

Yoshinori Tatematsu

List of Publications by Year in descending order

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docs citations

64
times ranked

547
citing authors

#	ARTICLE	IF	CITATIONS
1	Frequency-Tunable Second Harmonic Gyrotron With Selective Cavity: Design and Simulations. IEEE Transactions on Electron Devices, 2022, 69, 1402-1408.	3.0	4
2	Hybrid Bulk-Surface Modes Excited by a Sheet Electron Beam in THz Cherenkov Oscillator. IEEE Transactions on Electron Devices, 2022, 69, 3407-3412.	3.0	2
3	Reflective Gyrotron Backward-Wave Oscillator With Piecewise Frequency Tunability. IEEE Transactions on Electron Devices, 2021, 68, 324-329.	3.0	12
4	Dielectric property measurements of corneal tissues for computational dosimetry of the eye in terahertz band in vivo and in vitro. Biomedical Optics Express, 2021, 12, 1295.	2.9	11
5	Efficient Excitation of Hybrid Modes in a THz Clinotron. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 671-683.	2.2	11
6	Increase of Gyrotron Output Power at High-Order Axial Mode Through an After-Cavity Excitation of the Next Transverse Mode. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 684-700.	2.2	1
7	Novel and Emerging Applications of the Gyrotrons Worldwide: Current Status and Prospects. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 715-741.	2.2	56
8	Traveling-Wave Amplification in a Circuit With Nonuniform Grating. IEEE Transactions on Electron Devices, 2021, 68, 5232-5237.	3.0	5
9	Experimental investigation of gyrotron radiation frequency multiplication. , 2021, , .		0
10	Influence of the Aftercavity Interaction on the Output Power of a Gyrotron Operating at a High-Order Axial Mode. , 2021, , .		0
11	Low-Voltage Operation of the Double-Beam Gyrotron at 400 GHz. IEEE Transactions on Electron Devices, 2020, 67, 673-676.	3.0	10
12	Low-Voltage Adiabatic Magnetron Injection Gun for 400 GHz Gyrotron. , 2020, , .		0
13	Super Multi-Frequency Oscillations at Fundamental Harmonics With a Complex Cavity Gyrotron. IEEE Electron Device Letters, 2020, 41, 1241-1244.	3.9	7
14	Development of Gyrotron FU CW GVII: a Second Harmonic, Multifrequency Gyrotron that Radiates Gaussian Beams. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 576-589.	2.2	7
15	Clinical Course of High-Frequency Millimeter-Wave (162 GHz) Induced Ocular Injuries and Investigation of Damage Thresholds. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 834-845.	2.2	6
16	Application of the Millimeter-Wave Discharge Induced in Gas to a Wireless Power Transfer System. , 2020, , .		1
17	Observation of Multi-Frequency Oscillations at Second-Harmonics with a Two-Cavity Sub-THz Gyrotron. , 2020, , .		1
18	Frequency Measurements of a Complex-Cavity Gyrotron for 400 GHz Second-Harmonic Oscillation. , 2020, , .		0

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19	An Experimental Investigation of a 0.8-THz Double-Beam Gyrotron. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2019, 40, 1114-1128.	2.2	14
20	Observation of strong yellow emission for high-conductivity ZnO excited by sub-terahertz gyrotron beam. , 2019, , .		0
21	Development of a Second Harmonic Multi-Frequency Gaussian Beam Output Gyrotron FU CW GVII. , 2019, , .		0
22	Developments for collective Thomson scattering equipment with a sub-THz gyrotron in LHD. <i>EPJ Web of Conferences</i> , 2019, 203, 03012.	0.3	2
23	GaN Schottky Barrier Diode for Sub-Terahertz Rectenna. , 2019, , .		4
24	Experimental and Numerical study of the 0.4-THz Second-Harmonic Gyrotron with a Complex-Cavity Resonator. , 2019, , .		2
25	Oscillation Characteristics of a High Power 300 GHz Band Pulsed Gyrotron for Use in Collective Thomson Scattering Diagnostics. <i>Plasma and Fusion Research</i> , 2019, 14, 1406104-1406104.	0.7	5
26	Recent progress in development and application of sub-THz gyrotrons in University of Fukui. <i>EPJ Web of Conferences</i> , 2018, 195, 01018.	0.3	9
27	Observation of Increased Number of Frequency Steps in Multi-Frequency Oscillations with a Two-Cavity Gyrotron. , 2018, , .		3
28	Saturation Effects in Frequency Pulling of Gyrotrons Operating in High-Order Axial Modes. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 2848-2855.	1.3	7
29	Subterahertz Wireless Power Transmission Using 303-GHz Rectenna and 300-kW-Class Gyrotron. <i>IEEE Microwave and Wireless Components Letters</i> , 2018, 28, 834-836.	3.2	16
30	Strong yellow emission of high-conductivity bulk ZnO single crystals irradiated with high-power gyrotron beam. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	42
31	Development of 300 GHz Band Gyrotron for Collective Thomson Scattering Diagnostics in the Large Helical Device. <i>Plasma and Fusion Research</i> , 2017, 12, 1206013-1206013.	0.7	17
32	Electromagnetic Modeling of a Complex-Cavity Resonator for the 0.4-THz Second-Harmonic Frequency-Tunable Gyrotron. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 5141-5146.	3.0	16
33	Influence of thermal-insulation structure of thermionic cathode on oscillation efficiency of a sub-THz gyrotron. , 2016, , .		1
34	Frequency tunability in both 200 and 400 GHz bands realized in Gyrotrons FU CW GIV and FU CW X. , 2016, , .		3
35	Influence of the electron velocity spread and the beam width on the efficiency and mode competition in the high-power pulsed gyrotron for 300-GHz band collective Thomson scattering diagnostics in the large helical device. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	13
36	Further Characterization of 394-GHz Gyrotron FU CW GII with Additional PID Control System for 600-MHz DNP-SSNMR Spectroscopy. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2016, 37, 825-836.	2.2	9

