Marco Guglielmi

List of Publications by Year
in descending order

164 papers	2,691 citations	257101 24 h-index	264894 42 g-index
164 all docs	164 docs citations	164 times ranked	1152 citing authors

#	Article	IF	Citations
1	New microstrip "Wiggly-Line" filters with spurious passband suppression. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1593-1598.	2.9	239
2	A new family of all-inductive dual-mode filters. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 1764-1769.	2.9	142
3	Broadside radiation from periodic leaky-wave antennas. IEEE Transactions on Antennas and Propagation, 1993, 41, 31-37.	3.1	130
4	Microstrip "wiggly-line" bandpass filters with multispurious rejection. IEEE Microwave and Wireless Components Letters, 2004, 14, 531-533.	2.0	108
5	Real-time spectrum analysis in microstrip technology. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 705-717.	2.9	90
6	Simple CAD procedure for microwave filters and multiplexers. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 1347-1352.	2.9	86
7	Multimode network description of a planar periodic metal-strip grating at a dielectric interface. I. Rigorous network formulations. IEEE Transactions on Microwave Theory and Techniques, 1989, 37, 534-541.	2.9	70
8	A novel theory for dielectric-inset waveguide leaky-wave antennas. IEEE Transactions on Antennas and Propagation, 1991, 39, 497-504.	3.1	66
9	Implementing transmission zeros in inductive-window bandpass filters. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 1911-1915.	2.9	59
10	Efficient integral equation formulations for admittance or impedance representation of planar waveguide junctions. , 0, , .		56
11	A new multiple-tuned six-port riblet-type directional coupler in rectangular waveguide. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 1441-1448.	2.9	52
12	Chirped delay lines in microstrip technology. IEEE Microwave and Wireless Components Letters, 2001, 11, 486-488.	2.0	45
13	Experimental Investigation of Dual-Mode Microstrip Ring Resonators. , 1990, , .		44
14	Efficient CAD of boxed microwave circuits based on arbitrary rectangular elements. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 1045-1058.	2.9	43
15	A fast integral equation technique for shielded planar circuits defined on nonuniform meshes. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 2293-2296.	2.9	42
16	Rigorous multimode network numerical representation of inductive step. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 317-326.	2.9	41
17	Dual-mode circular waveguide filters without tuning screws. , 1992, 2, 457-458.		40
18	Multipactor Effect Characterization of Dielectric Materials for Space Applications. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 3644-3655.	2.9	39

#	Article	IF	Citations
19	Multimode network description of a planar periodic metal-strip grating at a dielectric interface. III. Rigorous solution. IEEE Transactions on Microwave Theory and Techniques, 1989, 37, 902-909.	2.9	38
20	A Systematic Design Procedure of Classical Dual-Mode Circular Waveguide Filters Using an Equivalent Distributed Model. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 1006-1017.	2.9	37
21	On Space Mapping Techniques for Microwave Filter Tuning. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 4860-4870.	2.9	36
22	New simple procedure for the computation of the multimode admittance or impedance matrix of planar waveguide junctions. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 413-418.	2.9	30
23	CAD of triple-mode cavities in rectangular waveguide. , 1998, 8, 339-341.		30
24	Rigorous, multimode equivalent network representation of inductive discontinuities. IEEE Transactions on Microwave Theory and Techniques, 1990, 38, 1651-1659.	2.9	29
25	Coplanar MMIC active bandpass filters using negative resistance circuits. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 2598-2602.	2.9	29
26	Two compact configurations for implementing transmission zeros in microstrip filters. IEEE Microwave and Wireless Components Letters, 2004, 14, 475-477.	2.0	29
27	Chained function filters. , 1997, 7, 390-392.		27
28	Design of Compact Wideband Manifold-Coupled Multiplexers. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 3398-3407.	2.9	27
29	High-Performance Compact Diplexers for Ku/K-Band Satellite Applications. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 3866-3876.	2.9	27
30	MoM/BI-RME analysis of boxed MMICs with arbitrarily shaped metallizations. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 2227-2234.	2.9	26
31	Compact Wideband Hybrid Filters in Rectangular Waveguide With Enhanced Out-of-Band Response. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 87-101.	2.9	25
32	On the Alignment of Low-Fidelity and High- Fidelity Simulation Spaces for the Design of Microwave Waveguide Filters. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 5183-5196.	2.9	24
33	Multimode equivalent network representation for H- and E-plane uniform bends in rectangular waveguide. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 1679-1687.	2.9	23
34	Full wave network representation for rectangular, circular, and elliptical to elliptical waveguide junctions. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 376-384.	2.9	23
35	Efficient Design of Waveguide Manifold Multiplexers Based on Low-Order EM Distributed Models. IEEE Transactions on Microwave Theory and Techniques, 2015, 63, 2540-2549.	2.9	23
36	Novel design procedure for microwave filters. , 1993, , .		21

