## Olgerts Dumbrajs

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8587983/publications.pdf

Version: 2024-02-01

237 papers

3,262 citations

28 h-index 206112 48 g-index

239 all docs

239 docs citations

times ranked

239

1025 citing authors

#	Article	IF	Citations
1	Compilation of coupling constants and low-energy parameters. Nuclear Physics B, 1983, 216, 277-335.	2.5	553
2	A 2-MW, 170-GHz Coaxial Cavity Gyrotron. IEEE Transactions on Plasma Science, 2004, 32, 413-417.	1.3	113
3	Frequency step-tunable (114–170 GHz) megawatt gyrotrons for plasma physics applications. Fusion Engineering and Design, 2001, 53, 407-421.	1.9	97
4	Coaxial Gyrotrons: Past, Present, and Future (Review). IEEE Transactions on Plasma Science, 2004, 32, 934-946.	1.3	89
5	Theory of gyrotrons with coaxial resonators. IEEE Transactions on Electron Devices, 1994, 41, 433-438.	3.0	85
6	First Experimental Results from the European Union 2-MW Coaxial Cavity ITER Gyrotron Prototype. Fusion Science and Technology, 2009, 55, 204-212.	1.1	66
7	Calculation of eigenmodes of tapered gyrotron resonators. International Journal of Electronics, 1986, 60, 143-154.	1.4	65
8	Coaxial cavity gyrotron- recent experimental results. IEEE Transactions on Plasma Science, 2002, 30, 819-827.	1.3	64
9	Theory of gyro-backward wave oscillators with tapered magnetic field and waveguide cross section. IEEE Transactions on Plasma Science, 1996, 24, 620-629.	1.3	60
10	Antiprotonic helium and lithium with one or two electrons. Zeitschrift FÃ $\frac{1}{4}$ r Physik A, 1982, 306, 297-300.	1.4	57
11	165-GHz Coaxial Cavity Gyrotron. IEEE Transactions on Plasma Science, 2004, 32, 853-860.	1.3	54
12	Stochastic sawtooth reconnection in ASDEX Upgrade. Nuclear Fusion, 2007, 47, 23-32.	3.5	48
13	Eigenvalues and Ohmic Losses in Coaxial Gyrotron Cavity. IEEE Transactions on Plasma Science, 2006, 34, 1516-1522.	1.3	44
14	Twoâ€harmonic prebunching of electrons in multicavity gyrodevices. Physics of Plasmas, 1995, 2, 568-577.	1.9	43
15	Ohmic Losses in Coaxial Gyrotron Cavities With Corrugated Insert. IEEE Transactions on Plasma Science, 2004, 32, 861-866.	1.3	42
16	Nonstationary oscillations in gyrotrons. Physics of Plasmas, 2001, 8, 4608-4612.	1.9	40
17	High-power gyrotron development at Forschungszentrum Karlsruhe for fusion applications. IEEE Transactions on Plasma Science, 2006, 34, 173-186.	1.3	38
18	A complex cavity with mode conversion for gyrotrons. International Journal of Electronics, 1988, 65, 285-295.	1.4	36

#	Article	IF	CITATIONS
19	Theory of a frequency-step-tunable gyrotron for optimum plasma ECRH. IEEE Transactions on Plasma Science, 1992, 20, 452-457.	1.3	36
20	Influence of reflections on mode competition in gyrotrons. IEEE Transactions on Plasma Science, 2000, 28, 588-596.	1.3	34
21	Towards a 2 MW, CW, 170 GHz coaxial cavity gyrotron for ITER. Fusion Engineering and Design, 2003, 66-68, 481-485.	1.9	34
22	Perturbative particle transport studies in the W7-AS stellarator. Nuclear Fusion, 2000, 40, 365-378.	3.5	33
23	EU developments of the ITER ECRH system. Fusion Engineering and Design, 2007, 82, 454-462.	1.9	33
24	Structure and dynamics of sawteeth crashes in ASDEX Upgrade. Physics of Plasmas, 2010, 17, .	1.9	33
25	Mode competition using TE <sup>03</sup> gyrotron cavities. International Journal of Electronics, 1992, 72, 687-720.	1.4	31
26	Kinetic theory of electron-cyclotron resonance masers with asymmetry of the electron beam in a cavity. IEEE Transactions on Plasma Science, 1992, 20, 126-132.	1.3	29
27	Generalized gyrotron theory with inclusion of electron velocity and energy spreads. Physics of Plasmas, 1999, 6, 2618-2621.	1.9	28
28	Stochastization as a possible cause for fast reconnection during MHD mode activity in the ASDEX Upgrade tokamak. Nuclear Fusion, 2006, 46, 741-751.	3.5	28
29	High-Speed Frequency Modulation of a 460-GHz Gyrotron for Enhancement of 700-MHz DNP-NMR Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2015, 36, 819-829.	2.2	28
30	Influence of Reflections on Frequency Tunability and Mode Competition in the Second-Harmonic THz Gyrotron. Journal of Infrared, Millimeter, and Terahertz Waves, 2017, 38, 824-837.	2.2	28
31	Hysteresis-like effects in gyrotron oscillators. Physics of Plasmas, 2003, 10, 1183-1186.	1.9	27
32	Microscopic calculation of antiproton atomic-like bound states in light nuclei. Nuclear Physics A, 1986, 457, 491-517.	1.5	26
33	Design of a 3-MW 140-GHz gyrotron with a coaxial cavity. IEEE Transactions on Plasma Science, 1996, 24, 586-595.	1.3	26
34	A low-dimensional model system for quasi-periodic plasma perturbations. Physics of Plasmas, 2011, 18, .	1.9	24
35	Effect of technical noise on radiation linewidth in free-running gyrotron oscillators. Physics of Plasmas, 1997, 4, 1413-1423.	1.9	23
36	Mode competition in a gyrotron with tapered external magnetic field. International Journal of Electronics, 1988, 64, 137-145.	1.4	22

