Wenxiang Wang

List of Publications by Year in Descending Order

94 papers	822 citations	15 h-index	25 g-index
150 ext. papers	1,092 ext. citations	2.4 avg, IF	3.66 L-index

#	Paper	IF	Citations
94	Broadband-Printed Traveling-Wave Tube Based on a Staggered Rings Microstrip Line Slow-Wave Structure. *Electronics (Switzerland)*, **2022**, 11, 384	2.6	1
93	Design and Experiment of 1 THz Slow Wave Structure Fabricated by Nano-CNC Technology. *IEEE Transactions on Electron Devices*, **2022**, 1-6	2.9	0
92	An Approach to Focus the Sheet Electron Beam in the Planar Microstrip Line Slow Wave Structure. *IEEE Transactions on Electron Devices*, **2022**, 1-7	2.9	
91	Attempt on Applying Semi-Metallic Supporting Rods to a Wideband Ka-Band Helix TWT. *IEEE Transactions on Electron Devices*, **2022**, 1-8	2.9	
90	A new approach of using low magnetic field to focus SEB. *Physics of Plasmas*, **2021**, 28, 102508	2.1	2
89	. *IEEE Transactions on Electron Devices*, **2021**, 1-6	2.9	1
88	. *IEEE Transactions on Electron Devices*, **2021**, 68, 2509-2514	2.9	10
87	A W-Band Rectangular Waveguide TE10 to Circular Waveguide TE02 Mode Converter. *IEEE Transactions on Microwave Theory and Techniques*, **2021**, 69, 3023-3029	4.1	2
86	A New Method to Focus SEBs Using the Periodic Magnetic Field and the Electrostatic Field. *Electronics (Switzerland)*, **2021**, 10, 2118	2.6	1
85	. *IEEE Transactions on Plasma Science*, **2020**, 48, 1910-1916	1.3	2
84	Design and Cold Test of Flat-Roofed Sine Waveguide Circuit for W-Band Traveling-Wave Tube. *IEEE Transactions on Plasma Science*, **2020**, 48, 4021-4028	1.3	5
83	Quinonoid Zwitterion: An Amphiphilic Cathode Interlayer with Initial Thickness-Insensitive and Self-Organizing Properties for Inverted Polymer Solar Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 3792-3799	9.5	3
82	Experimental Verification of the Low Transmission Loss of a Flat-Roofed Sine Waveguide Slow-Wave Structure. *IEEE Electron Device Letters*, **2019**, 40, 808-811	4.4	22
81	The electronic applications of stable diradicaloids: present and future. *Journal of Materials Chemistry C*, **2018**, 6, 11232-11242	7.1	70
80	0.85 THz truncated sine waveguide traveling-wave tube with sheet beam tunnel. *Journal of Engineering*, **2018**, 2018, 665-668	0.7	3
79	Study on W-band sheet-beam traveling-wave tube based on flat-roofed sine waveguide. *AIP Advances*, **2018**, 8, 055116	1.5	14
78	Full-wave analysis of the high frequency characteristics of the sine waveguide slow-wave structure. *AIP Advances*, **2017**, 7, 085111	1.5	5

