvers for Three-Dimensional Simulations of Borehole Sensors. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2011</b> , 8, 98-102	4.1	6
106	Detection of targets in continuous random media: A numerical study using the angular correlation function. <i>Microwave and Optical Technology Letters</i> , <b>2002</b> , 33, 242-247	1.2	6
105	Design of a multifunctional integrated optical isolator switch based on nonlinear and nonreciprocal effects. <i>Optical Engineering</i> , <b>2005</b> , 44, 124002	1.1	6
104	Broadband c-Si metasurfaces with polarization control at visible wavelengths: applications to 3D stereoscopic holography. <i>Optics Express</i> , <b>2018</b> , 26, 30740-30752	3.3	6
103	Quantum information preserving computational electromagnetics. <i>Physical Review A</i> , <b>2020</b> , 102,	2.6	6
102	Locating small structural damages in pipes using space-frequency DORT processing. <i>Results in Physics</i> , <b>2017</b> , 7, 1637-1643	3.7	5
101	Tuning the Plasmonic Extinction Resonances of Hexagonal Arrays of Ag Nanoparticles. <i>Plasmonics</i> , <b>2015</b> , 10, 1505-1512	2.4	5
100	Computation of potentials from current electrodes in cylindrically stratified media: A stable, rescaled semi-analytical formulation. <i>Journal of Computational Physics</i> , <b>2015</b> , 280, 692-709	4.1	5
99	Analysis of canonical low-profile radiators on isoimpedance metamaterial substrates. <i>Radio Science</i> , <b>2012</b> , 47, n/a-n/a	1.4	5
98	Anisotropic metamaterial blueprints for cladding control of waveguide modes. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2010</b> , 27, 1603	1.7	5
97	Perfectly matched layer in cylindrical coordinates		5

96	Comparison of Coupled-Potentials and Field-Based Finite-Volume Techniques for Modeling of Borehole EM Tools. <i>IEEE Geoscience and Remote Sensing Letters</i> , <b>2008</b> , 5, 209-211	4.1	5
95	Comments on "An efficient PML implementation for the ADI-FDTD method". <i>IEEE Microwave and Wireless Components Letters</i> , <b>2004</b> , 14, 248-249	2.6	5
94	An improved wide-angle FD-BPM for nonlinear and nonreciprocal waveguides. <i>IEEE Transactions on Magnetism</i> , <b>2003</b> , 39, 1223-1226	2	5
93	Finite element time-domain body-of-revolution Maxwell solver based on discrete exterior calculus. <i>Journal of Computational Physics</i> , <b>2019</b> , 376, 249-275	4.1	5
92	Efficient and Flexible Sensitivity Matrix Computation for Adaptive Electrical Capacitance Volume Tomography. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2021</b> , 70, 1-10	5.2	5
91	Analysis of Multipactor Effects by a Particle-in-Cell Algorithm Integrated With Secondary Electron Emission Model on Irregular Grids. <i>IEEE Transactions on Plasma Science</i> , <b>2019</b> , 47, 1269-1278	1.3	4
90	Performance Analysis of Perfectly Matched Layers Applied to Spherical FDTD Grids. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 1035-1039	4.9	4
89	Electromagnetic Subsurface Remote Sensing <b>2016</b> , 1-28		4
88	An intercomparison of models for predicting bistatic scattering from rough surfaces <b>2015</b> ,		4
87	Spectral-domain-based scattering analysis of fields radiated by distributed sources in planar-stratified environments with arbitrarily anisotropic layers. <i>Physical Review E</i> , <b>2014</b> , 90, 063302	2.4	4
86	Time-reversal techniques applied to ultrawideband indoor wireless communication systems: A comparative study <b>2012</b> ,		4
85	Two-Stage Perfectly Matched Layer for the Analysis of Plasmonic Structures. <i>IEICE Transactions on Electronics</i> , <b>2010</b> , E93-C, 1371-1374	0.4	4
84	Moment-method analysis of circularly symmetric reflectors using bandlimited basis functions. <i>IET Microwaves Antennas and Propagation</i> , <b>1997</b> , 144, 179		4
