VakÃ¼r B ErtÃ¼rk

List of Publications by Year
in descending order

68 papers	675 citations	516710 16 h-index	610901 24 g-index
68 all docs	68 docs citations	68 times ranked	528 citing authors

#	Article	IF	Citations
1	Efficient analysis of input impedance and mutual coupling of microstrip antennas mounted on large coated cylinders. IEEE Transactions on Antennas and Propagation, 2003, 51, 739-749.	5.1	45
2	Wireless Displacement Sensing Enabled by Metamaterial Probes for Remote Structural Health Monitoring. Sensors, 2014, 14, 1691-1704.	3.8	45
3	Efficient computation of surface fields excited on a dielectric-coated circular cylinder. IEEE Transactions on Antennas and Propagation, 2000, 48, 1507-1516.	5.1	44
4	A comparative investigation of SRRâ€•and CSRRâ€based bandâ€•reject filters: Simulations, experiments, and discussions. Microwave and Optical Technology Letters, 2008, 50, 519-523.	1.4	37
5	Closed-Form Green's Function Representations in Cylindrically Stratified Media for Method of Moments Applications. IEEE Transactions on Antennas and Propagation, 2009, 57, 1158-1168.	5.1	35
6	Achieving transparency and maximizing scattering with metamaterial-coated conducting cylinders. Physical Review E, 2007, 76, 056603.	2.1	33
7	A Wireless Passive Sensing System for Displacement/Strain Measurement in Reinforced Concrete Members. Sensors, 2016, 16, 496.	3.8	32
8	Examination of existent propagation models over large inhomogeneous terrain profiles using fast integral equation solution. IEEE Transactions on Antennas and Propagation, 2005, 53, 3080-3083.	5.1	30
9	Characteristic Basis Function Method for Solving Electromagnetic Scattering Problems Over Rough Terrain Profiles. IEEE Transactions on Antennas and Propagation, 2010, 58, 1579-1589.	5.1	30
10	Wireless Measurement of Elastic and Plastic Deformation by a Metamaterial-Based Sensor. Sensors, 2014, 14, 19609-19621.	3.8	23
11	A Wireless Metamaterial-Inspired Passive Rotation Sensor With Submilliradian Resolution. IEEE Sensors Journal, 2018, 18, 4482-4490.	4.7	22
12	A Novel Broadband Multilevel Fast Multipole Algorithm With Incomplete-Leaf Tree Structures for Multiscale Electromagnetic Problems. IEEE Transactions on Antennas and Propagation, 2016, 64, 2445-2456.	5.1	19
13	Paraxial space-domain formulation for surface fields on a large dielectric coated circular cylinder. IEEE Transactions on Antennas and Propagation, 2002, 50, 1577-1587.	5.1	18
14	Wireless Sensing in Complex Electromagnetic Media: Construction Materials and Structural Monitoring. IEEE Sensors Journal, 2015, 15, 5545-5554.	4.7	18
15	Analysis of Finite Arrays of Axially Directed Printed Dipoles on Electrically Large Circular Cylinders. IEEE Transactions on Antennas and Propagation, 2004, 52, 2586-2595.	5.1	17
16	Analytic expressions for the ultimate intrinsic signalâ€toâ€noise ratio and ultimate intrinsic specific absorption rate in MRI. Magnetic Resonance in Medicine, 2011, 66, 846-858.	3.0	17
17	Novel Microstrip Fed Mechanically Tunable Combline Cavity Filter. IEEE Microwave and Wireless Components Letters, 2013, 23, 578-580.	3.2	15
18	Closed-Form Green's Function Representations for Mutual Coupling Calculations Between Apertures on a Perfect Electric Conductor Circular Cylinder Covered With Dielectric Layers. IEEE Transactions on Antennas and Propagation, 2011, 59, 3094-3098.	5.1	14

