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List of Publications by Citations

277 papers	2,631 citations	26 h-index	41 g-index
373 ext. papers	3,283 ext. citations	1.4 avg, IF	5.2 L-index

#	Paper	IF	Citations
277	Generation of 1.5-kW, 1-THz coherent radiation from a gyrotron with a pulsed magnetic field. *Physical Review Letters*, **2008**, 100, 015101	7.4	253
276	A 670 GHz gyrotron with record power and efficiency. *Applied Physics Letters*, **2012**, 101, 153503	3.4	110
275	. *IEEE Transactions on Plasma Science*, **2004**, 32, 67-72	1.3	105
274	Review of Subterahertz and Terahertz Gyrodevices at IAP RAS and FIR FU. *IEEE Transactions on Plasma Science*, **2009**, 37, 36-43	1.3	92
273	Experimental tests of a 263 GHz gyrotron for spectroscopic applications and diagnostics of various media. *Review of Scientific Instruments*, **2015**, 86, 054705	1.7	85
272	Development of THz Gyrotrons at IAP RAS and FIR UF and Their Applications in Physical Research and High-Power THz Technologies. *IEEE Transactions on Terahertz Science and Technology*, **2015**, 5, 788-797	3.4	55
271	A point-like source of extreme ultraviolet radiation based on a discharge in a non-uniform gas flow, sustained by powerful gyrotron radiation of terahertz frequency band. *Applied Physics Letters*, **2014**, 105, 174101	3.4	54
270	A high harmonic gyrotron with an axis-encircling electron beam and a permanent magnet. *IEEE Transactions on Plasma Science*, **2004**, 32, 903-909	1.3	53
269	Terahertz Gyrotrons at IAP RAS: Status and New Designs. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2011**, 32, 371-379	2.2	44
268	High power terahertz sources for spectroscopy and material diagnostics. *Physics-Uspekhi*, **2016**, 59, 595-604	2.4	44
267	A novel THz-band double-beam gyrotron for high-field DNP-NMR spectroscopy. *Review of Scientific Instruments*, **2017**, 88, 094708	1.7	41
266	Gyrotron Development for High Power THz Technologies at IAP RAS. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2012**, 33, 715-723	2.2	40
265	High-power sub-terahertz source with a record frequency stability at up to 1 Hz. *Scientific Reports*, **2018**, 8, 4317	4.9	39
264	First experimental tests of powerful 250 GHz gyrotron for future fusion research and collective Thomson scattering diagnostics. *Review of Scientific Instruments*, **2018**, 89, 084702	1.7	39
263	Development of THz-range Gyrotrons for Detection of Concealed Radioactive Materials. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2011**, 32, 380-402	2.2	38
262	On the sensitivity of terahertz gyrotron based systems for remote detection of concealed radioactive materials. *Journal of Applied Physics*, **2012**, 111, 124912	2.5	33
261	Frequency-tunable CW gyro-BWO with a helically rippled operating waveguide. *IEEE Transactions on Plasma Science*, **2004**, 32, 884-889	1.3	32

260	Reflections Influence on the Gyrotron Oscillation Regimes. *Journal of Infrared, Millimeter and Terahertz Waves*, **1998**, 19, 1499-1511		30
259	Terahertz gyrotrons: State of the art and prospects. *Journal of Communications Technology and Electronics*, **2014**, 59, 792-797	0.5	29
258	Experimental investigation of a 110 GHz/1 MW gyrotron with the one-step depressed collector. *Journal of Infrared, Millimeter and Terahertz Waves*, **1997**, 18, 2129-2136		28
257	A proposal to use reflection with delay for achieving the self-modulation and stochastic regimes in millimeter-wave gyrotrons. *Technical Physics Letters*, **1998**, 24, 436-438	0.7	28
256	The Gyrotrons as Promising Radiation Sources for THz Sensing and Imaging. *Applied Sciences (Switzerland)*, **2020**, 10, 980	2.6	26
255	Experimental Study of the Pulsed Terahertz Gyrotron with Record-Breaking Power and Efficiency Parameters. *Radiophysics and Quantum Electronics*, **2014**, 56, 497-507	0.7	26
