

# Xiaotong Guan

## List of Publications by Citations

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67

papers

307

citations

10

h-index

15

g-index

96

ext. papers

395

ext. citations

2.5

avg, IF

3.46

L-index

#	Paper	IF	Citations
67	A Fully-Sealed Carbon-Nanotube Cold-Cathode Terahertz Gyrotron. <i>Scientific Reports</i> , <b>2016</b> , 6, 32936	4.9	38
66	A Gridded High-Compression-Ratio Carbon Nanotube Cold Cathode Electron Gun. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 399-401	4.4	21
65	Design and Experiment of a 220/420-GHz Gyrotron for Nondestructive Evaluation. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 2531-2537	2.9	19
64	Experiment of a High-Power Sub-THz Gyrotron Operating in High-Order Axial Modes. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2752-2757	2.9	17
63	Parametrically Optimized Carbon Nanotube-Coated Cold Cathode Spindt Arrays. <i>Nanomaterials</i> , <b>2017</b> , 7,	5.4	16
62	Two-beam magnetron injection guns for coaxial gyrotron with two electron beams. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 023103	2.1	13
61	Experiment Studies on Two-Dimension Terahertz Raster Scan Imaging. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2012</b> , 33, 513-521	2.2	12
60	A 0.4-THz Second Harmonic Gyrotron with Quasi-Optical Confocal Cavity. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2017</b> , 38, 1457-1470	2.2	11
59	A high efficiency low-temperature microwave-driven atmospheric pressure plasma jet. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 254106	3.4	11
58	Theoretical Research on a Multibeam-Modulated Electron Gun Based on Carbon Nanotube Cold Cathodes. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 2919-2924	2.9	11
57	Theoretical and Experimental Investigations on the Quasi-Optical Mode Converter for a Pulsed Terahertz Gyrotron. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 195-197	4.4	10
56	High harmonic terahertz confocal gyrotron with nonuniform electron beam. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 013301	2.1	9
55	The Numerical Simulation Study of Pseudospark Hollow Cathode Discharge. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2009</b> , 30, 1083-1091	2.2	8
54	Theoretical Study of a 0.22 THz Backward Wave Oscillator Based on a Dual-Gridded, Carbon-Nanotube Cold Cathode. <i>Applied Sciences (Switzerland)</i> , <b>2018</b> , 8, 2462	2.6	8
53	A Low-Voltage, Premodulation Terahertz Oscillator Based on a Carbon Nanotube Cold Cathode. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 1266-1269	2.9	6
52	Development of a Ka-Band Circular TM01 to Rectangular TE10 Mode Converter. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 1254-1258	2.9	6
51	Theoretical study of extended interaction frequency-locking oscillator based on carbon nanotube cold cathodes. <i>IET Microwaves, Antennas and Propagation</i> , <b>2018</b> , 12, 1771-1774	1.6	6

50	Nonlinear theory for a terahertz gyrotron with a special cross-section interaction cavity. <i>Physics of Plasmas</i> , <b>2012</b> , 19, 053107	2.1	6
49	Harmonic terahertz gyrotron with a double confocal quasi-optical cavity. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 043109	2.1	5
48	Generating High-Power Continuous-Frequency Tunable Sub-Terahertz Radiation From a Quasi-Optical Gyrotron With Confocal Waveguide. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 613-616	4.4	5
47	Linear theory of the electron beam-wave-plasma interactions in a magnetized plasma waveguide. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 053309	2.5	5
46	Design and demonstration of a 0.22 THz gyrotron oscillator. <i>Science Bulletin</i> , <b>2009</b> , 54, 1495-1499	10.6	4
45	Harmonic Generation of High-Power Microwave in Plasma Filled Waveguide. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>2008</b> , 29, 43-50		4
44	Design of confocal waveguide interaction structure for a 220 GHz gyro-TWT. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2017</b> , 31, 650-662	1.3	3
43	Demonstration of a High-Order Mode Input Coupler for a 220-GHz Confocal Gyrotron Traveling Wave Tube. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2018</b> , 39, 183-194	2.2	3
42	Design of a 220-GHz continuous frequency-tunable gyrotron with quasi-optical cavity <b>2015</b> ,		3
41	Generating 0.42 THz radiation from a second harmonic gyrotron. <i>Science Bulletin</i> , <b>2011</b> , 56, 3572-3574		3
40	A high current density plasma cathode electron gun. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 071502	3.4	3
39	Study of a high harmonic gyrotron with inner slotted coaxial structure. <i>International Journal of Electronics</i> , <b>1994</b> , 76, 119-129	1.2	3
38	Investigation on the Microwave Excited Plasma Filament at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , <b>2021</b> , 49, 1877-1881	1.3	3
37	Design and Simulation of a Multi-Sheet Beam Terahertz Radiation Source Based on Carbon-Nanotube Cold Cathode. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	3
36	Experimental results of a 0.42 THz harmonic gyrotron <b>2010</b> ,		2
35	Study on a 60 kV/5 A magnetron injection gun for 200 GHz electron cyclotron master. <i>Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities</i> , <b>2009</b> , 4, 440-445		2
34	Langmuir Probe Diagnostics with Optical Emission Spectrometry (OES) for Coaxial Line Microwave Plasma. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 8117	2.6	2
33	A High-Current-Density Terahertz Electron-Optical System Based on Carbon Nanotube Cold Cathode. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 5760-5765	2.9	2

