

# Andrei V Savilov

## List of Publications by Year in Descending Order

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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	Single-Cavity Gyromultipliers With Asymmetric Electron Beams. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 353-357	2.9	
171	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
170	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
169	Generation in the regime with three resonance frequencies. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 2103, 012060	0.3	
168	Parasitic excitation of fundamental-cyclotron-harmonic waves in high-harmonic gyrotrons. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 113105	2.1	1
167	Terahertz-frequency-range large-orbit-gyrotrons for physical applications <b>2021</b> ,		1
166	On the voltage-current optimization in high-harmonic gyrotrons. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 054504	2.1	0
165	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
164	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
163	Coherent super-radiative undulator emission of ultra-short THz wave pulses. <i>Physics of Plasmas</i> , <b>2021</b> , 28, 093302	2.1	1
162	Mode Selective Azimuthally Asymmetric Cavity for Terahertz Gyrotrons. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 347-352	2.9	2
161	Cooling of an Electron Bunch in the Regime of Sectioned Trapping of Electrons by the Excited Wave Fields. <i>Radiophysics and Quantum Electronics</i> , <b>2021</b> , 64, 422-434	0.7	
160	Generation of ultrashort pulses in the THz frequency range. <i>Journal of Physics: Conference Series</i> , <b>2021</b> , 2103, 012061	0.3	
159	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
158	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
157	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	
156	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	

155	Masers with selective excitation of Talbot-type supermode. <i>Journal of Physics: Conference Series</i> , <b>2020</b> , 1697, 012059	0.3	
154	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	
153	Supermodes of oversized Talbot-type cavities. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 114502	2.5	0
152	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
151	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
150	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
149	Frequency Tuning in Short-Wave Gyrotrons with Irregular Cavities. <i>Radiophysics and Quantum Electronics</i> , <b>2020</b> , 62, 740-748	0.7	
148	1.2 THz Second Harmonic Gyrotron with Selective Groove <b>2019</b> ,		1
147	Double-Beam Gyrotron With Frequency Multiplication. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 2396-2400	2.9	4
146	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
145	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
144	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
143	Multi-resonance cyclotron-undulator electron acceleration. <i>Journal of Physics: Conference Series</i> , <b>2019</b> , 1400, 044004	0.3	
142	Powerful Relativistic Oscillators of THz-band based on Excitation of Talbot-type Supermode in an Oversized Cavity <b>2019</b> ,		2
141	Powerful 1 THz Third-Harmonic Gyrotron for Plasma Applications <b>2019</b> ,		1
140	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
139	Spontaneous super-radiative cascade undulator emission from short dense electron bunches. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 113105	2.1	9
138	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

137	A Free Electron Laser Based on a Sectional System of RF Undulators. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2018</b> , 82, 1596-1599	0.4	
136	THz radiation of stabilized dense electron bunches. <i>EPJ Web of Conferences</i> , <b>2018</b> , 195, 01016	0.3	
135	High-harmonic gyrotrons with irregular microwave systems. <i>EPJ Web of Conferences</i> , <b>2018</b> , 195, 01015	0.3	1
134	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
133	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
132	Terahertz Gyrotrons at High Cyclotron Harmonics with Irregular Electrodynamical Systems. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2018</b> , 82, 1582-1586	0.4	
131	Spontaneous Cyclotron Radiation of a Dense Electron Bunch. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , <b>2018</b> , 82, 1600-1603	0.4	
130	Terahertz Large-Orbit High-Harmonic Gyrotrons at IAP RAS Features <b>2018</b> ,		2
129	High-Power Ultra-Wideband Operation of the JINR-IAP FEM-Amplifier <b>2018</b> ,		2
128	Self-compression of dense photo-injector electron bunches. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1135, 012018	0.3	2
127	Regime of multi-stage trapping in electron masers. <i>Physics of Plasmas</i> , <b>2018</b> , 25, 113114	2.1	11
126	Two-beam gyrotron with frequency multiplication. <i>EPJ Web of Conferences</i> , <b>2018</b> , 187, 01002	0.3	
125	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
124	Traditional vs. advanced Bragg reflectors for oversized circular waveguide. <i>Fusion Engineering and Design</i> , <b>2017</b> , 123, 477-480	1.7	7
123	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
122	Simulations of Sectioned Cavity for High-Harmonic Gyrotron. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 300-305	2.9	24
121	Super-radiative self-compression of photo-injector electron bunches. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 263508	3.4	18
120	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

119	Development of powerful Ka-band FEM-amplifiers with broad frequency tuning. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 04011	0.3	
118	Terahertz gyrotrons with quasi-regular cavities. <i>EPJ Web of Conferences</i> , <b>2017</b> , 149, 05018	0.3	
117	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
116	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
115	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
114	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
113	Terahertz large-orbit high-harmonic gyrotrons at IAP RAS: Recent experiments and new designs <b>2017</b> ,		1
112	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	
111	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
110	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
109	Testing of RF source and microwave components of the millimeter-wavelength flying RF undulators <b>2016</b> ,		1
108	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
107	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
106	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
105	Powerful broadband FEM-amplifier operating over Ka frequency range <b>2016</b> ,		2
104	Prospects of realization of powerful sub-millimeter relativistic cyclotron masers <b>2016</b> ,		1
103	Optimal parameters of gyrotrons with weak electron-wave interaction. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 093108		5
102	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

