

# Manfred Thumm

## List of Publications by Year in descending order

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410  
papers

6,925  
citations

66343

42  
h-index

110387

64  
g-index

423  
all docs

423  
docs citations

423  
times ranked

2036  
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigations on RF Behavior of a $\nu$ -Band Second Harmonic Gyrotron for 100/200 kW Operation. IEEE Transactions on Plasma Science, 2022, 50, 222-228.	1.3	3
2	Realistic Design Studies on a 300-GHz, 1-MW, DEMO-Class Conventional-Cavity Gyrotron. IEEE Transactions on Electron Devices, 2022, 69, 1442-1450.	3.0	4
3	Experimental Testing of the European TH1509U 170-GHz 1-MW CW Industrial Gyrotron's Long Pulse Operation. IEEE Electron Device Letters, 2022, 43, 623-626.	3.9	10
4	Frequency and mode measurement techniques for megawatt-class gyrotrons. TM Technisches Messen, 2022, 89, 85-96.	0.7	2
5	Surface Flute Waves in Plasmas. Springer Series on Atomic, Optical, and Plasma Physics, 2022, , .	0.2	4
6	Design of a High-Q Diamond-Loaded Cavity for a Third-Harmonic Subterahertz Gyrotron Driven by a Low-Power Electron Beam. IEEE Transactions on Electron Devices, 2022, 69, 3386-3392.	3.0	1
7	Status and future development of Heating and Current Drive for the EU DEMO. Fusion Engineering and Design, 2022, 180, 113159.	1.9	22
8	Time-Domain Simulation of Helical Gyro-TWTs With Coupled Modes Method and 3-D Particle Beam. IEEE Transactions on Electron Devices, 2022, 69, 4546-4552.	3.0	2
9	New Type of Sub-THz Frequency-Doubling Gyro-TWT With Helically Corrugated Circuit. IEEE Electron Device Letters, 2022, 43, 1347-1350.	3.9	4
10	Mode Discrimination by Lossy Dielectric Rods in Cavities of Second-Harmonic Gyrotrons. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 93-105.	2.2	7
11	Starting currents of modes in cylindrical cavities with mode-converting corrugations for second-harmonic gyrotrons. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 260-274.	2.2	5
12	Towards a 1.5 MW, 140 GHz gyrotron for the upgraded ECRH system at W7-X. Fusion Engineering and Design, 2021, 164, 112173.	1.9	12
13	Calculations on Mode Eigenvalues in a Corrugated Waveguide with Varying Diameter and Corrugation Depth. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 493-503.	2.2	1
14	Design verification of the gyrotron diamond output window for the upgrade of the ECRH system at W7-X. Fusion Engineering and Design, 2021, 165, 112262.	1.9	3
15	Zeroth radial modes of azimuthal surface waves in dense plasma-loaded, coaxial helix traveling-wave-tube-like waveguides. Physics of Plasmas, 2021, 28, 043106.	1.9	2
16	Multifaceted Simulations Reproducing Experimental Results From the 1.5-MW 140-GHz Preprototype Gyrotron for W7-X. IEEE Transactions on Electron Devices, 2021, 68, 3063-3069.	3.0	5
17	Generation of 1.5 MW's 140 GHz Pulses With the Modular Pre-Prototype Gyrotron for W7-X. IEEE Electron Device Letters, 2021, 42, 939-942.	3.9	10
18	AZIMUTHAL SURFACE WAVES IN LOW-DENSITY PLASMA LOADED, COAXIAL HELIX TRAVELING-WAVE-TUBE-LIKE WAVEGUIDES. , 2021, , 24-29.		1

