Claudio Paoloni

List of Publications by Year
in descending order

187 papers	2,995 citations	361413 20 h-index	175258 52 g-index
188 all docs	188 docs citations	188 times ranked	2486 citing authors

#	Article	IF	Citations
1	Vacuum Electronic Devices. Springer Series in Optical Sciences, 2022, , 317-327.	0.7	3
2	ULTRAWAVE. Springer Series in Optical Sciences, 2022, , 423-425.	0.7	0
3	Recent Progress in Electromagnetic Interference Shielding Performance of Porous Polymer Nanocompositesâ€"A Review. Energies, 2022, 15, 3901.	3.1	23
4	A 0.35-THz Extended Interaction Oscillator Based on Overmoded and Bi-Periodic Structure. IEEE Transactions on Electron Devices, 2021, 68, 5814-5819.	3.0	8
5	D-band Transmission Hub for Point to MultiPoint Wireless Distribution. , 2021, , .		3
6	Experimental Validation of Phase Velocity and Interaction Impedance of Meander-Line Slow-Wave Structures for Space Traveling-Wave Tubes. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2148-2154.	4.6	7
7	Sub-THz Wireless Transport Layer for Ubiquitous High Data Rate. IEEE Communications Magazine, 2021, 59, 102-107.	6.1	15
8	Improved Model for Beamâ€"Wave Interaction With Ohmic Losses and Reflections of Sheet Beam Traveling Wave Tubes. IEEE Transactions on Electron Devices, 2021, 68, 2977-2983.	3.0	3
9	Toward the first D-band Point to multipoint wireless system field test. , 2021, , .		0
10	Development of a<i>D</i>-Band Traveling Wave Tube for High Data-Rate Wireless Links. IEEE Transactions on Electron Devices, 2021, 68, 4675-4680.	3.0	7
11	Millimeter wave traveling wave tubes for the 21st Century. Journal of Electromagnetic Waves and Applications, 2021, 35, 567-603.	1.6	76
12	Analysis of the Bottom Metal/Dielectric Supporting Plane in Meander Line Slow Wave Structures for Millimeter Wave Traveling Wave Tubes. , 2021, , .		0
13	Preliminary Design of Reentrant Square Cavity for EIK Application. , 2021, , .		0
14	Tolerance Analysis of Double Corrugated Waveguide for D-band TWT. , 2021, , .		0
15	Pillared Meander Line Slow Wave Structure for W-band Traveling Wave Tubes. , 2021, , .		1
16	Low Cost Electron Gun for D-band Traveling Wave Tubes. , 2021, , .		5
17	Offset Double Corrugated Waveguide. , 2021, , .		2
18	${H}$ - and ${E}$ -Plane Loaded Slow Wave Structure for ${W}$ -Band TWT. IEEE Transactions on Electron Devices, 2020, 67, 309-313.	3.0	8

#	Article	IF	Citations
19	D-band Point to Multi-Point Deployment with G-Band Transport. , 2020, , .		9
20	Technology, Assembly, and Test of a <i>W</i>-Band Traveling Wave Tube for New 5G High-Capacity Networks. IEEE Transactions on Electron Devices, 2020, 67, 2919-2924.	3.0	27
21	Advancement in high capacity wireless distribution above 140 GHz. , 2020, , .		1
22	Longâ€range millimetre wave wireless links enabled by travelling wave tubes and resonant tunnelling diodes. IET Microwaves, Antennas and Propagation, 2020, 14, 2110-2114.	1.4	2
23	TWTs for Point to Point D-band Wireless Links. , 2020, , .		0
24	3D Meander Line Slow Wave Structure for W-band TWT. , 2020, , .		1
25	Design and Microfabrication of a Double Corrugated Waveguide for G-band TWTs. , 2020, , .		0
26	On a D-band Traveling Wave Tube for Wireless Links. , 2020, , .		1
27	Front end for D-band High Data Rate Point to Point links. , 2020, , .		0
28	Novel Meander Line Slow Wave Structure for W-band TWT. , 2020, , .		1
29	Sub-THz Traveling Wave Tubes for Novel Wireless High Capacity Networks. , 2020, , .		0
30	Preliminary Study of a New Meander Line for W-band TWT. , 2019, , .		2
31	Design of Slow Wave Structure for G-band TWT for High Data Rate Links. , 2019, , .		1
32	Technology for D-band/G-band ultra capacity layer. , 2019, , .		9
33	Design of a highâ€gain silicon BJT and an Eâ€pHEMT hybrid matrix amplifier with an optimum filterâ€matching technique. IET Microwaves, Antennas and Propagation, 2019, 13, 2153-2158.	1.4	0
34	Design of D-band Double Corrugated Waveguide TWT for Wireless Communications. , 2019, , .		8
35	Design and fabrication of a D-Band Traveling Wave Tube for millimeter wave communications. , 2019, , .		0
36	Modeling and Analysis of Point-to-Multipoint Millimeter Wave Backhaul Networks. IEEE Transactions on Wireless Communications, 2019, 18, 268-285.	9.2	21

