Richard J Temkin

List of Publications by Year in descending order

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289 papers 10,778 citations

41344 49 h-index 97 g-index

293 all docs

293 docs citations

times ranked

293

4069 citing authors

#	Article	IF	CITATIONS
1	Vacuum Electronic High Power Terahertz Sources. IEEE Transactions on Terahertz Science and Technology, 2011, 1, 54-75.	3.1	841
2	Dynamic nuclear polarization at high magnetic fields. Journal of Chemical Physics, 2008, 128, 052211.	3.0	734
3	High Frequency Dynamic Nuclear Polarization. Accounts of Chemical Research, 2013, 46, 1933-1941.	15.6	480
4	Dynamic nuclear polarization with a cyclotron resonance maser at 5 T. Physical Review Letters, 1993, 71, 3561-3564.	7.8	417
5	Solid-state dynamic nuclear polarization at 263 GHz: spectrometer design and experimental results. Physical Chemistry Chemical Physics, 2010, 12, 5850.	2.8	315
6	High-Field Dynamic Nuclear Polarization for Solid and Solution Biological NMR. Applied Magnetic Resonance, 2008, 34, 237-263.	1.2	296
7	Generalized nonlinear harmonic gyrotron theory. Physics of Fluids, 1986, 29, 561.	1.4	220
8	Continuous-Wave Operation of a Frequency-Tunable 460-GHz Second-Harmonic Gyrotron for Enhanced Nuclear Magnetic Resonance. IEEE Transactions on Plasma Science, 2010, 38, 1150-1159.	1.3	216
9	Dynamic nuclear polarization at 9T using a novel 250GHz gyrotron microwave source. Journal of Magnetic Resonance, 2003, 160, 85-90.	2.1	209
10	Observation of Frequency-Locked Coherent Terahertz Smith-Purcell Radiation. Physical Review Letters, 2005, 94, 054803.	7.8	206
11	Second Harmonic Operation at 460 GHz and Broadband Continuous Frequency Tuning of a Gyrotron Oscillator. IEEE Transactions on Electron Devices, 2005, 52, 798-807.	3.0	182
12	Modeling the structure of amorphous tetrahedrally coordinated semiconductors. I. Physical Review B, 1974, 9, 5323-5326.	3.2	176
13	High frequency (140 GHz) dynamic nuclear polarization: Polarization transfer to a solute in frozen aqueous solution. Journal of Chemical Physics, 1995, 102, 9494-9497.	3.0	174
14	A Spectrometer for Dynamic Nuclear Polarization and Electron Paramagnetic Resonance at High Frequencies. Journal of Magnetic Resonance Series A, 1995, 117, 28-40.	1.6	163
15	THz Dynamic Nuclear Polarization NMR. IEEE Transactions on Terahertz Science and Technology, 2011, 1, 145-163.	3.1	161
16	250GHz CW gyrotron oscillator for dynamic nuclear polarization in biological solid state NMR. Journal of Magnetic Resonance, 2007, 189, 251-279.	2.1	158
17	Operation of a Continuously Frequency-Tunable Second-Harmonic CW 330-GHz Gyrotron for Dynamic Nuclear Polarization. IEEE Transactions on Electron Devices, 2011, 58, 2777-2783.	3.0	157
18	Observation of Large Arrays of Plasma Filaments in Air Breakdown by 1.5-MW 110-GHz Gyrotron Pulses. Physical Review Letters, 2008, 100, 035003.	7.8	145