#	ARTICLE	IF	CITATIONS
19	Large Area Diamond Disk Growth Experiments and Thermomechanical Investigations for the Broadband Brewster Window in DEMO. IEEE Transactions on Electron Devices, 2021, 68, 4669-4674.	3.0	4
20	Large Power Increase Enabled by High-Q Diamond-Loaded Cavities for Terahertz Gyrotrons. Journal of Infrared, Millimeter, and Terahertz Waves, 2021, 42, 863-877.	2.2	6
21	Improvement of the Output Mode Purity of a Complex-Cavity Resonator for a Frequency-Tunable Sub-THz Gyrotron. IEEE Transactions on Electron Devices, 2021, 68, 5220-5226.	3.0	4
22	Frequency Stabilization of Megawatt-Class 140 GHz Gyrotrons at W7-X Using an Off-the-Shelf PLL System. , 2021, , .		2
23	Theoretical Investigation on Injection Locking of the EU 170 GHz 2 MW TE <sub>34,19</sub> -Mode Coaxial-Cavity Gyrotron. , 2021, , .		0
24	Two-Frequency Notch Filters for Sub-THz Plasma Diagnostics. , 2021, , .		0
25	Basic design considerations for a frequency step-tunable electron cyclotron wave system to suppress NTMs in DEMO. Fusion Engineering and Design, 2021, 173, 112931.	1.9	2
26	Design Studies on 0.3- THz, 0.5-MW Conventional Cavity Gyrotron for Plasma Heating. , 2021, , .		0
27	Performance Expectation and Preparation of the First Experimental Campaign of the KIT 2 MW 170/204 GHz Coaxial-Cavity Gyrotron. , 2021, , .		1
28	Mechanical Design of the Short Pulse E <sub>A</sub> –B Drift Two-Stage Depressed Collector Prototype for High Power Gyrotron. , 2021, , .		1
29	Exploring fusion-reactor physics with high-power electron cyclotron resonance heating on ASDEX Upgrade. Plasma Physics and Controlled Fusion, 2020, 62, 024012.	2.1	16
30	State-of-the-Art of High-Power Gyro-Devices and Free Electron Masers. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1-140.	2.2	223
31	Theoretical investigation on possible operation of a 140 GHz 1 MW gyrotron at 175 GHz for CTS plasma diagnostics at W7-X. Physics of Plasmas, 2020, 27, .	1.9	7
32	Operations with spherical calorimetric loads in different configurations at gyrotron test stands at EPFL and QST. AIP Conference Proceedings, 2020, , .	0.4	1
33	Megawatt power generation of the dual-frequency gyrotron for TCV at 84 and 126 GHz, in long pulses. AIP Conference Proceedings, 2020, , .	0.4	3
34	Extended Feedback System for Coupled Sub-THz Gyro-Devices to Provide New Regimes of Operation. IEEE Transactions on Electron Devices, 2020, 67, 5729-5735.	3.0	1
35	Rotation of electromagnetic energy initiated by azimuthal surface waves in coaxial metal waveguides entirely filled by plasma. Physics of Plasmas, 2020, 27, .	1.9	1
36	Collective Thomson Scattering Diagnostic for Wendelstein 7-X at 175 GHz. Journal of Instrumentation, 2020, 15, C05035-C05035.	1.2	6