83	Perfectly matched layer and piecewise-linear recursive convolution for the FDTD solution of the 3D dispersive half-space problem. <i>IEEE Transactions on Magnetism</i> , <b>1998</b> , 34, 2747-2750	2	4
82	A Comparison of Two Numerical Mode-Matching Methodologies for the Analysis of Inhomogeneous Media With Radial and Vertical Stratifications. <i>IEEE Transactions on Antennas and Propagation</i> , <b>2018</b> , 66, 7499-7504	4.9	4
81	A Perturbation Method to Model Electromagnetic Well-Logging Tools in Curved Boreholes. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2018</b> , 56, 1979-1993	8.1	3
80	. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2018</b> , 3, 29-36	1.5	3
79	Spectral-Domain Computation of Fields Radiated by Sources in Non-Birefringent Anisotropic Media. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2016</b> , 15, 340-343	3.8	3

78	Interface-Flattening Transform for EM Field Modeling in Tilted, Cylindrically Stratified Geophysical Media. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2014</b> , 13, 1808-1811	3.8	3
77	Parallel 3D PML-FDTD simulation of GPR on dispersive, inhomogeneous and conductive media		3
76	Dispersion-relation-preserving (DRP) 2-D finite-difference time-domain schemes		3
75	Numerical modeling development for characterizing complex GPR problems <b>2002</b> , 4758, 652		3
74	Progress in Kinetic Plasma Modeling for High-Power Microwave Devices: Analysis of Multipactor Mitigation in Coaxial Cables. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2020</b> , 68, 501-508	4.1	3
73	Toward Water Volume Fraction Calculation in Multiphase Flows Using Electrical Capacitance Tomography Sensors. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 7702-7712	4	3
72	Stability-Improved ADE-FDTD Method for Wideband Modeling of Graphene Structures. <i>IEEE Antennas and Wireless Propagation Letters</i> , <b>2019</b> , 18, 212-216	3.8	3
71	Diagnosing numerical Cherenkov instabilities in relativistic plasma simulations based on general meshes. <i>Journal of Computational Physics</i> , <b>2020</b> , 402, 108880	4.1	3
70	Evaluation of Eccentered Electrode-Type Resistivity Logging in Anisotropic Geological Formations With a Matrix Method. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , <b>2018</b> , 56, 3895-3902	8.1	3
69	<b>2019</b> ,		2
68	Unconditionally stable LOD-FDTD for modeling transmission properties of magnetized graphene sheet. <i>Optics Communications</i> , <b>2019</b> , 442, 90-94	2	2
67	Applications of capacitance tomography in gas-solid fluidized bed systems <b>2015</b> , 529-549		2
66	Pseudo-Analytical Modeling of Tilted-Coil Antennas in Anisotropic Geophysical Formations. <i>Journal of Microwaves, Optoelectronics and Electromagnetic Applications</i> , <b>2017</b> , 16, 284-296	0.7	2
65	A Numerical Mode-Matching Method Based on Multiple-Knot Cubic B-Splines Applied to the Analysis of Well-Logging Tools. <i>Journal of Microwaves, Optoelectronics and Electromagnetic Applications</i> , <b>2017</b> , 16, 664-674	0.7	2
64	Launching and controlling Gaussian beams from point sources via planar transformation media. <i>Physical Review B</i> , <b>2018</b> , 97,	3.3	2
63	Space-Time Block Diagonalization for Frequency-Selective MIMO Broadcast Channels. <i>IEEE Access</i> , <b>2016</b> , 4, 6602-6613	3.5	2
62	Broadband Finite-Difference Time-Domain Modeling of Plasmonic Organic Photovoltaics. <i>ETRI Journal</i> , <b>2014</b> , 36, 654-661	1.4	2
61	Fast imaging of velocity profiles of two-phase flows using electrical capacitance volume tomography sensors <b>2017</b> ,		2

60	Impedance analysis of extremely low-profile antennas using metamaterial substrates <b>2010</b> ,		2
59	CE-ADI-FDTD analysis of photonic crystals with a degenerate band edge (DBE) <b>2007</b> ,		2