#	Article	IF	Citations
19	Single-mode operation of a high-power, step-tunable gyrotron. Physical Review Letters, 1987, 59, 547-550.	7.8	135
20	Photonic-Band-Gap Resonator Gyrotron. Physical Review Letters, 2001, 86, 5628-5631.	7.8	131
21	High-Power 140-GHz Quasioptical Gyrotron Traveling-Wave Amplifier. Physical Review Letters, 2003, 90, 258302.	7.8	131
22	Continuous-wave operation of a 460-GHz second harmonic gyrotron oscillator. IEEE Transactions on Plasma Science, 2006, 34, 524-533.	1.3	128
23	Plasma structures observed in gas breakdown using a 1.5 MW, 110 GHz pulsed gyrotron. Physics of Plasmas, 2009, 16, .	1.9	113
24	Simulation of photonic band gaps in metal rod lattices for microwave applications. Journal of Applied Physics, 2002, 91, 960-968.	2.5	110
25	Cryogenic sample exchange NMR probe for magic angle spinning dynamic nuclear polarization. Journal of Magnetic Resonance, 2009, 198, 261-270.	2.1	108
26	High-Frequency Dynamic Nuclear Polarization in MAS Spectra of Membrane and Soluble Proteins. Journal of the American Chemical Society, 2003, 125, 13626-13627.	13.7	107
27	Photonic-Band-Gap Traveling-Wave Gyrotron Amplifier. Physical Review Letters, 2013, 111, 235101.	7.8	100
28	Demonstration of a 17-GHz, High-Gradient Accelerator with a Photonic-Band-Gap Structure. Physical Review Letters, 2005, 95, 074801.	7.8	99
29	Resolution and polarization distribution in cryogenic DNP/MAS experiments. Physical Chemistry Chemical Physics, 2010, 12, 5861.	2.8	87
30	A 250 GHz gyrotron with a 3 GHz tuning bandwidth for dynamic nuclear polarization. Journal of Magnetic Resonance, 2012, 221, 147-153.	2.1	87
31	Dynamic nuclear polarization at 700MHz/460GHz. Journal of Magnetic Resonance, 2012, 224, 1-7.	2.1	85
32	An Overmoded W-Band Coupled-Cavity TWT. IEEE Transactions on Electron Devices, 2015, 62, 1609-1616.	3.0	83
33	The Design of Megawatt Gyrotrons. IEEE Transactions on Plasma Science, 1985, 13, 364-373.	1.3	82
34	Overview of the ITER EC H&CD system and its capabilities. Fusion Engineering and Design, 2011, 86, 951-954.	1.9	82
35	Submillimeter-wave harmonic gyrotron experiment. IEEE Transactions on Plasma Science, 1990, 18, 334-342.	1.3	74
36	Corrugated waveguide and directional coupler for CW 250-GHz gyrotron DNP experiments. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 1863-1869.	4.6	73

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37	Microwave field distribution in a magic angle spinning dynamic nuclear polarization NMR probe. Journal of Magnetic Resonance, 2011, 210, 16-23.	2.1	73
38	Linearly Polarized Modes of a Corrugated Metallic Waveguide. IEEE Transactions on Microwave Theory and Techniques, 2010, 58, 2772-2780.	4.6	69
39	Design of a Metamaterial-Based Backward-Wave Oscillator. IEEE Transactions on Plasma Science, 2014, 42, 930-936.	1.3	65
40	Operational characteristics of a 14-W 140-GHz gyrotron for dynamic nuclear polarization. IEEE Transactions on Plasma Science, 2006, 34, 518-523.	1.3	64
41	Active negative-index metamaterial powered by an electron beam. Physical Review B, 2012, 86, .	3.2	64
42	Efficient Low-Voltage Operation of a CW Gyrotron Oscillator at 233 GHz. IEEE Transactions on Plasma Science, 2007, 35, 27-30.	1.3	63
43	Sub-wavelength waveguide loaded by a complementary electric metamaterial for vacuum electron devices. Physics of Plasmas, 2014, 21, .	1.9	61
44	Theoretical and experimental investigation of a quasi-optical mode converter for a 110-GHz gyrotron. IEEE Transactions on Plasma Science, 1996, 24, 1058-1066.	1.3	59
45	Two-Dimensional 13Câ^'13C Correlation Spectroscopy with Magic Angle Spinning and Dynamic Nuclear Polarization. Journal of the American Chemical Society, 2002, 124, 3214-3215.	13.7	59
46	Low-loss Transmission Lines for High-power Terahertz Radiation. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 695-714.	2.2	58
47	High efficiency operation of a 140 GHz pulsed gyrotron. International Journal of Electronics, 1984, 57, 835-850.	1.4	55
48	Demonstration of a 140-GHz 1-kW Confocal Gyro-Traveling-Wave Amplifier. IEEE Transactions on Electron Devices, 2009, 56, 818-827.	3.0	55
49	Experimental demonstration of externally driven millimeter-wave particle accelerator structure. Applied Physics Letters, 2020, 117 , .	3.3	53
50	17 GHz photonic band gap cavity with improved input coupling. Physical Review Special Topics: Accelerators and Beams, 2001, 4, .	1.8	50
51	Amplification of Picosecond Pulses in a 140-GHz Gyrotron-Traveling Wave Tube. Physical Review Letters, 2010, 105, 135101.	7.8	50
52	Metamaterial-Inspired Vacuum Electron Devices and Accelerators. IEEE Transactions on Electron Devices, 2019, 66, 207-218.	3.0	48
53	Self-consistent simulation of cyclotron autoresonance maser amplifiers. IEEE Transactions on Plasma Science, 1988, 16, 122-128.	1.3	47
54	Coherent Cherenkov-Cyclotron Radiation Excited by an Electron Beam in a Metamaterial Waveguide. Physical Review Letters, 2016, 117, 237701.	7.8	47