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37	Towards large area CVD diamond disks for Brewster-angle windows. <i>Fusion Engineering and Design</i> , 2020, 157, 111818.	1.9	9
38	Azimuthal surface waves in cylindrical metal waveguides partially filled by magnetoactive plasma: Analysis of energy transfer. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	3
39	A Compact Two-Frequency Notch Filter for Millimeter Wave Plasma Diagnostics. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2020, 41, 741-749.	2.2	6
40	Triode magnetron injection gun for the KIT 2 MW 170 GHz coaxial cavity gyrotron. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	10
41	Gyro-devices – natural sources of high-power high-order angular momentum millimeter-wave beams. <i>Terahertz Science &amp; Technology</i> , 2020, 13, 1-21.	0.5	5
42	Investigations on W-Band Second Harmonic Gyrotron for 50/100-kW Operation. <i>IEEE Transactions on Plasma Science</i> , 2020, 48, 4127-4133.	1.3	3
43	Mechanical Design Study for Gyrotron E–B Drift Two-Stage Depressed Collector. , 2020, , .		1
44	Improvement of the Power Handling Capability of the Upgraded Multi-Frequency ECRH System at ASDEX Upgrade. , 2020, , .		0
45	Recent Development of a 1.5 MW, 140 GHz Continuous-Wave Gyrotron for the Upgraded ECRH System at W7-X. , 2020, , .		1
46	Theoretical Study on the Possibility for Stepwise Tuning of the Frequency of the KIT 2 MW 170/204 GHz Coaxial-Cavity Gyrotron. , 2020, , .		1
47	Operating the KIT 170 GHz 2 MW Coaxial-Cavity Gyrotron at 204 GHz: Performance Expectations and First Cold Test of the Quasi-Optical System. , 2019, , .		1
48	Multiphysics Modeling of Inert Cooling System for a 170-GHz, 2-MW Long-Pulse Coaxial-Cavity Gyrotron. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 4008-4015.	3.0	9
49	Automated mode recovery for gyrotrons demonstrated at Wendelstein 7-X. <i>Fusion Engineering and Design</i> , 2019, 148, 111258.	1.9	5
50	Overview of first Wendelstein 7-X high-performance operation. <i>Nuclear Fusion</i> , 2019, 59, 112004.	3.5	165
51	GDS2H - V.2018: A Comprehensive Computer Code Package for the Design of Second Harmonic Gyrotrons. , 2019, , .		2
52	From W7-X Towards ITER and Beyond: 2019 Status on EU Fusion Gyrotron Developments. , 2019, , .		2
53	Design Studies of Mini-Channel Cavity Cooling for a 170 GHz, 2 MW Coaxial-Cavity Gyrotron. , 2019, , .		2
54	Manufacturing and Test of the 1 MW Long-Pulse 84/126 GHz Dual-Frequency Gyrotron for TCV. , 2019, , .		8

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55	Diamond Window Technology for Electron Cyclotron Heating and Current Drive: State of the Art. Fusion Science and Technology, 2019, 75, 719-729.	1.1	10
56	Design of a Quasi-Optical Mode Converter for a Dual-Frequency Coaxial-Cavity Gyrotron. , 2019, , .		1
57	DEMO-Relevant Gyrotron Research at KIT. , 2019, , .		1
58	Completion of the 8 MW Multi-Frequency ECRH System at ASDEX Upgrade. , 2019, , .		1
59	Investigation of a Mini-Channel Cavity Cooling Concept for a 170 GHz, 2 MW Coaxial-Cavity Gyrotron. , 2019, , .		0
60	THALES TH1507 140 GHz 1 MW CW Gyrotron for W7-X Stellarator. , 2019, , .		5
61	Towards Advanced Fusion Gyrotrons: 2018 Update on Activities within EUROfusion. EPJ Web of Conferences, 2019, 203, 04007.	0.3	1
62	Studies towards an upgraded 1.5 MW gyrotron for W7-X. EPJ Web of Conferences, 2019, 203, 04003.	0.3	6
63	Recent Status and Future Prospects of Coaxial-Cavity Gyrotron Development at KIT. EPJ Web of Conferences, 2019, 203, 04005.	0.3	3
64	Report of recent experiments with the European 1 MW, 170 GHz CW and SP prototype gyrotrons for ITER. EPJ Web of Conferences, 2019, 203, 04006.	0.3	5
65	Improved Simulation of Quasi-Optical Launchers for High Power Gyrotrons with Smoothing Algorithm. EPJ Web of Conferences, 2019, 203, 04008.	0.3	1
66	Overview on recent progress in magnetron injection gun theory and design for high power gyrotrons. EPJ Web of Conferences, 2019, 203, 04011.	0.3	6
67	Theoretical Study on the Operation of the EU/KIT TE <sub>34,19</sub> -Mode Coaxial-Cavity Gyrotron at 170/204/238 GHz. EPJ Web of Conferences, 2019, 203, 04014.	0.3	4
68	Metrology techniques for the verification of the alignment of the EU gyrotron prototype for ITER. EPJ Web of Conferences, 2019, 203, 04015.	0.3	2
69	Gyrotron multistage depressed collector based on $E \times B$ drift concept using azimuthal electric field. II: Upgraded designs. Physics of Plasmas, 2019, 26, .	1.9	10
70	Electromagnetic energy rotation by azimuthal surface waves along plasma-metal interface around a cylindrical metallic rod placed into infinite magnetized plasma. Physics of Plasmas, 2019, 26, 052103.	1.9	2
71	Surface Electron Cyclotron Waves in Plasmas. Springer Series on Atomic, Optical, and Plasma Physics, 2019, , .	0.2	2
72	Automated Generation of High-Order Modes for Tests of Quasi-Optical Systems of Gyrotrons for W7-X Stellarator. , 2019, , .		0

