

# Andrei V Savilov

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/2959141/andrei-v-savilov-publications-by-citations.pdf>  
**Version:** 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

172 papers	1,121 citations	20 h-index	25 g-index
237 ext. papers	1,524 ext. citations	1.7 avg, IF	4.67 L-index

#	Paper	IF	Citations
172	Moderately relativistic high-harmonic gyrotrons for millimeter/submillimeter wavelength band. <i>IEEE Transactions on Plasma Science</i> , <b>1999</b> , 27, 456-461	1.3	70
171	Terahertz Gyrotrons at IAP RAS: Status and New Designs. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2011</b> , 32, 371-379	2.2	44
170	Terahertz Large-Orbit High-Harmonic Gyrotrons at IAP RAS: Recent Experiments and New Designs. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 2287-2293	2.9	40
169	High-harmonic gyrotron with sectioned cavity. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 073101	2.1	35
168	Negative-mass mitigation of Coulomb repulsion for terahertz undulator radiation of electron bunches. <i>Applied Physics Letters</i> , <b>2015</b> , 107, 163505	3.4	31
167	Experimental Realization of the High-Harmonic Gyrotron Oscillator With a Klystron-Like Sectioned Cavity. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 2356-2359	2.9	28
166	Compression of complicated rf pulses produced from the super-radiant backward-wave oscillator. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 093501	3.4	25
165	Experimental study of a fourth-harmonic gyromultiplier. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 070701	2.1	25
164	Cyclotron resonance maser with a tapered magnetic field in the regime of "nonresonant" trapping of the electron beam. <i>Physical Review E</i> , <b>2001</b> , 64, 066501	2.4	25
163	Simulations of Sectioned Cavity for High-Harmonic Gyrotron. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 300-305	2.9	24
162	On the theory of frequency-quadrupling gyroklystrons. <i>Physics of Plasmas</i> , <b>2007</b> , 14, 053113	2.1	23
161	Effective coupling of cyclotron autoresonance maser and "gyrotron" modes on a phase-synchronized electron beam. <i>Physical Review E</i> , <b>2000</b> , 62, 4207-15	2.4	23
160	Phase mixing of electron bunches and decrease of negative-mass instability increments in cyclotron resonance masers. <i>Physics of Plasmas</i> , <b>1995</b> , 2, 557-564	2.1	23
159	High-harmonic gyrotron with sectioned cavity. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 073503	3.4	22
158	Klystron-like cavity with mode transformation for high-harmonic terahertz gyrotrons. <i>Physics of Plasmas</i> , <b>2013</b> , 20, 014503	2.1	21
157	Dynamics of excitation of backward waves in long inhomogeneous systems. <i>Physics of Plasmas</i> , <b>2007</b> , 14, 113104	2.1	21
156	High-power electrostatic free-electron maser as a future source for fusion plasma heating: experiments in the short-pulse regime. <i>Physical Review E</i> , <b>1999</b> , 59, 6058-63	2.4	21

155	Possibilities for Continuous Frequency Tuning in Terahertz Gyrotrons with Nontunable Electrodynamic Systems. <i>Radiophysics and Quantum Electronics</i> , <b>2016</b> , 58, 660-672	0.7	21
154	Flying radio frequency undulator. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 033504	3.4	20
153	Competition of longitudinal modes and the scenario of single-mode regime build-up for the FOM-Fusion-FEM project. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1995</b> , 358, 182-185	1.2	20
152	Gyrotron with a sectioned cavity based on excitation of a far-from-cutoff operating mode. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 013113	2.1	19
151	Method of Providing the High Cyclotron Harmonic Operation Selectivity in a Gyrotron With a Spatially Developed Operating Mode. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3893-3897	2.9	19
150	Generation of ultra-short quasi-unipolar electromagnetic pulses from quasi-planar electron bunches. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2001</b> , 475, 436-440	1.2	19
149	Super-radiative self-compression of photo-injector electron bunches. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 263508	3.4	18
148	Sources of Coherent Terahertz Radiation. <i>AIP Conference Proceedings</i> , <b>2006</b> ,	0	17
147	Regime of non-resonant trapping in an FEM-amplifier. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2003</b> , 507, 158-161 <sup>1.2</sup>		17
146	Simulations of the build-up of transverse and longitudinal structures of the microwave field in the Fusion FEM. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1998</b> , 407, 40-44	1.2	16
145	Negative-mass instability in magnetron-injection guns. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 2276-2284	2.1	15
144	To the problem of energy recuperation in gyrotrons. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>1995</b> , 16, 459-471		15
143	Compression of a photoinjector electron bunch in the negative-mass undulator. <i>Physical Review Accelerators and Beams</i> , <b>2017</b> , 20,	1.8	15
142	A method for suppression of spurious fundamental-harmonic waves in gyrotrons operating at the second cyclotron harmonic. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 053116	2.1	14
141	Q-switching in the electron backward-wave oscillator. <i>Physics of Plasmas</i> , <b>2011</b> , 18, 103102	2.1	13
140	Stability of frequency-multiplying harmonic gyroklystrons. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 013112	2.1	13
139	Peculiarities of the coherent spontaneous synchrotron radiation of dense electron bunches. <i>Physics of Plasmas</i> , <b>2014</b> , 21, 023103	2.1	12
138	Cyclotron-undulator cooling of a free-electron-laser beam. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 073503	3.4	12