#	Article	IF	CITATIONS
37	A 2 MW, 170 GHz coaxial cavity gyrotron - experimental verification of the design of main components. Journal of Physics: Conference Series, 2005, 25, 24-32.	0.4	22
38	Effect of electron beam misalignments on the gyrotron efficiency. Physics of Plasmas, 2013, 20, .	1.9	22
39	Wave interaction in gyrotrons with offâ€axis electron beams. Physics of Plasmas, 1995, 2, 4621-4630.	1.9	21
40	Development of a 2-MW, CW Coaxial Gyrotron at 70 GHz and Test Facility for ITER. Journal of Physics: Conference Series, 2005, 25, 33-44.	0.4	21
41	Insert misalignment in coaxial cavities and its influence on gyrotron operation. International Journal of Electronics, 1997, 82, 261-268.	1.4	20
42	Reflections in Gyrotrons With Axial Output. IEEE Transactions on Plasma Science, 2004, 32, 899-902.	1.3	20
43	Optimization of multistage harmonic gyrodevices. Physics of Plasmas, 1996, 3, 3133-3144.	1.9	19
44	Tunable coaxial gyrotron for plasma heating and diagnostics. International Journal of Electronics, 1998, 84, 411-419.	1.4	19
45	Transition from quasiperiodicity to chaos just before sawtooth crash in the ASDEX Upgrade tokamak. Nuclear Fusion, 2008, 48, 062001.	3.5	19
46	Analyticity in hadron-nuclei binary reactions. Physics Reports, 1975, 19, 141-168.	25.6	18
46	Analyticity in hadron-nuclei binary reactions. Physics Reports, 1975, 19, 141-168.  Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz Waves, 1994, 15, 1255-1262.	25.6	18
	Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz		
47	Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz Waves, 1994, 15, 1255-1262.  To the theory of high-power gyrotrons with uptapered resonators. Physics of Plasmas, 2010, 17,	0.6	18
47	Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz Waves, 1994, 15, 1255-1262.  To the theory of high-power gyrotrons with uptapered resonators. Physics of Plasmas, 2010, 17, 053104.  Resonator design studies for a 150 GHz gyrotron at Kf K. International Journal of Electronics, 1988, 64,	0.6	18
48	Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz Waves, 1994, 15, 1255-1262.  To the theory of high-power gyrotrons with uptapered resonators. Physics of Plasmas, 2010, 17, 053104.  Resonator design studies for a 150 GHz gyrotron at Kf K. International Journal of Electronics, 1988, 64, 107-126.	0.6 1.9 1.4	18 18 17
47 48 49 50	Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz Waves, 1994, 15, 1255-1262.  To the theory of high-power gyrotrons with uptapered resonators. Physics of Plasmas, 2010, 17, 053104.  Resonator design studies for a 150 GHz gyrotron at Kf K. International Journal of Electronics, 1988, 64, 107-126.  Theory of relativistic cyclotron masers. Physical Review E, 1995, 52, 998-1012.  Calculations of Starting Currents and Frequencies in Frequency-Tunable Gyrotrons. Japanese Journal	0.6 1.9 1.4 2.1	18 18 17 17
47 48 49 50	Eccentricity of the electron beam in a gyrotron cavity. Journal of Infrared, Millimeter and Terahertz Waves, 1994, 15, 1255-1262.  To the theory of high-power gyrotrons with uptapered resonators. Physics of Plasmas, 2010, 17, 053104.  Resonator design studies for a 150 GHz gyrotron at Kf K. International Journal of Electronics, 1988, 64, 107-126.  Theory of relativistic cyclotron masers. Physical Review E, 1995, 52, 998-1012.  Calculations of Starting Currents and Frequencies in Frequency-Tunable Gyrotrons. Japanese Journal of Applied Physics, 2012, 51, 126601.  Parameter studies for a 150ÂGHz gyrotron operating in the TE031 mode. International Journal of	0.6 1.9 1.4 2.1	18 18 17 17 17