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37	Exploring the Tuning Range of Channel Filters for Satellite Applications Using Electromagnetic-Based Computer Aided Design Tools. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 717-725.	2.9	21
38	Rigorous multimode network representation of capacitive steps. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 622-628.	2.9	20
39	The nature of the spectral gap for leaky waves on a periodic strip-grating structure. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 2296-2307.	2.9	20
40	Simple and effective EM-based optimization procedure for microwave filters. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 856-858.	2.9	20
41	Multimode equivalent network representation for junctions between coaxial and circular waveguides. The International Executive, 1997, 7, 180-194.	0.2	20
42	Full-wave CAD of a rectangular waveguide filter with integrated coaxial excitation. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 986-989.	2.9	19
43	Design of Hybrid Folded Rectangular Waveguide Filters With Transmission Zeros Below the Passband. IEEE Transactions on Microwave Theory and Techniques, 2016, , 1-11.	2.9	19
44	Accurate CAD for dual mode filters in circular waveguide including tuning elements. , 0, , .		18
45	Design Procedure for Bandpass Filters Based on Integrated Coaxial and Rectangular Waveguide Resonators. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 4390-4404.	2.9	18
46	Angular bandpass filters: an alternative viewpoint gives improved design flexibility. IEEE Transactions on Antennas and Propagation, 1995, 43, 390-395.	3.1	17
47	Capacitive Obstacle Realizing Multiple Transmission Zeros for In-Line Rectangular Waveguide Filters. IEEE Microwave and Wireless Components Letters, 2016, 26, 795-797.	2.0	17
48	Low-frequency location of the leaky-wave poles for a dielectric layer. IEEE Transactions on Microwave Theory and Techniques, 1990, 38, 1743-1746.	2.9	15
49	Advanced Compact Setups for Passive Intermodulation Measurements of Satellite Hardware. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 700-710.	2.9	15
50	An efficient inversion technique for banded linear systems. , 0, , .		14
51	Compact broadband waveguide diplexer for satellite applications. , 2016, , .		14
52	Resonant aperture filters in rectangular waveguide. , 0, , .		13
53	A New Family of Multiband Waveguide Filters Based on a Folded Topology. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2590-2600.	2.9	13
54	A Practical Theory for Dielectric Image Guide Leaky-Wave Antennas Loaded by Periodic Metal Strips. , 1987, , .		12

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55	Efficient CAD Tool for Inductively Coupled Rectangular Waveguide Filters with Rounded Corners. , 2001, , .		12
56	Low-cost dual-mode asymmetric filters in rectangular waveguide. , 0, , .		12
57	Ku-band high-power lowpass filter with spurious rejection. Electronics Letters, 2006, 42, 1460.	0.5	12
58	A Technique for the Measurement of the Generalized Scattering Matrix of Overmoded Waveguide Devices. IEEE Transactions on Microwave Theory and Techniques, 2013, 61, 2705-2714.	2.9	12
59	Resonant Aperture Filters: Improved Out-Of-Band Rejection and Size Reduction. , 2001, , .		11
60	An efficient mixed potential integral equation technique for the analysis of shielded MMIC's. , 1995, , .		10
61	New simple procedure for the computation of the multimode admittance matrix of arbitrary waveguide junctions. , 0, , .		10
62	Efficient analysis of cubic junction of rectangular waveguides using admittance-matrix representation. IET Microwaves Antennas and Propagation, 2000, 147, 417.	1.2	10
63	New folded configuration of rectangular waveguide filters with asymmetrical transmission zeros. , 2014, , .		10
64	Correction of manufacturing deviations in circular-waveguide dual-mode filters using aggressive space mapping. , 2014, , .		10
65	Evanescent-Mode Ridge-Waveguide Radiating Filters for Space Applications. IEEE Transactions on Antennas and Propagation, 2019, 67, 6286-6297.	3.1	10
66	Scattering from a double-strip grating: rigorous equivalent network formulation. IEEE Transactions on Antennas and Propagation, 1991, 39, 1479-1487.	3.1	9
67	The technology management process at the European space agency. Acta Astronautica, 2010, 66, 883-889.	1.7	9
68	Novel rectangular waveguide structures for advanced filter characteristics. , 2014, , .		9
69	Robust optimization and tuning of microwave filters and artificial transmission lines using aggressive space mapping techniques. , 2017, , .		9
70	Waveguide Quadruplet Diplexer for Multi-Beam Satellite Applications. IEEE Access, 2020, 8, 110116-110128.	2.6	9
71	Compact Dual-Band and Wideband Filters With Resonant Apertures in Rectangular Waveguide. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 3125-3140.	2.9	9
72	Multimode Network Representation of Two Dimensional Steps in Rectangular Waveguides. , 1994, , .		8

