

Zhanliang Wang

List of Publications by Year in descending order

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153
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153
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472
citing authors

#	ARTICLE	IF	CITATIONS
1	A Ka-Band Angular Log-Periodic Meander-Line SWS Supported by Diamond Rods. IEEE Transactions on Electron Devices, 2022, 69, 1374-1379.	3.0	3
2	Demonstration of a Ka-Band Oversized Coaxial Multi-Beam Relativistic Klystron Amplifier for High Power Millimeter-Wave Radiation. IEEE Electron Device Letters, 2022, 43, 131-134.	3.9	12
3	A 0.14 THz Angular Radial Extended Interaction Oscillator. IEEE Transactions on Electron Devices, 2022, 69, 1468-1473.	3.0	3
4	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. IEEE Transactions on Plasma Science, 2022, 50, 1790-1795.	1.3	4
5	Terahertz radiation generated by electron-beam-driven plasma waves in a transverse external magnetic field. Physics of Plasmas, 2022, 29, .	1.9	2
6	Experimental Investigation of a Shape-Optimized Staggered Double-Vane Slow-Wave Structure for Terahertz Traveling-Wave Tubes. IEEE Transactions on Electron Devices, 2022, 69, 4632-4637.	3.0	5
7	Simulation Design of G -Band FWG TWT Amplifier Enhanced by H -Mode Extended Interaction. IEEE Transactions on Electron Devices, 2022, 69, 4604-4610.	3.0	1
8	High power terahertz radiation generated by beam-plasma system in multi-filament regime. Physics of Plasmas, 2022, 29, 073103.	1.9	1
9	Investigation of Sine Groove Waveguide Slow Wave Structure for Terahertz Traveling Wave Tube. IEEE Transactions on Electron Devices, 2021, 68, 804-810.	3.0	3
10	A Semi-Analytic Numerical Algorithm of Diamond Pillbox Windows for Terahertz Vacuum Electron Device Applications. IEEE Electron Device Letters, 2021, 42, 252-255.	3.9	2
11	Electron-optical system for dual radial sheet beams for Ka-band cascaded angular log-periodic strip-line traveling wave tube. AIP Advances, 2021, 11, 035325.	1.3	0
12	Improved Model for Beam-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
13	The Effects of Grating Profile on Dispersion Relations of Surface Plasmon Polaritons in Kretschmann-Raether Configuration. Plasmonics, 2021, 16, 2249-2258.	3.4	0
14	Study of an Attenuator Supporting Meander-Line Slow Wave Structure for Ka-Band TWT. Electronics (Switzerland), 2021, 10, 2372.	3.1	5
15	Dielectric-Supported Staggered Dual Meander-Line Slow Wave Structure for an E -Band TWT. IEEE Transactions on Electron Devices, 2021, 68, 369-375.	3.0	4
16	A Simulation Method Based on Nonlinear Theory for Noise Analysis in Traveling-Wave Tube. IEEE Transactions on Electron Devices, 2021, 68, 5858-5863.	3.0	2
17	Experimental Investigation of an Electron-Optical System for Terahertz Traveling-Wave Tubes. IEEE Transactions on Electron Devices, 2021, 68, 6498-6504.	3.0	17
18	Numerical Computation of Hydrodynamic Equations Based on Dyakonov-Shur Instability. , 2021, , .		0