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37	Start-up scenario of a high-power pulsed gyrotron for 300 GHz band collective Thomson scattering diagnostics in the large helical device. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	13
38	High power 303 GHz gyrotron for CTS in LHD. <i>Journal of Instrumentation</i> , 2015, 10, C10002-C10002.	1.2	21
39	First millimeter-wave spectroscopy of ground-state positronium. <i>Progress of Theoretical and Experimental Physics</i> , 2015, 2015, 11C01-0.	6.6	38
40	Development of the Multifrequency Gyrotron FU CW GV with Gaussian Beam Output. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2015, 36, 697-708.	2.2	25
41	The Development of 460 GHz gyrotrons for 700 MHz DNP-NMR spectroscopy. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2015, 36, 613-627.	2.2	47
42	High-power pulsed gyrotron for 300 GHz-band collective Thomson scattering diagnostics in the Large Helical Device. <i>Nuclear Fusion</i> , 2015, 55, 013002.	3.5	26
43	Spectrum response and analysis of 77 GHz band collective Thomson scattering diagnostic for bulk and fast ions in LHD plasmas. <i>Nuclear Fusion</i> , 2014, 54, 023006.	3.5	65
44	Development of a multiple-frequency gyrotron, gyrotron FU CW GV. , 2014, , .		1
45	Analysis of oscillation characteristics and optimal conditions for high power operation of Gyrotron FU CW GIII. <i>Physics of Plasmas</i> , 2014, 21, 083113.	1.9	5
46	The Direct Spectroscopy of Positronium Hyperfine Structure Using a Sub-THz Gyrotron. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2014, 35, 91-100.	2.2	26
47	Development of second harmonic gyrotrons, Gyrotron FU CW GII and Gyrotron FU CW GIII, equipped with internal mode converters. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2014, 35, 169-178.	2.2	24
48	Characteristics of the mode converter of Gyrotron FU CW GII radiating Gaussian beams in both the fundamental and second harmonic frequency bands. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2014, 35, 517-524.	2.2	19
49	Broadband Continuously Frequency Tunable Gyrotron for 600 MHz DNP-NMR Spectroscopy. <i>Plasma and Fusion Research</i> , 2014, 9, 1206058-1206058.	0.7	18
50	Sub-THz spectroscopy of the ground state hyperfine splitting of positronium. , 2013, , .		0
51	Experiment for over 200 kW oscillation of a 295 GHz pulse gyrotron. , 2013, , .		3
52	The sub-THz direct spectroscopy of positronium hyperfine splitting. <i>Journal of Physics: Conference Series</i> , 2013, 443, 012002.	0.4	1
53	Development of a high-power 295 GHz fundamental-harmonic gyrotron. , 2012, , .		3
54	Development of Gyrotron FU CW GIII with a Gaussian beam output. , 2012, , .		0

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55	Generation of high power sub-terahertz radiation from a gyrotron with second harmonic oscillation. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	63
56	Observation of Dynamic Interactions between Fundamental and Second-Harmonic Modes in a High-Power Sub-Terahertz Gyrotron Operating in Regimes of Soft and Hard Self-Excitation. <i>Physical Review Letters</i> , 2012, 109, 155001.	7.8	47
57	Formation of a laminar electron flow for 300GHz high-power pulsed gyrotron. <i>Physics of Plasmas</i> , 2012, 19, .	1.9	30
58	Development of a kW Level-200GHz Gyrotron FU CW GI with an Internal Quasi-optical Mode Converter. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2012, 33, 292-305.	2.2	39
59	Formation of Laminar Electron Flow for a High-Power Sub-THz Gyrotron. <i>Plasma and Fusion Research</i> , 2012, 7, 1205004-1205004.	0.7	9
60	Calculations of Starting Currents and Frequencies in Frequency-Tunable Gyrotrons. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 126601.	1.5	15
61	Review of Subterahertz and Terahertz Gyrodevices at IAP RAS and FIR FU. <i>IEEE Transactions on Plasma Science</i> , 2009, 37, 36-43.	1.3	120
62	Development of a Novel High Power Sub-THz Second Harmonic Gyrotron. <i>Physical Review Letters</i> , 2009, 103, 225002.	7.8	83
63	The potential of the gyrotrons for development of the sub-terahertz and the terahertz frequency range – A review of novel and prospective applications. <i>Thin Solid Films</i> , 2008, 517, 1503-1506.	1.8	57
64	Performance Test of CW 300GHz Gyrotron FU CW I. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , 2007, 28, 1063-1078.	0.6	31