

# Edl Schamiloglu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2086686/publications.pdf>

Version: 2024-02-01

335  
papers

5,174  
citations

126907

33  
h-index

189892

50  
g-index

343  
all docs

343  
docs citations

343  
times ranked

2055  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-Power Microwave Sources and Technologies. , 2001, , .		482
2	Rapid Start of Oscillations in a Magnetron with a "Transparent" Cathode. Physical Review Letters, 2005, 95, 205101.	7.8	167
3	70% Efficient Relativistic Magnetron With Axial Extraction of Radiation Through a Horn Antenna. IEEE Transactions on Plasma Science, 2010, 38, 1302-1312.	1.3	139
4	Pulsed power-driven high-power microwave sources. Proceedings of the IEEE, 2004, 92, 1082-1095.	21.3	102
5	Efficiency enhancement of high power vacuum BWO's using nonuniform slow wave structures. IEEE Transactions on Plasma Science, 1994, 22, 554-565.	1.3	95
6	Experimental study of Q-V Lissajous figures in nanosecond-pulse surface discharges. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 1101-1111.	2.9	89
7	Analysis of polarity effects in the electrical breakdown of liquids. Journal Physics D: Applied Physics, 2006, 39, 359-369.	2.8	88
8	Microbubble-based model analysis of liquid breakdown initiation by a submicrosecond pulse. Journal of Applied Physics, 2005, 97, 113304.	2.5	78
9	Are microbubbles necessary for the breakdown of liquid water subjected to a submicrosecond pulse?. Journal of Applied Physics, 2004, 96, 5129-5139.	2.5	75
10	Time-domain detection of superluminal group velocity for single microwave pulses. Physical Review E, 2000, 62, 5758-5766.	2.1	69
11	Mode conversion in a magnetron with axial extraction of radiation. IEEE Transactions on Plasma Science, 2006, 34, 620-626.	1.3	67
12	Silicon diodes in avalanche pulse-sharpening applications. IEEE Transactions on Plasma Science, 1997, 25, 138-144.	1.3	64
13	Enhanced frequency agility of high-power relativistic backward wave oscillators. IEEE Transactions on Plasma Science, 1996, 24, 852-858.	1.3	61
14	Modern Pulsed Power: Charlie Martin and Beyond. Proceedings of the IEEE, 2004, 92, 1014-1020.	21.3	60
15	Review of the relativistic magnetron. Matter and Radiation at Extremes, 2019, 4, .	3.9	55
16	Application of a Magnetic Mirror to Increase Total Efficiency in Relativistic Magnetrons. Physical Review Letters, 2019, 122, 224801.	7.8	55
17	An x-band gigawatt amplifier. IEEE Transactions on Plasma Science, 2002, 30, 1041-1052.	1.3	54
18	rf mode switching in a relativistic magnetron with diffraction output. Applied Physics Letters, 2010, 97, .	3.3	54

#	ARTICLE	IF	CITATIONS
19	High power microwave sources and applications. , 0, , .		53
20	Improvement of the output characteristics of magnetrons using the transparent cathode. IEEE Transactions on Plasma Science, 2006, 34, 606-619.	1.3	52
21	Experimental study on conduction current of positive nanosecond-pulse diffuse discharge at atmospheric pressure. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 1304-1314.	2.9	52
22	Metamaterial-Inspired Vacuum Electron Devices and Accelerators. IEEE Transactions on Electron Devices, 2019, 66, 207-218.	3.0	48
23	Analysis of Quadrupole Focusing Lattices for Electron Beam Transport in Traveling-Wave Tubes. IEEE Transactions on Electron Devices, 2014, 61, 1865-1870.	3.0	47
24	The resistive sensor: a device for high-power microwave pulsed measurements. IEEE Antennas and Propagation Magazine, 2001, 43, 64-79.	1.4	46
25	Efficient Magnetron With a Virtual Cathode. IEEE Transactions on Plasma Science, 2016, 44, 1298-1302.	1.3	46
26	Circuit Modeling of Nonlinear Lumped Element Transmission Lines Including Hybrid Lines. IEEE Transactions on Plasma Science, 2012, 40, 2523-2534.	1.3	43
27	Characterization of a semi-insulating GaAs photoconductive semiconductor switch for ultrawide band high power microwave applications. Applied Physics Letters, 1998, 73, 1988-1990.	3.3	42
28	Microscopic analysis for water stressed by high electric fields in the prebreakdown regime. Journal of Applied Physics, 2004, 96, 3617-3625.	2.5	42
29	Design of a metamaterial slow wave structure for an O-type high power microwave generator. Physics of Plasmas, 2016, 23, .	1.9	40
30	Electron density measurements during microwave generation in a high power backward-wave oscillator. IEEE Transactions on Plasma Science, 1998, 26, 275-281.	1.3	38
31	Frequency-domain detection of superluminal group velocity in a distributed Bragg reflector. IEEE Journal of Quantum Electronics, 2000, 36, 418-424.	1.9	38
32	A Hyperband Antenna to Launch and Focus Fast High-Voltage Pulses Onto Biological Targets. IEEE Transactions on Microwave Theory and Techniques, 2011, 59, 1090-1101.	4.6	38
33	Initial studies of a long-pulse relativistic backward-wave oscillator utilizing a disk cathode. IEEE Transactions on Plasma Science, 2002, 30, 1112-1119.	1.3	35
34	A repetitive microsecond pulse generator for atmospheric pressure plasma jets. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 1907-1915.	2.9	35
35	The effects of an electromagnetic crystal substrate on a microstrip patch antenna. IEEE Transactions on Antennas and Propagation, 2002, 50, 451-456.	5.1	34
36	A Cascaded Microsecond-Pulse Generator for Discharge Applications. IEEE Transactions on Plasma Science, 2014, 42, 1721-1728.	1.3	34