254	A one-dimensional study of the evolution of the microwave breakdown in air. *Physics of Plasmas*, **2015**, 22, 092308	2.1	26
253	Design of a Subterahertz, Third-Harmonic, Continuous-Wave Gyrotron. *IEEE Transactions on Plasma Science*, **2008**, 36, 591-596	1.3	26
252	Gyrotron FU series □current status of development and applications. *Vacuum*, **2001**, 62, 123-132	3.7	26
251	Influence of reflections on mode competition in gyrotrons. *IEEE Transactions on Plasma Science*, **2000**, 28, 588-596	1.3	26
250	Low-voltage gyrotrons. *Physics of Plasmas*, **2013**, 20, 033103	2.1	25
249	Stabilization of gyrotron frequency by reflection from nonresonant and resonant loads. *Technical Physics Letters*, **2015**, 41, 628-631	0.7	23
248	Molecular gas spectroscopy using radioacoustic detection and high-power coherent subterahertz radiation sources. *Journal of Molecular Spectroscopy*, **2017**, 331, 9-16	1.3	23
247	Experimental studies of gyrotron electron beam systems. *IEEE Transactions on Plasma Science*, **1999**, 27, 474-483	1.3	23
246	Application of the 263□GHz/1□kW gyrotron setup to produce a metal oxide nanopowder by the evaporation-condensation technique. *Vacuum*, **2017**, 145, 340-346	3.7	22
245	High Temperature Thermal Insulation System for Millimeter Wave Sintering of B4C. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 1531-1541		22
244	Frequency Tunable sub-THz Gyrotron for Direct Measurements of Positronium Hyperfine Structure. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2018**, 39, 975-983	2.2	21
243	Development of a Magnetic Cusp Gun for Terahertz Harmonic Gyrodevices. *IEEE Transactions on Electron Devices*, **2012**, 59, 3635-3640	2.9	21

242	Method of Providing the High Cyclotron Harmonic Operation Selectivity in a Gyrotron With a Spatially Developed Operating Mode. *IEEE Transactions on Electron Devices*, **2017**, 64, 3893-3897	2.9	19
241	Computer Simulation of Axis-Encircling Beams Generated by an Electron Gun with a Permanent Magnet System. *Journal of Infrared, Millimeter and Terahertz Waves*, **2000**, 21, 1191-1209		19
240	Electron-optical systems for planar gyrotrons. *Physics of Plasmas*, **2014**, 21, 023106	2.1	18
239	A High-Efficiency Second-Harmonic Gyrotron with a Depressed Collector. *Journal of Infrared, Millimeter and Terahertz Waves*, **2008**, 29, 1004-1010		18
238	Development of a high harmonic gyrotron with an axis-encircling electron beam and a permanent magnet. *Vacuum*, **2005**, 77, 539-546	3.7	18
237	Design of a Second Harmonic Double-Beam Continuous Wave Gyrotron with Operating Frequency of 0.79 THz. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2015**, 36, 1164-1175	2.2	17
236	Russian Gyrotrons: Achievements and Trends. *IEEE Journal of Microwaves*, **2021**, 1, 260-268		17
235	Measurement of plasma density in the discharge maintained in a nonuniform gas flow by a high-power terahertz-wave gyrotron. *Physics of Plasmas*, **2016**, 23, 043511	2.1	16
234	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	16
233	Millimeter-Wave Gyrotron Research System. I. Description of the Facility. *Radiophysics and Quantum Electronics*, **2019**, 61, 752-762	0.7	15
232	Gyrotron collector systems: Types and capabilities. *Infrared Physics and Technology*, **2018**, 91, 46-54	2.7	15
231	Operation of a sub-terahertz CW gyrotron with an extremely low voltage. *Physics of Plasmas*, **2017**, 24, 113105	2.1	15
230	Breakdown simulations in a focused microwave beam within the simplified model. *Physics of Plasmas*, **2016**, 23, 073109	2.1	15
229	Observation of extreme ultraviolet light emission from an expanding plasma jet with multiply charged argon or xenon ions. *Applied Physics Letters*, **2018**, 113, 153502	3.4	15