#	Article	IF	CITATIONS
55	Rate equations for an optically-pumped, far infrared laser. Optics Communications, 1976, 16, 213-217.	2.1	46
56	Loss Estimate for ITER ECH Transmission Line Including Multimode Propagation. Fusion Science and Technology, 2010, 57, 196-207.	1.1	46
57	Single-mode operation of a Bragg free-electron maser oscillator. Physical Review Letters, 1994, 72, 2391-2394.	7.8	45
58	Continuously Tunable 250ÂGHz Gyrotron with a Double Disk Window for DNP-NMR Spectroscopy. Journal of Infrared, Millimeter, and Terahertz Waves, 2013, 34, 42-52.	2.2	45
59	Linear theory of an electron cyclotron maser operating at the fundamental. Journal of Infrared, Millimeter and Terahertz Waves, 1980, 1, 195-223.	0.6	44
60	Experimental study of a highâ€frequency megawatt gyrotron oscillator. Physics of Fluids B, 1990, 2, 640-646.	1.7	43
61	Spatial dispersion in metamaterials with negative dielectric permittivity and its effect on surface waves. Optics Letters, 2006, 31, 2051.	3.3	42
62	The EC H&CD Transmission Line for ITER. Fusion Science and Technology, 2011, 59, 709-717.	1.1	42
63	Second Harmonic 527-GHz Gyrotron for DNP-NMR: Design and Experimental Results. IEEE Transactions on Electron Devices, 2020, 67, 328-334.	3.0	41
64	Analytic theory of a tapered gyrotron resonator. Journal of Infrared, Millimeter and Terahertz Waves, 1981, 2, 629-650.	0.6	39
65	Frequency pulling and bandwidth measurements of a 140 GHz pulsed gyrotron. International Journal of Electronics, 1984, 57, 851-862.	1.4	39
66	Generation of High-Power, Reversed-Cherenkov Wakefield Radiation in a Metamaterial Structure. Physical Review Letters, 2019, 122, 014801.	7.8	38
67	Experimental study of a 28 GHz high-power long-pulse cyclotron autoresonance maser oscillator. Physical Review Letters, 1993, 71, 2018-2021.	7.8	37
68	A 140GHz pulsed EPR/212MHz NMR spectrometer for DNP studies. Journal of Magnetic Resonance, 2012, 223, 170-179.	2.1	37
69	Electron density and gas density measurements in a millimeter-wave discharge. Physics of Plasmas, 2016, 23, .	1.9	37
70	A 100 kW, 140 GHz pulsed gyrotron. Journal of Infrared, Millimeter and Terahertz Waves, 1982, 3, 427-437.	0.6	35
71	Experimental study of a megawatt 200–300 GHz gyrotron oscillator. Physics of Fluids B, 1993, 5, 4135-4143.	1.7	35
72	Fabrication and cold test of photonic band gap resonators and accelerator structures. Physical Review Special Topics: Accelerators and Beams, 2005, 8, .	1.8	35