137	Demonstration of a Selective Oversized Cavity in a Terahertz Second-Harmonic Gyrotron. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1412-1415	4.4	12
136	Recovery of electron energy in cyclotron autoresonance masers. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 2285-2291	2.1	11
135	Effective Co-generation of opposite and forward waves in cyclotron-resonance masers. <i>Physical Review Letters</i> , <b>2000</b> , 85, 3424-7	7.4	11
134	Regime of multi-stage trapping in electron masers. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 113114	2.1	11
133	Super-radiant backward-wave oscillators with enhanced power conversion. <i>Physics of Plasmas</i> , <b>2013</b> , 20, 024501	2.1	10
132	First mm-wave generation in the FOM free electron maser. <i>IEEE Transactions on Plasma Science</i> , <b>1999</b> , 27, 1084-1091	1.3	10
131	Spontaneous super-radiative cascade undulator emission from short dense electron bunches. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 113105	2.1	9
130	Stability of Excitation of Traveling Waves in Gyrotrons With Low-Relativistic Electron Beams. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 4693-4699	2.9	8
129	Frequency multiplication in gyrotron autooscillators. <i>Technical Physics Letters</i> , <b>2006</b> , 32, 84-87	0.7	8
128	Space charge effects as a source of electron energy spread and efficiency degradation in gyrotrons. <i>IEEE Transactions on Plasma Science</i> , <b>2000</b> , 28, 633-637	1.3	8
127	Account of the feedback frequency dispersion in spatio-temporal equations of a free-electron laser. <i>Optics Communications</i> , <b>1996</b> , 123, 133-138	2	8
126	Traditional vs. advanced Bragg reflectors for oversized circular waveguide. <i>Fusion Engineering and Design</i> , <b>2017</b> , 123, 477-480	1.7	7
125	Super-radiant effects in electron oscillators with near-cutoff operating waves. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 063113	2.1	7
124	Modeling of a High-Power Wideband Free-Electron Maser Amplifier with an Operating Frequency of 30 GHz to be Used in Particle Acceleration Experiments. <i>Radiophysics and Quantum Electronics</i> , <b>2016</b> , 58, 607-614	0.7	7
123	Super-radiant Cherenkov backward-wave oscillator with cyclotron absorption. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 193506	3.4	6
122	Nonresonant excitation and nonlinear suppression of parasitic transverse modes in free-electron masers. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>1993</b> , 14, 2119-2130		6
121	Use of Quasiregular Resonator Cavities with Short Phase Correctors in Gyrotrons Operated at Higher Cyclotron Harmonics. <i>Radiophysics and Quantum Electronics</i> , <b>2017</b> , 59, 655-666	0.7	5
120	Electron rf Oscillator Based on Self-Excitation of a Talbot-Type Supermode in an Oversized Cavity. <i>Physical Review Applied</i> , <b>2019</b> , 12,	4.3	5