77	A Ridge-Loaded Sine Waveguide for G -Band Traveling-Wave Tube. *IEEE Transactions on Plasma Science*, **2016**, 44, 2832-2837	1.3	20
76	2-dimensional microstrip meander-line for broad band planar TWTs **2016**,		2
75	Preliminary Design and Experiment of a Ridge-Loaded Staggered Single-Slot Rectangular Coupled-Cavity Structure for X -Band Traveling-Wave Tube. *IEEE Transactions on Plasma Science*, **2016**, 44, 587-593	1.3	1
74	A Study of the Effects of Helix Misalignment on the Cold Parameters of a Sheath Helix Slow-Wave Structure. *IEEE Transactions on Electron Devices*, **2015**, 62, 1334-1341	2.9	1
73	Dispersion Equations of a Rectangular Tape Helix Slow-Wave Structure. *IEEE Transactions on Microwave Theory and Techniques*, **2015**, 63, 1445-1456	4.1	10
72	A V-band folded waveguide TWT **2015**,		2
71	A Research of 140-GHz Folded Rectangular Groove Waveguide Traveling-Wave Tube. *Chinese Journal of Electronics*, **2015**, 24, 873-876	0.9	0
70	A D-band backward-wave oscillator based on quasi-parallel-plate slow-wave structure **2015**,		3
69	A Novel Folded Waveguide for V-Band TWT. *IEEE Transactions on Plasma Science*, **2015**, 43, 4088-4091	1.3	6
68	A 0.22 THz sine waveguide traveling-wave tube **2015**,		2
67	A Modified Slow-Wave Structure for Backward-Wave Oscillator Design in THz Band. *IEEE Transactions on Terahertz Science and Technology*, **2014**, 4, 741-748	3.4	9
66	Novel W-Band Ridge-Loaded Folded Waveguide Traveling Wave Tube. *IEEE Electron Device Letters*, **2014**, 35, 1058-1060	4.4	12
65	Beam-wave interaction study on a novel Ka-band ring-shaped microstrip meander-line slow wave structure **2014**,		3
64	Analysis of 140 gigahertz folded frame travelling wave tube. *Physics of Plasmas*, **2013**, 20, 103118	2.1	1
63	A Novel Winding Microstrip Meander-Line Slow-Wave Structure for V-Band TWT. *IEEE Electron Device Letters*, **2013**, 34, 1325-1327	4.4	10
62	V-Shape Folded Rectangular Groove Waveguide for Millimeter-Wave Traveling-Wave Tube. *IEEE Transactions on Plasma Science*, **2012**, 40, 1027-1031	1.3	6
61	W-Band 1-kW Staggered Double-Vane Traveling-Wave Tube. *IEEE Transactions on Electron Devices*, **2012**, 59, 496-503	2.9	58
60	A Novel Slow-Wave Structure Folded Rectangular Groove Waveguide for Millimeter-Wave TWT. *IEEE Transactions on Electron Devices*, **2012**, 59, 510-515	2.9	14

59	A Tapered Ridge-loaded Folded Waveguide Slow-wave Structure for Millimeter-wave Traveling-wave Tube. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2012**, 33, 131-140	2.2	9
58	A Novel V-Shaped Microstrip Meander-Line Slow-Wave Structure for W-band MMPM. *IEEE Transactions on Plasma Science*, **2012**, 40, 463-469	1.3	60
57	Design and fabrication of Q-band folded waveguide Traveling-Wave Tube **2012**,		7
56	A watt-class 1-THz backward-wave oscillator based on sine waveguide. *Physics of Plasmas*, **2012**, 19, 013113	2.1	42
55	A research of W-band folded waveguide traveling wave tube with elliptical sheet electron beam. *Physics of Plasmas*, **2012**, 19, 093117	2.1	14
54	Propagation properties of an elliptical anisotropic metamaterial cylinder. *Journal of Modern Optics*, **2012**, 59, 778-783	1.1	
53	1 KW Ka-band folded waveguide Traveling-Wave Tube **2011**,		1
52	Investigation on a W Band Ridge-Loaded Folded Waveguide TWT. *IEEE Transactions on Plasma Science*, **2011**, 39, 1660-1664	1.3	11
51	Linear Analysis of Dielectric-Lined Azimuthally Periodic Circular Waveguide for TWT. *IEEE Transactions on Plasma Science*, **2011**, 39, 1673-1679	1.3	2
50	Suppression of In-Band Power Holes in Helix Traveling-Wave Tubes. *IEEE Transactions on Electron Devices*, **2011**, 58, 1556-1561	2.9	12
49	Sine Waveguide for 0.22-THz Traveling-Wave Tube. *IEEE Electron Device Letters*, **2011**, 32, 1152-1154	4.4	59
48	A 140-GHz sheet electron beam sine waveguide traveling-wave tube **2011**,		3
47	Linear analysis of a W band groove-loaded folded waveguide traveling wave tube. *Physics of Plasmas*, **2010**, 17, 113305	2.1	7
46	20.3: High power Ka-band Folded Waveguide Traveling-Wave Tube **2010**,		4
45	A Rectangular Groove-Loaded Folded Waveguide for Millimeter-Wave Traveling-Wave Tubes. *IEEE Transactions on Plasma Science*, **2010**, 38, 1574-1578	1.3	23
44	Investigation of the Slow-Wave Properties of a Dielectric-Lined Azimuthally Periodic Circular Waveguide for TWT. *IEEE Transactions on Electron Devices*, **2010**, 57, 2019-2026	2.9	5
43	Investigation of the Dielectric-Loaded Folded Waveguide Traveling-Wave Tube Amplifier. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2009**, 30, 1027-1037	2.2	4
42	Left-Handed/Right-Handed Transmission Line Subwavelength Cavity Resonators. *IEEE Antennas and Wireless Propagation Letters*, **2009**, 8, 80-83	3.8	5