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73	Photonic-band-gap gyrotron amplifier with picosecond pulses. Applied Physics Letters, 2017, 111, 233504.	3.3	35
74	High frequency dynamic nuclear polarization: New directions for the 21st century. Journal of Magnetic Resonance, 2019, 306, 128-133.	2.1	33
75	A tunable far infrared laser. IEEE Journal of Quantum Electronics, 1984, 20, 834-837.	1.9	32
76	Operation of a 140-GHz Gyro-Amplifier Using a Dielectric-Loaded, Severless Confocal Waveguide. IEEE Transactions on Plasma Science, 2017, 45, 2835-2840.	1.3	32
77	Laser-driven semiconductor switch for generating nanosecond pulses from a megawatt gyrotron. Applied Physics Letters, 2019, 114, 164102.	3.3	32
78	Excitation of an atom by a train of short pulses. Journal of the Optical Society of America B: Optical Physics, 1993, 10, 830.	2.1	31
79	Design and emission uniformity studies of a 1.5-MW gyrotron electron gun. IEEE Transactions on Plasma Science, 2002, 30, 2117-2123.	1.3	31
80	Time- and frequency-domain models for Smith-Purcell radiation from a two-dimensional charge moving above a finite length grating. Physical Review E, 2005, 71, 016501.	2.1	30
81	Experimental observation of the effect of aftercavity interaction in a depressed collector gyrotron oscillator. Physics of Plasmas, 2007, 14, .	1.9	30
82	Velocity ratio measurements of a gyrotron electron beam. Journal of Applied Physics, 1991, 69, 3789-3795.	2.5	29
83	Observation of plasma array dynamics in 110 GHz millimeter-wave air breakdown. Physics of Plasmas, 2011, 18, 100704.	1.9	29
84	Mode excitation in a gyrotron operating at the fundamental. Journal of Infrared, Millimeter and Terahertz Waves, 1981, 2, 175-196.	0.6	28
85	Kiloampere and microsecond electron beams from ferroelectric cathodes. IEEE Transactions on Plasma Science, 1998, 26, 1347-1352.	1.3	28
86	Spectral Characteristics of a 140-GHz Long-Pulsed Gyrotron. IEEE Transactions on Plasma Science, 2007, 35, 559-564.	1.3	28
87	Spectroscopic temperature measurements of air breakdown plasma using a $110\mathrm{GHz}$ megawatt gyrotron beam. Physics of Plasmas, 2012, 19, .	1.9	28
88	Harmonic emission from high-power high-frequency gyrotrons. International Journal of Electronics, 1984, 57, 1033-1047.	1.4	27
89	Experimental investigation of a 140-GHz coaxial gyrotron oscillator. IEEE Transactions on Plasma Science, 2001, 29, 943-950.	1.3	27
90	High-intensity CO_2 laser pumping of a CH_3F Raman FIR laser. Optics Letters, 1979, 4, 381.	3.3	26

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91	Application of advanced millimeter/far-infrared sources to collective Thomson scattering plasma diagnostics. Journal of Infrared, Millimeter and Terahertz Waves, 1983, 4, 205-229.	0.6	26
92	Power measurement of frequency-locked Smith-Purcell radiation. Physical Review Special Topics: Accelerators and Beams, 2006, 9, .	1.8	26
93	Experimental results for a 1.5MW, 110GHz gyrotron oscillator with reduced mode competition. Physics of Plasmas, 2006, 13, 023103.	1.9	26
94	Phase retrieval of gyrotron beams based on irradiance moments. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 1526-1535.	4.6	25
95	Maturing ECRF technology for plasma control. Nuclear Fusion, 2003, 43, 1501-1504.	3.5	25
96	Experimental Results on a 1.5ÂMW, 110ÂGHz Gyrotron with a Smooth Mirror Mode Converter. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 358-370.	2.2	25
97	Sideband mode competition in a gyrotron oscillator. Physical Review Letters, 1992, 69, 3727-3730.	7.8	23
98	High frequency gyrotrons and their application to tokamak plasma heating. Journal of Magnetism and Magnetic Materials, 1979, 11, 368-371.	2.3	20
99	<mml:math <="" p="" xmlns:mml="http://www.w3.org/1998/Math/MathML"> display="inline"><mml:mi>X</mml:mi></mml:math> -band photonic band-gap accelerator structure breakdown experiment. Physical Review Special Topics: Accelerators and Beams, 2011, 14, .	1.8	20
100	Measurements of electron avalanche formation time in W-band microwave air breakdown. Physics of Plasmas, 2011, 18, 080707.	1.9	20
101	Millimeter wave scattering and diffraction in 110 GHz air breakdown plasma. Physics of Plasmas, 2013, 20, 043507.	1.9	20
102	Pumping and emission characteristics of a 4 kW, submillimeter CH3 F laser. Optics Communications, 1975, 14, 314-317.	2.1	19
103	Tunable microwigglers for freeâ€electron lasers. Applied Physics Letters, 1989, 54, 1299-1301.	3.3	19
104	Design of correcting mirrors for a gyrotron used at Large Helical Device. Fusion Engineering and Design, 2001, 53, 537-544.	1.9	19
105	Studies of the 1.5-MW 110-GHz Gyrotron Experiment. IEEE Transactions on Plasma Science, 2004, 32, 877-883.	1.3	19
106	Observation and Study of Low-Frequency Oscillations in a 1.5-MW 110-GHz Gyrotron. IEEE Transactions on Plasma Science, 2009, 37, 1219-1224.	1.3	19
107	Measurement of RF Transmission Mode in ITER Relevant EC H&CD Transmission Line. Journal of Infrared, Millimeter, and Terahertz Waves, 2010, 31, 949.	2.2	19
108	Direct spectral measurements of a quasi-cw free-electron laser oscillator. Physical Review Letters, 1990, 65, 2251-2254.	7.8	18