119	Cyclotron frequency multiplication in Cherenkov backward-wave oscillators. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 063103	2.1	5
118	Submillimeter moderately relativistic free-electron maser. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2003</b> , 507, 162-165	1.2	5
117	Optimal parameters of gyrotrons with weak electron-wave interaction. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 093108	1.08	5
116	Experimental demonstration of free electron maser operation in the regime of non-resonant trapping. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 163501	3.4	5
115	Double-Beam Gyrotron With Frequency Multiplication. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2396-2400	2.9	4
114	Spontaneous coherent cyclotron THz super-radiation from a short dense photo-injector electron bunch. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 05019	0.3	4
113	Multi-pulse operation of a super-radiant backward-wave oscillator. <i>Physics of Plasmas</i> , <b>2014</b> , 21, 084501	2.1	4
112	Numerical simulations of a co-harmonic gyrotron. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 065105	3	4
111	Electron energy recuperation in gyrodevices. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 073104	2.1	4
110	A high power, tunable free electron maser for fusion. <i>Fusion Engineering and Design</i> , <b>2001</b> , 53, 423-430	1.7	4
109	FEM with guiding magnetic field based on simultaneous fundamental and high-harmonic oscillations. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 445, 284-289	1.2	4
108	A gyrodevice based on simultaneous excitation of opposite and forward waves (Gyrotron BWO-TWT). <i>IEEE Transactions on Plasma Science</i> , <b>2000</b> , 28, 1742-1746	1.3	4
107	First lasing of the Dutch Fusion-FEM: 730 kW, 200 GHz. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1999</b> , 429, 12-16	1.2	4
106	On the feasibility of a pulsed gyrotron with a peak rf power exceeding the power of the operating electron beam. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 073504	3.4	3
105	Regime of nonresonant trapping in a CARM oscillator. <i>IEEE Transactions on Plasma Science</i> , <b>2004</b> , 32, 929-933	1.3	3
104	Electron bunching at the doubled frequency of the input wave and the use of this effect in klystron-type frequency multipliers. <i>IEEE Transactions on Plasma Science</i> , <b>2004</b> , 32, 1147-1151	1.3	3
103	Mode dynamics in a free electron maser with broadband frequency-dispersive feedback. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 638-642	2.1	3
102	CARM-amplifier in the regime of "nonresonant" trapping of the electron beam. <i>IEEE Transactions on Plasma Science</i> , <b>2002</b> , 30, 927-930	1.3	3

101	The spread of the initial energy of electrons in a gyrotron due to the negative-mass instability developing in a magnetron-injector gun. <i>Technical Physics</i> , <b>2000</b> , 45, 470-475	0.5	3
100	Stabilization of spatio-temporal dynamics of free-electron laser operation under effect of spread in electron velocity. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1999</b> , 429, 65-69	1.2	3
99	Improvement of Mode Selectivity of High-Harmonic Gyrotrons by Using Operating Cavities with Short Output Reflectors. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , <b>2018</b> , 39, 595-613	2.2	3
98	The regime of multi-stage trapping in free-electron lasers operating in the super-radiant and SASE regimes. <i>Physics of Plasmas</i> , <b>2020</b> , 27, 063103	2.1	2
97	The reflex gyrotron. <i>Physics of Plasmas</i> , <b>2012</b> , 19, 024505	2.1	2
96	The multi-mode gyrotron. <i>Physics of Plasmas</i> , <b>2011</b> , 18, 104502	2.1	2
95	Regime of trapping and adiabatic deceleration of electrons in a sectioned electron RF generator. <i>IEEE Transactions on Plasma Science</i> , <b>1998</b> , 26, 36-40	1.3	2
94	LF-mode excitation in FEL caused by stimulated scattering of operating HF-mode. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1998</b> , 407, 102-106	1.2	2
93	Terahertz high-harmonic gyrotrons and gyro-multipliers <b>2008</b> ,		2
92	Suppressing electron bunching at low harmonics in gyromultipliers of the klystron type. <i>Technical Physics Letters</i> , <b>2007</b> , 33, 795-798	0.7	2
91	High-harmonic electron bunching in the field of a signal wave and the use of this effect in cyclotron masers with frequency multiplication. <i>Physical Review Special Topics: Accelerators and Beams</i> , <b>2005</b> , 8,		2
90	New Schemes of High-harmonic Gyro-devices with Frequency Multiplication <b>2006</b> ,		2
89	Spontaneous coherent cyclotron emission from a short laser-kicked electron bunch. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2004</b> , 528, 562-565	1.2	2
88	A free-electron amplifier in the regime of non-resonant trapping. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2002</b> , 483, 200-204	1.2	2
87	First lasing of the Dutch fusion-FEM in the long-pulse configuration. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2002</b> , 483, 259-262	1.2	2
86	Cooperation of traveling and quasi-cutoff waves in a cyclotron-resonance maser. <i>Technical Physics</i> , <b>2001</b> , 46, 1001-1008	0.5	2
85	Experimental study of CRM with simultaneous excitation of traveling and near-cutoff waves (CARM-gyrotron). <i>IEEE Transactions on Plasma Science</i> , <b>2001</b> , 29, 609-612	1.3	2
84	Stimulated wave scattering in the Smith-Purcell FEL. <i>IEEE Transactions on Plasma Science</i> , <b>2001</b> , 29, 820-823		2