#	ARTICLE	IF	CITATIONS
37	High-Power RF Generation From Nonlinear Transmission Lines With Barium Titanate Ceramic Capacitors. IEEE Transactions on Plasma Science, 2016, 44, 3424-3431.	1.3	34
38	Experimental Demonstration of a High-Efficiency Relativistic Magnetron With Diffraction Output With Spherical Cathode Endcap. IEEE Transactions on Plasma Science, 2017, 45, 282-288.	1.3	34
39	Temporal evolution of atmosphere pressure plasma jets driven by microsecond pulses with positive and negative polarities. Europhysics Letters, 2014, 107, 65004.	2.0	33
40	Advances in High-Voltage Modulators for Applications in Pulsed Power and Plasma-Based Ion Implantation. IEEE Transactions on Plasma Science, 2011, 39, 3033-3044.	1.3	32
41	Compact Relativistic Magnetron With Gaussian Radiation Pattern. IEEE Transactions on Plasma Science, 2012, 40, 3116-3120.	1.3	32
42	Analysis of high voltage operation of gallium arsenide photoconductive switches used in high power applications. Journal of Applied Physics, 1999, 86, 1754-1758.	2.5	30
43	Nonlinear Transmission Lines for High Power Microwave Applications - A Survey. , 2008, , .		28
44	A Comparative Study of Water Electrodes Versus Metal Electrodes for Excitation of Nanosecond-Pulse Homogeneous Dielectric Barrier Discharge in Open Air. IEEE Transactions on Plasma Science, 2013, 41, 3069-3078.	1.3	28
45	Dual-Band Operation of Relativistic BWO With Linearly Polarized Gaussian Output. IEEE Transactions on Plasma Science, 2014, 42, 2141-2145.	1.3	28
46	Transport of a relativistic electron beam in gas and plasma-filled focusing cells for x-ray radiography. Physics of Plasmas, 2004, 11, 751-760.	1.9	26
47	Pulsed RF oscillations on a nonlinear capacitive transmission line. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 1129-1135.	2.9	26
48	Practical Constraints on Nonlinear Transmission Lines for RF Generation. IEEE Transactions on Plasma Science, 2019, 47, 1000-1016.	1.3	26
49	Electrical Breakdown and Dielectric Recovery of Propylene Carbonate. IEEE Transactions on Plasma Science, 2006, 34, 1653-1661.	1.3	25
50	Operation Characteristics of A6 Relativistic Magnetron Using Single-Stepped Cavities With Axial Extraction. IEEE Transactions on Plasma Science, 2014, 42, 3344-3348.	1.3	24
51	Similarity of Properties of Metamaterial Slow-Wave Structures and Metallic Periodic Structures. IEEE Transactions on Plasma Science, 2016, 44, 1280-1286.	1.3	24
52	Integration of a Microstrip Patch Antenna with a Two-Dimensional Photonic Crystal Substrate. Electromagnetics, 1999, 19, 277-290.	0.7	23
53	Operation Characteristics of 12-Cavity Relativistic Magnetron With Single-Stepped Cavities. IEEE Transactions on Plasma Science, 2014, 42, 3283-3287.	1.3	23
54	Experimental Testing of a 3-D-Printed Metamaterial Slow Wave Structure for High-Power Microwave Generation. IEEE Transactions on Plasma Science, 2020, 48, 4356-4364.	1.3	23