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109	Experimental Studies of Local and Global Emission Uniformity for a Magnetron Injection Gun. IEEE Transactions on Electron Devices, 2005, 52, 825-828.	3.0	18
110	Experimental Verification of Phase Retrieval of Quasi-Optical Millimeter-Wave Beams. IEEE Transactions on Microwave Theory and Techniques, 2006, 54, 3899-3905.	4.6	18
111	CW operation of a tunable 330/460 GHz gyrotron for enhanced nuclear magnetic resonance. , 2008, , .		18
112	Megawatt Power Level 120 GHz Gyrotrons for ITER Start-Up. Journal of Physics: Conference Series, 2005, 25, 1-7.	0.4	17
113	Measurement of subpicosecond bunch lengths using coherent Smith-Purcell radiation. Physical Review Special Topics: Accelerators and Beams, 2006, 9, .	1.8	17
114	Efficiency Enhancement of a 1.5-MW, 110-GHz Gyrotron with a Single-Stage Depressed Collector. Fusion Science and Technology, 2007, 52, 334-339.	1.1	17
115	A high power, 1.22 mm 13C H3 laser. Physics Letters, Section A: General, Atomic and Solid State Physics, 1976, 57, 328-330.	2.1	16
116	Highâ€frequency gyrotron scattering diagnostic for instability studies on TARA. Review of Scientific Instruments, 1985, 56, 914-916.	1.3	16
117	A high-voltage modulator for high-power RF source research. IEEE Transactions on Electron Devices, 1991, 38, 817-821.	3.0	16
118	Longâ€pulse millimeterâ€wave freeâ€electron laser and cyclotron autoresonance maser experiments. Physics of Fluids B, 1992, 4, 2307-2314.	1.7	16
119	High-power operation of a 170 GHz megawatt gyrotron. Physics of Plasmas, 1997, 4, 1907-1914.	1.9	16
120	Experimental Study of the Start-Up Scenario of a 1.5-MW, 110-GHz Gyrotron. IEEE Transactions on Plasma Science, 2013, 41, 862-871.	1.3	16
121	Experimental Results for a Pulsed 110/124.5-GHz Megawatt Gyrotron. IEEE Transactions on Plasma Science, 2014, 42, 1128-1134.	1.3	16
122	Experimental study of a high efficiency quasi-optical mode converter for whispering gallery mode gyrotrons. International Journal of Electronics, 1992, 72, 1093-1102.	1.4	15
123	An improved design for quasi-optical mode conversion of whispering gallery mode gyrotron radiation. Journal of Infrared, Millimeter and Terahertz Waves, 1992, 13, 1033-1063.	0.6	15
124	Continuous-wave submillimeter-wave gyrotrons. , 2006, 6373, 63730C.		15
125	Calculation of Radiation from a Helically Cut Waveguide for a Gyrotron Mode Converter in the Quasi-Optical Approximation. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 8-25.	2.2	15
126	Direct Machining of Low-Loss THz Waveguide Components With an RF Choke. IEEE Microwave and Wireless Components Letters, 2014, 24, 842-844.	3.2	15