83	Temporal dynamics of fusion-FEM oscillations: comparison of experiment and simulations. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1999</b> , 429, 46-51	1.2	2
82	Problems of autobunching and phase stability for the TBA-driver: calculations and design for a modeling experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1995</b> , 358, 528-531	1.2	2
81	Self-trapping of the pre-bunched electron beam in a discrete system of isolated cells of the TBA-driver. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1996</b> , 372, 539-542	1.2	2
80	Negative-mass instability at nonsymmetrical perturbations. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>1994</b> , 15, 1819-1828		2
79	Generation of Super-Radiance rf Pulses in a Sectioned Backward-Wave Oscillator. <i>The Open Plasma Physics Journal</i> , <b>2009</b> , 2, 165-170		2
78	Competition of Oscillations at Different Cyclotron Harmonics in the Subterahertz Large-Orbit Gyrotron. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 3795-3801	2.9	2
77	Powerful broadband FEM-amplifier operating over Ka frequency range <b>2016</b> ,		2
76	Microwave Undulators and Electron Generators for New-Generation Free-Electron Lasers. <i>Radiophysics and Quantum Electronics</i> , <b>2016</b> , 58, 755-768	0.7	2
75	High-Harmonic Gyrotrons with Axis-Encircling Electron Beams at IAP RAS. <i>Radiophysics and Quantum Electronics</i> , <b>2019</b> , 62, 513-519	0.7	2
74	Pumping Systems for Compton Free-Electron Lasers: Microwave Undulators and Powering Sources. <i>Radiophysics and Quantum Electronics</i> , <b>2019</b> , 62, 520-527	0.7	2
73	Powerful Relativistic Oscillators of THz-band based on Excitation of Talbot-type Supermode in an Oversized Cavity <b>2019</b> ,		2
72	A Compact THz Source for Enhancing the Sensitivity of Nuclear Magnetic Resonance Spectroscopy with Dynamic Nuclear Polarization. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2018</b> , 82, 1592-1595	0.4	2
71	Terahertz Large-Orbit High-Harmonic Gyrotrons at IAP RAS Features <b>2018</b> ,		2
70	High-Power Ultra-Wideband Operation of the JINR-IAP FEM-Amplifier <b>2018</b> ,		2
69	Self-compression of dense photo-injector electron bunches. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1135, 012018	0.3	2
68	Mode Selective Azimuthally Asymmetric Cavity for Terahertz Gyrotrons. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 347-352	2.9	2
67	1.2 THz Second Harmonic Gyrotron with Selective Groove <b>2019</b> ,		1
66	Two-wave regime of operation of the high-harmonic gyrotron. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 043104	2.1	1