#	ARTICLE	IF	CITATIONS
55	Studies of relativistic backward-wave oscillator operation in the cross-excitation regime. IEEE Transactions on Plasma Science, 2000, 28, 567-575.	1.3	22
56	Design of a special dielectric lens for concentrating a subnanosecond electromagnetic pulse on a biological target. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 1364-1375.	2.9	22
57	Effects of Laser Surface Modification on Secondary Electron Emission of Copper. IEEE Transactions on Plasma Science, 2011, 39, 836-841.	1.3	22
58	A Compact Microsecond-Pulse Generator Used for Surface Dielectric Barrier Discharges. IEEE Transactions on Plasma Science, 2016, 44, 2072-2078.	1.3	22
59	<title>Optimization of the parameters of a relativistic magnetron with diffraction output</title>. , 2002, 4720, 18.		21
60	Frequency switching in a relativistic magnetron with diffraction output. Journal of Applied Physics, 2011, 110, .	2.5	21
61	Frequency Switching in a 12-Cavity Relativistic Magnetron With Axial Extraction of Radiation. IEEE Transactions on Plasma Science, 2012, 40, 1569-1574.	1.3	21
62	Initial plasma-filled backward-wave oscillator experiments using a cathode-mounted plasma prefill source. IEEE Transactions on Plasma Science, 1998, 26, 653-668.	1.3	20
63	Water and propylene carbonate as storage and switching media in pulsed power systems. , 0, , .		20
64	Simple techniques for the generation of high peak power pulses with nanosecond and subnanosecond rise times. Review of Scientific Instruments, 1996, 67, 2626-2629.	1.3	19
65	Electron emission from slow-wave structure walls in a long-pulse, high-power backward wave oscillator. IEEE Transactions on Plasma Science, 1997, 25, 335-341.	1.3	19
66	Electromagnetic Modeling of Hot-Wire Detonators. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 1707-1713.	4.6	19
67	Suppression of Leakage Current in a Relativistic Magnetron Using a Novel Design Cathode Endcap. IEEE Transactions on Plasma Science, 2012, 40, 2089-2093.	1.3	19
68	Suppression of vacuum breakdown using thin-film coatings. Journal of Applied Physics, 1994, 76, 4448-4450.	2.5	18
69	Influence of Input Pulse Shape on RF Generation in Nonlinear Transmission Lines. IEEE Transactions on Plasma Science, 2016, 44, 2258-2267.	1.3	18
70	Observation of the cross-excitation instability in a relativistic backward wave oscillator. Physics of Plasmas, 1998, 5, 3490-3492.	1.9	17
71	Compensation mechanisms and the response of high resistivity GaAs photoconductive switches during high-power applications. IEEE Transactions on Plasma Science, 2000, 28, 1512-1519.	1.3	17
72	The Seventh Special Issue On High Power Microwave Generation. IEEE Transactions on Plasma Science, 1998, 26, 232-234.	1.3	16

#	ARTICLE	IF	CITATIONS
73	Dynamical discrete-time load balancing in distributed systems in the presence of time delays. , 0, , .		16
74	Focal waveforms for various source waveforms driving a prolate-spheroidal impulse radiating antenna (IRA). Radio Science, 2008, 43, n/a-n/a.	1.6	16
75	Dual-Mode Reltron. IEEE Transactions on Plasma Science, 2012, 40, 2083-2088.	1.3	16
76	Experimental Verification of a Stochastic Topology Approach for High-Power Microwave Effects. IEEE Transactions on Electromagnetic Compatibility, 2015, 57, 448-453.	2.2	16
77	The HelCat basic plasma science device. Journal of Plasma Physics, 2015, 81, .	2.1	16
78	Effects of frequency chirp on magnetron injection locking. Physics of Plasmas, 2008, 15, 073110.	1.9	15
79	High-power microwave-induced TM/sub 01/ plasma ring. IEEE Transactions on Plasma Science, 1996, 24, 6-7.	1.3	14
80	Simulation studies of persistent photoconductivity and filamentary conduction in opposed contact semi-insulating GaAs high power switches. Journal of Applied Physics, 1999, 86, 3833-3843.	2.5	14
81	Transient and steady state simulations of internal temperature profiles in high-power semi-insulating GaAs photoconductive switches. Journal of Applied Physics, 2001, 89, 1411-1417.	2.5	14
82	Simulation Studies of Distributed Nonlinear Gyromagnetic Lines Based on <i>LC</i> Lumped Model. IEEE Transactions on Plasma Science, 2016, 44, 2232-2239.	1.3	14
83	Power Combiner for High Power Cerenkov Devices. IEEE Transactions on Plasma Science, 2016, 44, 2268-2271.	1.3	14
84	Producing a magnetized low energy, high electron charge density state using a split cathode. Physics of Plasmas, 2020, 27, .	1.9	14
85	3-D simulations of rigid microwave-propelled sails including spin. AIP Conference Proceedings, 2001, , .	0.4	13
86	Waveguide Resonators With Combined Bragg Reflectors. IEEE Transactions on Plasma Science, 2004, 32, 1323-1333.	1.3	13
87	Secondary electron yield measurements from materials with application to collectors of high-power microwave devices. IEEE Transactions on Plasma Science, 2006, 34, 642-651.	1.3	13
88	Overview of RF generation using nonlinear transmission lines. , 2015, , .		13
89	Solid-State Bipolar Marx Modulator Modeling. IEEE Transactions on Plasma Science, 2014, 42, 3048-3056.	1.3	12
90	Relativistic BWO With Linearly Polarized Gaussian Radiation Pattern. IEEE Transactions on Plasma Science, 2014, 42, 2135-2140.	1.3	12

