

# Juan CÃ³rcoles

## List of Publications by Year in descending order

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times ranked

447  
citing authors

#	ARTICLE	IF	CITATIONS
1	Manufacturing Guidelines for W-Band Full-Metal Waveguide Devices: Selecting the most appropriate technology. IEEE Antennas and Propagation Magazine, 2023, 65, 48-62.	1.4	4
2	2-D FEM Formulation for Closed Waveguides With Magnetically Biased Graphene Sheets. IEEE Transactions on Terahertz Science and Technology, 2022, 12, 98-101.	3.1	1
3	On the Use of Quadrilateral Meshes for Enhanced Analysis of Waveguide Devices with Manhattan-Type Geometry Cross-Sections. Mathematics, 2022, 10, 656.	2.2	1
4	A Finite Element formulation for waveguides with first and second order symmetries. , 2022, , .		2
5	Degeneracy-Discriminating Modal FEM Computation in Higher Order Rotationally Symmetric Waveguides. IEEE Transactions on Antennas and Propagation, 2021, 69, 8003-8008.	5.1	10
6	Triple-Radiation Pattern Monopulse Horn Feed With Compact Single-Layer Comparator Network. IEEE Transactions on Antennas and Propagation, 2021, 69, 2546-2559.	5.1	18
7	Enhanced FEM-Based DBIM Approach for Two-Dimensional Microwave Imaging. IEEE Transactions on Antennas and Propagation, 2021, 69, 5187-5192.	5.1	5
8	Experimental and numerical optimization modelling to reduce radiofrequency-induced risks of magnetic resonance examinations on leaded implants. Applied Mathematical Modelling, 2021, 96, 177-188.	4.2	1
9	Spectral MoM NUFFT-Based Formulation for the Efficient Analysis of High-Order Bandpass FSSs With Tightly Packed Nonresonant Elements in Skewed Grid. IEEE Transactions on Antennas and Propagation, 2021, 69, 6099-6104.	5.1	3
10	Contribution of the Evanescent Modes to the Power Radiated by an Aperture. , 2021, , .		1
11	Waveguide Manufacturing Technologies for Next-Generation Millimeter-Wave Antennas. Micromachines, 2021, 12, 1565.	2.9	4
12	Modal Field Synthesis of Monopulse Difference Patterns for Radiating Aperture. IEEE Transactions on Antennas and Propagation, 2020, 68, 8203-8208.	5.1	2
13	Mechanically Reconfigurable Linear Phased Array Antenna Based on Single-Block Waveguide Reflective Phase Shifters With Tuning Screws. IEEE Access, 2020, 8, 113487-113497.	4.2	10
14	A New 4 Å– 4 Rectangular Waveguide Short-Slot Coupler in 3D Printed Technology at Ku-Band. Electronics (Switzerland), 2020, 9, 610.	3.1	1
15	Analytical Far-Zone Calculation of the Field Radiated From an Equilateral Triangular Aperture. IEEE Transactions on Antennas and Propagation, 2019, 67, 5668-5672.	5.1	0
16	On the Theoretical Maximum Directivity of a Radiating Aperture From Modal Field Expansions. IEEE Transactions on Antennas and Propagation, 2019, 67, 2781-2786.	5.1	9
17	Higher-Order Mode Electromagnetic Analysis of a Material Sample between Two Flanged Coaxial Probes for Broadband Modelling of Dielectric Measurement Setups. Advances in Mathematical Physics, 2019, 2019, 1-17.	0.8	3
18	Non-linear Microwave Imaging Using Fast Iterative Shrinkage Thresholding. , 2019, , .		2