32	Investigation on a 220 GHz Quasi-Optical Antenna for Wireless Power Transmission. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 634	2.6	2
31	Study on a gyrotron quasi-optical mode converter for terahertz imaging. <i>Journal of Electromagnetic Waves and Applications</i> , <b>2021</b> , 35, 176-184	1.3	2
30	Design and simulation of a W-band extended interaction oscillator with coupled cavity. <i>International Journal of Electronics Letters</i> , <b>2017</b> , 5, 26-35	0.6	1
29	Nonlinear Theory for a Compact Radial Extended Interaction Oscillator. <i>IEEE Journal of the Electron Devices Society</i> , <b>2015</b> , 3, 371-376	2.3	1
28	Harmonic terahertz gyrotron with quasi-optical confocal cavity. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 050143	1.3	1
27	Investigation of magnetron injection locking and cascaded locking by solid-state microwave power source. <i>Journal of Microwave Power and Electromagnetic Energy</i> , <b>2019</b> , 53, 171-183	1.4	1
26	Design of a 75GHz Low Voltage-Continuous Wave Gyrotron with Mode Converter <b>2019</b> ,		1
25	Study on a Quasi-Optical Mode Converter for Gyrotron Based on Metamaterial <b>2019</b> ,		1
24	Simulation of extended interaction oscillator based on carbon nanotube cold cathode <b>2017</b> ,		1
23	Initial experimental results for a 400GHz second harmonic gyrotron with quasi-optical confocal cavity <b>2017</b> ,		1
22	The Experiment of A 220 GHz Gyrotron with a Pulse Magnet. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2009</b> , 31, 404	2.2	1
21	Design and Preliminary Experiment of 35 GHz Pulsed Extended Interaction Oscillator with Folded Waveguide. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2010</b> , 31, 543	2.2	1
20	Propagation Characteristics of a High-Power Microwave in Waveguide Filled with Plasma. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>2005</b> , 26, 807-817		1
19	A Hybrid Shuffled Frog Leaping Algorithm and Its Performance Assessment in Multi-Dimensional Symmetric Function. <i>Symmetry</i> , <b>2022</b> , 14, 131	2.7	1
18	Design of a G-Band Extended Interaction Klystron Based on a Three-Coupling-Hole Structure. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-6	2.9	1
17	Dual-Frequency Microwave Plasma Source Based on Microwave Coaxial Transmission Line. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 9873	2.6	1
16	Ultra-High Velocity Ratio in Magnetron Injection Guns for Low-Voltage Compact Gyrotrons. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 1587	2.6	1
15	Investigation on Symmetric and Asymmetric Broadband Low-Loss W-Band Pillbox Windows. <i>Electronics (Switzerland)</i> , <b>2020</b> , 9, 2060	2.6	1

14	Frequency Tuning Characteristics of a High-Power Sub-THz Gyrotron with Quasi-Optical Cavity. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 526	2.6	1
13	THz Coherent Vavilov-Cherenkov Radiation in a Special Three-Mirror Cavity. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>2007</b> , 28, 797-809		0
12	Over-Size Pill-Box Window for Sub-Terahertz Vacuum Electronic Devices. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 653	2.6	0
11	Study on a Depressed Collector for a 75 GHz Low-Voltage Compact Gyrotron for Industrial Application. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2021</b> , 42, 211-219	2.2	0
10	Investigation of sterilization by a microwave-generated low-temperature atmospheric pressure plasma jet. <i>Journal of Microwave Power and Electromagnetic Energy</i> , <b>2022</b> , 56, 58-67	1.4	0
9	Development of a High-Beam-Transparency Gridded Electron Gun Based on a Carbon Nanotube Cold Cathode. <i>IEEE Electron Device Letters</i> , <b>2022</b> , 43, 615-618	4.4	0
8	Coaxial electrostatic wiggler with corrugated inner and outer walls. <i>AIP Advances</i> , <b>2020</b> , 10, 035028	1.5	
7	Broadband Nonuniform Terahertz Multimode Conversion Series with Compactness and Pure Pattern. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2022</b> , 43, 150	2.2	
6	Design of second harmonic terahertz gyrotron cavity based on double confocal waveguide. <i>Wuli Xuebao/Acta Physica Sinica</i> , <b>2020</b> , 69, 068401	0.6	
5	Investigation on Continuous and Modulated Microwave Plasma Filaments at Atmospheric Pressure. <i>IEEE Access</i> , <b>2021</b> , 9, 154318-154323	3.5	
4	An Economic Real-Time Microwave Plasma Impedance Measurement Method. <i>IEEE Transactions on Plasma Science</i> , <b>2021</b> , 1-6	1.3	
3	A Broadband Quasi-Optical Mode Converter for Sub-Terahertz Confocal Gyrotron Devices. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 1-5	2.9	
2	Design and analysis of a quasi-TM03 mode G-band extended interaction radiation source. <i>AIP Advances</i> , <b>2021</b> , 11, 035327	1.5	
1	Investigation on 220 GHz Taper Cascaded Over-Mode Circular Waveguide TE0n Mode Converter. <i>Electronics (Switzerland)</i> , <b>2021</b> , 10, 103	2.6	