

# Zhanliang Wang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

91  
papers

553  
citations

11  
h-index

18  
g-index

153  
ext. papers

732  
ext. citations

2.3  
avg, IF

3.62  
L-index

#	Paper	IF	Citations
91	A Ka-Band Angular Log-Periodic Meander-Line SWS Supported by Diamond Rods. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-6	2.9	
90	Demonstration of a Ka-Band Oversized Coaxial Multi-Beam Relativistic Klystron Amplifier for High Power Millimeter-Wave Radiation. <i>IEEE Electron Device Letters</i> , <b>2022</b> , 43, 131-134	4.4	4
89	A 0.14 THz Angular Radial Extended Interaction Oscillator. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 1468-1473	2.9	1
88	Q-Band Helix Traveling-Wave Tube With High Efficiency by Helix Pitch and Diameter Profiling for Potential Application in the Next Generation Wireless Communication System. <i>IEEE Transactions on Plasma Science</i> , <b>2022</b> , 1-6	1.3	
87	Terahertz radiation generated by electron-beam-driven plasma waves in a transverse external magnetic field. <i>Physics of Plasmas</i> , <b>2022</b> , 29, 053106	2.1	
86	A Simulation Method Based on Nonlinear Theory for Noise Analysis in Traveling-Wave Tube. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 1-6	2.9	
85	Experimental Investigation of an Electron-Optical System for Terahertz Traveling-Wave Tubes. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 1-7	2.9	6
84	Electron-optical system for dual radial sheet beams for Ka-band cascaded angular log-periodic strip-line traveling wave tube. <i>AIP Advances</i> , <b>2021</b> , 11, 035325	1.5	
83	Improved Model for Beam-Wave Interaction With Ohmic Losses and Reflections of Sheet Beam Traveling Wave Tubes. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 2977-2983	2.9	2
82	Investigation of Sine Groove Waveguide Slow Wave Structure for Terahertz Traveling Wave Tube. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 804-810	2.9	2
81	A Semi-Analytic Numerical Algorithm of Diamond Pillbox Windows for Terahertz Vacuum Electron Device Applications. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 252-255	4.4	1
80	Study of an Attenuator Supporting Meander-Line Slow Wave Structure for Ka-Band TWT. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 2372	2.6	2
79	Dielectric-Supported Staggered Dual Meander-Line Slow Wave Structure for an E-Band TWT. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 369-375	2.9	3
78	A 340 GHz High-Power Multi-Beam Overmoded Flat-Roofed Sine Waveguide Traveling Wave Tube. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 3018	2.6	3
77	Investigation of Double Tunnel Sine Waveguide Slow-Wave Structure for Terahertz Dual-Beam TWT. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 2176-2181	2.9	8
76	Theory and Experiment of High-Gain Modified Angular Log-Periodic Folded Waveguide Slow Wave Structure. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1237-1240	4.4	5
75	An Active Transmission Matrix-Based Nonlinear Analysis for Folded Waveguide TWT. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 1205-1210	2.9	

74	Investigation of angular log-periodic folded groove waveguide slow-wave structure for low voltage Ka-band TWT. <i>AIP Advances</i> , <b>2020</b> , 10, 035030	1.5	3
73	Study on an X-Band Sheet Beam Meander-Line SWS. <i>IEEE Transactions on Plasma Science</i> , <b>2020</b> , 48, 4149-4154	4.3	4
72	. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 284-287	4.4	10
71	A Novel Scheme for Gain and Power Enhancement of THz TWTs by Extended Interaction Cavities. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 667-672	2.9	2
70	Design and Cold Test of Dual Beam Azimuthal Supported Angular Log-Periodic Strip-Line Slow Wave Structure. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2020</b> , 41, 785-795	2.2	8
69	Investigation on a Ka Band Diamond-Supported Meander-Line SWS. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2020</b> , 41, 1460-1468	2.2	5
68	Novel S-Band Metamaterial Extended Interaction Klystron. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1580-1583	4.4	11
67	Ka-band dual sheet beam traveling wave tube using supported planar ring-bar slow wave structure. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2020</b> , 34, 2236-2250	1.3	4
66	0.2-THz Traveling Wave Tube Based on the Sheet Beam and a Novel Staggered Double Corrugated Waveguide. <i>IEEE Transactions on Plasma Science</i> , <b>2020</b> , 48, 3229-3237	1.3	2
65	Novel Helical Groove Rectangular Waveguide Slow Wave Structure for 0.2 THz Traveling Wave Tube. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1526-1529	4.4	6
64	Microfabrication of A Conformal Microstrip Angular Log-periodic Meander Line TWT <b>2019</b> ,		4
63	Design of a low-gain high-power W-band sheet-beam traveling wave tube using a double-staggered grating slow wave structure. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2019</b> , 33, 1996-2008	1.3	2
62	High power folded waveguide traveling wave tube based on variable-width technology. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 053106	2.1	6
61	Oversized coaxial relativistic extended interaction oscillator with gigawatt-level output at Ka-band. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 043107	2.1	6
60	Input and Output Couplers for an Oversized Coaxial Relativistic Klystron Amplifier at Ka-Band. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2758-2763	2.9	10
59	Characterization of Metamaterial Slow-Wave Structure Loaded With Complementary Electric Split-Ring Resonators. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2019</b> , 67, 2238-2246	4.1	14
58	Design and Experiment of 4 MW Ka Band Sheet Electron Beam TWT. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2019</b> , 40, 637-647	2.2	1
57	Experiment on the electromagnetic radiation excited in an electron beam-ion channel system. <i>Contributions To Plasma Physics</i> , <b>2019</b> , 59, e201900035	1.4	1