228	Improvement of Stability of High Cyclotron Harmonic Operation in the Double-Beam THz Gyrotrons. *IEEE Transactions on Plasma Science*, **2016**, 1-7	1.3	14
227	Mode Competition in a Two-Mode Gyrotron With Delayed Reflections. *IEEE Transactions on Plasma Science*, **2014**, 42, 2030-2036	1.3	14
226	The K(a)-band 10-kW continuous wave gyrotron with wide-band fast frequency sweep. *Review of Scientific Instruments*, **2012**, 83, 074706	1.7	14
225	Development of a high-power pulsed subterahertz gyrotron for remote detection of sources of ionizing radiation. *Radiophysics and Quantum Electronics*, **2012**, 54, 600-608	0.7	14

224	Frequency Stabilization in a Sub-Terahertz Gyrotron With Delayed Reflections of Output Radiation. *IEEE Transactions on Plasma Science*, **2018**, 46, 2465-2469	1.3	13
223	Gas discharge powered by the focused beam of the high-intensive electromagnetic waves of the terahertz frequency band. *Journal Physics D: Applied Physics*, **2018**, 51, 464002	3	13
222	The Discharge Maintained by High-Power Terahertz Radiation in a Nonuniform Gas Flow. *Radiophysics and Quantum Electronics*, **2014**, 56, 561-565	0.7	13
221	Three-dimensional particle-in-cell modeling of terahertz gyrotrons with cylindrical and planar configurations of the interaction space. *Physics of Plasmas*, **2013**, 20, 043103	2.1	12
220	Demonstration of a Selective Oversized Cavity in a Terahertz Second-Harmonic Gyrotron. *IEEE Electron Device Letters*, **2020**, 41, 1412-1415	4.4	12
219	Frequency Stabilization of a 0.67-THz Gyrotron by Self-Injection Locking. *IEEE Transactions on Electron Devices*, **2016**, 63, 1288-1293	2.9	11
218	A pulse magnetic-field generator for terahertz gyrodevices. *Instruments and Experimental Techniques*, **2011**, 54, 77-80	0.5	11
217	A terahertz gyrotron with pulsed magnetic field. *Radiophysics and Quantum Electronics*, **2007**, 50, 755-760	0.7	11
216	Smooth wideband tuning of the operating frequency of a gyrotron. *Radiophysics and Quantum Electronics*, **2008**, 51, 57-63	0.7	11
215	Design of a Large Orbit Gyrotron with a Permanent Magnet System. *Journal of Infrared, Millimeter and Terahertz Waves*, **2003**, 24, 253-260		11
214	Technological gyrotron with low accelerating voltage. *Radiophysics and Quantum Electronics*, **2005**, 48, 741-747	0.7	11
213	Experimental study of the output radiation spectrum of a gyrotron with partial reflection of the output signal. *Radiophysics and Quantum Electronics*, **2000**, 43, 396-399	0.7	11
212	Gyrotron Frequency Stabilization by a Weak Reflected Wave. *Radiophysics and Quantum Electronics*, **2016**, 58, 673-683	0.7	11
211	Plasma density in discharge sustained in inhomogeneous gas flow by high-power radiation in the terahertz frequency range. *Technical Physics Letters*, **2017**, 43, 186-189	0.7	10
210	The concept of an electron-optical system with field emitter for a spectroscopic gyrotron. *Infrared Physics and Technology*, **2016**, 78, 185-189	2.7	10
209	The Design of the 394.6 Ghz Continuously Tunable Coaxial Gyrotron for DNP Spectroscopy. *Journal of Infrared, Millimeter and Terahertz Waves*, **2008**, 29, 641-648		10
208	Modelling and simulation of gyrotrons. *Vacuum*, **2005**, 77, 519-525	3.7	10
207	Effect of ion compensation of the beam space charge on gyrotron operation. *Physics of Plasmas*, **2015**, 22, 043119	2.1	9

206	Sub-Terahertz High-Sensitivity High-Resolution Molecular Spectroscopy With a Gyrotron. *IEEE Transactions on Terahertz Science and Technology*, **2020**, 10, 502-512	3.4	9
205	Novel approach to the theory of longitudinally inhomogeneous lossy waveguides **2013**,		9
204	Numerical Analysis of Weakly Relativistic Large Orbit Gyrotron with Permanent Magnet System. *Journal of Infrared, Millimeter and Terahertz Waves*, **2000**, 21, 1211-1221		9