#	ARTICLE	IF	CITATIONS
91	Experimental and numerical study of a split cathode fed relativistic magnetron. Journal of Applied Physics, 2021, 130, .	2.5	12
92	Measurement of plasma electron density generated by a semiconductor bridge (SCB). Electronics Letters, 1994, 30, 603-604.	1.0	11
93	Photonic crystals: a new quasi-optical component for high-power microwaves. IEEE Transactions on Plasma Science, 1996, 24, 1067-1071.	1.3	11
94	A control theory approach on the design of a Marx generator network. , 2009, , .		11
95	Impact of Spent Electrons on BWO Operation. IEEE Transactions on Plasma Science, 2009, 37, 560-567.	1.3	11
96	Experimental verification of the advantages of the transparent cathode in a short-pulse magnetron. , 2009, , .		11
97	A Fan-Beam Radiator Using Waveguide's Narrow Wall for Horizontal Polarization and High Power. IEEE Transactions on Electromagnetic Compatibility, 2011, 53, 380-389.	2.2	11
98	RF Pulse Generator Based on a Nonlinear Hybrid Line. IEEE Transactions on Plasma Science, 2014, 42, 3268-3273.	1.3	11
99	Operation Characteristics of a 12-Cavity Relativistic Magnetron When Considering Secondary and Backscattered Electrons's Emission. IEEE Transactions on Plasma Science, 2015, 43, 1855-1861.	1.3	11
100	Optimizing the Parameters of a 12-Cavity Rising-Sun Relativistic Magnetron With Single-Stepped Cavities for $\pi$ -Mode Operation. IEEE Transactions on Plasma Science, 2016, 44, 2852-2858.	1.3	11
101	Hybrid Nonlinear Transmission Lines Used for RF Soliton Generation. IEEE Transactions on Plasma Science, 2018, 46, 3648-3652.	1.3	11
102	Transverse oscillations of a long-pulse electron beam on a laser-formed channel. IEEE Transactions on Plasma Science, 1991, 19, 850-854.	1.3	10
103	Investigation of the operating characteristics of a 12-cavity rising-sun relativistic magnetron with diffraction output using particle-in-cell simulations. Physics of Plasmas, 2016, 23, .	1.9	10
104	A multibeam metamaterial backward wave oscillator. Physics of Plasmas, 2019, 26, .	1.9	10
105	High-Voltage Capacitive Nonlinear Transmission Lines for RF Generation Based on Silicon Carbide Schottky Diodes. IEEE Transactions on Plasma Science, 2019, 47, 566-573.	1.3	10
106	An advanced relativistic magnetron operating with a split cathode and separated anode segments. Journal of Applied Physics, 2022, 131, .	2.5	10
107	Erosion of a Relativistic Electron Beam Propagating in a Plasma Channel. Physical Review Letters, 1994, 73, 2986-2989.	7.8	9
108	Improved hold-off characteristics of gallium arsenide photoconductive switches used in high power applications. , 0, , .		9

#	ARTICLE	IF	CITATIONS
109	Percolative model of electric breakdown in liquid dielectrics. IEEE Transactions on Plasma Science, 2002, 30, 1931-1938.	1.3	9
110	Studies of Dielectric Breakdown Under Pulsed Power Conditions. , 2005, , .		9
111	Radially Inhomogeneous Spherical Dielectric Lens for Matching 100-ps Pulses Into Biological Targets. IEEE Transactions on Plasma Science, 2010, 38, 1915-1927.	1.3	9
112	Assessing the role of secondary electron emission on the characteristics of 6-cavity magnetrons with transparent cathode through particle-in-cell simulations. Journal of Applied Physics, 2014, 115, .	2.5	9
113	Robert Barker Memorial Session: Leadership in Plasma Science and Applications. IEEE Transactions on Plasma Science, 2015, 43, 914-936.	1.3	9
114	Temporal measurement of plasma density variations above a semiconductor bridge (SCB). IEEE Transactions on Instrumentation and Measurement, 1995, 44, 843-846.	4.7	8
115	Modeling of a compact, portable transmission line for pulsed-power applications. , 0, , .		8
116	Experimental demonstration of nonlinear lumped element transmission lines using COTS components. , 2011, , .		8
117	Operation analysis of a novel concept of RF source known as gyromagnetic line. , 2017, , .		8
118	First principles inelastic mean free paths coupled with Monte Carlo simulation of secondary electron yield of Cu-Ni, Cu-Zn, and Mo-Li. Journal of Applied Physics, 2021, 129, .	2.5	8
119	Toward "smart tubes" using iterative learning control. IEEE Transactions on Plasma Science, 1998, 26, 905-911.	1.3	7
120	Limitations to compacting a parallel-plate Blumlein pulse-forming line. International Journal of RF and Microwave Computer-Aided Engineering, 2008, 18, 176-186.	1.2	7
121	Electromagnetic Implosion Using an Array. IEEE Transactions on Plasma Science, 2008, 36, 757-762.	1.3	7
122	Experimental Study of a Relativistic Resonant Traveling-Wave Tube With Selective Feedback Provided by Bragg Reflectors. IEEE Transactions on Plasma Science, 2010, 38, 1255-1263.	1.3	7
123	Circuit modeling of nonlinear lumped element transmission lines. , 2011, , .		7
124	Oscillating Pulse Generator Based on a Nonlinear Inductive Line. IEEE Transactions on Plasma Science, 2013, 41, 2619-2624.	1.3	7
125	Self-consistent evolution of plasma discharge and electromagnetic fields in a microwave pulse compressor. Physics of Plasmas, 2015, 22, .	1.9	7
126	A compact high-power microwave metamaterial slow-wave structure: From computational design to hot test validation. , 2017, , .		7