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37	Large Signal Analysis of a New Meander Line Topology for W-band Traveling Wave Tubes. , 2019, , .		1
38	THz links using tube amplifiers and steerable beams for indoor applications. , 2019, , .		2
39	Sub-THz components for high capacity point to multipoint wireless networks. , 2019, , .		3
40	Long range millimeter wave wireless links enabled by traveling wave tubes and resonant tunnelling diodes. , 2019, , .		3
41	Variable aperture horn antenna for millimeter wave wireless communications. , 2019, , .		0
42	Design of 71â€"76 GHz Double-Corrugated Waveguide Traveling-Wave Tube for Satellite Downlink. IEEE Transactions on Electron Devices, 2018, 65, 2195-2200.	3.0	33
43	Transmisson Hub and Terminals for Point to Multipoint W-Band Tweether System. , 2018, , .		8
44	Frequency-Stabilized Terahertz Gyrotron Backward-Wave Oscillator During Electronic Tuning Process. , 2018, , .		0
45	Design of sub-THz traveling wave tubes for high data rate long range wireless links. Semiconductor Science and Technology, 2018, 33, 124009.	2.0	20
46	Fabrication of a 0.346-THz BWO for Plasma Diagnostics. IEEE Transactions on Electron Devices, 2018, 65, 2156-2163.	3.0	27
47	W-band TWT for high capacity transmission hub for small cells backhaul. , 2018, , .		2
48	Effect of fabrication tolerance on 0.346 THz double corrugated waveguide for backward wave oscillators. , 2018, , .		0
49	Lagrangian large signal model for double corrugated waveguide. , 2018, , .		0
50	Toward 100 Gbps wireless networks enabled by millimeter wave Traveling Wave Tubes. , 2018, , .		1
51	Millimeter wave point to multipoint for affordable high capacity backhaul of dense cell networks. , 2018, , .		9
52	The 2017 terahertz science and technology roadmap. Journal Physics D: Applied Physics, 2017, 50, 043001.	2.8	1,160
53	Lagrangian simulator for millimetre wave TWT based on non-rotationally symmetric slow wave structure. Journal of Electromagnetic Waves and Applications, 2017, 31, 1902-1913.	1.6	2
54	TWEETHER future generation W-band backhaul and access network technology. , 2017, , .		6