#	Article	IF	CITATIONS
55	Cold-cavity and self-consistent approaches in the theory of mode competition in gyrotrons. IEEE Transactions on Plasma Science, 1992, 20, 133-138.	1.3	15
56	A cavity with reduced mode conversion for gyrotrons. Journal of Infrared, Millimeter and Terahertz Waves, 1992, 13, 825-840.	0.6	15
57	Design of a high order volume mode cavity for a l MW/140GHz gyrotron. International Journal of Electronics, 1995, 78, 771-787.	1.4	15
58	Electron density profile reconstruction from multichannel microwave interferometer data at W7-AS. Review of Scientific Instruments, 1997, 68, 4038-4042.	1.3	15
59	Field Formation in the Interaction Space of Gyrotrons. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 111-122.	2.2	15
60	Calculations of Starting Currents and Frequencies in Frequency-Tunable Gyrotrons. Japanese Journal of Applied Physics, 2012, 51, 126601.	1.5	15
61	Analysis ofπ±â^'C12elastic scattering. Physical Review C, 1984, 29, 581-591.	2.9	14
62	Analysis of electron trajectories in a gyrotron resonator. IEEE Transactions on Plasma Science, 1998, 26, 846-853.	1.3	14
63	Electron cyclotron heating and current drive control by means of frequency step tunable gyrotrons. Nuclear Fusion, 2001, 41, 927-944.	3.5	14
64	Phenomenological analyses of antiproton elastic scattering data. Nuclear Physics A, 1985, 446, 637-656.	1.5	13
65	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
66	Start-up scenario of a 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
67	Technical noise in gyroklystrons and phase-locked gyrotron oscillators. Physics of Plasmas, 1997, 4, 1424-1433.	1.9	12
68	Design of rapid-frequency step-tunable powerful coaxial-cavity harmonic gyrotrons. IEEE Transactions on Plasma Science, 2000, 28, 681-687.	1.3	12
69	Traces of Stochasticity in Electron Trajectories in Gyrotron Resonators. Journal of Infrared, Millimeter and Terahertz Waves, 2000, 21, 1759-1776.	0.6	12
70	Spatio-temporal chaos in the transverse section of gyrotron resonators. IEEE Transactions on Plasma Science, 2002, 30, 846-850.	1.3	12
71	Generalized gyrotron theory with inclusion of adiabatic electron trapping in the presence of a depressed collector. Physics of Plasmas, 2001, 8, 1358.	1.9	11
72	Influence of reflections on the operation of the 2ÂMW, CW 170ÂGHz coaxial cavity gyrotron for ITER. Nuclear Fusion, 2003, 43, 1454-1457.	3.5	11