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73	Initial stage of interaction between gyrating relativistic electron beam and long-wavelength electromagnetic surface waves in cylindrical metallic waveguides partially filled with plasma. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	2
74	Overview of recent gyrotron R&D towards DEMO within EUROfusion Work Package Heating and Current Drive. <i>Nuclear Fusion</i> , 2019, 59, 066014.	3.5	18
75	Electromagnetic energy rotation along plasma-metal interface in cylindrical waveguides initiated by azimuthal surface waves. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	5
76	Coaxial multistage depressed collector design for high power gyrotrons based on E $\tilde{A}$ -B concept. <i>Physics of Plasmas</i> , 2019, 26, .	1.9	6
77	Electromagnetic energy rotation along plasma-dielectric interface caused by azimuthal surface waves in isotropic cylindrical metallic waveguide. <i>Physics of Plasmas</i> , 2019, 26, 122104.	1.9	4
78	New trends of gyrotron development at KIT: An overview on recent investigations. <i>Fusion Engineering and Design</i> , 2019, 146, 341-344.	1.9	8
79	Recent experiments with the European 1MW, 170GHz industrial CW and short-pulse gyrotrons for ITER. <i>Fusion Engineering and Design</i> , 2019, 146, 349-352.	1.9	11
80	Electron-cyclotron-resonance heating in Wendelstein 7-X: A versatile heating and current-drive method and a tool for in-depth physics studies. <i>Plasma Physics and Controlled Fusion</i> , 2019, 61, 014037.	2.1	43
81	Design Studies of a 3-MW, Multifrequency (170/204/236 GHz) DEMO Class Triangular Corrugated Coaxial Cavity Gyrotron. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 702-708.	3.0	6
82	Computer-Controlled Test System for the Excitation of Very High-Order Modes in Highly Oversized Waveguides. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2019, 40, 257-268.	2.2	9
83	Numerical Investigation on Spent Beam Deceleration Schemes for Depressed Collector of a High-Power Gyrotron. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 2321-2326.	3.0	4
84	Numerical Studies on the Influence of Cavity Thermal Expansion on the Performance of a High-Power Gyrotron. <i>IEEE Transactions on Electron Devices</i> , 2018, 65, 2308-2315.	3.0	17
85	Considerations on the selection of operating modes for future coaxial-cavity gyrotrons for DEMO. , 2018, , .		2
86	Mode competition control using triode-type start-up scenario for a 236 GHz gyrotron for DEMO. , 2018, , .		2
87	KIT in-house manufacturing and first operation of a 170 GHz 2 MW longer-pulse coaxial-cavity pre-prototype gyrotron. , 2018, , .		3
88	Benefits of advanced full-wave vector analysis codes for the design of high-power microwave tubes. , 2018, , .		1
89	Gyrotron multistage depressed collector based on $E\tilde{A}$ - $B$ drift concept using azimuthal electric field. I. Basic design. <i>Physics of Plasmas</i> , 2018, 25, .	1.9	19
90	2018 Status of the Measurement Capabilities for Fusion Gyrotrons at KIT/IHM. <i>EPJ Web of Conferences</i> , 2018, 187, 01019.	0.3	2