56	. <i>IEEE Transactions on Plasma Science</i> , <b>2019</b> , 47, 2971-2978	1.3	13
55	Preliminary experimental investigations into an oversized coaxial relativistic klystron amplifier at Ka band <b>2019</b> ,		1
54	Stacked dual beam electron optical system for THz integrated wideband traveling wave tube. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 063106	2.1	14
53	Study of low voltage angular log-periodic slow wave structure for 340 GHz TWT <b>2019</b> ,		3
52	Double-Anode Sheet-Beam Electron Gun with a Circular Cathode for 220 GHz TWT <b>2019</b> ,		1
51	Experimental Advances in 220 GHz Sheet-Beam Traveling-Wave Tubes <b>2019</b> ,		4
50	The Interaction Between Two-dimensional Electron Gas and Terahertz Plasma Wave in HEMT-like Structure <b>2019</b> ,		1
49	Designing a Water-Immersed Rectangular Horn Antenna for Generating Underwater OAM Waves. <i>Electronics (Switzerland)</i> , <b>2019</b> , 8, 1224	2.6	4
48	3-D Fast Nonlinear Simulation for Beam-Wave Interaction of Sheet Beam Traveling-Wave Tube. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 1504-1511	2.9	4
47	Third-Harmonic Traveling-Wave Tube Multiplier-Amplifier. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 2189-2194	2.9	5
46	Dual-band circularly polarised planar monopole antenna for WLAN/Wi-Fi/Bluetooth/WiMAX applications. <i>IET Microwaves, Antennas and Propagation</i> , <b>2018</b> , 12, 972-976	1.6	8
45	Extended interaction oversized coaxial relativistic klystron amplifier with gigawatt-level output at Ka band. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 043116	2.1	4
44	Study of a miniaturized dual-beam TWT with planar dielectric-rods-support uniform metallic meander line. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 063113	2.1	4
43	Study on the ridge loaded azimuthal supported angular log-periodic strip meander line slow wave structure <b>2018</b> ,		4
42	Investigation of low voltage angular log-periodic folded groove waveguide slow wave structure for G-band TWT <b>2018</b> ,		3
41	Study on single radial sheet beam azimuthal support angular log- periodic strip line Travelling Wave Tube <b>2018</b> ,		5
40	Angular log-periodic meander line traveling wave tube based on quartz substrate <b>2018</b> ,		4
39	Study for 850 GHz sheet beam staggered double-vane traveling wave tube considering the metal loss <b>2018</b> ,		1

38	Design of a 340GHz phase-velocity-taper travelling wave tube. <i>Journal of Engineering</i> , <b>2018</b> , 2018, 673-677		
37	Study on W-Band 2.8kW Sheet-Beam Three-Slot Staggered-Ladder Coupled-Cavity Traveling-Wave Tube. <i>Recent Advances in Electrical and Electronic Engineering</i> , <b>2018</b> , 11, 203-210	0.3	
36	Study of a Water-Immersed Orbital Angular Momentum Horn Antenna <b>2018</b> ,		2
35	A numerical study for dielectric constant profile of aqueous solvent in ionic solution radiated by high-intensity electric pulses. <i>AIP Advances</i> , <b>2018</b> , 8, 115217	1.5	3
34	Investigation of Staggered Double Grating Slow Wave Structure Loaded by Photonic Crystals <b>2018</b> ,		1
33	Sheet Beam Electron Gun with High Current for 220 GHz TWT <b>2018</b> ,		3
32	0.85 THz truncated sine waveguide traveling-wave tube with sheet beam tunnel. <i>Journal of Engineering</i> , <b>2018</b> , 2018, 665-668	0.7	3
31	Design of W-band sheet beam travelling wave tubes based on staggered double vane slow wave structure. <i>Journal of Engineering</i> , <b>2018</b> , 2018, 698-703	0.7	3
30	Oversized coaxial output cavity for Ka band relativistic klystron. <i>Journal of Engineering</i> , <b>2018</b> , 2018, 678-681		3
29	Microstrip angular log-periodic slow wave structure on quartz substrate with coaxial input/output coupler. <i>Journal of Engineering</i> , <b>2018</b> , 2018, 692-697	0.7	2
28	Development of a 140-GHz folded-waveguide traveling-wave tube in a relatively larger circular electron beam tunnel. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2017</b> , 31, 1914-1923	1.3	7
27	Study on Radial Sheet Beam Electron Optical System for Miniature Low-Voltage Traveling-Wave Tube. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3405-3412	2.9	10
26	Observation of the reversed Cherenkov radiation. <i>Nature Communications</i> , <b>2017</b> , 8, 14901	17.4	62
25	Study on Ka-band sheet-beam, three-slot-staggered-ladder coupled-cavity traveling-wave tube in a small tunable periodic cusped magnet. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2017</b> , 31, 1924-1937	1.3	7
24	Design of a two-stage Ka-band relativistic sheet electron beam traveling wave tube <b>2017</b> ,		1
23	Study of a water-immersed ultra-wide band microstrip patch antenna <b>2017</b> ,		1
22	Simulation study of a W-band broadband extended interaction klystron <b>2016</b> ,		1
21	A High-Power Single Rectangular Grating Sheet Electron Beam Traveling-Wave Tube. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 3262-3269	2.9	6