203	Automated Microwave Complex on the Basis of a Continuous-Wave Gyrotron with an Operating Frequency of 263 GHz and an Output Power of 1 kW. *Radiophysics and Quantum Electronics*, **2016**, 58, 639-648	0.7	9
202	Control of sub-terahertz gyrotron frequency by modulation-anode voltage: Comparison of theoretical and experimental results. *Review of Scientific Instruments*, **2019**, 90, 124705	1.7	9
201	The Role of Nanodispersed Catalysts in Microwave Application during the Development of Unconventional Hydrocarbon Reserves: A Review of Potential Applications. *Processes*, **2021**, 9, 420	2.9	9
200	A double-beam magnetron-injection gun for third-harmonic continuous wave 1-THz gyrotron. *Physics of Plasmas*, **2013**, 20, 123303	2.1	8
199	Mode competition in nonstationary regimes of high-power gyrotrons. *Radiophysics and Quantum Electronics*, **1998**, 41, 542-548	0.7	8
198	Separation of energy fractions of an electron beam by a localized nonuniformity of magnetic field in the collector region of gyrodevices. *Radiophysics and Quantum Electronics*, **2006**, 49, 811-815	0.7	8
197	Development of Third-Harmonic 1.2-THz Gyrotron With Intentionally Increased Velocity Spread of Electrons. *IEEE Transactions on Electron Devices*, **2020**, 67, 4432-4436	2.9	8
196	Traditional vs. advanced Bragg reflectors for oversized circular waveguide. *Fusion Engineering and Design*, **2017**, 123, 477-480	1.7	7
195	A 45-GHz/20-kW Gyrotron-Based Microwave Setup for the Fourth-Generation ECR Ion Sources. *IEEE Transactions on Electron Devices*, **2018**, 65, 3963-3969	2.9	7
194	An Experimental Investigation of a 0.8 THz Double-Beam Gyrotron. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2019**, 40, 1114-1128	2.2	7
193	Studies of continuous-wave submillimeter-wave gyrotrons for spectroscopy and diagnostics of various media. *Radiophysics and Quantum Electronics*, **2009**, 52, 500-510	0.7	7
192	Simulation of a High Harmonic Gyrotron with Axis-Encircling Electron Beam and Permanent Magnet. *Journal of Infrared, Millimeter and Terahertz Waves*, **2002**, 23, 675-692		7
191	Electron-Optical System of a High-Power Gyrotron with Nonadiabatic Electron Gun. *Radiophysics and Quantum Electronics*, **2005**, 48, 461-465	0.7	7
190	Experimental Study of the Influence of Reflections from a Non-resonant Load on the Gyrotron Operation Regime. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2020**, 41, 164-170	2.2	7
189	High precision frequency stabilization of a 100W/263 GHz continuous wave gyrotron **2017**,		6

188	Narrowing of the Emission Spectrum of a Gyrotron with External Reflections. *Technical Physics Letters*, **2018**, 44, 221-224	0.7	6
187	Breakdown of the heavy noble gases in a focused beam of powerful sub-THz gyrotron. *Physics of Plasmas*, **2019**, 26, 083510	2.1	6
186	Mutual synchronization of weakly coupled gyrotrons. *Physics of Plasmas*, **2015**, 22, 093118	2.1	6
185	Electron Optical System of the Sub-terahertz Coaxial Gyrotron with Continuous Frequency Tuning. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2010**, 31, 912	2.2	6
184	Design of a large orbit gyrotron with a permanent magnet system. *Vacuum*, **2001**, 62, 133-142	3.7	6
183	Dynamics of the gas discharge in noble gases sustained by the powerful radiation of 0.67 THz gyrotron. *Physics of Plasmas*, **2020**, 27, 093509	2.1	6
182	Use of Quasiregular Resonator Cavities with Short Phase Correctors in Gyrotrons Operated at Higher Cyclotron Harmonics. *Radiophysics and Quantum Electronics*, **2017**, 59, 655-666	0.7	5
181	Nonlinear excitation of parasitic modes in harmonic gyrotrons. *Physics of Plasmas*, **2020**, 27, 063304	2.1	5
180	Gyrotron-Based Technological Systems for Material Processing: Current Status and Prospects. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2020**, 41, 1022-1037	2.2	5