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55	A Millimeter-Wave Klystron Upconverter With a Higher Order Mode Output Cavity. IEEE Transactions on Electron Devices, 2017, 64, 3857-3862.	3.0	14
56	Cold-test analysis of H-plane and E-plane loaded rectangular slow-wave structure. , 2017, , .		0
57	Lagrangian large signal model for double corrugated waveguides. , 2017, , .		0
58	71â€"76 GHz traveling wave tube for high data rate satellite communication. , 2017, , .		1
59	Fabrication of the 0.346 THz BWO for plasma diagnostic. , 2017, , .		1
60	Study of multiple beam backward wave oscillator based on corrugated waveguide TWT. , 2017, , .		3
61	UV-LIGA microfabrication of 0.3 THz double corrugated waveguide. , 2017, , .		4
62	W-band klystron upconverter driven by pseudospark-sourced electron beam. , 2017, , .		0
63	Fabrication of W-band TWT for 5G small cells backhaul. , 2017, , .		10
64	Efficient Interference Mitigation in mmWave Backhaul Network for High Data Rate 5G Wireless Communications. International Journal of Communications, Network and System Sciences, 2017, 10, 170-180.	0.6	0
65	Backward wave oscillator for high power generation at THz frequencies. , 2017, , .		1
66	Photonic Crystal-Coupler for Sheet Beam THz Vacuum Electron Tubes. IEEE Electron Device Letters, 2016, 37, 1227-1230.	3.9	13
67	Microwave coupler for Wâ€band micro reâ€entrant square cavities. IET Microwaves, Antennas and Propagation, 2016, 10, 764-769.	1.4	6
68	Low-cost method for waveguide device components fabrication at 220 â€" 325 GHz. , 2016, , .		0
69	TWEETHER project for W-band wireless networks. , 2016, , .		4
70	Comparison of couplers for 0.346 THz DCW-BWO. , 2016, , .		1
71	Progress in development of a 346GHz BWO. , 2016, , .		1
72	A traveling wave tube for 92â€"95 GHz band wireless applications. , 2016, , .		8

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73	Photonic band gap corrugated slow wave structure for THz sheet-beam vacuum electron devices. , 2016, , .		0
74	Double corrugated waveguide 0.346 THz BWO with wide beam channel. , 2016, , .		0
75	Evaluation of a rapid manufacturing approach for rectangular waveguide filters up to 1.1 THz. , 2016, , .		0
76	THz Backward-Wave Oscillators for Plasma Diagnostic in Nuclear Fusion. IEEE Transactions on Plasma Science, 2016, 44, 369-376.	1.3	63
77	Design and fabrication of double corrugated waveguide for a Ka-band traveling wave tube. , 2016, , .		0
78	Millimeter wave wireless system based on point to multipoint transmissions. , 2016, , .		9
79	Nano-CNC Machining of Sub-THz Vacuum Electron Devices. IEEE Transactions on Electron Devices, 2016, 63, 4067-4073.	3.0	84
80	UV-LIGA microfabrication process for sub-terahertz waveguides utilizing multiple layered SU-8 photoresist. Journal of Micromechanics and Microengineering, 2016, 26, 095010.	2.6	22
81	Study of the dispersion of the double-corrugated waveguide at THz frequencies. , 2016, , .		0
82	Electron gun and CVD diamond window for a 346 GHz sheet beam BWO. , 2016, , .		1
83	High energy beam THz backward wave oscillator based on double corrugated waveguide. , 2016, , .		1
84	W-band TWTs for new generation high capacity wireless networks. , 2016, , .		10
85	Nanoscale Surface Roughness Effects on THz Vacuum Electron Device Performance. IEEE Nanotechnology Magazine, 2016, 15, 85-93.	2.0	57
86	Photonic bandgap coupler for 346 GHz sheet-beam BWO. , 2015, , .		1
87	Simulation of 0.346 THz double corrugated waveguide BWO. , 2015, , .		0
88	A fast model of a 1-D nonlinear beam-wave interaction for a 225 GHz TWT. , 2015, , .		0
89	Sub-THz traveling wave amplifiers based on the double corrugated waveguide. , 2015, , .		0
90	Double Corrugated Waveguide for Ka-Band Traveling Wave Tube. IEEE Transactions on Electron Devices, 2015, 62, 3851-3856.	3.0	26