20	Recent advances in theory and experiment of metamaterial-based high power radiation sources <b>2016,</b>		1
19	Study on phase velocity tapered microstrip angular log-periodic meander line travelling wave tube. <i>IET Microwaves, Antennas and Propagation</i> , <b>2016</b> , 10, 902-907	1.6	14
18	Sheet Electron Beam Transport in a Metamaterial-Loaded Waveguide Under the Uniform Magnetic Focusing. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2132-2138	2.9	11
17	Study of the Symmetrical Microstrip Angular Log-Periodic Meander-Line Traveling-Wave Tube. <i>IEEE Transactions on Plasma Science</i> , <b>2016</b> , 44, 1787-1793	1.3	14
16	Theoretical investigation of rectangular sheet beam transport in a waveguide loaded by a metamaterial <b>2016,</b>		2
15	Design of a two-stage, two-sheet-beam 220-GHz, 70-kW planar relativistic traveling-wave tube. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2016</b> , 30, 1858-1868	1.3	2
14	An arbitrary staggered multi-vane traveling wave tube driven by double sheet electron beams <b>2015</b> ,		2
13	Analysis and Simulation of a Multigap Sheet Beam Extended Interaction Relativistic Klystron Amplifier. <i>IEEE Transactions on Plasma Science</i> , <b>2015</b> , 43, 1862-1870	1.3	10
12	Ka-band traveling wave tube driving by relativistic sheet electron beam <b>2015,</b>		1
11	Theoretical and Experimental Research on a Novel Small Tunable PCM System in Staggered Double Vane TWT. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 4258-4264	2.9	22
10	A Modified Slow-Wave Structure for Backward-Wave Oscillator Design in THz Band. <i>IEEE Transactions on Terahertz Science and Technology</i> , <b>2014</b> , 4, 741-748	3.4	9
9	Study of Low-Voltage Radial Convergent Sheet Electron Optical System. <i>IEEE Transactions on Plasma Science</i> , <b>2014</b> , 42, 1847-1853	1.3	9
8	Study of High-Power Ka-Band Rectangular Double-Grating Sheet Beam BWO. <i>IEEE Transactions on Plasma Science</i> , <b>2014</b> , 42, 1502-1508	1.3	14
7	Study on Wideband Sheet Beam Traveling Wave Tube Based on Staggered Double Vane Slow Wave Structure. <i>IEEE Transactions on Plasma Science</i> , <b>2014</b> , 42, 3996-4003	1.3	43
6	Optimization of multi-gap extended output cavity for a G-band sheet beam extended interaction klystron <b>2014,</b>		3
5	Study of a Log-Periodic Slow Wave Structure for Ka-band Radial Sheet Beam Traveling Wave Tube. <i>IEEE Transactions on Plasma Science</i> , <b>2013</b> , 41, 2277-2282	1.3	31
4	Sheet electron beam formation and transport in the uniform magnetic field <b>2013,</b>		2
3	A novel angular log-periodic micro-strip meander-line slow wave structure for low-voltage and wideband traveling wave tube <b>2013,</b>		2

2	Stable Sheet-Beam Transport in Periodic Nonsymmetric Quadrupole Field. <i>IEEE Transactions on Plasma Science</i> , <b>2010</b> , 38, 32-38	1.3	14
1	The Effects of Grating Profile on Dispersion Relations of Surface Plasmon Polaritons in Kretschmann-Raether Configuration. <i>Plasmonics</i> , 1	2.4	