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91	Magnetron Injection Gun for the 2 MW 170 GHz Modular Coaxial Cavity Gyrotron. , 2018, , .		0
92	Development and First Operation of the 170 GHz, 2 MW Longer-Pulse Coaxial-Cavity Modular Gyrotron Prototype at KIT. , 2018, , .		6
93	2018 Status on KIT Gyrotron Activities. EPJ Web of Conferences, 2018, 187, 01009.	0.3	3
94	Thirty Joint Russian-German Meetings on ECRH and Gyrotrons - A Retrospect -. EPJ Web of Conferences, 2018, 187, 01020.	0.3	0
95	Towards Fully Automated Systems for the Generation of Very High Order Modes in Oversized Waveguides. EPJ Web of Conferences, 2018, 195, 01030.	0.3	2
96	Influence of Electron Beam Misalignment on the Performance of a 0.24 THz, 1.5 MW Hollow-Cavity Gyrotron Design for DEMO. , 2018, , .		2
97	Overview of Recent Gyrotron R&D at KIT in View of the EU DEMO. , 2018, , .		0
98	The Multi-Frequency ECRH System at ASDEX Upgrade - Current Status and Plans -. , 2018, , .		0
99	Progress in the development of a multistage depressed collector system for high power gyrotrons. , 2018, , .		1
100	Higher radial modes of azimuthal surface waves in magnetoactive cylindrical plasma waveguides. Journal of Plasma Physics, 2018, 84, .	2.1	5
101	Current Status of the KIT Coaxial-Cavity Long-Pulse Gyrotron and its Key Components. EPJ Web of Conferences, 2018, 187, 01028.	0.3	3
102	Contributions to the Joint DFG-RSF Project - Generation of Ultra-Short Microwave Pulses -. EPJ Web of Conferences, 2018, 187, 01027.	0.3	0
103	Excitation of higher radial modes of azimuthal surface waves in the electron cyclotron frequency range by rotating relativistic flow of electrons in cylindrical waveguides partially filled by plasmas. Physics of Plasmas, 2018, 25, 052109.	1.9	10
104	KIT coaxial gyrotron development: from ITER toward DEMO. International Journal of Microwave and Wireless Technologies, 2018, 10, 547-555.	1.9	24
105	Design studies of a magnetron injection gun for a 2MW, multi-frequency (220/251.5/283 GHz) triangular corrugated coaxial cavity gyrotron. , 2018, , .		0
106	High Purity Mode CW Gyrotron Covering the Subterahertz to Terahertz Range Using a 20 T Superconducting Magnet. IEEE Transactions on Electron Devices, 2018, 65, 3486-3491.	3.0	5
107	Performance analysis of an insert cooling system for long-pulse operation of a coaxial-cavity gyrotron. , 2018, , .		1
108	EU DEMO EC system preliminary conceptual design. Fusion Engineering and Design, 2018, 136, 1173-1177.	1.9	18

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109	Study on After Cavity Interaction in a 140-GHz Model TE <sub>0,3</sub> Gyrotron Using 3-D CFDTD PIC Simulation. IEEE Transactions on Plasma Science, 2018, 46, 1937-1942.	1.3	4
110	Two mechanisms of resonance overlapping in excitation of azimuthal surface waves by rotating relativistic electron beams. Physics of Plasmas, 2018, 25, 052111.	1.9	2
111	RF behavior of a 220/251.5 GHz, 2MW, triangular corrugated coaxial cavity gyrotron extended to the third operating frequency 283 GHz. , 2018, , .		1
112	Experimental verification of the European 1 MW, 170 GHz industrial CW prototype gyrotron for ITER. Fusion Engineering and Design, 2017, 123, 490-494.	1.9	19
113	Excitation of Electromagnetic Waves Above the Upper-Hybrid Frequency by Internal Gyration Electron Beam in a Coaxial Waveguide. IEEE Transactions on Plasma Science, 2017, 45, 623-630.	1.3	5
114	Evaluation and Influence of Gyrotron Cathode Emission Inhomogeneity. IEEE Transactions on Electron Devices, 2017, 64, 1315-1322.	3.0	9
115	Conceptual designs of $E \times B$ multistage depressed collectors for gyrotrons. Physics of Plasmas, 2017, 24, .	1.9	19
116	Major results from the first plasma campaign of the Wendelstein 7-X stellarator. Nuclear Fusion, 2017, 57, 102020.	3.5	128
117	A Numerical Synthesis Method for Hybrid-Type High-Power Gyrotron Launchers. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 699-706.	4.6	21
118	RF Behavior and Launcher Design for a Fast Frequency Step-tunable 236 GHz Gyrotron for DEMO. Frequenz, 2017, 71, .	0.9	4
119	Study of the Influence of Stray Magnetic Fields on the Operation of the European Gyrotron for ITER. IEEE Transactions on Electron Devices, 2017, 64, 3421-3428.	3.0	3
120	Conceptual design of the EU DEMO EC-system: main developments and R&D achievements. Nuclear Fusion, 2017, 57, 116009.	3.5	21
121	Design and manufacturing process for the KIT 2-MW 170-GHz coaxial-cavity longer-pulse gyrotron. EPJ Web of Conferences, 2017, 149, 04015.	0.3	3
122	Tolerance Studies on an Inverse Magnetron Injection Gun for a 2-MW 170-GHz Coaxial-Cavity Gyrotron. IEEE Transactions on Electron Devices, 2017, 64, 3870-3876.	3.0	9
123	Design considerations for future DEMO gyrotrons: A review on related gyrotron activities within EUROfusion. Fusion Engineering and Design, 2017, 123, 241-246.	1.9	37
124	Transition Between Beam-Plasma and Beam-Dissipative Instability Regimes in the Interaction of Relativistic Large Larmor Orbit Electron Beams and Azimuthal Surface Waves Above the Upper-Hybrid Frequency in Coaxial Plasma Waveguides. IEEE Transactions on Plasma Science, 2017, 45, 2208-2214.	1.3	2
125	CW Experiments With the EU 1-MW, 170-GHz Industrial Prototype Gyrotron for ITER at KIT. IEEE Transactions on Electron Devices, 2017, 64, 3885-3892.	3.0	23
126	Orbital Angular Momentum (OAM) of Rotating Modes Driven by Electrons in Electron Cyclotron Masers. Scientific Reports, 2017, 7, 3372.	3.3	23



