

# Giovanni Angiulli

## List of Publications by Year in descending order

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papers

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all docs

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docs citations

65  
times ranked

566  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microwave Devices and Antennas Modelling by Support Vector Regression Machines. IEEE Transactions on Magnetics, 2007, 43, 1589-1592.	2.1	115
2	Adaptive Image Contrast Enhancement by Computing Distances into a 4-Dimensional Fuzzy Unit Hypercube. IEEE Access, 2017, 5, 26922-26931.	4.2	42
3	A Fuzzy Similarity-Based Approach to Classify Numerically Simulated and Experimentally Detected Carbon Fiber-Reinforced Polymer Plate Defects. Sensors, 2022, 22, 4232.	3.8	39
4	Resonant frequency evaluation of microstrip antennas using a neural-fuzzy approach. IEEE Transactions on Magnetics, 2003, 39, 1333-1336.	2.1	37
5	Application of Characteristic Modes To the Analysis of Scattering From Microstrip Antennas. Journal of Electromagnetic Waves and Applications, 2000, 14, 1063-1081.	1.6	32
6	Design of microstrip reflect array using data from isolated patch analysis. Microwave and Optical Technology Letters, 2002, 34, 411-414.	1.4	31
7	Joint use of eddy current imaging and fuzzy similarities to assess the integrity of steel plates. Open Physics, 2020, 18, 230-240.	1.7	30
8	An improved synthesis algorithm for reflectarrays design. IEEE Antennas and Wireless Propagation Letters, 2005, 4, 258-261.	4.0	26
9	Reconstructing the membrane detection of a 1D electrostatic-driven MEMS device by the shooting method: convergence analysis and ghost solutions identification. Computational and Applied Mathematics, 2018, 37, 4484-4498.	1.3	25
10	A Neuro-Fuzzy Network for the Design of Circular and Triangular Equilateral Microstrip Antennas. Journal of Infrared, Millimeter and Terahertz Waves, 2002, 23, 1513-1520.	0.6	23
11	A Semi-Linear Elliptic Model for a Circular Membrane MEMS Device Considering the Effect of the Fringing Field. Sensors, 2021, 21, 5237.	3.8	20
12	SAR Imagery Classification using Multi-class Support Vector Machines. Journal of Electromagnetic Waves and Applications, 2005, 19, 1865-1872.	1.6	19
13	On the uniqueness of the solution for a semi-linear elliptic boundary value problem of the membrane MEMS device for reconstructing the membrane profile in absence of ghost solutions. International Journal of Non-Linear Mechanics, 2019, 109, 24-31.	2.6	18
14	SUPPORT VECTOR REGRESSION MACHINES TO EVALUATE RESONANT FREQUENCY OF ELLIPTIC SUBSTRATE INTEGRATE WAVEGUIDE RESONATORS. Progress in Electromagnetics Research, 2008, 83, 107-118.	4.4	18
15	Synthesis of microstrip reflectarrays as planar scatterers for SAR interferometry. Electronics Letters, 2003, 39, 266.	1.0	17
16	Resonant Frequencies of Circular Substrate Integrated Resonators. IEEE Microwave and Wireless Components Letters, 2008, 18, 239-241.	3.2	17
17	On the Computation of Nonlinear Eigenvalues in Electromagnetic Problems. Journal of Electromagnetic Waves and Applications, 2007, 21, 527-532.	1.6	16
18	Fast Nonlinear Eigenvalues Analysis of Arbitrarily Shaped Substrate Integrated Waveguide (SIW) Resonators. IEEE Transactions on Magnetics, 2009, 45, 1412-1415.	2.1	16