#	Article	IF	CITATIONS
73	Linear and Non-Linear Inserts for Genuinely Wideband Continuous Frequency Tunable Coaxial Gyrotron Cavities. Journal of Infrared, Millimeter and Terahertz Waves, 2008, 29, 416-423.	0.6	11
74	Frequency Tunable Gyrotron FU CW VA for Measuring Hyperfine Split of Positronium. Journal of Infrared, Millimeter, and Terahertz Waves, 2010, 31, 1265-1270.	2.2	11
75	Simulation and experimental investigations on dynamic after cavity interaction (ACI)., 2010,,.		11
76	On optimization of sub-THz gyrotron parameters. Physics of Plasmas, 2012, 19, .	1.9	11
77	On the dependence of the efficiency of a 240 GHz high-power gyrotron on the displacement of the electron beam and on the azimuthal index. Physics of Plasmas, 2014, 21, .	1.9	11
78	Self-consistent non-stationary theory of the gyrotron. Physics of Plasmas, 2016, 23, .	1.9	11
79	Signals ofW±andZ0production in hadronic collisions as predicted by quantum-chromodynamics perturbation theory. Physical Review D, 1979, 20, 2873-2887.	4.7	10
80	Influence of the magnetic field tapering on gyrotron operation. International Journal of Electronics, 1991, 70, 1131-1141.	1.4	10
81	Space charge effects as a source of electron energy spread and efficiency degradation in gyrotrons. IEEE Transactions on Plasma Science, 2000, 28, 633-637.	1.3	10
82	Autoregressive moving average model for analyzing edge localized mode time series on Axially Symmetric Divertor Experiment (ASDEX) Upgrade tokamak. Physics of Plasmas, 2004, 11, 5658-5667.	1.9	10
83	Reflections in gyrotrons with radial output: Consequences for the ITER coaxial gyrotron. Physics of Plasmas, 2004, 11, 5423-5429.	1.9	10
84	Stochastization as a possible cause of fast reconnection in the frequently interrupted regime of neoclassical tearing modes. Physics of Plasmas, 2005, 12, 110704.	1.9	10
85	Hysteresis and Frequency Tunability of Gyrotrons. Journal of Infrared, Millimeter, and Terahertz Waves, 2016, 37, 551-560.	2.2	10
86	Competition of modes resonant with arbitrary cyclotron harmonics in a gyrotron with nonfixed axial structure of the high-frequency field. IEEE Transactions on Plasma Science, 1990, 18, 301-305.	1.3	9
87	Stochastic processes in gyrotrons. Nuclear Fusion, 2003, 43, 1446-1453.	3.5	9
88	Canonical perturbation theory for complex electron dynamics in gyrotron resonators. Physics of Plasmas, 2005, 12, 113102.	1.9	9
89	Efficiency of gyrotrons with a tapered magnetic field in the regime of soft self-excitation. Physics of Plasmas, 2018, 25, .	1.9	9
90	Phenomenological Dispersion Theory of pp, pì,,p Forward Scattering. Fortschritte Der Physik, 1975, 23, 399-429.	4.4	8

#	Article	IF	CITATIONS
91	On the π3He3He coupling. Annals of Physics, 1979, 118, 249-258.	2.8	8
92	On the determination of the π3He3He coupling on the basis of PCAC. Journal of Physics G: Nuclear Physics, 1980, 6, L9-L11.	0.8	8
93	Azimuthal instability of radiation in gyrotrons with overmoded resonators. Physics of Plasmas, 2005, 12, 053106.	1.9	8
94	Influence of Possible Reflections on the Operation of European ITER Gyrotrons. Journal of Infrared, Millimeter, and Terahertz Waves, 2010, 31, 892.	2.2	8
95	Is there any use for derivative analyticity relations?. Journal of Physics G: Nuclear Physics, 1976, 2, L129-L131.	0.8	7
96	Determination of the Ï€3He3He coupling constant from data on the p3Hâ†'n3He differential cross section. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1978, 78, 24-25.	4.1	7
97	Gyrotrons for technological applications. International Journal of Electronics, 1994, 76, 351-364.	1.4	7
98	On the negative-mass instability in gyrotrons. International Journal of Electronics, 2001, 88, 215-224.	1.4	7
99	Full wave analysis of coaxial gyrotron cavity with corrugated insert. , 0, , .		7
100	The search for chaotic edge localized modes in ASDEX Upgrade. Plasma Physics and Controlled Fusion, 2004, 46, 1409-1422.	2.1	7
101	Hysteresis in Mode Competition in High Power 170ÂGHz Gyrotron for ITER. Journal of Infrared, Millimeter and Terahertz Waves, 2008, 29, 232-239.	0.6	7
102	Diffusion in a stochastic magnetic field in ASDEX Upgrade. Nuclear Fusion, 2008, 48, 024011.	3.5	7
103	Design of the EU-1MW gyrotron for ITER. , 2013, , .		7
104	Zones of soft and hard self-excitation in gyrotrons: Generalized approach. Physics of Plasmas, 2020, 27, .	1.9	7
105	GYROCOMPU: Toolbox Designed for the Analysis of Gyrotron Resonators. IEEE Transactions on Plasma Science, 2020, 48, 3007-3016.	1.3	7
106	Estimation of the coupling 4Hedd. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1975, 57, 327-329.	4.1	6
107	Dispersion relation analysis of proton compton scattering. Nuclear Physics B, 1979, 149, 264-268.	2.5	6
108	The π3He3He coupling constant and the p3H → n3He charge exchange. Lettere Al Nuovo Cimento Rivista Internazionale Della Società Italiana Di Fisica, 1980, 29, 69-72.	0.4	6