41	Dispersion Characteristics of a Rectangular Helix Slow-Wave Structure. *IEEE Transactions on Electron Devices*, **2008**, 55, 3582-3589	2.9	28
40	Design of wide-band mode discriminator based on mode-selective coupling. *International Journal of Electronics*, **2008**, 95, 99-110	1.2	4
39	Investigation into the Effect of Dielectric Loss on RF Characteristics of Helical SWS. *Journal of Infrared, Millimeter and Terahertz Waves*, **2008**, 29, 23-34		2
38	Approach to a Coaxial Arbitrary-Shaped Groove Cylindrical Waveguide for Application in Wideband Gyro-TWTs. *IEEE Transactions on Plasma Science*, **2007**, 35, 551-558	1.3	4
37	Study of Corrugated Elliptical Waveguides for Slow-Wave Structures. *IEEE Transactions on Electron Devices*, **2007**, 54, 151-156	2.9	14
36	DIELECTRIC EFFECT ON THE RADIO-FREQUENCY CHARACTERISTICS OF A RECTANGULAR WAVEGUIDE GRATING TRAVELING WAVE TUBE. *Journal of Infrared, Millimeter and Terahertz Waves*, **2007**, 27, 1095-1108		1
35	Analysis of Elliptical Thin Ridged Waveguide. *Journal of Infrared, Millimeter and Terahertz Waves*, **2007**, 28, 733-739		1
34	The Small Signal Analysis of a Centered Dielectric-Rod Loaded, Arbitrarily-Shaped Helical Groove Traveling-Wave-Tube. *Journal of Infrared, Millimeter and Terahertz Waves*, **2007**, 28, 1051-1062		4
33	Study on rectangular waveguide grating Slow-Wave Structure with cosine-shaped grooves. *Journal of Electronics*, **2007**, 24, 384-389		1
32	Impact of attenuator models on computed traveling wave tube performances. *Physics of Plasmas*, **2007**, 14, 093103	2.1	8
31	Analysis of Elliptical Ridged Waveguide **2006**,		3
30	Corrections on Mode Discriminator Based on Mode-Selective Coupling *IEEE Transactions on Microwave Theory and Techniques*, **2005**, 53, 1833-1833	4.1	
29	Dispersion Characteristics of Coaxial Circular-Arc-Groove Slow-Wave Structure. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 107-116		
28	Discrimination and Analysis of Microwave Modes in High Power Systems. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 147-161		2
27	Characteristic Study of the Periodically Iris-Loaded Elliptical Waveguide for Slow-Wave Structures. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 1355-1368		4
26	Wave Properties of A Free Elliptical Helix Slow-Wave Structure with Arbitrary Eccentricity. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 1473-1489		
25	Analysis of the Dispersion Characteristic and Interaction Impedance of a Tape Helix Slow Wave Structure with Novel Supporting Mode. *International Journal of Electronics*, **2004**, 91, 309-318	1.2	7
24	Effect of attenuation on backward-wave oscillation start oscillation condition. *IEEE Transactions on Plasma Science*, **2004**, 32, 2184-2188	1.3	16