65	Frequency Tuning in the Gyrotron Oscillator With a Klystronlike Sectioned Cavity. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 3393-3398	2.9	1
64	On applicability of absorbing rectilinear electron beams in high-frequency gyrotrons operating at cyclotron harmonics. <i>Physics of Plasmas</i> , <b>2020</b> , 27, 064501	2.1	1
63	Relativistic Second-Harmonic Gyrotron With a Selective Quasi-Regular Cavity. <i>IEEE Transactions on Electron Devices</i> , <b>2016</b> , 63, 4968-4974	2.9	1
62	Testing of RF source and microwave components of the millimeter-wavelength flying RF undulators <b>2016</b> ,		1
61	Development of a High-Power Wideband Amplifier on the Basis of a Free-Electron Maser Having an Operating Frequency Near 30 GHz: Modeling and Results of the Initial Experiments. <i>Radiophysics and Quantum Electronics</i> , <b>2017</b> , 59, 674-681	0.7	1
60	Terahertz large-orbit high-harmonic gyrotrons at IAP RAS: Recent experiments and new designs <b>2017</b> ,		1
59	High-harmonic large orbit gyrotrons in IAP RAS <b>2015</b> ,		1
58	Project of powerful broadband FEM-amplifier of 30 GHz frequency range <b>2015</b> ,		1
57	High-power free-electron maser with frequency multiplication operating in a shortwave part of the millimeter wave range. <i>Technical Physics Letters</i> , <b>2012</b> , 38, 759-763	0.7	1
56	Parametric phase locking in an electron rf oscillator. <i>Physical Review Letters</i> , <b>2013</b> , 110, 174801	7.4	1
55	Progress in studying a self-excited gyromultiplier <b>2009</b> ,		1
54	RF Space-Charge Effects in CRM with Arbitrary Phase Velocity of the Operating Wave. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , <b>1998</b> , 19, 939-956		1
53	Progress in development of powerful sub-mm Bragg FEM based on moderately relativistic electron beam <b>2006</b> ,		1
52	Cyclotron resonance maser operating in a nonresonant electron bunching regime. <i>Technical Physics Letters</i> , <b>2006</b> , 32, 6-9	0.7	1
51	Gyrodevices with Axis-Encircling Electron Beams. <i>AIP Conference Proceedings</i> , <b>2003</b> ,	0	1
50	Spatiotemporal dynamics of a free electron maser oscillator with broadband feedback and klystronlike interaction region. <i>Physical Review Special Topics: Accelerators and Beams</i> , <b>2005</b> , 8,		1
49	A follow-up of the FOM fusion FEM for 1 MW, 1 s. <i>Fusion Engineering and Design</i> , <b>2001</b> , 53, 577-586	1.7	1
48	Theoretical explanation and experimental observation of effective cyclotron coupling of traveling and near-cutoff modes on a phase-synchronized electron beam. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 445, 230-235	1.2	1

47	Spurious excitation of near-cutoff modes in free-electron masers. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 445, 1-6	1.2	1
46	Parasitic excitation of fundamental-cyclotron-harmonic waves in high-harmonic gyrotrons. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 113105	2.1	1
45	Spurious Fundamental-Harmonic Oscillations in the Horn Section of a High-Harmonic Gyrotron. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 325-332	2.9	1
44	Terahertz-frequency-range large-orbit-gyrotrons for physical applications <b>2021</b> ,		1
43	Prospects of realization of powerful sub-millimeter relativistic cyclotron masers <b>2016</b> ,		1
42	Experimental Study of a Gyrotron with a Sectioned Klystron-Type Cavity Operated at Higher Cyclotron Harmonics. <i>Radiophysics and Quantum Electronics</i> , <b>2016</b> , 58, 694-700	0.7	1
41	Powerful 1 THz Third-Harmonic Gyrotron for Plasma Applications <b>2019</b> ,		1
40	High-harmonic gyrotrons with irregular microwave systems. <i>EPJ Web of Conferences</i> , <b>2018</b> , 195, 01015	0.3	1
39	Stable Excitation of Higher Axial Modes in the Traveling-Wave-Tube Regime in Gyrotron Cavities With Additional Loss Elements. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 4717-4722	2.9	1
38	Amplification of a slipping quasi-monochromatic wave pulse by an electron flow with a wide velocity spread. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 093303	2.1	1
37	Coherent super-radiative undulator emission of ultra-short THz wave pulses. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 093302	2.1	1
36	Free-electron RF-pulse compressor. <i>Physical Review Letters</i> , <b>2002</b> , 88, 064801	7.4	0
35	Frequency-Tunable Second Harmonic Gyrotron With Selective Cavity: Design and Simulations. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 1-7	2.9	0
34	Simulations of the build-up of transverse and longitudinal structures of the microwave field in the Fusion FEM <b>1998</b> , 40-44		0
33	Supermodes of oversized Talbot-type cavities. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 114502	2.5	0
32	Formations of a giant running pulse in the process of a quasi-regular amplification of a long wave signal by a slipping electron bunch. <i>Physics of Plasmas</i> , <b>2020</b> , 27, 104502	2.1	0
31	On the voltage current optimization in high-harmonic gyrotrons. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 054504	2.1	0
30	Terahertz Undulator Radiation of Stabilized Dense Electron Beams. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2018</b> , 82, 1587-1591	0.4	0