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91	Design and fabrication of a sheet beam BWO at 346 GHz. , 2015, , .		6
92	THz backward-wave oscillators for plasma diagnostic in nuclear fusion. , 2015, , .		7
93	Magnetic fusion energy plasma diagnostic needs novel THz BWOs. , 2015, , .		2
94	Dispersion characteristics of double-corrugated rectangular waveguide for terahertz vacuum devices. , 2015, , .		1
95	Nanoscale surface roughness effects on THz vacuum electron device performance. , 2015, , .		1
96	Horizon 2020 TWEETHER project for W-band high data rate wireless communications. , 2015, , .		3
97	THz BWO based on photonic crystal corrugated waveguide. , 2015, , .		1
98	Photonic Crystal-Structures for THz Vacuum Electron Devices. IEEE Transactions on Electron Devices, 2015, 62, 178-183.	3.0	37
99	346 GHz BWO for fusion plasma diagnostics. , 2014, , .		7
100	Periodically Allocated Reentrant Cavity Klystron. IEEE Transactions on Electron Devices, 2014, 61, 1687-1691.	3.0	10
101	Design of a Terahertz Cascade Backward Wave Amplifier. IEEE Transactions on Electron Devices, 2014, 61, 1715-1720.	3.0	4
102	0.22 THz TWT based on the double corrugated waveguide. , 2014, , .		4
103	Double Corrugated Waveguide for G-Band Traveling Wave Tubes. IEEE Transactions on Electron Devices, 2014, 61, 4259-4263.	3.0	120
104	THz backward wave oscillator based on PhC-wall corrugated waveguide. , 2014, , .		2
105	Scaled design and test of a coupler for micro-reentrant square-cavities for millimeter wave klystrons. , 2013, , .		6
106	Photonic crystals assisted slow wave structure for THz vacuum devices. , 2013, , .		2
107	New klystron topology based on periodic sequence of high order mode cavities. , 2013, , .		3
108	Improvement of cold parameters of the double corrugated waveguide by geometrical shaping of the corrugations. , 2013, , .		0

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109	Design and Realization Aspects of 1-THz Cascade Backward Wave Amplifier Based on Double Corrugated Waveguide. IEEE Transactions on Electron Devices, 2013, 60, 1236-1243.	3.0	120
110	Thermal analysis of THz double corrugated waveguide. , 2013, , .		1
111	Tapered metallic Photonic Crystal slow wave structure for terahertz vacuum electron devices. , 2013, , .		1
112	Novel klystron approach for THz frequency amplification. , 2013, , .		0
113	DUAL FED DISTRIBUTED AMPLIFIER WITH CONTROLLED TERMINATION ADJUSTMENT. Progress in Electromagnetics Research, 2013, 139, 761-777.	4.4	2
114	Narrow corrugated waveguide BWO for THz signal generation. , 2012, , .		0
115	Design procedure for THz cascade backward wave amplifiers. , 2012, , .		3
116	Vacuum tube amplifier of the opther Project for 1-THz amplification. , 2012, , .		0
117	1-THz cascade backward wave amplifier. , 2012, , .		8
118	Micro reentrant cavity for 100 GHz klystron. , 2012, , .		11
119	Improved Corrugation Cross-Sectional Shape in Terahertz Double Corrugated Waveguide. IEEE Transactions on Electron Devices, 2012, 59, 3116-3119.	3.0	14
120	Vectorially Combined Distributed Power Amplifiers for Software-Defined Radio Applications. IEEE Transactions on Microwave Theory and Techniques, 2012, 60, 3189-3200.	4.6	19
121	COMPARISON OF THz BACKWARD WAVE OSCILLATORS BASED ON CORRUGATED WAVEGUIDES. Progress in Electromagnetics Research Letters, 2012, 30, 163-171.	0.7	15
122	Backward wave mode interaction impedance at THz frequencies for corrugated waveguide. Microwave and Optical Technology Letters, 2012, 54, 837-839.	1.4	4
123	Vacuum electron tubes for THz applications. , 2011, , .		0
124	Backward wave oscillators for THz applications based on corrugated waveguide. , 2011, , .		5
125	The OPTHER project: Progress toward the THz amplifier. , 2011, , .		7
126	Backward-wave vacuum amplifier for THz amplification. , 2011, , .		2

