Abdulkadir C Yucel

List of Publications by Year
in descending order

48	462	840119	752256
papers	citations	11	20
		h-index	g-index

48	48	48	278
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Fast Stroud-Based Collocation Method for Statistically Characterizing EMI/EMC Phenomena on Complex Platforms. IEEE Transactions on Electromagnetic Compatibility, 2009, 51, 301-311.	1.4	69
2	An ME-PC Enhanced HDMR Method for Efficient Statistical Analysis of Multiconductor Transmission Line Networks. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2015, 5, 685-696.	1.4	56
3	Uncertainty Quantification in Transcranial Magnetic Stimulation via High-Dimensional Model Representation. IEEE Transactions on Biomedical Engineering, 2015, 62, 361-372.	2.5	38
4	VoxHenry: FFT-Accelerated Inductance Extraction for Voxelized Geometries. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 1723-1735.	2.9	31
5	The ICVSIE: A General Purpose Integral Equation Method for Bio-Electromagnetic Analysis. IEEE Transactions on Biomedical Engineering, 2018, 65, 565-574.	2.5	23
6	VoxCap: FFT-Accelerated and Tucker-Enhanced Capacitance Extraction Simulator for Voxelized Structures. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 5154-5168.	2.9	17
7	Compact Dual-Polarized Vivaldi Antenna with High Gain and High Polarization Purity for GPR Applications. Sensors, 2021, 21, 503.	2.1	17
8	A Wavelet-Enhanced PWTD-Accelerated Time-Domain Integral Equation Solver for Analysis of Transient Scattering From Electrically Large Conducting Objects. IEEE Transactions on Antennas and Propagation, 2018, 66, 2458-2470.	3.1	14
9	DMRF-UNet: A Two-Stage Deep Learning Scheme for GPR Data Inversion Under Heterogeneous Soil Conditions. IEEE Transactions on Antennas and Propagation, 2022, 70, 6313-6328.	3.1	14
10	An FMM-FFT Accelerated SIE Simulator for Analyzing EM Wave Propagation in Mine Environments Loaded With Conductors. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2018, 3, 3-15.	1.4	13
11	Internally Combined Volume-Surface Integral Equation for EM Analysis of Inhomogeneous Negative Permittivity Plasma Scatterers. IEEE Transactions on Antennas and Propagation, 2018, 66, 1903-1913.	3.1	13
12	Computation of Electromagnetic Fields Scattered From Objects With Uncertain Shapes Using Multilevel Monte Carlo Method. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2019, 4, 37-50.	1.4	11
13	The Orientation Estimation of Elongated Underground Objects via Multipolarization Aggregation and Selection Neural Network. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	11
14	A Scalable Parallel PWTD-Accelerated SIE Solver for Analyzing Transient Scattering From Electrically Large Objects. IEEE Transactions on Antennas and Propagation, 2016, 64, 663-674.	3.1	10
15	SuperVoxHenry: Tucker-Enhanced and FFT-Accelerated Inductance Extraction for Voxelized Superconducting Structures. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-11.	1.1	10
16	Statistical Characterization of Electromagnetic Wave Propagation in Mine Environments. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 1602-1605.	2.4	9
17	On the Compression of Translation Operator Tensors in FMM-FFT-Accelerated SIE Simulators via Tensor Decompositions. IEEE Transactions on Antennas and Propagation, 2021, 69, 3359-3370.	3.1	9
18	Dual-Cross-Polarized GPR Measurement Method for Detection and Orientation Estimation of Shallowly Buried Elongated Object. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	9