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127	Development of an advanced vector analysis code for simulation of electromagnetic fields in quasi-optical systems of high power gyrotrons. , 2017, , .		1
128	Experimental study on further performance optimization of the European 1 MW, 170 GHz gyrotron prototype for ITER. , 2017, , .		1
129	Investigation on mm-wave sintering of metal powder compacts using in-situ dilatometry and electrical resistivity measurements. EPJ Web of Conferences, 2017, 149, 02007.	0.3	4
130	Simulation of electromagnetic fields scattered from arbitrary shaped electric conductors. EPJ Web of Conferences, 2017, 149, 04016.	0.3	3
131	Investigation on misalignment tolerances of 240-GHz DEMO gyrotrons. , 2017, , .		3
132	Quasi-optical mode converter for 1MW dual-frequency gyrotrons. , 2017, , .		1
133	Orbital angular momentum of gyrotron modes. , 2017, , .		0
134	Design of E $\tilde{A}$ - B multistage depressed collector concepts for high-power fusion gyrotrons. , 2017, , .		1
135	Powerful multichannel schemes of spatially-extended planar FEMs operated with two-dimensional distributed feedback. , 2017, , .		0
136	Developments of fusion gyrotrons for W7-X, ITER and EU DEMO: Ongoing activities and future plans of KIT. , 2017, , .		3
137	Powerful multichannel planar FEMs based on intense parallel sheet beams. , 2017, , .		1
138	Novel multistage depressed collector for high power fusion gyrotrons based on an E $\tilde{A}$ -B drift concept. , 2017, , .		6
139	Commissioning of the extended multi-frequency ECRH system at ASDEX upgrade. , 2017, , .		1
140	RF Behavior of a 220/251.5-GHz, 2-MW, Triangular Corrugated Coaxial Cavity Gyrotron. IEEE Transactions on Electron Devices, 2017, 64, 4287-4294.	3.0	6
141	KIT coaxial gyrotron development: From ITER towards DEMO. , 2017, , .		6
142	Overview of recent theoretical studies on ExB multistage depressed collector designs for gyrotrons. , 2017, , .		1
143	Experimental Results of the EU ITER Prototype Gyrotrons. EPJ Web of Conferences, 2017, 157, 03016.	0.3	2
144	The gyrotron â€œ a natural source of high-power orbital angular momentum millimeter-wave beams. EPJ Web of Conferences, 2017, 149, 04014.	0.3	4