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127	Experimental Charge Density of Copper. Physical Review B, 1972, 6, 3572-3581.	3.2	14
128	Highâ€power second harmonic emission and frequency locking in a 28â€GHz gyrotron. Applied Physics Letters, 1985, 46, 728-730.	3.3	14
129	Whispering-Gallery-Mode Gyrotron Operation with a Quasi-Optical Antenna. IEEE Transactions on Plasma Science, 1985, 13, 383-388.	1.3	14
130	Imaging of Atmospheric Air Breakdown Caused by a High-Power 110-GHz Pulsed Gaussian Beam. IEEE Transactions on Plasma Science, 2008, 36, 936-937.	1.3	14
131	High power breakdown testing of a photonic band-gap accelerator structure with elliptical rods. Physical Review Special Topics: Accelerators and Beams, 2013, 16, .	1.8	14
132	Simple Correctors for Elimination of High-Order Modes in Corrugated Waveguide Transmission Lines. IEEE Transactions on Plasma Science, 2014, 42, 29-37.	1.3	14
133	High power long pulse microwave generation from a metamaterial structure with reverse symmetry. Physics of Plasmas, 2018, 25, .	1.9	14
134	Measurement of Dielectric Multipactor Thresholds at 110ÂGHz. Physical Review Letters, 2019, 123, 175001.	7.8	14
135	Gain spectrum of a pulsed laserâ€pumped submillimeter laser. Applied Physics Letters, 1978, 33, 154-156.	3.3	13
136	Analytical treatment of linearized self-consistent theory of a gyromonotron with a non-fixed structure. International Journal of Electronics, 1986, 61, 895-903.	1.4	13
137	A long-pulse, CARM oscillator experiment. International Journal of Electronics, 1992, 72, 983-1004.	1.4	13
138	Theory of Linear and Nonlinear Gain in a Gyroamplifier Using a Confocal Waveguide. IEEE Transactions on Plasma Science, 2017, 45, 2438-2449.	1.3	13
139	Efficient highâ€power CH3F amplifier for a 496â€Î¼m cavity laser. Applied Physics Letters, 1976, 28, 328-330.	3.3	12
140	Laser-induced gas breakdown at cyclotron resonance: Low pressure results. Journal of Magnetism and Magnetic Materials, 1979, 11, 47-50.	2.3	12
141	Handling Technology of Mega-Watt Millimeter-Waves For Optimized Heating of Fusion Plasmas. Journal of Microwave Power and Electromagnetic Energy, 2008, 43, 60-70.	0.8	12
142	Dynamic nuclear polarization at 9 T using a novel 250 GHz gyrotron microwave source. Journal of Magnetic Resonance, 2011, 213, 404-409.	2.1	12
143	Mode Content Determination of Terahertz Corrugated Waveguides Using Experimentally Measured Radiated Field Patterns. IEEE Transactions on Plasma Science, 2012, 40, 1530-1537.	1.3	12
144	Real-time, T-ray imaging using a sub-terahertz gyrotron. Journal of the Korean Physical Society, 2012, 60, 1857-1861.	0.7	12

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145	A high power, narrow linewidth D2O laser at 384.6 μm. Physics Letters, Section A: General, Atomic and Solid State Physics, 1976, 59, 264-266.	2.1	11
146	137â€GHz gyrotron diagnostic for instability studies in Tara. Review of Scientific Instruments, 1986, 57, 1983-1985.	1.3	11
147	Emission of microwave and millimeter wavelength radiation during hollow cathode discharge operation of the back lighted thyratron. Applied Physics Letters, 1992, 61, 2779-2781.	3.3	11
148	Modeling of the interaction of a volumetric metallic metamaterial structure with a relativistic electron beam. Physical Review Special Topics: Accelerators and Beams, 2015, 18, .	1.8	11
149	Prototyping high-gradient mm-wave accelerating structures. Journal of Physics: Conference Series, 2017, 874, 012039.	0.4	11
150	Design of an overmoded W-band TWT. , 2009, , .		10
151	Calculation of a Hyperbolic Corrugated Horn Converting the TEM00 Mode to the HE11 Mode. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 283-294.	2.2	10
152	Novel linear analysis for a gyrotron oscillator based on a spectral approach. Physics of Plasmas, 2016, 23, .	1.9	10
153	Coherent high-power RF wakefield generation by electron bunch trains in a metamaterial structure. Applied Physics Letters, 2020, 116, .	3.3	10
154	Continuous-Wave Operation of a Frequency-Tunable 460-GHz Second-Harmonic Gyrotron for Enhanced Nuclear Magnetic Resonance. IEEE Transactions on Electron Devices, 2010, 38, 1150-1159.	3.0	10
155	Free-electron lasers and their application to biomedicine. IEEE Journal of Quantum Electronics, 1987, 23, 1739-1750.	1.9	9
156	RADIATION SOURCES: Scanning with Ease Through the Far Infrared. Science, 1998, 280, 854-854.	12.6	9
157	Measurement of wakefields in a 17GHz photonic bandgap accelerator structure. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 618, 16-21.	1.6	9
158	Design and High-Power Test of an Internal Coupler to HE ₁₁ Mode in Corrugated Waveguide for High-Power Gyrotrons. IEEE Transactions on Electron Devices, 2018, 65, 2316-2320.	3.0	9
159	A gyrotron with a minimumQcavity. International Journal of Electronics, 1986, 61, 757-770.	1.4	8
160	High-Frequency Cyclotron Autoresonance Maser Amplifier Experiments At MIT. Proceedings of SPIE, 1989, 1061, 243.	0.8	8
161	Study of rotating modes in high frequency whispering gallery mode gyrotrons. IEEE Transactions on Plasma Science, 1994, 22, 883-888.	1.3	8
162	Mode conversion losses in ITER transmission lines. , 2008, , .		8