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19	Determining the Effective Constitutive Parameters of Finite Periodic Structures: Photonic Crystals and Metamaterials. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1423-1434.	4.6	11
20	SIWâ€based interdigital bandpass filter with harmonic suppression. Microwave and Optical Technology Letters, 2015, 57, 66-69.	1.4	11
21	An Equivalent Circuit Model for Nested Split-Ring Resonators. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3733-3743.	4.6	11
22	Error Control of Multiple-Precision MLFMA. IEEE Transactions on Antennas and Propagation, 2018, 66, 5651-5656.	5.1	11
23	Application of Iterative Techniques for Electromagnetic Scattering From Dielectric Random and Reentrant Rough Surfaces. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 3320-3329.	6.3	10
24	Analysis of Input Impedance and Mutual Coupling of Microstrip Antennas on Multilayered Circular Cylinders Using Closed-Form Green's Function Representations. IEEE Transactions on Antennas and Propagation, 2014, 62, 5485-5496.	5.1	9
25	Efficient Computation of Nonparaxial Surface Fields Excited on an Electrically Large Circular Cylinder With an Impedance Boundary Condition. IEEE Transactions on Antennas and Propagation, 2006, 54, 2559-2567.	5.1	8
26	A Simple Analytical Expression for the Gradient Induced Potential on Active Implants During MRI. IEEE Transactions on Biomedical Engineering, 2012, 59, 2845-2851.	4.2	8
27	Multi-Point Single-Antenna Sensing Enabled by Wireless Nested Split-Ring Resonator Sensors. IEEE Sensors Journal, 2016, 16, 7744-7752.	4.7	8
28	Incomplete-Leaf Multilevel Fast Multipole Algorithm for Multiscale Penetrable Objects Formulated With Volume Integral Equations. IEEE Transactions on Antennas and Propagation, 2017, 65, 4914-4918.	5.1	8
29	Scan Blindness Phenomenon in Conformal Finite Phased Arrays of Printed Dipoles. IEEE Transactions on Antennas and Propagation, 2006, 54, 1699-1708.	5.1	7
30	Analysis of Slotted Sectoral Waveguide Arrays With Multilayered Radomes. IEEE Transactions on Antennas and Propagation, 2016, 64, 800-805.	5.1	6
31	Broadband Solutions of Potential Integral Equations With NSPWMLFMA. IEEE Transactions on Antennas and Propagation, 2019, 67, 4307-4312.	5.1	6
32	Efficient Analysis of Phased Arrays of Microstrip Patches Using a Hybrid Generalized Forward Backward Method/Green's Function Technique With a DFT Based Acceleration Algorithm. IEEE Transactions on Antennas and Propagation, 2008, 56, 1669-1678.	5.1	5
33	Novel SIW based interdigital bandpass filter with harmonic suppression. , 2014, , .		5
34	Solution of Potential Integral Equations with NSPWMLFMA. , 2018, , .		5
35	Efficient analysis of large phased arrays using iterative MoM with DFT-based acceleration algorithm. Microwave and Optical Technology Letters, 2003, 39, 89-94.	1.4	4
36	Capacity of printed dipole arrays in the MIMO channel. IEEE Antennas and Propagation Magazine, 2008, 50, 190-198.	1.4	4