#	Article	IF	Citations
109	Analytic Parametrizations for Nuclear Form Factors. Zeitschrift Fýr Physik A, 1981, 301, 55-57.	1.4	6
110	Resonator for a frequency-step tunable gyrotron. International Journal of Electronics, 1990, 68, 885-890.	1.4	6
111	2.2 MW, 165 GHz coaxial cavity gyrotron. , 0, , .		6
112	Novel method of improving performance of coaxial gyrotron resonators. IEEE Transactions on Plasma Science, 2002, 30, 836-839.	1.3	6
113	Chaotic electron dynamics in gyrotron resonators. Physics of Plasmas, 2005, 12, 043104.	1.9	6
114	Hamiltonian map description of electron dynamics in gyrotrons. IEEE Transactions on Plasma Science, 2006, 34, 673-680.	1.3	6
115	Regions of azimuthal instability in gyrotrons. Physics of Plasmas, 2012, 19, 063103.	1.9	6
116	Theoretical Study of the Effect of Electron Beam Misalignment on Operation of the Gyrotron FU IV A. IEEE Transactions on Plasma Science, 2014, 42, 1586-1593.	1.3	6
117	FIRST EXPERIMENTAL RESULTS FROM THE EU 2 MW COAXIAL CAVITY ITER GYROTRON PROTOTYPE. , 2009, , .		6
118	Dispersion relations for the logarithm of the K $\hat{A}$ ±p forward scattering amplitude. Journal of Physics G: Nuclear Physics, 1975, 1, 172-179.	0.8	5
119	Present status of the experimental testing of the forward K+-p and pp, $\hat{A}^-$ pp dispersion relations. European Physical Journal D, 1976, 26, 68-80.	0.4	5
120	Analyticity and model-independent determination of the nuclear charge density. Physical Review C, 1980, 21, 1677-1679.	2.9	5
121	Dispersion relations in atomic physics. Journal of Physics B: Atomic and Molecular Physics, 1982, 15, 961-975.	1.6	5
122	Low-energy scattering parameters and atomic level shifts in the pl, 160, pl, 32S and pl, 40Ca systems. Nuclear Physics A, 1984, 412, 195-200.	1.5	5
123	Multifrequency operation of a gyrotron. IEEE Transactions on Plasma Science, 1999, 27, 327-329.	1.3	5
124	Constraints on the short-range potential from the energy level shifts in protonium. Zeitschrift FÃ $\frac{1}{4}$ r Physik A, 1984, 319, 87-89.	1.4	4
125	Fast Frequency-Step-Tunable Gyrotrons for Plasma Heating and Fusion Diagnostics. Fusion Science and Technology, 1994, 26, 561-565.	0.6	4
126	A multifrequency gyrotron for plasma heating and diagnostics. Journal of Infrared, Millimeter and Terahertz Waves, 1997, 18, 2111-2115.	0.6	4

#	Article	IF	CITATIONS
127	Development of Advanced High Power Gyrotrons at Forschungszentrum Karlsruhe. Frequenz, 2001, 55,	0.9	4
128	Mode Selection for a Terahertz Gyrotron Based on a Pulse Magnet System. Journal of Infrared, Millimeter and Terahertz Waves, 2004, 25, 1023-1036.	0.6	4
129	TM Modes in Coaxial Cavities With Inner Surface Corrugations. IEEE Transactions on Plasma Science, 2008, 36, 2613-2617.	1.3	4
130	On the accuracy of some mapping techniques used to study the magnetic field dynamics in tokamaks. Nuclear Fusion, 2008, 48, 024017.	3.5	4
131	Electron dynamics in the process of mode switching in gyrotrons. Physics of Plasmas, 2009, 16, .	1.9	4
132	The non-resonant kink modes triggering strong sawtooth-like crashes in the EAST tokamak. Plasma Physics and Controlled Fusion, 2014, 56, 125016.	2.1	4
133	Multimode time-dependent gyrotron equations for different time scales. Physics of Plasmas, 2017, 24, .	1.9	4
134	To the Theory of Gyrotrons with Wide Emitters. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 141-151.	2.2	4
135	Analysis of equations arising in gyrotron theory. Nonlinear Analysis: Modelling and Control, 2012, 17, 139-152.	1.6	4
136	Pole and quark-counting model for form factors of light nuclei. Zeitschrift FÃ $\frac{1}{4}$ r Physik A, 1977, 280, 249-252.	1.4	3
137	Analytic representation for form factors and determination of radii of hadrons and light nuclei. Zeitschrift FÃ1⁄4r Physik A, 1977, 280, 383-384.	1.4	3
138	Kaon-nucleus scattering and kaon nuclear coupling constants. Il Nuovo Cimento A, 1979, 54, 155-164.	0.2	3
139	Pion coupling to theA=6,A=12, andA=14nuclei. Physical Review C, 1980, 22, 2151-2155.	2.9	3
140	The (?+??), (?+ K ?), (?? ?+), (K + K ?), and \$\$(overline {Sigma ^ + } Sigma ^ + )\$\$ Atomic States. Zeitschrift Fýr Physik A, 1985, 321, 297-299.	1.4	3
141	Scattering Lengths Derived from Atomic Level Shifts in Light Antiprotonic Atoms. Physica Scripta, 1985, 31, 485-486.	2.5	3
142	On a self-consistent calculation of the self-modulation instability in gyrotrons operating in whispering gallery modes. Journal of Infrared, Millimeter and Terahertz Waves, 1990, 11, 61-67.	0.6	3
143	Nonstationary theory of mode competition in gyrotrons with allowance for small inhomogeneity of the guiding magnetic field. Journal of Applied Physics, 1994, 76, 5580-5585.	2.5	3
144	Experimental results and technical requirements for a 2 MW, CW, 170 GHz coaxial cavity gyrotron. , 0, , .		3

