

Jamesina J Simpson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8486003/publications.pdf>

Version: 2024-02-01

43
papers

625
citations

840776

11
h-index

580821

25
g-index

43
all docs

43
docs citations

43
times ranked

617
citing authors

#	ARTICLE	IF	CITATIONS
1	Geomagnetically induced currents: Science, engineering, and applications readiness. <i>Space Weather</i> , 2017, 15, 828-856.	3.7	149
2	An E-J Collocated 3-D FDTD Model of Electromagnetic Wave Propagation in Magnetized Cold Plasma. <i>IEEE Transactions on Antennas and Propagation</i> , 2010, 58, 469-478.	5.1	77
3	Current and Future Applications of 3-D Global Earth-Ionosphere Models Based on the Full-Vector Maxwell's Equations FDTD Method. <i>Surveys in Geophysics</i> , 2009, 30, 105-130.	4.6	61
4	A 3-D Stochastic FDTD Model of Electromagnetic Wave Propagation in Magnetized Ionosphere Plasma. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 304-313.	5.1	53
5	A 3-D Global Earth-Ionosphere FDTD Model Including an Anisotropic Magnetized Plasma Ionosphere. <i>IEEE Transactions on Antennas and Propagation</i> , 2012, 60, 3246-3256.	5.1	52
6	An Efficient 3-D FDTD Model of Electromagnetic Wave Propagation in Magnetized Plasma. <i>IEEE Transactions on Antennas and Propagation</i> , 2015, 63, 269-279.	5.1	49
7	A Magnetic Field-Independent Absorbing Boundary Condition for Magnetized Cold Plasma. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2011, 10, 294-297.	4.0	15
8	3-D FDTD Modeling of Electromagnetic Wave Propagation in Magnetized Plasma Requiring Singular Updates to the Current Density Equation. <i>IEEE Transactions on Antennas and Propagation</i> , 2018, 66, 4772-4781.	5.1	15
9	Global FDTD Maxwell's Equations Modeling of Electromagnetic Propagation From Currents in the Lithosphere. <i>IEEE Transactions on Antennas and Propagation</i> , 2008, 56, 199-203.	5.1	14
10	On the possibility of high-level transient coronal mass ejection-induced ionospheric current coupling to electric power grids. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	13
11	A Finite Difference Time Domain Investigation of Electric Field Enhancements Along Ocean-Continent Boundaries During Space Weather Events. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 5033-5046.	2.4	11
12	Parallel I/O for 3-D Global FDTD Earth-Ionosphere Waveguide Models at Resolutions on the Order of ~1 km and Higher Using HDF5. <i>IEEE Transactions on Antennas and Propagation</i> , 2018, 66, 3548-3555.	5.1	11
13	Analysis of Electromagnetic Wave Propagation in Variable Magnetized Plasma via Polynomial Chaos Expansion. <i>IEEE Transactions on Antennas and Propagation</i> , 2019, 67, 438-449.	5.1	11
14	Two-Dimensional Full-Wave Simulation of Whistler Mode Wave Propagation Near the Local Lower Hybrid Resonance Frequency in a Dipole Field. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027750.	2.4	11
15	A polynomial chaos approach for EM uncertainty propagation in 3D-FDTD magnetized cold plasma. , 2015, , .		10
16	Parallelization of 3-D Global FDTD Earth-Ionosphere Waveguide Models at Resolutions on the Order of ~1 km and Higher. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2016, 15, 1959-1962.	4.0	10
17	Making a Synthesis of FDTD and DGTD Schemes for Computational Electromagnetics. <i>IEEE Journal on Multiscale and Multiphysics Computational Techniques</i> , 2020, 5, 99-118.	2.2	10
18	3-D FDTD Modeling of Long-Distance VLF Propagation in the Earth-Ionosphere Waveguide. <i>IEEE Transactions on Antennas and Propagation</i> , 2021, 69, 7743-7752.	5.1	9

#	ARTICLE	IF	CITATIONS
19	Ionospheric Variability Effects on Impulsive ELF Antipodal Propagation About the Earth Sphere. IEEE Transactions on Antennas and Propagation, 2018, 66, 6244-6254.	5.1	8
20	FDTD Modeling of Scattered Ultra-Low Frequency Electromagnetic Waves From Objects Submerged in the Ocean. IEEE Transactions on Antennas and Propagation, 2019, 67, 2534-2541.	5.1	8
21	FDTD Modeling of High-Frequency Waves Through Ionospheric Plasma Irregularities. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027499.	2.4	6
22	Two Dimensional Full-Wave Modeling of Propagation of Low-Altitude Hiss in the Ionosphere. Geophysical Research Letters, 2020, 47, e2019GL086601.	4.0	4
23	An established numerical method applied to geophysics. Eos, 2012, 93, 265-266.	0.1	3
24	Three-dimensional subwavelength confinement of a photonic nanojet using a plasmonic nanoantenna GAP. Microwave and Optical Technology Letters, 2014, 56, 2700-2706.	1.4	3
25	Analysis of electromagnetic field variability in magnetized ionosphere plasma using the stochastic FDTD method. , 2014, , .		3
26	An FDTD Investigation of Orthogonality and the Backscattering of HF Waves in the Presence of Ionospheric Irregularities. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028201.	2.4	2
27	An Optimized CPML Formulation for High Order FVTD Schemes for CED. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2021, 6, 183-200.	2.2	2
28	Using FDTD to improve our understanding of partial wave spectroscopy for advancing ultra early-stage cancer detection techniques. , 2009, , .		1
29	Multiphysics modeling of VLF - HF propagation in the Earth-ionosphere system for communications, surveillance, and navigation. , 2011, , .		1
30	A feasibility study of microjets applied to breast cancer detection. , 2012, , .		1
31	Improving the Efficiency of Maxwell's Equations FDTD Modeling for Space Weather Applications by Scaling the Speed of Light. , 2020, , .		1
32	University of Utah Hybrid-Flexible Education. , 2021, , .		1
33	A new 3-D FDTD model of magnetized cold plasma for modeling electromagnetic wave propagation in the earth-ionosphere waveguide. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	0
34	FDTD Modeling Applications in Ultrahigh-Speed Interconnects and Electromagnetic Compatibility of Complex Packages. , 2009, , .		0
35	FDTD Calculations of the Diffraction Coefficient of Vibrating Wedges. IEEE Antennas and Wireless Propagation Letters, 2011, 10, 163-166.	4.0	0
36	On the development of global plasma-ionosphere FDTD algorithms for electromagnetic calculations in the Earth-ionosphere system. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
37	Lightsabers (“laster swords”) for improving photodetector speed and responsivity. , 2013, , .		0
38	A stochastic FDTD model of electromagnetic wave propagation in magnetized ionospheric plasma. , 2013, , .		0
39	Super-enhanced optical energy concentration through a subwavelength aperture using a photonic nanojet. , 2014, , .		0
40	An efficient stochastic approach to uncertainty quantification in 3-D FDTD magnetized cold plasma. , 2014, , .		0
41	A summary of the major global 3-D FDTD modeling capabilities to-date. , 2015, , .		0
42	Simplified FDTD model of electromagnetic wave propagation in magnetized plasma. , 2018, , .		0
43	FDTD Modeling of Internal Electrostatic Discharge Events Coupled to High Frequency Antennas. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 39-46.	2.2	0