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73	Enhancing the spurious free range in inductive rectangular waveguide filters. , 2015, , .		8
74	Practical design of rectangular waveguide filters with a capacitive building block providing an extra transmission zero. , 2015, , .		8
75	Enhancing the performance of stepped impedance resonator filters in rectangular waveguide. , 2017, , .		8
76	Novel Spatial Domain Integral Equation Formulation for the Analysis of Rectangular Waveguide Steps Close to Arbitrarily Shaped Dielectric and/or Conducting Posts. Radio Science, 2018, 53, 406-419.	0.8	8
77	Overview of microwave components activities at the European Space Agency. IEEE Transactions on Microwave Theory and Techniques, 1992, 40, 1150-1158.	2.9	7
78	Design and performance of a SAW ladder-type filter at 3.15 GHz using SAW mass-production technology [wireless LANs]. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 2312-2316.	2.9	7
79	CAD of waveguide array antennas based on "Filter" concepts. IEEE Transactions on Antennas and Propagation, 1999, 47, 542-548.	3.1	7
80	Application of Chained Functions to Low-Cost Microwave Band-pass Filters Using Standard PCB Etching Techniques. , 2000, , .		7
81	Accurate modelling of narrow-band filters for satellite communications. , 0, , .		7
82	Experimental Validation of Multipactor Effect for Ferrite Materials Used in L- and S-Band Nonreciprocal Microwave Components. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2151-2161.	2.9	7
83	Inline Combline Filters of Order N With up to N + 1 Transmission Zeros. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 3287-3297.	2.9	7
84	Hybrid Wideband Staircase Filters in Rectangular Waveguide With Enhanced Out-of-Band Response. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 3783-3796.	2.9	7
85	Multimode equivalent network representation of inductive and capacitive multiple posts. IET Microwaves Antennas and Propagation, 1995, 142, 41.	1.2	6
86	Six-pole triple mode filters in rectangular waveguide. , 0, , .		6
87	CAD of coaxially end-fed waveguide phased-array antennas. Microwave and Optical Technology Letters, 2002, 34, 276-281.	0.9	6
88	Synthesis of dual-mode in-line microwave rectangular filters with higher modes. International Journal of RF and Microwave Computer-Aided Engineering, 2005, 15, 241-248.	0.8	6
89	Correction of manufacturing deviations in waveguide filters and manifold multiplexers using metal insertions. International Journal of Microwave and Wireless Technologies, 2015, 7, 219-227.	1.5	6
90	Efficient implementation of the aggressive space mapping technique for microwave filter design. , 2017, , .		6