#	ARTICLE	IF	CITATIONS
127	Multiple electron beam generation with different energies and comparable currents from a single cathode potential for high power traveling wave tubes (TWTs). Journal of Applied Physics, 2022, 131, .	2.5	7
128	Ultrafast high power switching diodes. , 0, , .		6
129	Recent advances in the study of a long pulse relativistic backward wave oscillator. , 0, , .		6
130	Electrical conduction in water revisited: roles of field-enhanced dissociation and a reaction-based boundary condition. IEEE Transactions on Dielectrics and Electrical Insulation, 2003, 10, 225-232.	2.9	6
131	The Dose Effect in Secondary Electron Emission. IEEE Transactions on Plasma Science, 2009, 37, 1537-1551.	1.3	6
132	Increased efficiency and faster turn-on in magnetrons using the transparent cathode. , 2010, , .		6
133	Dual cavity reltron. , 2011, , .		6
134	Generating oscillating pulses using nonlinear capacitive transmission lines. , 2012, , .		6
135	Investigation of the operating characteristics of a 12 stepped-cavity relativistic magnetron with axial extraction driven by an "F" transparent cathode using particle-in-cell simulations. Physics of Plasmas, 2016, 23, .	1.9	6
136	Coherent Cherenkov-cyclotron radiation excited by an electron beam in a two-spiral metamaterial waveguide. AIP Advances, 2018, 8, .	1.3	6
137	Operation of a Gyromagnetic Line at Low and High Voltages With Simultaneous Axial and Azimuthal Biases. IEEE Transactions on Plasma Science, 2018, 46, 2573-2581.	1.3	6
138	A "crab-like" 12-cavity relativistic magnetron with diffraction output driven by a transparent cathode. Physics of Plasmas, 2019, 26, .	1.9	6
139	Study of Pulsed RF Signal Extraction and Irradiation from a Capacitive Nonlinear Transmission Line. International Journal of Advanced Engineering Research and Science, 2018, 5, 121-133.	0.1	6
140	RF generation using a compact bench gyromagnetic line. Review of Scientific Instruments, 2022, 93, 024704.	1.3	6
141	Ion ring propagation in a magnetized plasma. Physics of Fluids B, 1993, 5, 3069-3087.	1.7	5
142	Effects of end reflections on the performance of relativistic backward wave oscillators. , 0, , .		5
143	A neural-network model of the input/output characteristics of a high-power backward wave oscillator. IEEE Transactions on Plasma Science, 1996, 24, 879-883.	1.3	5
144	Interactive DSP course development/teaching environment. , 0, , .		5