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37	Closed-form green's functions in cylindrically stratified media for method of moments applications. , 2009, , .		4
38	Optical antenna of comb-shaped split ring architecture for increased field localization in NIR and MIR. Optics Express, 2013, 21, 29455.	3.4	4
39	Error Analysis of MLFMA With Closed-Form Expressions. IEEE Transactions on Antennas and Propagation, 2021, 69, 6618-6623.	5.1	4
40	Applications of hybrid discrete Fourier transform moment method to the fast analysis of large rectangular dipole arrays printed on a thin grounded dielectric substrate. Microwave and Optical Technology Letters, 2002, 34, 203-207.	1.4	3
41	Analysis of finite arrays of circumferentially oriented printed dipoles on electrically large cylinders. Microwave and Optical Technology Letters, 2004, 42, 299-304.	1.4	3
42	Spectrally accelerated biconjugate gradient stabilized method for scattering from and propagation over electrically large inhomogeneous geometries. Microwave and Optical Technology Letters, 2005, 46, 158-162.	1.4	3
43	Broadband Analysis of Multiscale Electromagnetic Problems: Novel Incomplete-Leaf MLFMA for Potential Integral Equations. IEEE Transactions on Antennas and Propagation, 2021, , 1-1.	5.1	3
44	Fast Solutions of Multiscale Electromagnetic Problems Using Potential Integral Equations. , 2020, , .		3
45	Extension of forward-backward method with DFT-based acceleration algorithm for the efficient analysis of large periodic arrays with arbitrary boundaries. Microwave and Optical Technology Letters, 2005, 47, 293-298.	1.4	2
46	Investigation of planar and conformal printed arrays for MIMO performance analysis. , 2006, , .		2
47	Particle swarm optimization of dipole arrays for superior MIMO capacity. Microwave and Optical Technology Letters, 2009, 51, 333-337.	1.4	2
48	On the Capacity of Printed Planar Rectangular Patch Antenna Arrays in the MIMO Channel: Analysis and Measurements [Wireless Corner]. IEEE Antennas and Propagation Magazine, 2010, 52, 181-193.	1.4	2
49	Three-dimensional study of planar optical antennas made of split-ring architecture outperforming dipole antennas for increased field localization. Optics Letters, 2012, 37, 139.	3.3	2
50	A Novel Approach for the Efficient Computation of 1-D and 2-D Summations. IEEE Transactions on Antennas and Propagation, 2016, 64, 1014-1022.	5.1	2
51	Propagation and coverage analysis over terrain profiles comparing empirical approaches with numerically exact solutions. , 2003, , .		1
52	Investigation of metamaterial coated conducting cylinders for achieving transparency and maximizing radar cross section. , 2007, , .		1
53	European collaboration in conformal antenna research. , 2007, , .		1
54	Design and analysis of slotted sectoral waveguide array antennas embedded in cylindrically stratified media. , 2014, , .		1

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55	Wireless Monitoring of a Structural Beam to be Used for Post-Earthquake Damage Assessment. , 2018, , .		1
56	Frequency-selective loading for a transmitting active integrated antenna. Microwave and Optical Technology Letters, 2001, 31, 3-5.	1.4	0
57	A model with electric fields for the inclusion of mutual coupling effects in the MIMO channel. , 2007, , .		0
58	A closed-form solution to the asymptotic part of the MOM impedance matrix and the MOM excitation vector for printed structures on planar grounded dielectric slabs. Microwave and Optical Technology Letters, 2007, 49, 882-886.	1.4	0
59	Derivation of Green's function representations for the analysis of sectoral waveguides embedded in cylindrically stratified media. , 2013, , .		0
60	Analysis of slotted sectoral waveguides embedded in cylindrically stratified media using closed-form Green's function representations. , 2013, , .		0
61	Novel optical antenna designs of comb shaped split ring architecture for NIR and MIR enhanced field localization. , 2014, , .		0
62	RF displacement and strain sensing system for wireless structural health monitoring. , 2015, , .		0
63	Analysis of slotted sectoral waveguide array antennas with multilayer radomes and nonzero metal thickness. , 2015, , .		0
64	A broadband multilevel fast multipole algorithm with incomplete-leaf tree structures for multiscale electromagnetic problems. , 2016, , .		0
65	An electromagnetic sensing system incorporating multiple probes and single antenna for wireless structural health monitoring. , 2017, , .		0
66	Error Control of MLFMA within a Multiple- Precision Arithmetic Framework. , 2018, , .		0
67	Broadband multilevel fast multipole algorithm for large-scale problems with nonuniform discretizations. , 2016, , .		0
68	An Integral-Equation-Based Method for Efficient and Accurate Solutions of Scattering Problems with Highly Nonuniform Discretizations. , 2021, , .		0