

Teruo Saito

List of Publications by Year in descending order

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36
papers

720
citations

567281

15
h-index

526287

27
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36
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36
docs citations

36
times ranked

385
citing authors

#	ARTICLE	IF	CITATIONS
1	Development of 394.6 GHz CW Gyrotron (Gyrotron FU CW II) for DNP/Proton-NMR at 600 MHz. Journal of Infrared, Millimeter and Terahertz Waves, 2007, 28, 433-442.	0.6	83
2	Continuously Frequency Tunable High Power Sub-THz Radiation Source—Gyrotron FU CW VI for 600 MHz DNP-NMR Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2010, 31, 775-790.	2.2	72
3	Spectrum response and analysis of 77 GHz band collective Thomson scattering diagnostic for bulk and fast ions in LHD plasmas. Nuclear Fusion, 2014, 54, 023006.	3.5	65
4	Generation of high power sub-terahertz radiation from a gyrotron with second harmonic oscillation. Physics of Plasmas, 2012, 19, .	1.9	63
5	The potential of the gyrotrons for development of the sub-terahertz and the terahertz frequency range — A review of novel and prospective applications. Thin Solid Films, 2008, 517, 1503-1506.	1.8	57
6	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. Physical Review Letters, 2012, 109, 155001.	7.8	47
7	Development of a kW Level-200 GHz Gyrotron FU CW GI with an Internal Quasi-optical Mode Converter. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 292-305.	2.2	39
8	Formation of a laminar electron flow for 300 GHz high-power pulsed gyrotron. Physics of Plasmas, 2012, 19, .	1.9	30
9	High-power pulsed gyrotron for 300 GHz-band collective Thomson scattering diagnostics in the Large Helical Device. Nuclear Fusion, 2015, 55, 013002.	3.5	26
10	Development of the Multifrequency Gyrotron FU CW GV with Gaussian Beam Output. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 697-708.	2.2	25
11	High power 303 GHz gyrotron for CTS in LHD. Journal of Instrumentation, 2015, 10, C10002-C10002.	1.2	21
12	Broadband Continuously Frequency Tunable Gyrotron for 600 MHz DNP-NMR Spectroscopy. Plasma and Fusion Research, 2014, 9, 1206058-1206058.	0.7	18
13	Development of 300 GHz Band Gyrotron for Collective Thomson Scattering Diagnostics in the Large Helical Device. Plasma and Fusion Research, 2017, 12, 1206013-1206013.	0.7	17
14	Electromagnetic Modeling of a Complex-Cavity Resonator for the 0.4-THz Second-Harmonic Frequency-Tunable Gyrotron. IEEE Transactions on Electron Devices, 2017, 64, 5141-5146.	3.0	16
15	Subterahertz Wireless Power Transmission Using 303-GHz Rectenna and 300-kW-Class Gyrotron. IEEE Microwave and Wireless Components Letters, 2018, 28, 834-836.	3.2	16
16	Calculations of Starting Currents and Frequencies in Frequency-Tunable Gyrotrons. Japanese Journal of Applied Physics, 2012, 51, 126601.	1.5	15
17	Observation of a comb-shaped filamentary plasma array under subcritical condition in 303-GHz millimetre-wave air discharge. Scientific Reports, 2019, 9, 17972.	3.3	14
18	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. Physics of Plasmas, 2016, 23, .	1.9	13

#	ARTICLE	IF	CITATIONS
19	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
20	Reflective Gyrotron Backward-Wave Oscillator With Piecewise Frequency Tunability. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 324-329.	3.0	12
21	Observation of Frequency Pulling Effect in Gyrotron. <i>Japanese Journal of Applied Physics</i> , 1986, 25, 654-655.	1.5	10
22	Low-Voltage Operation of the Double-Beam Gyrotron at 400 GHz. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 673-676.	3.0	10
23	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
24	Super Multi-Frequency Oscillations at Fundamental Harmonics With a Complex Cavity Gyrotron. <i>IEEE Electron Device Letters</i> , 2020, 41, 1241-1244.	3.9	7
25	Development of Gyrotron FU CW GVII: a Second Harmonic, Multifrequency Gyrotron that Radiates Gaussian Beams. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2020, 41, 576-589.	2.2	7
26	GaN Schottky Barrier Diode for Sub-Terahertz Rectenna. , 2019, , .		4
27	Observation of Increased Number of Frequency Steps in Multi-Frequency Oscillations with a Two-Cavity Gyrotron. , 2018, , .		3
28	Transmission Characteristics of Hybrid Modes in Corrugated Waveguides Above the Bragg Frequency. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2017, 38, 853-873.	2.2	2
29	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
30	Experimental and Numerical study of the 0.4-THz Second-Harmonic Gyrotron with a Complex-Cavity Resonator. , 2019, , .		2
31	Transmission test of 300 GHz band gyrotron power by corrugated waveguides. , 2016, , .		1
32	Increase of Gyrotron Output Power at High-Order Axial Mode Through an After-Cavity Excitation of the Next Transverse Mode. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2021, 42, 684-700.	2.2	1
33	Application of the Millimeter-Wave Discharge Induced in Gas to a Wireless Power Transfer System. , 2020, , .		1
34	Observation of Multi-Frequency Oscillations at Second-Harmonics with a Two-Cavity Sub-THz Gyrotron. , 2020, , .		1
35	Frequency Measurements of a Complex-Cavity Gyrotron for 400 GHz Second-Harmonic Oscillation. , 2020, , .		0
36	Influence of the Aftercavity Interaction on the Output Power of a Gyrotron Operating at a High-Order Axial Mode. , 2021, , .		0