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19	S-band Two-gap Metamaterial Extended Interaction Oscillator. , 2021, , .		0
20	Design and Sensitivity Analysis of an Electro-Optical System for a Ka-Band Traveling Wave Tube. , 2021, , .		2
21	Staggered Double-vane Slow-wave Structure with Attenuators for a 220 GHz Sheet Beam Traveling-wave Tube. , 2021, , .		2
22	PIC Simulation of Multi-beam Terahertz Coaxial Resonator Reflex Klystron. , 2021, , .		0
23	Design of a High Compression Ratio Electron Gun for Terahertz TWT Applications. , 2021, , .		0
24	Investigation on a 0.34THz Dual-Open-Cavity Extended Interaction Klystron. , 2021, , .		1
25	A W-Band Radial Klystron Amplifier. , 2021, , .		0
26	Plasma Frequency Reduction Factors of Sheet Electron Beam in Rectangular Waveguide. , 2021, , .		1
27	A 340 GHz High-Power Multi-Beam Overmoded Flat-Roofed Sine Waveguide Traveling Wave Tube. Electronics (Switzerland), 2021, 10, 3018.	3.1	6
28	Novel Double Tunnel Staggered Grating Slow Wave Structure for 0.2 THz Traveling Wave Tube. IEEE Electron Device Letters, 2020, 41, 284-287.	3.9	21
29	A Novel Scheme for Gain and Power Enhancement of THz TWTs by Extended Interaction Cavities. IEEE Transactions on Electron Devices, 2020, 67, 667-672.	3.0	12
30	Design and Cold Test of Dual Beam Azimuthal Supported Angular Log-Periodic Strip-Line Slow Wave Structure. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 785-795.	2.2	11
31	Investigation on a Ka Band Diamond-Supported Meander-Line SWS. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1460-1468.	2.2	9
32	Novel S-Band Metamaterial Extended Interaction Klystron. IEEE Electron Device Letters, 2020, 41, 1580-1583.	3.9	27
33	Ka-band dual sheet beam traveling wave tube using supported planar ring-bar slow wave structure. Journal of Electromagnetic Waves and Applications, 2020, 34, 2236-2250.	1.6	7
34	0.2-THz Traveling Wave Tube Based on the Sheet Beam and a Novel Staggered Double Corrugated Waveguide. IEEE Transactions on Plasma Science, 2020, 48, 3229-3237.	1.3	6
35	Investigation of Double Tunnel Sine Waveguide Slow-Wave Structure for Terahertz Dual-Beam TWT. IEEE Transactions on Electron Devices, 2020, 67, 2176-2181.	3.0	16
36	Theory and Experiment of High-Gain Modified Angular Log-Periodic Folded Waveguide Slow Wave Structure. IEEE Electron Device Letters, 2020, 41, 1237-1240.	3.9	9

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37	Metamaterial-based Vacuum Electronic Devices with Miniaturization. , 2020, , .		0
38	An Active Transmission Matrix-Based Nonlinear Analysis for Folded Waveguide TWT. IEEE Transactions on Electron Devices, 2020, 67, 1205-1210.	3.0	3
39	Investigation of angular log-periodic folded groove waveguide slow-wave structure for low voltage Ka-band TWT. AIP Advances, 2020, 10, .	1.3	4
40	Study on an X-Band Sheet Beam Meander-Line SWS. IEEE Transactions on Plasma Science, 2020, 48, 4149-4154.	1.3	5
41	A Novel Tunable PCM Focusing System for a 220 GHz Sheet Beam Electron Gun. , 2020, , .		5
42	Miniaturized Metamaterial-based Sheet Beam Radiation Sources. , 2020, , .		0
43	A Multi-Beam Terahertz Coaxial Cavity Reflex Klystron. , 2020, , .		1
44	Broad bandwidth Suspending Conformal Angular Meander Line Slow Wave Structure. , 2020, , .		0
45	T-shape Vane Slow-wave Structure for 220 GHz Sheet Beam Traveling-wave Tubes. , 2020, , .		0
46	Compact and High-efficiency Metamaterial Extended Interaction Oscillator. , 2020, , .		1
47	A Low-Voltage Backward Wave Oscillator Operating at THz Band. , 2020, , .		0
48	A Thermal Analysis Method for Dielectric Supported Ring-bar Meander Line Slow Wave Structure. , 2020, , .		2
49	Simulation of Non-Periodic Folded Waveguide Slow Wave Structure. , 2020, , .		0
50	Recent Advances in Intense Microwave Generation Using Metamaterials. , 2020, , .		0
51	The Study of Very Low Voltage Planar Slow Wave Structure For Compact TWT. , 2020, , .		0
52	Study of 220 GHz Dual-Beam Overmoded Photonic Crystal-Loaded Folded Waveguide TWT. IEEE Transactions on Plasma Science, 2019, 47, 2971-2978.	1.3	22
53	Electron Optical System with Uniform Magnetic Field for 220 GHz Sheet Beam TWT. , 2019, , .		1
54	Study on Broadband Ridge-Loaded Symmetrical Conformal Microstrip Meander Line Traveling Wave Tube at Ka- Band. , 2019, , .		0