#	Article	IF	Citations
19	Sparsity-Aware Precorrected Tensor Train Algorithm for Fast Solution of 2-D Scattering Problems and Current Flow Modeling on Unstructured Meshes. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 4833-4847.	2.9	8
20	Volume-Surface Combined Field Integral Equation for Plasma Scatterers. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1064-1067.	2.4	7
21	Low-Frequency Stable Internally Combined Volume-Surface Integral Equation for High-Contrast Scatterers. IEEE Antennas and Wireless Propagation Letters, 2015, 14, 1423-1426.	2.4	7
22	A Butterfly-Accelerated Volume Integral Equation Solver for Broad Permittivity and Large-Scale Electromagnetic Analysis. IEEE Transactions on Antennas and Propagation, 2022, 70, 3549-3559.	3.1	7
23	An h-adaptive stochastic collocation method for stochastic EMC/EMI analysis. , 2010, , .		5
24	Efficient stochastic EMC/EMI analysis using HDMR-generated surrogate models. , 2011, , .		5
25	Statistical characterization of wave propagation in mine environments. , 2012, , .		5
26	Compression of Far-Fields in the Fast Multipole Method via Tucker Decomposition. IEEE Transactions on Antennas and Propagation, 2021, 69, 6660-6668.	3.1	5
27	Tree Roots Reconstruction Framework for Accurate Positioning in Heterogeneous Soil. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2022, 15, 1912-1925.	2.3	5
28	A fast and parallel stroud-based stochastic collocation method for statistical EMI/EMC analysis. , 2008, , .		4
29	A Deep Learning-Based Methodology for Rapidly Detecting the Defects inside Tree Trunks via GPR. , 2020, , .		4
30	Estimating Parameters of the Tree Root in Heterogeneous Soil Environments via Mask-Guided Multi-Polarimetric Integration Neural Network. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-16.	2.7	4
31	Accurate Tree Roots Positioning and Sizing Over Undulated Ground Surfaces by Common Offset GPR Measurements. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-11.	2.4	4
32	Internally Combined Volume-Surface Integral Equation for a 3-D Electromagnetic Scattering Analysis of High-Contrast Media. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 1691-1694.	2.4	3
33	A Deep Learning-Based GPR Forward Solver for Predicting B-Scans of Subsurface Objects. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	3
34	Efficient GA-based electromagnetic optimization using HDMR-generated surrogate models. , 2012, , .		2
35	Sensitivity of TMS-induced electric fields to the uncertainty in coil placement and brain anatomy. , 2014, , .		2
36	FFT-Accelerated and Tucker-Enhanced Impedance Extraction for Voxelized Structures. , 2021, , .		2

#	Article	IF	Citations
37	A well-conditioned volume-surface combined field integral equation (VSCFIE) for inhomogeneous scatterers with negative permittivities. , 2014, , .		1
38	Graphics Processing Unit Implementation of Multilevel Plane-Wave Time-Domain Algorithm. IEEE Antennas and Wireless Propagation Letters, 2014, 13, 1671-1675.	2.4	1
39	An internally combined volume-surface integral equation for 3D plasma scatterers. , 2015, , .		1
40	Low-frequency stable internally combined volume-surface integral equation for 3D high-contrast scatterers. , 2015, , .		1
41	Ultraefficient Förster-Type Nonradiative Energy Transfer Enabled by the Complex Dielectric Medium with Tuned Permittivity. Journal of Physical Chemistry C, 2021, 125, 12405-12413.	1.5	1
42	A Multi-Region Internally Combined Volume Surface Integral Equation for EM Analysis of Inhomogeneous Negative and Positive Permittivity Scatterers. , 2020, , .		1
43	A new FDTD formulation for long distance wave computations. , 2014, , .		0
44	A wavelet-based PWTD algorithm-accelerated time domain surface integral equation solver. , 2015, , .		0
45	Adaptively matched dual band GPS antenna for plasma environments. , 2015, , .		0
46	MLMC method to estimate propagation of uncertainties in electromagnetic fields scattered from objects of uncertain shapes. Proceedings in Applied Mathematics and Mechanics, 2021, 20, e202000064.	0.2	0
47	Elongated Object Orientation Estimation Based on Deep Neural Networks. , 2021, , .		0
48	Tensor Decompositions Applied to Electromagnetics: A Review. , 2022, , .		0