179	Investigation of the Frequency Double-Multiplication Effect in a Sub-THz Gyrotron. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2020**, 41, 1245-1251	2.2	5
178	Design of master oscillator for frequency locking of a complex of megawatt level microwave sources. *Microwave and Optical Technology Letters*, **2020**, 62, 2137-2143	1.2	5
177	Glow of the Plasma of a Pulse Discharge Produced in Nitrogen by High-Power Terahertz-Wave Radiation. *Radiophysics and Quantum Electronics*, **2017**, 60, 136-142	0.7	5
176	Nonadiabatic Electron-Optical System of a Technological Gyrotron. *Radiophysics and Quantum Electronics*, **2017**, 60, 395-400	0.7	5
175	Experimental investigation of emission inhomogeneity of gyrotron cathodes basing on their current-voltage characteristics. *Journal of Infrared, Millimeter and Terahertz Waves*, **1997**, 18, 2137-2146		5
174	Experimental study of a 110-GHz/1-MW gyrotron with a single-stage depressed collector. *Radiophysics and Quantum Electronics*, **1998**, 41, 449-456	0.7	5
173	Novel source of the chaotic microwave radiation based on the gyro-backward-wave oscillator. *IEEE Transactions on Microwave Theory and Techniques*, **2006**, 54, 2741-2744	4.1	5
172	Some opportunities to control and stabilize frequency of gyrotron		5
171	Imaging the output field pattern of a 110-GHz gyrotron with pulsed magnetic field using recombination continuum emitted by a slab of the Cs-Xe dc discharge. *IEEE Transactions on Plasma Science*, **2005**, 33, 380-381	1.3	5

170	. *IEEE Transactions on Electron Devices*, **2020**, 67, 673-676	2.9	5
169	Optimal parameters of gyrotrons with weak electron-wave interaction. *Physics of Plasmas*, **2016**, 23, 093108	1.1	5
168	Relief Creation on Molybdenum Plates in Discharges Initiated by Gyrotron Radiation in Metal–Dielectric Powder Mixtures. *Radiophysics and Quantum Electronics*, **2016**, 58, 701-709	0.7	5
167	Terahertz Gyrotrons with Unique Parameters **2018**,		5
166	Optimization of terahertz range gyrotron self-excitation conditions by increasing the lifetime of cyclotron oscillators in low-voltage interaction space. *Technical Physics Letters*, **2017**, 43, 110-113	0.7	4
165	Second-Harmonic Generation of Subterahertz Gyrotron Radiation by Frequency Doubling in InP:Fe and Its Application for Magnetospectroscopy of Semiconductor Structures. *Semiconductors*, **2019**, 53, 1217-1221	0.7	4
164	Experimental Demonstration of the Possibility to Expand the Band of Smooth Tuning of Frequency Generation in Short-Cavity Gyrotrons. *Radiophysics and Quantum Electronics*, **2019**, 61, 797-800	0.7	4
163	Double-Beam Gyrotron With Frequency Multiplication. *IEEE Transactions on Electron Devices*, **2019**, 66, 2396-2400	2.9	4
162	Study of a Stationary Breakdown Wave Under the Conditions of Noticeable Reflection of the Incident Electromagnetic Wave from a Gas-Discharge Plasma. *Radiophysics and Quantum Electronics* , **2015**, 58, 327-338	0.7	4
161	Design and Test of 253/527 GHz Gyrotron for Spectroscopy Applications **2019**,		4
160	Development of the 75-GHz planar gyrotron with transverse energy extraction. *Journal of Communications Technology and Electronics*, **2014**, 59, 777-781	0.5	4
159	Imaging of spatial distributions of the millimeter wave intensity by using the Visible Continuum Radiation from a discharge in a Cs–Xe mixture. Part II: Demonstration of application capabilities of the technique. *Plasma Physics Reports*, **2017**, 43, 778-791	1.2	4
158	Experimental study of a THz band double-beam gyrotron **2017**,		4
157	Development of high power THz band gyrotrons and their applications in physical research **2017**,		4
156	Prospective gyro-devices for technological applications **2009**,		4