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91	Space Mapping for Tuning Microwave Waveguide Filters. , 2019, , .		6
92	Enhancing the Out-of-Band Response of Hybrid Wide-Band Filters in Rectangular Waveguide. , 2021, , .		6
93	New dual mode coupling using slotted dielectric resonator. Microwave and Optical Technology Letters, 1993, 6, 84-87.	0.9	5
94	Accelerated computation of admittance parameters for planar waveguide junctions. The International Executive, 1997, 7, 195-205.	0.2	5
95	Low-loss filters in rectangular waveguides. Microwave and Optical Technology Letters, 2000, 27, 7-9.	0.9	5
96	Direct computation of the admittance parameters of a cubic junction with arbitrarily shaped access ports using the Blâ€“RME method. IET Microwaves Antennas and Propagation, 2003, 150, 111.	1.2	5
97	New design methodology for multiband waveguide filters based on multiplexing techniques. , 2017, , .		5
98	Rectangular Waveguide Quadruplet Filter for Satellite Applications. , 2019, , .		5
99	Increasing Peak Power Handling in Microstrip Bandpass Filters by Using Rounded-End Resonators. IEEE Microwave and Wireless Components Letters, 2021, 31, 237-240.	2.0	5
100	Dual-Band Filters in Rectangular Waveguide Based on Resonant Apertures. , 2021, , .		5
101	Metal-strip-loaded rectangular dielectric rod leaky-wave antennas: experimental verification of a new simple theory. , 1990, , .		4
102	Multimode network approach for the solution of two-dimensional waveguide discontinuities. , 1993, , .		4
103	Boundary integral equation approach to multi-mode Y-Matrix characterization of multi-ridged sections in circular waveguide. , 0, , .		4
104	A contour-based approach to the multimode network representation of waveguide transitions. IEEE Transactions on Microwave Theory and Techniques, 1998, 46, 411-419.	2.9	4
105	Accurate CAD of integrated band-pass and second harmonic band-reject microwave filters. , 0, , .		4
106	Efficient Full-Wave Analysis of Waveguide Arrays on Cylindrical Surfaces. , 1999, , .		4
107	Impedance Representation of Waveguide Junctions Based on the Integral Equation Approach. , 2000, , .		4
108	Design of waveguide manifold multiplexers with dual-mode filters using distributed models. , 2014, , .		4

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109	Novel Solution for the Coaxial Excitation of Inductive Rectangular Waveguide Filters. , 2018, , .		4
110	Implementation of Waveguide Terminations With Low-Passive Intermodulation for Conducted Test Beds in Backward Configuration. IEEE Microwave and Wireless Components Letters, 2019, 29, 659-661.	2.0	4
111	Multimode Equivalent Network for Boxed Multilayer Arbitrary Planar Circuits. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2501-2514.	2.9	4
112	On the Integration of Microwave Filters and Waveguide Switches. IEEE Microwave and Wireless Components Letters, 2021, 31, 265-268.	2.0	4
113	Enhancement of corona discharge thresholds in microstrip bandpass filters by using cover-ended resonators. International Journal of Microwave and Wireless Technologies, 2021, 13, 708-718.	1.5	4
114	Multimode network analysis of planar transmission lines. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 2621-2626.	2.9	3
115	Field theory analysis of circular ridge waveguides with partial dielectric filling. , 0, , .		3
116	A new family of microstrip open-loop resonator filters for high-selectivity applications. Microwave and Optical Technology Letters, 2004, 43, 450-455.	0.9	3
117	Accurate consideration of metal losses at waveguide junctions using admittance and impedance integral equation formulations. Radio Science, 2005, 40, n/a-n/a.	0.8	3
118	Computer-aided design (CAD) of filters and multiplexers for passive inter-modulation (PIM) set-ups. , 2016, , .		3
119	Helical resonator with modulated radius for improved multipactor threshold: Numerical and experimental results. , 2016, , .		3
120	Generalized Thru-Reflect-Line Calibration Technique for the Measurement of Multimodal Radiating Waveguides. IEEE Antennas and Wireless Propagation Letters, 2017, 16, 844-847.	2.4	3
121	Exploring the tunability range of classic circular waveguide dual mode filters using EM-Based CAD. , 2017, , .		3
122	Rigorous Multimode Equivalent Network Representation of Multilayer Planar Circuits. , 2018, , .		3
123	A Wideband Diplexer for Ka-Band Passive Intermodulation Measurement. , 2018, , .		3
124	Analysis and Design of Re-Configurable Combline Filters Using Dielectric Tuners. , 2022, , .		3
125	Rigorous, multimode equivalent network representation of capacitive discontinuities. IEEE Transactions on Microwave Theory and Techniques, 1993, 41, 1195-1206.	2.9	2
126	Multimode Network Representation of a Radiating Array of Thick Parallel Plates. , 1994, , .		2