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127	P2-4: Improved rod shapes for helix slow wave structures. , 2010, , .		0
128	European research on THz vacuum amplifiers. , 2010, , .		3
129	Backward wave oscillator for THz frequency range based on double corrugation slow-wave structure. , 2010, , .		2
130	15.3: Design method for Double Corrugation Rectangular Waveguide THz vacuum amplifiers. , 2010, , .		1
131	Corrugated Rectangular Waveguide Tunable Backward Wave Oscillator for Terahertz Applications. IEEE Transactions on Electron Devices, 2010, 57, 1481-1484.	3.0	121
132	Double-Corrugated Rectangular Waveguide Slow-Wave Structure for Terahertz Vacuum Devices. IEEE Transactions on Electron Devices, 2010, 57, 3169-3175.	3.0	221
133	Narrow corrugation rectangular waveguide for terahertz TWTs. Electronics Letters, 2010, 46, 927.	1.0	10
134	Towards a THz backward wave amplifier in European OPTHER project. , 2010, , .		3
135	Analytical Design Method for Corrugated Rectangular Waveguide SWS THz Vacuum Tubes. Journal of Electromagnetic Waves and Applications, 2010, 24, 2479-2494.	1.6	21
136	Vectorially combined distributed power amplifier with load pull impedance determination. Electronics Letters, 2010, 46, 1137.	1.0	13
137	Helix TWT yield improvement by helix pitch optimization. , 2009, , .		0
138	Design study of Corrugated Waveguide Slow-Wave Structure for THz amplification. , 2009, , .		1
139	Parametric oscillations in distributed power amplifiers. Electronics Letters, 2009, 45, 1325.	1.0	9
140	The European project OPTHER for the development of a THz tube amplifier. , 2009, , .		11
141	On the Analysis and Improvement of Yield for TWT Small-Signal Gain. IEEE Transactions on Electron Devices, 2008, 55, 2774-2778.	3.0	3
142	Design and computer simulation of high efficiency broadband parallel-circuit Class E RF power amplifier with reactance compensation technique. , 2008, , .		1
143	Field emission vacuum triode: THz waveguide solutions for the transmission lines. , 2008, , .		2
144	A novel adaptive LDMOS power amplifier with constant efficiency for wide dynamic power levels control. , 2008, , .		2

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145	SWS improved analysis based on inhomogeneous dielectric loading. , 2008, , .		1
146	High performance 1.5W pHEMT Distributed Power Amplifier with Adjustable Inter-Stage Cascaded Network for 10. , 2008, , .		0
147	Analytical Computations, Measurements and 3-D EM Simulations for the Calculation of Cold Parameters in Helical SWSs. , 2007, , .		12
148	Innovative design of nano-vacuum triode. , 2007, , .		0
149	Modeling of carbon nanotube-based devices: from nanoFETs to THz emitters. , 2006, , .		4
150	Analysis of dielectric rods with arbitrary shape for low-dispersion slow-wave structures in helix TWTs. IEEE Transactions on Electron Devices, 2006, 53, 1490-1493.	3.0	4
151	Yield improvement via helix-pitch profile adjustment in multisection helix traveling-wave tubes. Microwave and Optical Technology Letters, 2005, 46, 433-435.	1.4	0
152	Nonrounded dielectric rectangular rods in helix traveling-wave tubes. Microwave and Optical Technology Letters, 2005, 47, 101-103.	1.4	0
153	Cathode voltage adjustment to compensate helix pitch tolerance in TWTs. Electronics Letters, 2004, 40, 36.	1.0	2
154	A study on helix pitch tolerance impact on TWT small-signal gain. IEEE Electron Device Letters, 2002, 23, 746-748.	3.9	9
155	Fast computation of FET power gains. Microwave and Optical Technology Letters, 2002, 33, 104-106.	1.4	0
156	On the influence of electron-beam parameters on TWT small-signal gain. Microwave and Optical Technology Letters, 2002, 34, 433-434.	1.4	0
157	Impact of process parameters in 40 GHz traveling-wave amplifiers. Microwave and Optical Technology Letters, 2001, 31, 421-423.	1.4	0
158	Helix wire tolerances in TWT small-signal gain prediction. Microwave and Optical Technology Letters, 2001, 29, 208-209.	1.4	0
159	Effect of mechanical tolerance of T-shaped rods in a TWT based on a helix slow-wave structure. Microwave and Optical Technology Letters, 2000, 25, 393-395.	1.4	2
160	A finite-element 3-D method for the design of TWT collectors. Microwave and Optical Technology Letters, 2000, 26, 119-122.	1.4	0
161	Sensitivity analysis of TWT's small signal gain based on the effect of rod shape and dimensions. IEEE Transactions on Electron Devices, 2000, 47, 1457-1462.	3.0	12
162	A simplified procedure to calculate the power gain definitions of FETs. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 470-474.	4.6	6

