Alan M Cook

List of Publications by Year
in descending order

49 papers	726 citations	840776 11 h-index	996975 15 g-index
49 all docs	49 docs citations	49 times ranked	454 citing authors

#	Article	IF	Citations
1	Demonstration of a High Power, Wideband 220-GHz Traveling Wave Amplifier Fabricated by UV-LIGA. IEEE Transactions on Electron Devices, 2014, 61, 1672-1678.	3.0	168
2	Pressure dependence of plasma structure in microwave gas breakdown at 110 GHz. Applied Physics Letters, 2010, 97, .	3.3	127
3	Design Methodology and Experimental Verification of Serpentine/Folded-Waveguide TWTs. IEEE Transactions on Electron Devices, 2014, 61, 1679-1686.	3.0	105
4	High-Power Copper Gratings for a Sheet-Beam Traveling-Wave Amplifier at G-band. IEEE Transactions on Electron Devices, 2013, 60, 506-509.	3.0	37
5	Observation of plasma array dynamics in 110â€‰GHz millimeter-wave air breakdown. Physics of Plasmas, 2011, 18, 100704.	1.9	29
6	Demonstration of a high power, wideband 220 GHz serpentine waveguide amplifier fabricated by UV-LIGA. , 2013, , .		24
7	Broadband 220-GHz Vacuum Window for a Traveling-Wave Tube Amplifier. IEEE Transactions on Electron Devices, 2013, 60, 1257-1259.	3.0	21
8	W-Band and D-Band Traveling-Wave Tube Circuits Fabricated by 3D Printing. IEEE Access, 2019, 7, 72561-72566.	4.2	21
9	Measurements of electron avalanche formation time in W-band microwave air breakdown. Physics of Plasmas, 2011, 18, 080707.	1.9	20
10	Millimeter wave scattering and diffraction in 110â€‰GHz air breakdown plasma. Physics of Plasmas, 2013, 20, 043507.	1.9	20
11	Demonstration of a W-Band Traveling-Wave Tube Power Amplifier With 10-GHz Bandwidth. IEEE Transactions on Electron Devices, 2021, 68, 2492-2498.	3.0	17
12	High power breakdown testing of a photonic band-gap accelerator structure with elliptical rods. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	14
13	W-band TWT circuit fabricated by 3D-printed mold electroforming. , 2018, , .		12
14	Design and Large-Signal Modeling of a W -Band Dielectric TWT. IEEE Transactions on Plasma Science, 2017, 45, 2820-2834.	1.3	10
15	Millimeter-wave and sub-millimeter-wave vacuum electronics amplifier development at the US Naval Research Laboratory. Proceedings of SPIE, 2013, , .	0.8	9
16	Development of a 233 GHz high-gain traveling wave amplifier. , 2014, , .		9
17	Design of a wideband high-power W-band serpentine TWT. , 2013, , .		7
18	Modeling of the NRL G-Band TWT amplifier using the CHRISTINE and TESLA simulation codes. , 2013, , .		7

#	Article	IF	Citations
19	Design of a 233 GHz high-gain single-stage hybrid-serpentine TWT. , 2014, , .		7
20	Microfabrication and cold testing of copper circuits for a 50-watt 220-GHz traveling wave tube. Proceedings of SPIE, 2013, , .	0.8	6
21	Development of a wideband W-band serpentine waveguide TWT. , 2013, , .		5
22	Breakthrough UV-LIGA microfabrication of sub-mm and THz circuits. , 2013, , .		5
23	Coherent cherenkov radiation as a temporal diagnostic for microbunched beams. , 2007, , .		4
24	Microfabrication methods for W-band TWT circuits. , 2016, , .		4
25	Monolithically integrated 140 GHz TWT arrays. , 2018, , .		4
26	Serpentine waveguide 220 GHz millimeter wave amplifier cold test. , 2012, , .		3
27	Microfabricated 233 GHz traveling wave amplifier. , 2016, , .		3
28	Characterization of W-band Serpentine Waveguide TWT Circuits. , 2019, , .		3
29	W-band TWT Component Fabrication and Testing. , 2019, , .		3
30	Circuit Fabrication Methods for Millimeter-Wave Vacuum Electronics. , 2019, , .		3
31	1.5 MW, 110 GHz gyrotron breakdown in air. , 2012, , .		2
32	Dielectric and alternative-configuration-metal slow wave structures for W-Band traveling wave amplifiers. , 2014, , .		2
33	Dielectric, serpentine, and loaded-helix slow wave structures for W-band traveling wave tubes. , 2014, , .		2
34	3D-printed mold electroforming for microfabrication of W-band TWT circuits. , 2017, , .		2
35	A High-Current-Density Electron Beam for Millimeter-Wave Amplifiers. IEEE Transactions on Electron Devices, 2021, 68, 3040-3044.	3.0	2
36	Demonstration of a W-band TWT with 10 GHz Bandwidth. , 2020, , .		2

#	Article	IF	Citations
37	Design of broadband kilo-watt class W-band serpentine TWTs. , 2014, , .		1
38	Microfabricated, high power millimeter wave amplifiers at G-band. , 2014, , .		1
39	Microwave absorbing composites for vacuum electronics: New material compositions with unusual frequency responses and improved characterization of existing materials. , 2016, , .		1
40	Study of W-band diamond RF windows for high-average-power TWTs. , 2017, , .		1
41	Microfabrication methods for a 233 GHz traveling wave amplifier. , 2017, , .		1
42	Fabrication and testing of Ka-band multi-beam TWT circuits. , 2018, , .		1
43	Validation of the Stability Analysis Framework Based on the Large-signal Code TESLA-Z by Its Application to the Experimental TWTs. , 2021, , .		1
44	Embedded monofilament UV-LIGA techniques for microfabrication of beam tunnels in a 220 GHz wideband serpentine waveguide amplifier. , 2012, , .		0
45	Characterization of MgO-TiO<inf>2</inf>-based ceramic materials at W-band. , 2014, , .		0
46	High-power MMW sheet beam amplifiers. , 2015, , .		0
47	Microfabrication techniques for millimeter-wave vacuum electronics. , 2015, , .		0
48	Compact, efficient, high-power millimeter-wave power boosters. , 2017, , .		0
49	Validation of the Tesla-Z Stability Analysis Framework by its Application to Experimental TWTS*. , 2021, , .		0