#	ARTICLE	IF	CITATIONS
145	High power microwave sources: where do we go from here?. , 0, , .		5
146	Control of microwave-propelled sails using delayed measurements. AIP Conference Proceedings, 2002, , .	0.4	5
147	Effects of dielectric width extension in a parallel-plate Blumlein line. Microwave and Optical Technology Letters, 2005, 46, 220-225.	1.4	5
148	Frequency switching in a relativistic magnetron with diffraction output. , 2011, , .		5
149	Surface modification of polymers by a nanosecond-pulse plasma jet. , 2012, , .		5
150	Acoustically determined linear piezoelectric response of lithium niobate up to 1100â€‰V. Applied Physics Letters, 2014, 104, .	3.3	5
151	Two-dimensional single-stream electron motion in a coaxial diode with magnetic insulation. Physics of Plasmas, 2014, 21, .	1.9	5
152	Low-Energy State Electron Beam in a Uniform Channel. Plasma, 2019, 2, 222-228.	1.8	5
153	Two-photon ionization of trimethylamine using KrF laser radiation. Journal of Applied Physics, 1996, 79, 2728-2731.	2.5	4
154	Studies of dielectric breakdown under pulsed power conditions. , 0, , .		4
155	Simulation Studies for Nonlinear-Transmission-Line Based Ultrafast Rise Times and Waveform Shaping for Pulsed-Power Applications. IEEE Transactions on Plasma Science, 2008, 36, 2618-2625.	1.3	4
156	Magnetron experiments on the short-pulse &#x201C;SINUS-6&#x201D; accelerator. , 2008, , .		4
157	Prospects of building capacitive nonlinear lines using ceramic PZT for high-frequency operation. , 2012, , .		4
158	X-band relativistic backward wave oscillator with two-spiral corrugated Bragg reflector. , 2012, , .		4
159	Single/dual band relativistic BWO using electron beam magnetic field decompression. , 2013, , .		4
160	Spice simulations of inductive Nonlinear Transmission Lines. , 2015, , .		4
161	Spice simulations of nonlinear gyromagnetic lines. , 2015, , .		4
162	Efficient power combiner for THz radiation. AIP Advances, 2016, 6, .	1.3	4

#	ARTICLE	IF	CITATIONS
163	A "crab-like" A6 relativistic magnetron with diffraction output driven by a transparent cathode. Physics of Plasmas, 2019, 26, .	1.9	4
164	An Axial Output Relativistic Magnetron Fed by a Split Cathode and Magnetically Insulated by a Low-Power Solenoid. IEEE Transactions on Electron Devices, 2021, 68, 5227-5231.	3.0	4
165	Modeling and Simulation of Relativistic Multiple Electron Beam Generation With Different Energies From a Single-Cathode Potential for High-Power Microwave Sources. IEEE Transactions on Electron Devices, 2022, 69, 1380-1388.	3.0	4
166	Drive signal frequency multiplication in a hybrid antenna-amplifier device. , 0, , .		3
167	Autotriggered crowbar switch for a compact 600 kV pulser. Review of Scientific Instruments, 1989, 60, 3564-3565.	1.3	3
168	Steering relativistic electron beams with linear wire arrays. Journal of Applied Physics, 1989, 66, 4019-4024.	2.5	3
169	Relativistic Magnetron With Diffraction Antenna. AIP Conference Proceedings, 2002, , .	0.4	3
170	Survey of plasma diagnostic techniques applicable to radiographic diodes. , 0, , .		3
171	Characterization of Hot-Wire Detonators Using Analytical Modeling and Computational Tools. , 2008, , .		3
172	P3-25: Influence of implementing straps on pulsed relativistic magnetron operation. , 2010, , .		3
173	Experimental demonstration of the output characteristics of the A6 magnetron on Pulserad 110a, a very short rise-time accelerator at UNM. , 2012, , .		3
174	A repetitive microsecond-pulse generator for plasma application. , 2012, , .		3
175	A6 relativistic magnetron using a single-step cavity with diffraction output. , 2013, , .		3
176	Numerical simulations of output pulse extraction from a high-power microwave compressor with a plasma switch. Journal of Applied Physics, 2014, 115, 173302.	2.5	3
177	Dispersion diagram modeling for a metamaterial-like slow-wave structure. , 2014, , .		3
178	Simulation of Secondary Electron and Backscattered Electron Emission in A6 Relativistic Magnetron Driven by Different Cathode. Plasma Science and Technology, 2015, 17, 64-70.	1.5	3
179	Operation of a Microwave Pulse Compressor With a Laser-Triggered Plasma Switch at Different Laser Beam Directions. IEEE Transactions on Plasma Science, 2015, 43, 2140-2145.	1.3	3
180	Designing of an O-type BWO with a metamaterial slow-wave structure. , 2016, , .		3