#	Article	IF	CITATIONS
145	Search for deterministic chaos in ELM time series of ASDEX upgrade Tokamak. IEEE Transactions on Plasma Science, 2005, 33, 1115-1122.	1.3	3
146	Are Coaxial Super Power Gyrotrons Feasible?. Journal of Infrared, Millimeter and Terahertz Waves, 2005, 26, 787-805.	0.6	3
147	Mode competition in the 170 GHz coaxial gyrotron cavity for ITER. , 2007, , .		3
148	Explicit near-symplectic mappings of Hamiltonian systems with Lie-generating functions. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 115202.	2.1	3
149	Gyrotron mode competition calculations: Investigations on the choice of numerical parameters. , 2008, , .		3
150	Influence of possible reflections on the operation of European ITER gyrotrons. , 2010, , .		3
151	Understanding complex magnetohydrodynamic activities associated with a relaxation in the HT-7 tokamak. Plasma Physics and Controlled Fusion, 2011, 53, 085019.	2.1	3
152	Experimental verification of a self-consistent calculation for continuous frequency-tune with a 400 GHz band second harmonic gyro-BWO. , 2013, , .		3
153	Theoretical Study on the 1.185-THz Third Harmonic Gyrotron. Journal of Infrared, Millimeter, and Terahertz Waves, 2018, 39, 177-182.	2.2	3
154	Functional Analysis Method for Nonlinear Theory of Gyrotrons. IEEE Transactions on Plasma Science, 2019, 47, 3141-3147.	1.3	3
155	ELECTRON TRAJECTORIES IN A REALISTIC GYROTRON RESONATOR. Mathematical Modelling and Analysis, 1998, 3, 74-80.	1.5	3
156	NUMERICAL SOLUTION OF SINGLE MODE GYROTRON EQUATION. Mathematical Modelling and Analysis, 2005, 9, 25-38.	1.5	3
157	Comment on the real part of the K±p forward scattering amplitude. Nuclear Physics B, 1977, 126, 542-544.	2.5	2
158	Ion-atom dispersion relations. Journal of Physics B: Atomic and Molecular Physics, 1982, 15, L341-L344.	1.6	2
159	Possible operation of the KfK gyrotron at harmonics. Journal of Infrared, Millimeter and Terahertz Waves, 1988, 9, 1067-1086.	0.6	2
160	Diagnostics of density fluctuations by enhanced scattering with frequency-tunable microwave sources. Journal of Infrared, Millimeter and Terahertz Waves, 1995, 16, 307-315.	0.6	2
161	Design considerations for a multi-megawatt coaxial cavity gyrotron at 170 GHz., 0,,.		2
162	Reflections in gyrotrons with radial output: consequences for the ITER coaxial gyrotron. , $0$ , , .		2