155	The Influence of Initial Electron Velocities Distribution on the Energy Spectra of the Spent Electron Beam in Gyrotron. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2010**, 31, 1109-1114	2.2	4
154	The influence of reflections on the stability of gyrotron autooscillations. *Radiophysics and Quantum Electronics*, **1998**, 41, 916-922	0.7	4
153	Electron Optic System of Powerful Large Orbit Gyrotron with Pulse Magnetic Field. *Journal of Infrared, Millimeter and Terahertz Waves*, **2005**, 26, 15-28		4

152	Analysis of the Possibilities to Control Diffraction Quality Factors of the Cavities of Subterahertz Gyrotrons. *IEEE Transactions on Plasma Science*, **2020**, 48, 4037-4040	1.3	4
151	Peculiarities of Optimizing the Subsystems of a Continuous-Wave Gyrotron with a Generation Frequency of 0.26 THz at the Fundamental Cyclotron Resonance. *Radiophysics and Quantum Electronics*, **2016**, 58, 649-659	0.7	4
150	A 250-Watts, 0.5-THz continuous-wave second-harmonic gyrotron. *IEEE Electron Device Letters*, **2021**, 1-1	4.4	4
149	Development of the Prototype of High Power Sub-THz Gyrotron for Advanced Fusion Power Plant (DEMO). *EPJ Web of Conferences*, **2018**, 195, 01008	0.3	4
148	Suppression of the Oscillatory Modes of a Space Charge in the Magnetron Injection Guns of Technological Gyrotrons. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2015**, 36, 7-12	2.2	3
147	A Magneto-Armored Warm-Solenoid Based System for K-Band Gyrodevices. *Instruments and Experimental Techniques*, **2020**, 63, 97-100	0.5	3
146	Development and applications of THz gyrotrons. *EPJ Web of Conferences*, **2017**, 149, 01008	0.3	3
145	45 GHz/20 kW gyrotron-based system for ECR ION source **2016**,		3
144	Multiparametric gyrotron power control during microwave processing of materials. *Technical Physics Letters*, **2013**, 39, 140-142	0.7	3
143	Magnetically shielded electron-optical system of a continuous gyrotron with an operating frequency of 24 GHz. *Journal of Communications Technology and Electronics*, **2017**, 62, 1165-1171	0.5	3
142	On the feasibility of a pulsed gyrotron with a peak rf power exceeding the power of the operating electron beam. *Applied Physics Letters*, **2017**, 111, 073504	3.4	3
141	Influence of weak reflection from a nonresonant load on the operation frequency of the 28 GHz technological gyrotron. *EPJ Web of Conferences*, **2017**, 149, 04037	0.3	3
140	Nonparaxial magnetron injection gun for a high-power pulsed submillimeter-wave gyrotron. *Radiophysics and Quantum Electronics*, **2009**, 52, 150-156	0.7	3
139	Numerical simulation of high-power continuous-wave gyrotrons operated in the short-wavelength part of the millimeter-wave range. *Radiophysics and Quantum Electronics*, **2009**, 52, 370-378	0.7	3
138	Efficiency enhancement of gyrotron based setups for materials processing **2009**,		3
137	Nonstationary processes in a gyrotron with reflections from output-section inhomogeneities. *Radiophysics and Quantum Electronics*, **1998**, 41, 1096-1100	0.7	3
136	Recent test results on broad-band gyro-TWT and gyro-BWO with hellically grooved operating waveguides		3
135	The spread of the initial energy of electrons in a gyrotron due to the negative-mass instability developing in a magnetron-injector gun. *Technical Physics*, **2000**, 45, 470-475	0.5	3

134	Measurements of the spread in the initial electron energy in a gyrotron. *Technical Physics*, **2000**, 45, 476-479	0.5	3
133	The energy spectrum of an electron beam after interaction with an RF field in a gyrotron. *Technical Physics*, **2000**, 45, 1571-1574	0.5	3
132	Numerical simulation of transient processes in a 170 GHz/1 MW gyrotron for ITER. *Radiophysics and Quantum Electronics*, **1996**, 39, 788-792	0.7	3
131	Microwave Radiation Impact on Heavy Oil Upgrading from Carbonate Deposits in the Presence of Nano-Sized Magnetite. *Processes*, **2021**, 9, 2021	2.9	3