58	Correction to: "Sensitivity Matrix Calculation for Fast 3-D Electrical Capacitance Tomography (ECT) of Flow Systems". <i>IEEE Transactions on Magnetics</i> , <b>2004</b> , 40, 1972-1972	2	2
57	Implicit nonstaggered finite-difference time-domain method. <i>Microwave and Optical Technology Letters</i> , <b>2005</b> , 45, 317-319	1.2	2
56	Time-domain simulation of time-reversed EM pulse propagation in continuous random media for UWB sensing applications		2
55	Filtering schemes for dispersion-optimized FDTD algorithms		2
54	Study of Gas-Water Flow Inside of a Horizontal Passive Cyclonic Gas-Liquid Phase Separator System Using Displacement-Current Phase Tomography. <i>Gravitational and Space Research: Publication of the American Society for Gravitational and Space Research</i> , <b>2018</b> , 6, 28-43	0.4	2
53	Polynomial Finite-Size Shape Functions for Electromagnetic Particle-in-Cell Algorithms Based on Unstructured Meshes. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , <b>2019</b> , 4, 317-328	1.5	2
52	One-Step Leapfrog HIE-FDTD for Drude Media. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2019</b> , 29, 77-79	2.6	2
51	A Controlled-Site Comparison of Microwave Tomography and Time-Reversal Imaging Techniques for GPR Surveys. <i>Remote Sensing</i> , <b>2018</b> , 10, 214	5	2
50	Perturbative Analysis of Anisotropic Coaxial Waveguides With Small Eccentricities via Conformal Transformation Optics. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2021</b> , 69, 3958-3966	4.1	2
49	Complex space approach to perfectly matched layers: a review and some new developments <b>2000</b> , 13, 441		2
48	One-step leapfrog WCS-FDTD for drude dispersive models. <i>Electronics Letters</i> , <b>2019</b> , 55, 172-174	1.1	1
47	An efficient implementation of the nonlocal small-slope approximation for bistatic scattering from two-dimensional rough surfaces <b>2016</b> ,		1
46	Augmenting resolution capabilities of image reconstruction in adaptive electrical capacitance tomography <b>2016</b> ,		1
45	Systematic Cell-by-Cell FDTD Subgridding in 3-D. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2018</b> , 28, 546-548	2.6	1
44	Some recent improvements in modeling of electromagnetic well-logging sensors via numerical mode-matching <b>2017</b> ,		1
43	Displacement-current phase tomography and electrical capacitance tomography for air-water flow systems <b>2017</b> ,		1

42	Regularized time-reversal beamforming for mm-Wave massive MIMO systems <b>2015,</b>		1
41	Complex-valued levin transforms: A robust algorithm for field computation in anisotropic-layered media <b>2014,</b>		1
40	<b>2013,</b>		1
39	Perfectly matched layers and transformation optics <b>2009,</b>		1
38	Analysis of cylindrically conformal patch antennas on isoimpedance anisotropic substrates <b>2011,</b>		1
37	3D PML-FDTD simulation of ground penetrating radar on dispersive Earth media		1
36	General PML constitutive tensors to match arbitrary bianisotropic and dispersive linear media		1
35	Space-Frequency Ultrawideband Time-Reversal Imaging Method as Applied to Subsurface Objects <b>2008,</b>		1
34	Sparse and explicit FETD method via a topological-based sparsification of the inverse mass matrix <b>2006,</b>		1
33	Effects of array restriction on time-reversal methods <b>2007,</b>		1
32	Perturbative approach to compute sensitivity matrix elements in electrical capacitance tomography (ECT) of flow systems		1
31	<b>2004,</b>		1
30	Global vs. bandlimited basis functions in the analysis of axisymmetric reflector antennas		1
29			1
28	On the interpolation of numerically defined surfaces in collimated-beam dual reflector antennas. <i>Microwave and Optical Technology Letters</i> , <b>1994</b> , 7, 209-212	1.2	1