101	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
100	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
99	Two-wave regime of operation of the high-harmonic gyrotron. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 043104	2.1	1
98	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
97	Super-radiant effects in electron oscillators with near-cutoff operating waves. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 063113	2.1	7
96	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
95	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
94	High-harmonic large orbit gyrotrons in IAP RAS <b>2015</b> ,		1
93	Project of powerful broadband FEM-amplifier of 30 GHz frequency range <b>2015</b> ,		1
92	Flying radio frequency undulator. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 033504	3.4	20
91	Peculiarities of the coherent spontaneous synchrotron radiation of dense electron bunches. <i>Physics of Plasmas</i> , <b>2014</b> , 21, 023103	2.1	12
90	Multi-pulse operation of a super-radiant backward-wave oscillator. <i>Physics of Plasmas</i> , <b>2014</b> , 21, 084501	2.1	4
89	Cyclotron-undulator cooling of a free-electron-laser beam. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 073503	3.4	12
88	Super-radiant backward-wave oscillators with enhanced power conversion. <i>Physics of Plasmas</i> , <b>2013</b> , 20, 024501	2.1	10
87	Klystron-like cavity with mode transformation for high-harmonic terahertz gyrotrons. <i>Physics of Plasmas</i> , <b>2013</b> , 20, 014503	2.1	21
86	Parametric phase locking in an electron rf oscillator. <i>Physical Review Letters</i> , <b>2013</b> , 110, 174801	7.4	1
85	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
84	The reflex gyrotron. <i>Physics of Plasmas</i> , <b>2012</b> , 19, 024505	2.1	2

83	Numerical simulations of a co-harmonic gyrotron. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 065105	3	4
82	Electron cyclotron maser based on the combination two-wave resonance. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 094509	2.5	
81	Super-radiant Cherenkov backward-wave oscillator with cyclotron absorption. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 193506	3.4	6
80	The multi-mode gyrotron. <i>Physics of Plasmas</i> , <b>2011</b> , 18, 104502	2.1	2
79	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
78	Q-switching in the electron backward-wave oscillator. <i>Physics of Plasmas</i> , <b>2011</b> , 18, 103102	2.1	13
77	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
76	High-harmonic gyrotron with sectioned cavity. <i>Physics of Plasmas</i> , <b>2010</b> , 17, 073101	2.1	35
75	Cyclotron frequency multiplication in Cherenkov backward-wave oscillators. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 063103	2.1	5
74	Progress in studying a self-excited gyromultiplier <b>2009</b> ,		1
73	High-harmonic gyrotron with sectioned cavity. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 073503	3.4	22
72	Experimental study of a fourth-harmonic gyromultiplier. <i>Physics of Plasmas</i> , <b>2009</b> , 16, 070701	2.1	25
71	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
70	Terahertz high-harmonic gyrotrons and gyro-multipliers <b>2008</b> ,		2
69	Stability of frequency-multiplying harmonic gyroklystrons. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 013112	2.1	13
68	Electron energy recuperation in gyrodevices. <i>Physics of Plasmas</i> , <b>2008</b> , 15, 073104	2.1	4
67	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
66	On the theory of frequency-quadrupling gyroklystrons. <i>Physics of Plasmas</i> , <b>2007</b> , 14, 053113	2.1	23

65	Dynamics of excitation of backward waves in long inhomogeneous systems. <i>Physics of Plasmas</i> , <b>2007</b> , 14, 113104	2.1	21
64	Progress in development of powerful sub-mm Bragg FEM based on moderately relativistic electron beam <b>2006</b> ,		1
63	New Schemes of High-harmonic Gyro-devices with Frequency Multiplication <b>2006</b> ,		2
62	Sources of Coherent Terahertz Radiation. <i>AIP Conference Proceedings</i> , <b>2006</b> ,	0	17
61	Frequency multiplication in gyrotron autooscillators. <i>Technical Physics Letters</i> , <b>2006</b> , 32, 84-87	0.7	8
60	Cyclotron resonance maser operating in a nonresonant electron bunching regime. <i>Technical Physics Letters</i> , <b>2006</b> , 32, 6-9	0.7	1
59	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
58	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
57	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	
56	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
55	Regime of nonresonant trapping in a CARM oscillator. <i>IEEE Transactions on Plasma Science</i> , <b>2004</b> , 32, 929-933	1.3	3
54	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
53	Regime of non-resonant trapping in a Bragg-cavity FEM oscillator <b>2004</b> , 67-70		
52	Gyrodevices with Axis-Encircling Electron Beams. <i>AIP Conference Proceedings</i> , <b>2003</b> ,	0	1
51	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
50	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
49	Submillimeter moderately relativistic free-electron maser <b>2003</b> , 162-165		
48	Regime of non-resonant trapping in an FEM-amplifier <b>2003</b> , 158-161		

47	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
46	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
45	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	
44	Free-electron RF-pulse compressor. <i>Physical Review Letters</i> , <b>2002</b> , 88, 064801	7.4	0
43	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
42	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
41	A high power, tunable free electron maser for fusion. <i>Fusion Engineering and Design</i> , <b>2001</b> , 53, 423-430	1.7	4
40	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
39	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
38	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
37	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
36	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
35	Stimulated wave scattering in the Smith-Purcell FEL. <i>IEEE Transactions on Plasma Science</i> , <b>2001</b> , 29, 820-823	1.3	2
34	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	
33	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
32	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
31	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
30	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

29	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
28	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
27	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
26	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
25	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
24	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
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21	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
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19	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
18	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
17	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
16	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
15	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
14	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	
13	Simulations of the build-up of transverse and longitudinal structures of the microwave field in the Fusion FEM <b>1998</b> , 40-44		0
12	New opportunity of efficiency enhancement for FEL-oscillators <b>1998</b> , 480-484		

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10	Negative-mass instability in magnetron-injection guns. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 2276-2284	2.1	15
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