#	ARTICLE	IF	CITATIONS
19	Electrostatic Micro-Electro-Mechanical-Systems (MEMS) Devices: A Comparison Among Numerical Techniques for Recovering the Membrane Profile. IEEE Access, 2020, 8, 125874-125886.	4.2	15
20	Retrieving the Effective Parameters of an Electromagnetic Metamaterial Using the Nicolson-Ross-Weir Method: An Analytic Continuation Problem Along the Path Determined by Scattering Parameters. IEEE Access, 2021, 9, 77511-77525.	4.2	15
21	Analysis and design of passive and active microstrip reflectarrays. International Journal of RF and Microwave Computer-Aided Engineering, 2003, 13, 370-377.	1.2	13
22	COMPUTATION OF THE RESONANT FREQUENCY AND QUALITY FACTOR OF LOSSY SUBSTRATE INTEGRATED WAVEGUIDE RESONATORS BY METHOD OF MOMENTS. Progress in Electromagnetics Research Letters, 2013, 40, 107-117.	0.7	13
23	Numerical and analytical characteristic modes for conducting elliptic cylinders. Microwave and Optical Technology Letters, 1997, 16, 243-249.	1.4	12
24	Characteristic Modes in Multiple Scattering by Conducting Cylinders of Arbitrary Shape. Electromagnetics, 1998, 18, 593-612.	0.7	11
25	A fuzzy divergence approach for solving electrostatic identification problems for NDT applications. International Journal of Applied Electromagnetics and Mechanics, 2018, 57, 133-146.	0.6	11
26	RADIATION FROM DIELECTRIC COATED ELLIPTIC CONDUCTING CYLINDER BY ASSIGNED ELECTRIC CURRENT DISTRIBUTION. Progress in Electromagnetics Research, 2006, 57, 131-150.	4.4	9
27	Experimental evaluation of the phase of the field scattered by microstrip patches for reflect-array design. Microwave and Optical Technology Letters, 2002, 34, 163-164.	1.4	8
28	EMPIRICAL RELATIONS FOR THE EVALUATION OF RESONANT FREQUENCY AND QUALITY FACTOR OF THE $TM_{010}$ MODE OF CIRCULAR SUBSTRATE INTEGRATED WAVEGUIDE (SIW) RESONATORS. Progress in Electromagnetics Research C, 2013, 43, 165-173.	0.9	7
29	A numerical study on the performances of the flexible BiCGStab to solve the discretized E-field integral equation. International Journal of Applied Electromagnetics and Mechanics, 2014, 46, 547-553.	0.6	7
30	Comments on "A Hybrid Method Based on Combining Artificial Neural Network and Fuzzy Inference System for Simultaneous Computation of Resonant Frequencies of Rectangular, Circular, and Triangular Microstrip Antennas. IEEE Transactions on Antennas and Propagation, 2009, 57, 296-296.	5.1	6
31	Matching fluid influence on field scattered from breast tumour: analysis using 3D realistic numerical phantoms. Electronics Letters, 2012, 48, 13.	1.0	6
32	Second-Order Parabolic Equation to Model, Analyze, and Forecast Thermal-Stress Distribution in Aircraft Plate Attack Wing's Fuselage. Mathematics, 2020, 8, 6.	2.2	6
33	CHARACTERIZATION OF LOSSY SIW RESONATORS BASED ON MULTILAYER PERCEPTRON NEURAL NETWORKS ON GRAPHICS PROCESSING UNIT. Progress in Electromagnetics Research C, 2013, 42, 1-11.	0.9	5
34	A Modified Heart Dipole Model for the Generation of Pathological ECG Signals. Computation, 2020, 8, 92.	2.0	5
35	Scattering from arbitrarily shaped microstrip patch antennas using the theory of characteristic modes. , 0, , .		4
36	An experimental approach to active and passive reflectarray design. , 2002, , .		4