#	Article	IF	Citations
163	Progress in the development of the 170 GHz coaxial cavity gyrotron., 0,,.		2
164	Sightline optimization of the multichannel laser interferometer for W7-X. Review of Scientific Instruments, 2005, 76, 023501.	1.3	2
165	Progress in Development of the 170 GHz, 2MW Coaxial Cavity Gyrotron for ITER., 2006, , .		2
166	INFLUENCE OF MAGNETIC FIELD INHOMOGENEITY ON OPERATION OF THE THz GYROTRON WITH A PULSE MAGNET. Journal of Infrared, Millimeter and Terahertz Waves, 2007, 27, 1159-1171.	0.6	2
167	REVIEW OF THE EUROPEAN PROGRAMME FOR THE DEVELOPMENT OF THE GYROTRON FOR ITER. , 2009, , .		2
168	Analysis of Aftercavity Interaction in European ITER Gyrotrons and in the Compact Sub-THz Gyrotron FU CW-CI. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 1171-1181.	2.2	2
169	NUMERICAL EXPERIMENTS WITH SINGLE MODE GYROTRON EQUATIONS. Mathematical Modelling and Analysis, 2012, 17, 251-270.	1.5	2
170	Possible gyrotron operation in the "no start current―zone caused by the axial dependence of the phase of the resonator field. Physics of Plasmas, 2018, 25, 093108.	1.9	2
171	Shadowing of the operating mode by sidebands in gyrotrons with diode-type electron guns. Physics of Plasmas, 2021, 28, 013110.	1.9	2
172	THE GYROTRON STARTUP SCENARIO IN THE SINGLE MODE TIME DEPENDENT APPROACH. Mathematical Modelling and Analysis, 2019, 24, 494-506.	1.5	2
173	Evaluation of the medium-energy real parts of the forward p-4He elastic scattering amplitude from dispersion relations. Journal of Physics G: Nuclear Physics, 1976, 2, 795-801.	0.8	1
174	Electron scattering with the excitation of the 15.11 MeV state of 12C and the? 12B12C coupling constant. Zeitschrift FÃ $\frac{1}{4}$ r Physik A, 1980, 298, 61-63.	1.4	1
175	Positron-atom dispersion relations. Physical Review A, 1983, 27, 220-224.	2.5	1
176	Rapidly convergent effective range formula. Physical Review C, 1984, 29, 670-671.	2.9	1
177	Model-independent analysis of the differential cross section for the reaction $n+d$ ??0+t at medium energies. Zeitschrift Fýr Physik A, 1984, 316, 43-47.	1.4	1
178	Low-energy antiproton scattering by atoms and Coulomb level shifts. Physical Review A, 1985, 32, 637-638.	2.5	1
179	Resonator with a curved wall for a gyrotron. IEEE Transactions on Plasma Science, 1989, 17, 841-843.	1.3	1
180	Magnetic field tapering in the KfK coaxial gyrotron. Journal of Infrared, Millimeter and Terahertz Waves, 1995, 16, 473-482.	0.6	1

#	Article	IF	CITATIONS
181	Kinetic model of collective scattering off fast ion generated electromagnetic fluctuations in magnetized Vlasov plasma. Physics of Plasmas, 1996, 3, 696-698.	1.9	1
182	On determination of the particle pinch coefficient from data on gas modulation experiments. Plasma Physics and Controlled Fusion, 1998, 40, 447-449.	2.1	1
183	Frequency-step-tunable high-power gyrotron for plasma physics applications. , 0, , .		1
184	The reflection influence at powerful gyrotron complex operation., 0,,.		1
185	Hysteresis in gyrotrons. , 0, , .		1
186	QUANTUM CHAOS AND SYMMETRIES IN NUCLEAR SPECTROSCOPY., 2003,,.		1
187	Correction to "Spatio-Temporal Chaos in the Transverse Section of Gyrotron Resonators― IEEE Transactions on Plasma Science, 2004, 32, 2155-2155.	1.3	1
188	Design of Cavities for a Short Pulse Powerful Large Orbit Gyrotron. Journal of Infrared, Millimeter and Terahertz Waves, 2005, 26, 637-655.	0.6	1
189	Gyrotron Development in EU for Present and Future Fusion Plasma Experiments. , 2006, , .		1
190	Dynamics and Output Momentum Spectrum of Electrons Under Harmonic Resonance in Gyrotron Resonators. AIP Conference Proceedings, 2006, , .	0.4	1
191	Gyrotron Development in the EU for Present Fusion Experiments and for ITER. AIP Conference Proceedings, 2006, , .	0.4	1
192	Status of development of the 2MW, 170GHz coaxial-cavity gyrotron for ITER. , 2008, , .		1
193	Gyrotron interaction simulations with tapered magnetostatic field. , 2010, , .		1
194	To the theory of high-power gyrotrons with uptapered resonators. , 2010, , .		1
195	Temporal evolution of neoclassical tearing modes in the frequently interrupted regime. Physics of Plasmas, 2010, 17, 042118.	1.9	1
196	On the numerical scheme employed in gyrotron interaction simulations. EPJ Web of Conferences, 2012, 32, 04017.	0.3	1
197	Stability of gyrotron operation in very high-order modes. , 2014, , .		1
198	High speed frequency modulation of a 460 GHz gyrotron for application to the 700 MHz DNP enhanced NMR spectroscopy. , 2015, , .		1