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55	Preliminary experimental investigations into an oversized coaxial relativistic klystron amplifier at Ka band. , 2019, , .		1
56	Stacked dual beam electron optical system for THz integrated wideband traveling wave tube. Physics of Plasmas, 2019, 26, .	1.9	19
57	Study of low voltage angular log-periodic slow wave structure for 340 GHz TWT. , 2019, , .		3
58	Novel Helical Groove Rectangular Waveguide Slow Wave Structure for 0.2 THz Traveling Wave Tube. IEEE Electron Device Letters, 2019, 40, 1526-1529.	3.9	9
59	Thermal and Stress Analysis of the planar slow wave structure for Ka-band TWT. , 2019, , .		1
60	Theoretical Investigation into an Ultra-Wideband Helix Traveling-Wave Tube. , 2019, , .		0
61	Transmission Characteristics of Double Staggered Grating Waveguide SWS: Simulation and Measurement. , 2019, , .		1
62	Microfabrication of A Conformal Microstrip Angular Log-periodic Meander Line TWT. , 2019, , .		4
63	Simulation of high injection efficiency of multibeam diode for Ka-band relativistic klystron amplifier. , 2019, , .		0
64	Fabrication and Test of a W-band Three-Slot-Staggered-Ladder Coupled-Cavity TWT Circuit. , 2019, , .		1
65	Design of a low-gain high-power $\langle i \rangle W \langle /i \rangle$ -band sheet-beam traveling wave tube using a double-staggered grating slow wave structure. Journal of Electromagnetic Waves and Applications, 2019, 33, 1996-2008.	1.6	2
66	High power folded waveguide traveling wave tube based on variable-width technology. Physics of Plasmas, 2019, 26, .	1.9	8
67	Oversized coaxial relativistic extended interaction oscillator with gigawatt-level output at Ka-band. Physics of Plasmas, 2019, 26, 043107.	1.9	12
68	Input and Output Couplers for an Oversized Coaxial Relativistic Klystron Amplifier at $\langle i \rangle Ka \langle /i \rangle$ -Band. IEEE Transactions on Electron Devices, 2019, 66, 2758-2763.	3.0	13
69	Characterization of Metamaterial Slow-Wave Structure Loaded With Complementary Electric Split-Ring Resonators. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 2238-2246.	4.6	29
70	Design and Experiment of 4ÂMW Ka Band Sheet Electron Beam TWT. Journal of Infrared, Millimeter, and Terahertz Waves, 2019, 40, 637-647.	2.2	1
71	Experiment on the electromagnetic radiation excited in an electron beamâ€œion channel system. Contributions To Plasma Physics, 2019, 59, e201900035.	1.1	1
72	Investigation on 0.1 THz Array Beams Folded Waveguide Traveling Wave Tube. , 2019, , .		0

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73	Double-Anode Sheet-Beam Electron Gun with a Circular Cathode for 220 GHz TWT. , 2019, , .		3
74	Experimental Advances in 220 GHz Sheet-Beam Traveling-Wave Tubes. , 2019, , .		8
75	Design of Electron Optical System for 0.22THz Folded Waveguide TWT. , 2019, , .		0
76	The Interaction Between Two-dimensional Electron Gas and Terahertz Plasma Wave in HEMT-like Structure. , 2019, , .		2
77	Analysis of Folded Waveguide TWT with Non-Central Double Beams. , 2019, , .		0
78	Research on Y-Band Double Grating Diffraction Radiation Oscillators. , 2019, , .		0
79	Designing a Water-Immersed Rectangular Horn Antenna for Generating Underwater OAM Waves. Electronics (Switzerland), 2019, 8, 1224.	3.1	6
80	3-D Fast Nonlinear Simulation for Beam-Wave Interaction of Sheet Beam Traveling-Wave Tube. IEEE Transactions on Electron Devices, 2019, 66, 1504-1511.	3.0	6
81	Third-Harmonic Traveling-Wave Tube Multiplier-Amplifier. IEEE Transactions on Electron Devices, 2018, 65, 2189-2194.	3.0	10
82	Dual-band circularly polarised planar monopole antenna for WLAN/Wi-Fi/Bluetooth/WiMAX applications. IET Microwaves, Antennas and Propagation, 2018, 12, 972-976.	1.4	14
83	Extended interaction oversized coaxial relativistic klystron amplifier with gigawatt-level output at Ka band. Physics of Plasmas, 2018, 25, .	1.9	6
84	Study of a Water-Immersed Orbital Angular Momentum Horn Antenna. , 2018, , .		2
85	220 GHz Dual Beam Photonic Crystal Folded Waveguide TWT. , 2018, , .		0
86	A numerical study for dielectric constant profile of aqueous solvent in ionic solution radiated by high-intensity electric pulses. AIP Advances, 2018, 8, 115217.	1.3	3
87	The Study of Q-band Sheet Beam Backward Wave Oscillator Based on a Planar U-shaped Slot-line Slow-wave Structure. , 2018, , .		1
88	Investigation of Staggered Double Grating Slow Wave Structure Loaded by Photonic Crystals. , 2018, , .		3
89	Sheet Beam Electron Gun with High Current for 220 GHz TWT. , 2018, , .		9
90	0.85 THz truncated sine waveguide traveling-wave tube with sheet beam tunnel. Journal of Engineering, 2018, 2018, 665-668.	1.1	4