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163	Subterahertz Photonic Crystal Klystron Amplifier. Physical Review Letters, 2019, 123, 244801.	7.8	8
164	Experimental high gradient testing of a $17.1 {\rm \hat AGHz}$ photonic band-gap accelerator structure. Physical Review Accelerators and Beams, 2016, 19, .	1.6	8
165	Development of high power ch3f laser systems for plasma diagnosticsâ^—. Infrared Physics, 1976, 16, 429-434.	0.5	7
166	Prospects for high power gyrotrons. Plasma Physics and Controlled Fusion, 1985, 27, 1449-1459.	2.1	7
167	The Design Of Megawatt Gyrotrons For The Compact Ignition Tokamak. Proceedings of SPIE, 1988, 1039, 179.	0.8	7
168	Theory And Design Of A High-Power, 140 Ghz CARM Amplifier. Proceedings of SPIE, 1988, 0873, 143.	0.8	7
169	Velocity spread measurements on a magnetron injection gun beam. Journal of Applied Physics, 1994, 76, 3237-3243.	2.5	7
170	Low-Power Testing of Losses in Millimeter-Wave Transmission Lines for High-Power Applications. Journal of Infrared, Millimeter and Terahertz Waves, 2008, 29, 1011-1018.	0.6	7
171	Active real-time imaging system employed with a CW 460-GHz gyrotron and a pyroelectric array camera. , 2009, , .		7
172	14.4: Design of a 250 GHz photonic band gap gyrotron amplifier. , 2010, , .		7
173	THz gyrotrons and their applications. , 2014, , .		7
174	A Gyrotron with a High Q Cavity for Plasma Scattering Diagnostics. IEEE Transactions on Plasma Science, 1985, 13, 393-397.	1.3	6
175	Quasi-optical gyrotron with arbitrary beam injection angle. IEEE Transactions on Electron Devices, 1988, 35, 1166-1171.	3.0	6
176	Gyrotron collective Thomson scattering from plasma fluctuations in a Tara axicell. Review of Scientific Instruments, 1988, 59, 1562-1564.	1.3	6
177	Influence of sideband oscillations on gyrotron efficiency. IEEE Transactions on Plasma Science, 1994, 22, 871-877.	1.3	6
178	Mode-Content Analysis and Field Reconstruction of Propagating Waves in Corrugated Waveguides of an ECH System. Plasma and Fusion Research, 2010, 5, \$1029-\$1029.	0.7	6
179	Gas breakdown at cyclotron resonance with a submillimeter laser. Applied Physics Letters, 1976, 29, 146-148.	3.3	5
180	Low emittance electron beam formation with a 17 GHz RF gun. Physical Review Special Topics: Accelerators and Beams, 2001, 4, .	1.8	5

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181	Synthesis of gyrotron phase-correcting mirrors using irradiance moments. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 2610-2615.	4.6	5
182	Absolute scale power measurements of frequency-locked coherent transition radiation. Physical Review Special Topics: Accelerators and Beams, 2007, 10, .	1.8	5
183	Design and experimental results from a 527 GHz gyrotron for DNP-NMR spectroscopy. , 2014, , .		5
184	Cold test of gyrotron cavity modes using a 3D CFDTD method. , 2014, , .		5
185	Hot test of gyrotron cavity interaction using a 3D CFDTD PIC method. , 2014, , .		5
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