#	ARTICLE	IF	CITATIONS
181	Efficient relativistic magnetron with lengthy virtual cathode formed using the magnetic mirror effect. , 2017, , .		3
182	The Low-Energy State of an Electron Beam in a Coaxial Diode with a Homogeneous Anode and Inhomogeneous Magnetic Field Profile. Technical Physics Letters, 2018, 44, 949-952.	0.7	3
183	Mode control by rearrangement of the slow wave structure in a 12-cavity relativistic magnetron with diffraction output using single-stepped cavities driven by a transparent cathode. AIP Advances, 2021, 11, .	1.3	3
184	Material Selection for Axial Magnetization of a Gyromagnetic NLTL for Space Applications. Journal of Microwaves, Optoelectronics and Electromagnetic Applications, 2021, 20, 629-642.	0.7	3
185	PIC Simulation of the Coherent Cerenkovâ€ Cyclotron Radiation Excited by a High-Power Electron Beam in a Crossed-Elliptical Metamaterial Oscillator at S-Band. IEEE Transactions on Plasma Science, 2021, 49, 3351-3357.	1.3	3
186	Metamaterial assisted microwave tubes: a review. Journal of Electromagnetic Waves and Applications, 2022, 36, 1189-1211.	1.6	3
187	Measurements of the electrohydrodynamic instability in planar geometry using gallium. Journal of Applied Physics, 1995, 78, 5270-5276.	2.5	2
188	Transport of a relativistic electron beam in gas and plasma-filled focusing cells for X-ray radiography. , 0, , .		2
189	Effects of the Multi-Switch Excitation on the Responsiveness of a Blumlein Line. , 2005, , .		2
190	Development of an X-band Antenna-Amplifier: Numerical Simulations and Plasma-Related Investigations. , 0, , .		2
191	Measurements of the I-V Characteristic of Short-Pulse (10-15 ns) Electron Beams. , 2007, , .		2
192	Analytical calculations of a lens for better focusing the fields from a prolate-spheroidal reflector. , 2008, , .		2
193	Modeling of a solid-state Marx generator with parasitic capacitances for optimization studies. , 2011, , .		2
194	Recent trends in high power microwave source research: Multispectral and phase coherent solutions. , 2012, , .		2
195	O-type oscillator with metamaterial-like slow-wave structure. , 2014, , .		2
196	RF Generation at 200 MHz Using a SiC Schottky Diode Lumped NLTL. , 2018, , .		2
197	A Novel Statistical Model for the Electromagnetic Coupling to Electronics inside Enclosures. , 2019, , .		2
198	Predictive Modeling for Estimating the Limits for Nonpersistent Effects in MOSFET Response Under Large Signal Gate Injection. IEEE Transactions on Electromagnetic Compatibility, 2020, 62, 1763-1771.	2.2	2

#	ARTICLE	IF	CITATIONS
199	Modeling and Stability of a Laser Beam-Driven Sail. , 2021, , .		2
200	Clarifying Analytically Calculated Dispersion Relations of Finite-Length Overmoded Corrugated Cylindrical Azimuthally Symmetric Slow Wave Structures Using Numerical Simulations. IEEE Transactions on Electron Devices, 2021, 68, 2990-2995.	3.0	2
201	Operation Study of a Bench Compact Gyromagnetic NLTL. , 2021, , .		2
202	Tunability Behavior of (Ba, Ca)(Zr, Ti)O Ceramic Capacitors Powered by Thermally Induced Phase Transitions With Applications to Nonlinear Transmission Lines<sub />. IEEE Transactions on Plasma Science, 2022, 50, 3371-3378.	1.3	2
203	Electron irradiation effects on photoconductive semiconductor switches (PCSSs) used in sub-nanosecond transient generators. IEEE Transactions on Nuclear Science, 1999, 46, 1722-1727.	2.0	1
204	Simulation, modeling, and experimental studies of high-gain gallium arsenide photoconductive switches for ultra-wideband applications. , 0, , .		1
205	Advances in the control of a "smart tube" high power backward wave oscillator. , 0, , .		1
206	Axisymmetric waves in dielectric corrugated rods and systems of periodic dielectric rings. IEEE Transactions on Plasma Science, 2002, 30, 1082-1088.	1.3	1
207	Electrical breakdown in polar liquids. , 0, , .		1
208	Rapid Onset of Oscillations in a Magnetron with a Transparent Cathode. IEEE International Conference on Plasma Science, 2005, , .	0.0	1
209	Simulation of Anode Material Erosion in the Internal Environment of HPM Devices. IEEE International Conference on Plasma Science, 2005, , .	0.0	1
210	Prospects for Long Pulse Generation in a Magnetron using a Transparent Cathode. IEEE International Conference on Plasma Science, 2005, , .	0.0	1
211	Simulation Studies of Liquid Water Breakdown By a Sub-Microsecond Pulse. , 2005, , .		1
212	Measurement of I-V characteristic of short-pulse (10-15ns) electron beam. , 2006, , .		1
213	Magnetron Studies in Phase and Frequency Locking. , 2007, , .		1
214	Design of a uniform electromagnetic dielectric lens for launching an approximate spherical tem wave. , 2009, , .		1
215	High efficiency relativistic magnetron with diffraction output. , 2009, , .		1
216	Mode switching in the A6 magnetron. , 2010, , .		1