23	Effect of Attenuator on BWO Start Oscillation Condition in a Helix Millimeter Wave TWT Under Magnetic Focusing. *Journal of Infrared, Millimeter and Terahertz Waves*, **2004**, 25, 1175-1182		3
22	Analysis of coaxial ridged disk-loaded slow-wave structures for relativistic traveling wave tubes. *IEEE Transactions on Plasma Science*, **2004**, 32, 1086-1092	1.3	15
21	8mm TE 13 Mode Gyrotron. *Journal of Infrared, Millimeter and Terahertz Waves*, **2003**, 24, 661-668		3
20	Review of the Novel Slow-Wave Structures for High-Power Traveling-Wave Tube. *Journal of Infrared, Millimeter and Terahertz Waves*, **2003**, 24, 1469-1484		22
19	A 35-GHz low-voltage third-harmonic gyrotron with a permanent magnet system. *IEEE Transactions on Plasma Science*, **2003**, 31, 264-271	1.3	33
18	Experimental demonstration of the effect of groove shape on the wave properties of the helical groove waveguide. *IEEE Microwave and Wireless Components Letters*, **2003**, 13, 484-486	2.6	4
17	Mode discriminator based on mode-selective coupling. *IEEE Transactions on Microwave Theory and Techniques*, **2003**, 51, 55-63	4.1	13
16	Analysis of the Coaxial Ridge-Loaded Helical Groove Waveguide. *Journal of Infrared, Millimeter and Terahertz Waves*, **2002**, 23, 425-434		0
15	Analysis of the coaxial helical-groove slow-wave structure. *IEEE Transactions on Microwave Theory and Techniques*, **2002**, 50, 191-200	4.1	5
14	The Linear Analysis of Coaxial Helical-Groove Slow-Wave Structure. *Journal of Infrared, Millimeter and Terahertz Waves*, **2001**, 22, 1503-1509		
13	Investigation of the Dielectric-Loaded, Ridged Helical Groove Slow-Wave System for the Millimeter Wave TWT. *Journal of Infrared, Millimeter and Terahertz Waves*, **2001**, 22, 737-756		1
12	An approach to the analysis of arbitrarily shaped helical groove waveguides **2000**, 10, 4-6		17
11	Wave Propagation Along a Helical Step-Loaded Groove Waveguide. *Journal of Infrared, Millimeter and Terahertz Waves*, **1999**, 20, 1581-1592		
10	Investigation of the Half-Circular Helical Groove Slow-Wave Structure. *Journal of Infrared, Millimeter and Terahertz Waves*, **1998**, 19, 1089-1101		2
9	Study of the ridge-loaded helical-groove slow-wave structure. *IEEE Transactions on Microwave Theory and Techniques*, **1997**, 45, 1689-1695	4.1	19
8	Dispersion relation of one slow wave structure. *Journal of Infrared, Millimeter and Terahertz Waves*, **1997**, 18, 665-674		
7	Computation for the gain of ridge loaded ring-plane traveling wave tube. *Journal of Infrared, Millimeter and Terahertz Waves*, **1997**, 18, 2205-2217		
6	Analysis of the instability in relativistic traveling wave tube. *Journal of Infrared, Millimeter and Terahertz Waves*, **1997**, 18, 2219-2232		6

5	Study of sectorial groove gap RF structure for cusptron. *Journal of Infrared, Millimeter and Terahertz Waves*, **1996**, 17, 747-757		1
4	Study on microwave excited by virtual cathode oscillation in cavity. *Journal of Infrared, Millimeter and Terahertz Waves*, **1996**, 17, 1219-1225		
3	Improved design of a high power mode selective directional coupler. *International Journal of Electronics*, **1994**, 76, 131-142	1.2	3
2	The design of a waveguide-coaxial line directional coupler. *International Journal of Electronics*, **1993**, 74, 111-120	1.2	2
1	Self-consistent theory of ring-plane traveling wave tube		1