#	ARTICLE	IF	CITATIONS
19	Analytical expressions of the $Q$ -factor for the complete resonant mode spectrum of the equilateral triangular waveguide cavity. Electronics Letters, 2019, 55, 944-947.	1.0	2
20	Finite Element Analysis of a Wideband Microwave Tomography System for Potential Medical Imaging. , 2019, , .		1
21	Nested 2D finite-element function-spaces formulation for the mode-matching problem of arbitrary cross-section waveguide devices. Applied Mathematical Modelling, 2018, 60, 286-299.	4.2	7
22	Robust Calculation of the Modes in Parabolic Cylinder Metallic Waveguides by Means of a Root-Finding Method for Bivariate Functions. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 623-632.	4.6	3
23	Antenna Design by Means of the Fruit Fly Optimization Algorithm. Electronics (Switzerland), 2018, 7, 3.	3.1	12
24	Pregnant women models analyzed for $RF$ exposure and temperature increase in $3T$ $RF$ shimmed birdcages. Magnetic Resonance in Medicine, 2017, 77, 2048-2056.	3.0	42
25	On the estimation of the worst-case implant-induced RF-heating in multi-channel MRI. Physics in Medicine and Biology, 2017, 62, 4711-4727.	3.0	9
26	Slotted waveguide antenna design by segmented simulation and multi-objective genetic algorithm. , 2017, , .		1
27	Optimization-based strategy in multiple-channel magnetic resonance systems operating at 128 MHz to reduce radiofrequency heating induced by active implantable medical devices. , 2017, , .		1
28	Electromagnetic Scattering at the Waveguide Step between Equilateral Triangular Waveguides. Advances in Mathematical Physics, 2016, 2016, 1-16.	0.8	10
29	Virtual population-based assessment of the impact of 3 Tesla radiofrequency shimming and thermoregulation on safety and $B_1$ uniformity. Magnetic Resonance in Medicine, 2016, 76, 986-997.	3.0	42
30	Generalized Scattering Matrix of the discontinuity between an equilateral triangular waveguide and a rectangular, circular or elliptical waveguide. , 2016, , .		1
31	Efficient Radiation Antenna Modeling via Orthogonal Matching Pursuit in Terms of Infinitesimal Dipoles. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 444-447.	4.0	10
32	Computer Automated Design of an Irregular Slotted Waveguide Array for Ku-Band. IEEE Antennas and Wireless Propagation Letters, 2016, 15, 1593-1597.	4.0	4
33	Array Thinning of Coupled Antennas Based on the Orthogonal Matching Pursuit Method and a Spherical-Wave Expansion for Far-Field Synthesis. IEEE Transactions on Antennas and Propagation, 2015, 63, 5425-5432.	5.1	10
34	Reactively Loaded Array Pattern Synthesis as a Quadratically Constrained Quadratic Program. IEEE Transactions on Antennas and Propagation, 2015, 63, 5219-5224.	5.1	6
35	Convex optimization of MRI exposure for mitigation of RF-heating from active medical implants. Physics in Medicine and Biology, 2015, 60, 7293-7308.	3.0	18
36	Mutual Coupling Compensation Matrices for Transmitting and Receiving Arrays. IEEE Transactions on Antennas and Propagation, 2015, 63, 839-843.	5.1	21

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37	Full-wave analysis of finite periodic cylindrical conformal arrays with Floquet spherical modes and a hybrid finite element "generalized scattering matrix method. Journal of Electromagnetic Waves and Applications, 2014, 28, 102-111.	1.6	2
38	Linear Patch Array Over Substrate Integrated Waveguide for Ku-Band. IEEE Antennas and Wireless Propagation Letters, 2013, 12, 257-260.	4.0	14
39	Efficient Combined Array Thinning and Weighting for Pattern Synthesis With a Nested Optimization Scheme. IEEE Transactions on Antennas and Propagation, 2012, 60, 5107-5117.	5.1	14
40	Spherical-Wave-Based Shaped-Beam Field Synthesis for Planar Arrays Including the Mutual Coupling Effects. IEEE Transactions on Antennas and Propagation, 2011, 59, 2872-2881.	5.1	12
41	Modal Network Model for MIMO Antenna in-System Optimization. IEEE Transactions on Antennas and Propagation, 2011, 59, 643-653.	5.1	5
42	Mutual Coupling Compensation in Arrays Using a Spherical Wave Expansion of the Radiated Field. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 108-111.	4.0	16
43	Inclusion of the Feeding Network Effects in the Generalized-Scattering-Matrix Formulation of a Finite Array. IEEE Antennas and Wireless Propagation Letters, 2009, 8, 819-822.	4.0	11
44	Modelling line-of-sight coupled MIMO systems with generalised scattering matrices and spherical wave translations. Electronics Letters, 2009, 45, 598.	1.0	5
45	Linear programming from generalised scattering matrix analysis of array for minimum sidelobe level and prescribed nulls. Electronics Letters, 2009, 45, 9.	1.0	6
46	Performance characterization of wideband, wide-angle scan arrays of cavity-backed U-slot microstrip patch antennas. International Journal of RF and Microwave Computer-Aided Engineering, 2009, 19, 389-396.	1.2	5
47	Fourier Synthesis of Linear Arrays Based on the Generalized Scattering Matrix and Spherical Modes. IEEE Transactions on Antennas and Propagation, 2009, 57, 1944-1951.	5.1	3
48	Multiobjective Optimization of Real and Coupled Antenna Array Excitations via Primal-Dual, Interior Point Filter Method From Spherical Mode Expansions. IEEE Transactions on Antennas and Propagation, 2009, 57, 110-121.	5.1	11
49	Cad of stacked patch antennas through multipurpose admittance matrices from FEM and neural networks. Microwave and Optical Technology Letters, 2008, 50, 2411-2416.	1.4	1