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145	Study on the after cavity interaction in a 140 GHz model TE <sub>0,3</sub> gyrotron using 3D CFDTD PIC simulations. , 2017, , .		0
146	Towards an 2 MW long-pulse coaxial-cavity gyrotron: Progress on the advanced KIT inverse magnetron injection gun. , 2017, , .		0
147	Numerical studies on the influence of cavity thermal expansion on the performance of a high-power gyrotron. , 2017, , .		5
148	Measurements of satellite modes in 140 GHz wendelstein 7-X gyrotrons: An approach to an electronic stability control. , 2017, , .		2
149	First CW experiments with the EU ITER 1 MW, 170 GHz industrial prototype gyrotron. , 2017, , .		5
150	The EC-system of EU DEMO: concepts for a reactor heating system. EPJ Web of Conferences, 2017, 149, 03003.	0.3	4
151	Extension of the multi-frequency ECRH system at ASDEX upgrade. EPJ Web of Conferences, 2017, 149, 03004.	0.3	5
152	Comparison between controlled non-adiabatic and $\langle i \rangle E \tilde{A} - B \langle i \rangle$ concepts for gyrotron multistage depressed collectors. EPJ Web of Conferences, 2017, 149, 04005.	0.3	9
153	European research activities towards a future DEMO gyrotron. EPJ Web of Conferences, 2017, 149, 04007.	0.3	3
154	Recent progress in the upgrade of the TCV EC-system with two 1MW/2s dual-frequency (84/126GHz) gyrotrons. EPJ Web of Conferences, 2017, 157, 03001.	0.3	14
155	Recent Trends in Fusion Gyrotron Development at KIT. EPJ Web of Conferences, 2017, 157, 03017.	0.3	1
156	Investigation on mode eigenvalue limits for stable 236 GHz, 1 MW-class gyrotron operation. , 2016, , .		2
157	Influence of emitter ring manufacturing tolerances on electron beam quality of high power gyrotrons. Physics of Plasmas, 2016, 23, .	1.9	28
158	Beam-plasma system as a source of powerful submillimeter and terahertz radiation (experimental and) Tj ETQq0 0 Q,rgBT /Overlock 10 T	0.4	2
159	Gyrotronâ€Forschung und â€Entwicklung am KIT. Vakuum in Forschung Und Praxis, 2016, 28, 21-27.	0.1	3
160	Status and experimental results of the European 1 MW, 170 GHz industrial CW prototype Gyrotron for ITER. , 2016, , .		3
161	Extension of the multi-frequency ECRH system at ASDEX upgrade. , 2016, , .		1
162	Proposal of an inverse magnetron injection gun for future hollow-cylindrical-cavity high power gyrotrons. , 2016, , .		6

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163	Manufacturing and tests of the European 1 MW, 170 GHz CW gyrotron prototype for ITER. , 2016, , .		9
164	Progress on the upgrade of the TCV EC-system with two 1MW dual-frequency gyrotrons. , 2016, , .		2
165	Impact of emitter ring manufacturing tolerances on electron beam quality in high power gyrotrons. , 2016, , .		0
166	Electron trapping mechanisms in magnetron injection guns. Physics of Plasmas, 2016, 23, .	1.9	42
167	Choice of material composition for a high-performance inverted Magnetron Injection Gun. , 2016, , .		2
168	Direct Voltage Depression Calculation of Arbitrary Electron Beams in Misaligned Coaxial Gyrotron Cavities. IEEE Transactions on Electron Devices, 2016, 63, 3740-3746.	3.0	6
169	3D Simulation of a realistic Multistage Depressed Collector for high-power fusion gyrotrons. , 2016, , .		3
170	Excitation of azimuthal surface waves in the electron cyclotron frequency range by a rotating electron beam in presence of dissipation. Physics of Plasmas, 2016, 23, 122124.	1.9	5
171	Systematic cavity design approach for a multi-frequency gyrotron for DEMO and study of its RF behavior. Physics of Plasmas, 2016, 23, .	1.9	28
172	Instability of surface electron cyclotron TM-modes influenced by non-monochromatic alternating electric field. Physics of Plasmas, 2016, 23, 062106.	1.9	0
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