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127	Synthesis of Angular Bandpass Filters. , 1994, , .		2
128	Simulation of cylindrical cavities by an advanced FDTD algorithm. , 1995, , .		2
129	Multimode network representations for the scattering by an array of thick parallel plates. IEEE Transactions on Antennas and Propagation, 1997, 45, 608-613.	3.1	2
130	Real-Time Spectrum Analysis in Microstrip Technology. , 2001, , .		2
131	Broadside couplings for high-selectivity microstrip filters. Microwave and Optical Technology Letters, 2001, 30, 295-302.	0.9	2
132	Contributions to the analysis and design of all-inductive filters with dielectric resonators. , 2003, , .		2
133	On Multimode Equivalent Network Representation of Finite Arrays of Open-Ended Waveguides. IEEE Transactions on Antennas and Propagation, 2017, 65, 4334-4339.	3.1	2
134	Design of advanced waveguide filters for passive intermodulation measurement setups. , 2017, , .		2
135	An Efficient Technique to Assess the Convergence of the Multimode Equivalent Network for Waveguide Devices. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 651-659.	2.9	2
136	Advanced filter design technique based on equivalent circuits and coupling matrix segmentation. International Journal of Circuit Theory and Applications, 2018, 46, 1055-1071.	1.3	2
137	Electric Multimode Equivalent Network Technique for Multilayer Shielded Circuits Based on Arbitrary Rectangular Elements. , 2019, , .		2
138	Systematic procedure for the efficient design of folded waveguide comb-line filters. , 2019, , .		2
139	Inductive Cascaded Quadruplet With Diagonal Cross-Coupling in Rectangular Waveguide. IEEE Access, 2022, 10, 45241-45255.	2.6	2
140	Multimode network representation of multiple inductive and capacitive obstacles in parallel plate waveguides. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 1046-1051.	2.9	1
141	Correction to "Implementing Transmission Zeros in Inductive-Window Bandpass Filters" [Erratum]. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 353.	2.9	1
142	In-line Coaxial Excitation of Rectangular Waveguides. , 1998, , .		1
143	A new equiripple power splitter for radio link applications. , 1998, , .		1
144	MoM/BI-RME analysis of boxed microwave circuits based on arbitrarily shaped elements. , 0, , .		1

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145	Triple-mode asymmetric filters in a rectangular waveguide. Microwave and Optical Technology Letters, 2001, 28, 228-231.	0.9	1
146	Microstrip Chirped Delay Lines based on Photonic Band-Gap Structures. , 2002, , .		1
147	A new class of dual-mode asymmetric microwave rectangular filters. , 0, , .		1
148	Faster technique for the modal analysis of a coaxial cable with misaligned inner conductor. Radio Science, 2004, 39, n/a-n/a.	0.8	1
149	Spurious removal in satellite output multiplexer power filters. , 2007, , .		1
150	Innovative manufacturing technology for RF Passive devices combining electroforming and CFRP application. , 2008, , .		1
151	Quality factor of helical coaxial cavity resonators with modulated radius. , 2014, , .		1
152	A commercial EM solver using the BI-RME method. , 2014, , .		1
153	Efficient Design Procedure of OMUX Satellite Channel Filters using Full-Wave Numerical Methods. , 2018, , .		1
154	Optimized Design of Combline Filters with Transmission Zeros. , 2019, , .		1
155	Integral Equation Analysis of Multiport H-plane Devices Containing Arbitrarily Shaped Metallic and/or Dielectric Posts by Using Two-Dimensional Cavity and Parallel Plate Green's Functions. , 2019, , .		1
156	On the analysis of capacitive rectangular waveguide discontinuities close to arbitrarily shaped conducting and dielectric posts. AEU - International Journal of Electronics and Communications, 2020, 113, 152976.	1.7	1
157	Space mapping filter design and tuning techniques. International Journal of Microwave and Wireless Technologies, 2022, 14, 387-396.	1.5	1
158	Multimode equivalent network representation for the scattering from multistrip gratings. IEEE Transactions on Antennas and Propagation, 1995, 43, 597-603.	3.1	0
159	Fast Eigenmodes Analysis for Ridged Rectangular/Circular Waveguides by an Effcient Procedure. , 1998, , .		0
160	Circular Versus Rectangular Waveguide All-Inductive Dual-Mode Filters. , 2001, , .		0
161	New distributed model for synthesis of classical dual mode filters. , 2010, , .		0
162	Novel Integral Equation Formulation for the Analysis of Capacitive Step Discontinuities. , 2019, , .		0

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163	Multimode Equivalent Networks for Shielded Microwave Circuits With Thick Metallizations. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 5004-5013.	2.9	0
164	Multimode Equivalent Network Representations. , 0, , .		0