29	Development of powerful Ka-band FEM-amplifiers with broad frequency tuning. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 04011	0.3
28	Terahertz gyrotrons with quasi-regular cavities. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 05018	0.3
27	Coherent spontaneous THz undulator radiation from dense electron bunches formed in laser-driven photo-injectors. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 05002	0.3
26	Electron cyclotron maser based on the combination two-wave resonance. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094509	2.5
25	New opportunity of efficiency enhancement for FEL-oscillators. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>1998</b> , 407, 480-484	1.2
24	Regime of non-resonant trapping in a Bragg-cavity FEM oscillator. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2004</b> , 528, 67-70	1.2
23	Free-electron RF compressor. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2002</b> , 483, 466-469	1.2
22	Effect of the drift gap between the undulator sections on the operation of the Fusion-FEM. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , <b>2000</b> , 445, 187-191	1.2
21	Velocity separation in electron beam by static electromagnetic field of helical symmetry. <i>IEEE Transactions on Plasma Science</i> , <b>1999</b> , 27, 470-473	1.3
20	Generation in the regime with three resonance frequencies. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 2103, 012060	0.3
19	Single-Cavity Gyromultipliers With Asymmetric Electron Beams. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 353-357	2.9
18	Universal Subterahertz Large-Orbit Gyrotron: Operation at the Second and Third Cyclotron Harmonics. <i>Radiophysics and Quantum Electronics</i> , <b>2020</b> , 63, 321-331	0.7
17	Sources of Powerful Terahertz Radiation Based on Coherent Spontaneous Emission from Electron Bunches Formed by Photo Injectors. <i>Radiophysics and Quantum Electronics</i> , <b>2020</b> , 63, 422-429	0.7
16	Submillimeter moderately relativistic free-electron maser <b>2003</b> , 162-165	
15	Regime of non-resonant trapping in an FEM-amplifier <b>2003</b> , 158-161	
14	Regime of non-resonant trapping in a Bragg-cavity FEM oscillator <b>2004</b> , 67-70	
13	Masers with selective excitation of Talbot-type supermode. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1697, 012059	0.3
12	Efficiency enhancement of THz radiation from an electron bunch in a waveguide due to low-frequency stabilization. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1697, 012058	0.3

11 New opportunity of efficiency enhancement for FEL-oscillators **1998**, 480-484

10 LF-mode excitation in FEL caused by stimulated scattering of operating HF-mode **1998**, 102-106

9 Frequency Tuning in Short-Wave Gyrotrons with Irregular Cavities. *Radiophysics and Quantum Electronics*, **2020**, 62, 740-748 0.7

8 Multi-resonance cyclotron-undulator electron acceleration. *Journal of Physics: Conference Series*, **2019**, 1400, 044004 0.3

7 A Free Electron Laser Based on a Sectional System of RF Undulators. *Bulletin of the Russian Academy of Sciences: Physics*, **2018**, 82, 1596-1599 0.4

6 THz radiation of stabilized dense electron bunches. *EPJ Web of Conferences*, **2018**, 195, 01016 0.3

5 Terahertz Gyrotrons at High Cyclotron Harmonics with Irregular Electrodynamical Systems. *Bulletin of the Russian Academy of Sciences: Physics*, **2018**, 82, 1582-1586 0.4

4 Spontaneous Cyclotron Radiation of a Dense Electron Bunch. *Bulletin of the Russian Academy of Sciences: Physics*, **2018**, 82, 1600-1603 0.4

3 Two-beam gyrotron with frequency multiplication. *EPJ Web of Conferences*, **2018**, 187, 01002 0.3

2 Cooling of an Electron Bunch in the Regime of Sectioned Trapping of Electrons by the Excited Wave Fields. *Radiophysics and Quantum Electronics*, **2021**, 64, 422-434 0.7

1 Generation of ultrashort pulses in the THz frequency range. *Journal of Physics: Conference Series*, **2021**, 2103, 012061 0.3