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163	HEMT-HBT matrix amplifier. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 1308-1312.	4.6	12
164	Analysis of high-efficiency multistage depressed collectors based on the 3-D finite-element method. Microwave and Optical Technology Letters, 2000, 27, 275-278.	1.4	0
165	On the TWT based on a helix slow-wave structure sustained by rectangular dielectric rods. Microwave and Optical Technology Letters, 1999, 20, 177-179.	1.4	2
166	Effect of tape width and thickness on helix slow-wave structure performance. Microwave and Optical Technology Letters, 1999, 23, 147-149.	1.4	1
167	Accurate analysis of helix slow-wave structures. IEEE Transactions on Electron Devices, 1998, 45, 1605-1613.	3.0	75
168	Fast prediction and optimization of yield in gallium arsenide large-signal MMICs. , 1998, 8, 68-76.		0
169	An optimization procedure for MMIC large-signal amplifiers. , 1998, 19, 386-388.		0
170	A design procedure for monolithic matrix amplifier. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 135-139.	4.6	12
171	Experimental validation of a large-signal MESFET model for submicron-gate-length devices. Microwave and Optical Technology Letters, 1997, 15, 227-229.	1.4	1
172	A practical approach based on a unilateral FET model for the design of a MMIC distributed amplifier. Microwave and Optical Technology Letters, 1996, 13, 219-221.	1.4	0
173	An approach to distributed amplifier based on a design-oriented FET model. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 272-277.	4.6	13
174	Nonlinear yield analysis and optimization of monolithic microwave integrated circuits. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 2504-2507.	4.6	6
175	Comparison between MMIC matrix and distributed amplifiers. IET Microwaves Antennas and Propagation, 1995, 142, 75.	1.2	1
176	Design of a matrix amplifier using FETâ€gateâ€width tapering. Microwave and Optical Technology Letters, 1995, 8, 118-121.	1.4	1
177	Wideband large-signal amplifier based on an odd number of mesfets. Microwave and Optical Technology Letters, 1995, 9, 310-312.	1.4	0
178	On stability in the MMIC distributed amplifier. Microwave and Optical Technology Letters, 1994, 7, 215-216.	1.4	0
179	Power distributed amplifier with inputâ€output combiners. Microwave and Optical Technology Letters, 1994, 7, 312-315.	1.4	5
180	Sequentially rotated arrays with reduced sidelobe levels. IET Microwaves Antennas and Propagation, 1994, 141, 321.	1.2	31

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181	Design of high-performance power-distributed amplifier using Lange couplers. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 2525-2530.	4.6	20
182	An advanced GaAs monolithic transimpedance amplifier for high-speed optical communication systems. Microwave and Optical Technology Letters, 1993, 6, 65-70.	1.4	7
183	Application of filter theory in the design of twas based on FETS with different gate widths. Microwave and Optical Technology Letters, 1993, 6, 261-266.	1.4	4
184	Planar analysis of radial-line power dividers. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1990, 3, 23-31.	1.9	6
185	Low impedance matching: The radial stub solution. Microwave and Optical Technology Letters, 1989, 2, 291-297.	1.4	1
186	CAD-oriented lossy models for radial stubs. IEEE Transactions on Microwave Theory and Techniques, 1988, 36, 305-313.	4.6	21
187	Broadband lumped equivalent circuit for shunt-connected radial stub. Electronics Letters, 1986, 22, 485.	1.0	10