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91	Design of W-band sheet beam travelling wave tubes based on staggered double vane slow wave structure. Journal of Engineering, 2018, 2018, 698-703.	1.1	3
92	Oversized coaxial output cavity for Ka band relativistic klystron. Journal of Engineering, 2018, 2018, 678-681.	1.1	3
93	Microstrip angular log-periodic slow wave structure on quartz substrate with coaxial input/output coupler. Journal of Engineering, 2018, 2018, 692-697.	1.1	3
94	Mutual coupling reduction in patch antenna arrays. , 2018, , .		5
95	Study of a miniaturized dual-beam TWT with planar dielectric-rods-support uniform metallic meander line. Physics of Plasmas, 2018, 25, .	1.9	13
96	Simulation and cold test of 220GHz staggered double vane slow wave structure. , 2018, , .		3
97	Study on the ridge loaded azimuthal supported angular log-periodic strip meander line slow wave structure. , 2018, , .		4
98	Investigation of low voltage angular log-periodic folded groove waveguide slow wave structure for G-band TWT. , 2018, , .		3
99	Preliminary design of a three-slot-staggered-ladder coupled-cavity structure for W-band pulse power Traveling Wave Tube. , 2018, , .		1
100	Study on single radial sheet beam azimuthal support angular log- periodic strip line Travelling Wave Tube. , 2018, , .		5
101	Angular log-periodic meander line traveling wave tube based on quartz substrate. , 2018, , .		5
102	Study for 850 GHz sheet beam staggered double-vane traveling wave tube considering the metal loss. , 2018, , .		3
103	Uniform permanent magnetic field with hemi-ladder structure for sheet electron beam focusing. , 2018, , .		1
104	Design of a 340GHz phase-velocity-taper travelling wave tube. Journal of Engineering, 2018, 2018, 673-677.	1.1	0
105	S Band Metamaterial-Based Amplifier. , 2018, , .		0
106	Study on W-Band 2.8kW Sheet-Beam Three-Slot Staggered-Ladder Coupled-Cavity Traveling-Wave Tube. Recent Advances in Electrical and Electronic Engineering, 2018, 11, 203-210.	0.3	0
107	Development of a 140-GHz folded-waveguide traveling-wave tube in a relatively larger circular electron beam tunnel. Journal of Electromagnetic Waves and Applications, 2017, 31, 1914-1923.	1.6	11
108	Study on Radial Sheet Beam Electron Optical System for Miniature Low-Voltage Traveling-Wave Tube. IEEE Transactions on Electron Devices, 2017, 64, 3405-3412.	3.0	12

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109	Observation of the reversed Cherenkov radiation. Nature Communications, 2017, 8, 14901.	12.8	111
110	Study on Ka-band sheet-beam, three-slot-staggered-ladder coupled-cavity traveling-wave tube in a small tunable periodic cusped magnet. Journal of Electromagnetic Waves and Applications, 2017, 31, 1924-1937.	1.6	3
111	Design of a two-stage Ka-band relativistic sheet electron beam traveling wave tube. , 2017, , .		1
112	Recent advances in high-power metamaterial microwave sources at UESTC. , 2017, , .		2
113	Study of a water-immersed ultra-wide band microstrip patch antenna. , 2017, , .		1
114	Dual-band transmission measurement in a metamaterial. , 2017, , .		0
115	Study on one stage angular log-periodic meander line traveling-wave tube. , 2017, , .		3
116	THz electromagnetic radiation in beam-plasma system under different ions' quantity. , 2017, , .		0
117	Study on the dispersion characteristics of sine waveguide based on the field match method. , 2017, , .		2
118	Study of 220GHz relativistic BWO with phase velocity taper. , 2017, , .		0
119	A High-Power Single Rectangular Grating Sheet Electron Beam Traveling-Wave Tube. IEEE Transactions on Electron Devices, 2016, 63, 3262-3269.	3.0	9
120	Study on 140 GHz double-ridge-loaded folded waveguide slow wave structure with big electron tunnel. , 2016, , .		0
121	Recent advances in theory and experiment of metamaterial-based high power radiation sources. , 2016, , .		4
122	Study on phase velocity tapered microstrip angular log-periodic meander line travelling wave tube. IET Microwaves, Antennas and Propagation, 2016, 10, 902-907.	1.4	16
123	Sheet Electron Beam Transport in a Metamaterial-Loaded Waveguide Under the Uniform Magnetic Focusing. IEEE Transactions on Electron Devices, 2016, 63, 2132-2138.	3.0	18
124	Study of the Symmetrical Microstrip Angular Log-Periodic Meander-Line Traveling-Wave Tube. IEEE Transactions on Plasma Science, 2016, 44, 1787-1793.	1.3	23
125	Theoretical investigation of rectangular sheet beam transport in a waveguide loaded by a metamaterial. , 2016, , .		4
126	Design of a two-stage, two-sheet-beam 220-GHz, 70-kW planar relativistic traveling-wave tube. Journal of Electromagnetic Waves and Applications, 2016, 30, 1858-1868.	1.6	3