27	AN EFFICIENT METHOD TO CALCULATE FIELD THEORIES WITH DYNAMICAL FERMIONS. <i>International Journal of Modern Physics C</i> , <b>1991</b> , 02, 561-600	1.1	1
26	Semianalytical modeling of arbitrarily distributed quantum emitters embedded in nanopatterned hyperbolic metamaterials. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2019</b> , 36, 1273	1.7	1
25	<b>2019,</b>		1

24	Generalized Veselago-Pendry lenses via complex transformation optics. <i>Optics Express</i> , <b>2019</b> , 27, 25670-25677	1	1
23	Analysis of triaxial well-logging sensors in layered anisotropic earth formations <b>2016</b> ,		1
22	Axial mode-matching technique for analysis of directional well-logging sensor tools <b>2016</b> ,		1
21	Methodology for assessing the probabilistic condition of an asset based in concepts of structural reliability BCBM - Probabilistic Condition Based Maintenance <i>Procedia Structural Integrity</i> , <b>2016</b> , 1, 181-188	1	1
20	Numerical study of co-polarized InSAR phase bias in remote sensing of layered media <b>2016</b> ,		1
19	Exploiting Sparsity in Adaptive Relevance Vector Machine for Reconfigurable Soft-Field Tomography <b>2019</b> ,		1
18	Progress and Challenges in Kinetic Plasma Modeling for High Power Microwave Devices <b>2019</b> ,		1
17	Deep Convolutional Neural Network Approach for Solving Nonlinear Inverse Scattering Problems <b>2019</b> ,		1
16	A Perturbation-Based Method to Model Electromagnetic Logging Sensors in Eccentric Boreholes via Conformal Transformation Optics <b>2018</b> ,		1
15	Complex space approach to perfectly matched layers: a review and some new developments <b>2000</b> , 13, 441		1
14	Perturbation Solution for Anisotropic Circular Waveguides Loaded With Eccentric Rods. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2022</b> , 1-4	2.6	1
13	Full-wave algorithm to model effects of bedding slopes on the response of subsurface electromagnetic geophysical sensors near unconformities. <i>Journal of Computational Physics</i> , <b>2016</b> , 313, 328-351	4.1	0
12	Reduced-Space Relevance Vector Machine for Adaptive Electrical Capacitance Volume Tomography. <i>IEEE Transactions on Computational Imaging</i> , <b>2022</b> , 8, 41-53	4.5	0
11	Reduced-Order Modeling of Advection-Dominated Kinetic Plasma Problems by Shifted Proper Orthogonal Decomposition. <i>IEEE Transactions on Plasma Science</i> , <b>2021</b> , 49, 3689-3699	1.3	0
10	A Numerical Study on the Sensitivity of Time-Reversal Imaging Methods Against Clutter, Noise and Model Perturbations <b>2007</b> , 219-226		0
9	Extended ADI-FDTD for anisotropic magnetised graphene sheets. <i>Electronics Letters</i> , <b>2019</b> , 55, 833-835	1.1	0
8	Time-Reversal-Based Signal Processing Techniques for Ultra-wideband Electromagnetic Imaging <b>2010</b> , 89-96		0
7	Detection and prediction of equilibrium states in kinetic plasma simulations via mode tracking using reduced-order dynamic mode decomposition. <i>Journal of Computational Physics</i> , <b>2021</b> , 447, 110671 <sup>4.1</sup>		0

- 6 Corrections to Symmetric Source Implementation for the ADI-FDTD Method *IEEE Transactions on Antennas and Propagation*, **2006**, 54, 1051-1051 4.9
- 5 Author's reply by S. Wang and F. L. Teixeira. *IEEE Microwave and Wireless Components Letters*, **2004**, 14, 249 2.6
- 4 Geometric Aspects of the Simplicial Discretization of Maxwell's Equations- Abstract. *Journal of Electromagnetic Waves and Applications*, **2001**, 15, 479-480 1.3
- 3 An Analysis of Time-Domain DORT Method for Ultrawideband Probing of Embedded Objects in Dispersive and Random Media **2007**, 203-210
- 2 Fano-Assisted Tunable X-Band Microwave Ring Resonator. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 2155-2164 4.1
- 1 Electrical Capacitance Tomography **2022**, 3-29