#	ARTICLE	IF	CITATIONS
37	Modeling Realistic Contrast Maps from MRI [EM Programmer's Notebook] Images for Microwave Breast Cancer Detection. IEEE Antennas and Propagation Magazine, 2011, 53, 113-122.	1.4	4
38	Single layer dual band reflectarray cell. IEICE Electronics Express, 2013, 10, 20130310-20130310.	0.8	4
39	Accurate modelling of lossy SIW resonators using a neural network residual kriging approach. IEICE Electronics Express, 2017, 14, 20170073-20170073.	0.8	4
40	Accurate Computation of Drude-Lorentz Model Coefficients of Single Negative Magnetic Metamaterials Using a Micro-Genetic Algorithm Approach. Smart Innovation, Systems and Technologies, 2018, , 47-55.	0.6	4
41	Quick retrieval of effective electromagnetic metamaterial parameters by using a Multi-fidelity Surrogate Modelling approach. EPJ Applied Physics, 2020, 90, 20901.	0.7	4
42	Recovering of the Membrane Profile of an Electrostatic Circular MEMS by a Three-Stage Lobatto Procedure: A Convergence Analysis in the Absence of Ghost Solutions. Mathematics, 2020, 8, 487.	2.2	4
43	Elliptic-Hyperbolic Waveguides. Journal of Electromagnetic Waves and Applications, 2000, 14, 1473-1487.	1.6	3
44	Investigation of printed reflectarrays as permanent scatterers in SAR interferometry. Microwave and Optical Technology Letters, 2003, 37, 18-20.	1.4	3
45	Stabilizing the E-Field Integral Equation at the internal resonances through the computation of its numerical null space. International Journal of Applied Electromagnetics and Mechanics, 2010, 32, 63-72.	0.6	3
46	A hybrid neural model for the characterization of a single layer SIW waveguide. IEICE Electronics Express, 2013, 10, 20130613-20130613.	0.8	3
47	Electrostatic Capacity of a Metallic Cylinder: Effect of the Moment Method Discretization Process on the Performances of the Krylov Subspace Techniques. Mathematics, 2020, 8, 1431.	2.2	3
48	Computation of the Cutoff Wavenumbers of Metallic Waveguides with Symmetries by Using a Nonlinear Eigenproblem Formulation: A Group Theoretical Approach. Mathematics, 2020, 8, 489.	2.2	3
49	Feed forward neural network characterization of circular SIW resonators. , 2008, , ,		2
50	A sensitivity study for microwave breast cancer detection using the Contrast-Source Integral Equation and realistic anthropomorphic numerical 3-D phantoms. International Journal of Applied Electromagnetics and Mechanics, 2013, 43, 207-214.	0.6	2
51	Numerical Validation of Smallest Singular Value Estimation Techniques Applied to Localization of EFIE Interior Resonances.. , 0, , .		1
52	An algebraic preconditioner based on properties of the skew-hermitian part of the linear systems arising from the discretization of the e-field integral equation. , 2009, , .		1
53	KRYLOV SUBSPACES ITERATIVE METHODS TO EVALUATE ELECTROSTATIC PARAMETERS. American Journal of Applied Sciences, 2014, 11, 396-405.	0.2	1
54	Metamaterial Unit Cell Characterization by Using a Multi-fidelity Surrogate Modelling Approach. , 2019, , .		1

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55	Classing and Extracting Information from Radar Images. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2008, 4, 621-624.	0.4	1
56	Higham-Cheng algorithm for solving the generalized eigenproblem applied to the computation of the characteristic modes. , 0, , .		0
57	Application of Higham-Cheng algorithm to the generalised eigenproblem in computational electromagnetics. Electronics Letters, 2001, 37, 282.	1.0	0
58	Improved form of a synthesis algorithm for microstrip reflectarrays design. , 0, , .		0
59	Accurate tools for convergence prediction of series solutions of Contrast Source Integral Equations. , 2010, , .		0
60	A simple preconditioner based on skew-Hermitian part of the discretized E-field Integral Equation. IEICE Electronics Express, 2013, 10, 20130477-20130477.	0.8	0
61	RIGOROUS CLOSED FORM EXPRESSIONS FOR THE INPUT ADMITTANCE OF A COAXIAL PROBE RADIATING INTO A LOSSY PARALLEL PLATE WAVEGUIDE. A DYADIC GREEN'S FUNCTION APPROACH.. Progress in Electromagnetics Research M, 2013, 33, 153-167.	0.9	0
62	Efficient analysis of lossy <scp>SIW</scp> structures based on the parallel plates waveguide <scp>G</scp>reen's function and fast frequency sweep. Microwave and Optical Technology Letters, 2015, 57, 2435-2437.	1.4	0
63	Computation of nonlinear eigenvalues related to parameters of microwave structures by using group theory. , 2017, , .		0
64	2D Eddy Currents Imaging & Fuzzy Similarities for Assessing the Integrity of Steel Plates. , 2019, , .		0
65	Convergence of Krylov Solvers and Choice of Basis and Weighting Set of Functions in the Moment Method Solution of Electrical Field Integral Equation. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2008, 4, 771-774.	0.4	0