#	Article	IF	CITATIONS
199	Third harmonic CW gyrotron with operating frequency 1.2 THz for a DNP /NMA spectroscopy. , 2019, , .		1
200	Development of High Power 140 GHz Gyrotrons at KfK for Applications in Fusion., 1993,, 618-622.		1
201	Hysteresis in Sawtooth Crash in ASDEX Upgrade Tokamak. The Open Plasma Physics Journal, 2009, 1, 9-13.	0.7	1
202	STATUS OF EXPERIMENTS ON THE EU 2 MW COAXIAL CAVITY ITER GYROTRON PRE-PROTOTYPE AT FZK. , 2009, , .		1
203	Symmetry breaking in coaxial cavities and its influence on gyrotron operation. , 1995, , 521-524.		1
204	Mode Excitation in Gyrotrons With Triode-Type Electron Guns. IEEE Transactions on Electron Devices, 2022, 69, 785-791.	3.0	1
205	Determination of the 7Be 4He 3He coupling by a dispersion analysis of 3He + 4He scattering. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ Altaliana Di Fisica, 1978, 23, 48-50.	0.4	O
206	Backward dispersion relations and pion-4He phase-shift analyses. Il Nuovo Cimento A, 1979, 51, 81-87.	0.2	0
207	Extraction of nuclear coupling constants from data on nuclear charge form factors. Zeitschrift Für Physik A, 1981, 303, 235-237.	1.4	O
208	Pion Coupling to Nuclei. Fortschritte Der Physik, 1981, 29, 487-494.	4.4	0
209	Analytic parametrization for nuclear form factors. Physical Review C, 1982, 26, 680-684.	2.9	O
210	Frequency Step-Tunable Gyrotron. , 1988, 1039, 282.		0
211	Resonator With A Curved Wall For A Gyrotron. Proceedings of SPIE, 1988, 1039, 373.	0.8	O
212	Efficiency of a gyrotron operating in modes with axial index equal to two. International Journal of Electronics, 1990, 68, 877-883.	1.4	0
213	Competition between co- and counter-rotating modes in gyrotrons. International Journal of Electronics, 1992, 72, 683-686.	1.4	O
214	Maximum-entropy method and oscillations in the diffraction cone. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, 1321-1326.	3.6	0
215	Development of high power gyrotrons forfusion plasma applications in the EU., 0,,.		О
216	Modeling of stochastic processes in gyrotrons. , 0, , .		0

#	Article	IF	CITATIONS
217	Numerical Study of the Hamiltonian Gyrotron Map. , 2006, , .		O
218	Wideband continuous frequency tunable coaxial gyrotron oscillators., 2007,,.		0
219	Investigations on an experimental 170 GHz coaxial cavity gyrotron. , 2007, , .		0
220	Electron dynamics in the process of mode switching in gyrotrons. , 2008, , .		0
221	Effect of the tilt on the gyrotron operation. , 2013, , .		0
222	Dependence of the gyrotron efficiency on the azimuthal index of non-symmetric modes. Physics of Plasmas, 2014, 21, 063112.	1.9	0
223	Hysteresis and frequency tunability of gyrotrons. , 2015, , .		0
224	Start-up scenario of a high-power pulsed gyrotron for 300 GHz band collective Thomson scattering diagnostics in the Large Helical Device. , $2016,  .$		0
225	Using of reflections for expansion of frequency tuning in a THz-band gyrotron. , 2017, , .		0
226	Gyrotron Operation in the â€~No-Start-Current' Zone. , 2018, , .		0
227	Study of Mode Competition in the Third Harmonic Gyrotron with Inclusion of the Electron Velocity Spread and the Beam Width. , 2018, , .		0
228	High Cyclotron Harmonics Excitation in Multi-beam Terahertz Range Gyrotrons. , 2019, , .		0
229	Optimization of Gyrotron Resonator's Dimensions. Journal of Telecommunications and Information Technology, 0, 1, 71-76.	0.4	0
230	Numerical Simulation of the Problem Arising in the Gyrotron Theory. Mathematics in Industry, 2006, , 124-128.	0.3	0
231	Kaon-Nucleus Scattering, Regeneration and Analyticity. , 1981, , 187-190.		0
232	The Zerology of Kaon-Nucleon Forward Scattering Amplitudes. , 1981, , 139-144.		0
233	The energy shifts of antiprotonic atoms. Lecture Notes in Physics, 1985, , 368-373.	0.7	0
234	Influence of the magnetic field tapering on gyrotron operation. , 1990, , .		0

#	Article	IF	CITATIONS
235	Kinetic theory of a gyrotron with eccentricity of the electron beam in a cavity. , 1991, , .		O
236	Cold-cavity and self-consistent approaches in the theory of mode competition in gyrotrons. , 1991, , .		0
237	Some Advantages of the Gyrotrons with Width Emitters. , 2020, , .		O