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127	Simulation study of a W-band broadband extended interaction klystron. , 2016, , .		2
128	Research on 220GHz relativistic backward wave oscillator. , 2015, , .		2
129	An arbitrary staggered multi-vane traveling wave tube driven by double sheet electron beams. , 2015, , .		3
130	Analysis and Simulation of a Multigap Sheet Beam Extended Interaction Relativistic Klystron Amplifier. IEEE Transactions on Plasma Science, 2015, 43, 1862-1870.	1.3	15
131	Ka-band traveling wave tube driving by relativistic sheet electron beam. , 2015, , .		2
132	A 0.34THz sine waveguide TWT with cylindrical beam tunnel. , 2015, , .		1
133	Research on 0.22THz folded-waveguide traveling-wave tube with a proper phase-velocity taper. , 2015, , .		0
134	A Ka-band relativistic sheet electron beam traveling wave tube using electric coupling input structure. , 2015, , .		0
135	Design of the radial divergent sheet beam electron optical system with cylindrical emission surface. , 2015, , .		2
136	Theoretical and Experimental Research on a Novel Small Tunable PCM System in Staggered Double Vane TWT. IEEE Transactions on Electron Devices, 2015, 62, 4258-4264.	3.0	30
137	A new metamaterial-based UWB MIMO antenna. , 2015, , .		4
138	Study on Ka-band relativistic sheet electron beam Orotron. , 2015, , .		0
139	Study on Wideband Sheet Beam Traveling Wave Tube Based on Staggered Double Vane Slow Wave Structure. IEEE Transactions on Plasma Science, 2014, 42, 3996-4003.	1.3	58
140	Optimization of multi-gap extended output cavity for a G-band sheet beam extended interaction klystron. , 2014, , .		3
141	A Modified Slow-Wave Structure for Backward-Wave Oscillator Design in THz Band. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 741-748.	3.1	10
142	Study of Low- Voltage Radial Convergent Sheet Electron Optical System. IEEE Transactions on Plasma Science, 2014, 42, 1847-1853.	1.3	9
143	Study of High-Power Ka-Band Rectangular Double-Grating Sheet Beam BWO. IEEE Transactions on Plasma Science, 2014, 42, 1502-1508.	1.3	15
144	Study of a Log-Periodic Slow Wave Structure for Ka-band Radial Sheet Beam Traveling Wave Tube. IEEE Transactions on Plasma Science, 2013, 41, 2277-2282.	1.3	44

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145	Nonrelativistic electron beam control and its application in terahertz radiation generation. , 2013, , .		1
146	Sheet electron beam formation and transport in the uniform magnetic field. , 2013, , .		3
147	Study on high power Ka-band rectangular double-grating sheet beam device. , 2013, , .		2
148	A novel angular log-periodic micro-strip meander-line slow wave structure for low-voltage and wideband traveling wave tube. , 2013, , .		3
149	Ellipse-shaped electron gun for W-band sheet beam devices. , 2012, , .		1
150	Producing high current sheet electron beam with compact, repetitive Tesla generator. , 2012, , .		3
151	Stable Sheet-Beam Transport in Periodic Nonsymmetric Quadrupole Field. IEEE Transactions on Plasma Science, 2010, 38, 32-38.	1.3	16
152	Focusing high-current sheet electron beam with elliptical solenoid. , 2010, , .		1
153	3D simulation of Wiggler field focusing sheet electron beam. , 2008, , .		0