130	3.5 kW 24 GHz Compact Gyrotron System for Microwave Processing of Materials **2006**, 24-30		3
129	Universal Electron Gun Design for a CW Third Harmonic Gyrotron with an Operating Frequency over 1 THz. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2020**, 41, 1121-1130	2.2	3
128	Experimental Demonstration of Gyrotron Frequency Stabilization by Resonant Reflection. *IEEE Electron Device Letters*, **2021**, 42, 1077-1080	4.4	3
127	Development and preliminary tests of a second harmonic double-beam continuous wave gyrotron with operating frequency of 0.79 THz **2016**,		3
126	Pulsed Gyrotron Start-up Scenario in Presence of Voltage/Current Surge Front **2019**,		3
125	CW Multifrequency K-Band Source Based on a Helical-Waveguide Gyro-TWT With Delayed Feedback. *IEEE Transactions on Electron Devices*, **2021**, 68, 330-335	2.9	3
124	Investigation of mode interaction for a gyrotron with dense mode spectrum. *Journal of Electromagnetic Waves and Applications*, **2021**, 35, 19-26	1.3	3
123	Experimental investigation of powerful THz gyrotrons for initiation of localized gas discharge **2015**,		2
122	Design of a pulsed 0.5 THz gyrotron and preliminary test of its electron gun with field emitter. *Infrared Physics and Technology*, **2020**, 111, 103480	2.7	2
121	Gas breakdown by a focused beam of THz waves. *EPJ Web of Conferences*, **2017**, 149, 02031	0.3	2
120	Collector system of a gyrotron with magnetically shielded solenoid. *EPJ Web of Conferences*, **2017**, 149, 04043	0.3	2
119	High rate production of nanopowders by the evaporation condensation method using gyrotron radiation. *EPJ Web of Conferences*, **2017**, 149, 02022	0.3	2
118	Development of advanced electron optical systems for novel gyrotrons. *EPJ Web of Conferences*, **2017**, 149, 04004	0.3	2
117	A waveguide high-pass filter system for measuring the spectrum of pulsed terahertz sources. *Infrared Physics and Technology*, **2016**, 76, 11-20	2.7	2

116	Synthesis of Current–Voltage Characteristics of 670 GHz Gyrotron Magnetron Injection Gun and Calculation of the Helical Electron Beam Parameters at the Leading Edge of a High-Voltage Pulse. *Journal of Infrared, Millimeter, and Terahertz Waves*, **2013**, 34, 119-126	2.2	2
115	A point-like plasma, sustained by powerful radiation of terahertz gyrotrons, as a source of ultraviolet light **2017**,		2
114	High precision frequency stabilization of a 263 GHz continuous wave gyrotron. *EPJ Web of Conferences*, **2017**, 149, 04022	0.3	2
113	Development of high-efficient gyrotron based complex for industrial applications. *EPJ Web of Conferences*, **2017**, 149, 04034	0.3	2
112	Frequency stabilization of a 0.67 THz gyrotron by delayed reflection **2015**,		2
111	Efficiency of gyrotrons working at the second harmonic of gyrofrequency with multistage systems for recuperation of residual electron energy. *Technical Physics*, **2015**, 60, 757-760	0.5	2
110	A magnetron injection gun with extraction of reflected electrons. *Technical Physics Letters*, **2012**, 38, 680-682	0.7	2
109	The multi-mode gyrotron. *Physics of Plasmas*, **2011**, 18, 104502	2.1	2
108	Generation of 5 kW/1 THz coherent radiation from pulsed magnetic field gyrotron **2010**,		2
107	Experimental study of a gyrotron operated at the second gyrofrequency harmonic with the single-stage energy recovery. *Radiophysics and Quantum Electronics*, **2008**, 51, 768-771	0.7	2
106	24-28 GHz Gyrotron-based Sources for Technological Applications **2006**,		2
105	Gyro-TWTs and Gyro-BWOs with helically corrugated waveguides **2007**,		2
104	Influence of Voltage Fluctuations on Gyrotron Efficiency and Stability. *Journal of Infrared, Millimeter and Terahertz Waves*, **2003**, 24, 409-418		2
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