#	ARTICLE	IF	CITATIONS
217	21.3: Mode separation in a magnetron with diffraction output driven by a transparent cathode. , 2010, , .		1
218	A prolate-spheroidal impulse-radiating antenna system to launch and focus 100-ps pulses for melanoma treatment. , 2010, , .		1
219	Suppression of leakage current in a relativistic magnetron using a novel cathode endcap design. , 2011, , .		1
220	Nanosecond-pulse diffuse discharge at atmospheric pressure. , 2012, , .		1
221	Recent advances in relativistic A6 magnetron research &#x2014; Improvements in start-up and efficiency. , 2012, , .		1
222	Compact A6 magnetron with permanent magnet. , 2012, , .		1
223	Quadrupole strong focusing transport for a Ka-band coupled cavity traveling wave tube amplifier. , 2012, , .		1
224	X-band tunable relativistic BWO with linearly polarized Gaussian radiation. , 2012, , .		1
225	Study on Q-V Lissajous figures in nanosecond-pulsed surface discharge. , 2012, , .		1
226	Analysis of quadrupole focusing lattices for electron beam transport in traveling-wave tubes. , 2013, , .		1
227	Generating RF pulses using a nonlinear hybrid line. , 2013, , .		1
228	A Tribute to Dr. Robert (Bob) J. Barker 1949&#x2013;2013. IEEE Transactions on Plasma Science, 2014, 42, 1482-1483.	1.3	1
229	Axial leakage current reduction in a 12-cavity rising-sun relativistic magnetron with a &#x201C;F&#x201D; transparent cathode. , 2014, , .		1
230	Initial characterization of a modular Magnetically Insulated Line Oscillator. , 2014, , .		1
231	Relativistic BWO with Gaussian beam extracted radially using an electromagnetic bandgap medium. , 2014, , .		1
232	Multipactor Coating for Sapphire RF Windows Using Remote Plasma-Assisted Deposition. IEEE Transactions on Plasma Science, 2015, 43, 2571-2580.	1.3	1
233	Comparative study of 0&#x2013; X-cut and Y + 36&#x2013; cut lithium niobate high-voltage sensing. Review of Scientific Instruments, 2015, 86, 085001.	1.3	1
234	Recent advances in high power microwave sources and the science of electronics in extreme electromagnetic environments at the university of new mexico. , 2017, , .		1

#	ARTICLE	IF	CITATIONS
235	Multi-Beam MTM High Power Microwave Source. , 2017, , .		1
236	Operating characteristics of a clamp klystron oscillator at E-band. Physics of Plasmas, 2018, 25, 073305.	1.9	1
237	Electromagnetic Compatibility in Leakage Current of CMOS Integrated Circuits. , 2019, , .		1
238	Application of High-Frequency Leakage Current Model for Characterizing Failure Modes in Digital Logic Gates. Energies, 2021, 14, 2906.	3.1	1
239	Short-pulse HPM measurements using a resistive sensor. IET Microwaves, Antennas and Propagation, 2020, 14, 1655-1661.	1.4	1
240	Time-Varying Radiation Impedance of Microcontroller GPIO Ports and Their Dependence on Software Instructions. IEEE Transactions on Electromagnetic Compatibility, 2022, 64, 1147-1159.	2.2	1
241	Analysis of the sharpening effect in gyromagnetic nonlinear transmission lines using the unidimensional form of the Landau-Lifshitz-Gilbert equation. Review of Scientific Instruments, 2022, 93, .	1.3	1
242	LONG-PULSE HIGH POWER MICROWAVE EXPERIMENTS. , 0, , .		0
243	EFFECTS OF USING A NONUNIFORM-AMPLITUDE SLOW WAVE STRUCTURE IN A REPETITIVELY-PULSED, HIGH POWER REL. , 1993, , .		0
244	INITIAL STUDIES OF FERROELECTRIC CATHODES. , 0, , .		0
245	Initial studies of ferroelectric cathodes. , 1993, , .		0
246	Characterization of the UNM long-pulse BWO experiment. , 0, , .		0
247	Neural network modeling of the input/output characteristics of a high power backward wave oscillator. , 0, , .		0
248	Plasma filling of high-power backward wave oscillators with nonuniform slow wave structures. , 0, , .		0
249	Implementation of a frequency-agile, high power backward wave oscillator. , 0, , .		0
250	A cathode mounted plasma prefill source for high power microwave experiments. , 0, , .		0
251	Study of power enhancement and frequency shifting of microwave emission in a plasma filled non-uniform BWO. , 0, , .		0
252	Rise time considerations for photoconductive switch materials used in high power UWB microwave applications. , 0, , .		0

#	ARTICLE	IF	CITATIONS
253	Comment on "Experimental Study of a High-Power Backward-Wave Oscillator Operating Far from the Upper Cutoff", Journal of the Physical Society of Japan, 1999, 68, 2147-2148.	1.6	0
254	Overview of intense beam-driven relativistic backward wave oscillators and their use in high power microwave effects studies. , 0, , .		0
255	Effects in an HPM BWO induced by the spent electron beam. , 0, , .		0
256	Communicating with microwave-propelled sails. IEEE Antennas and Propagation Magazine, 2003, 45, 111-122.	1.4	0
257	Studies of ceramic dielectrics for use in high power, pulsed power transmission lines. , 0, , .		0
258	Robust mobile robotic formation control using Internet-like protocols. , 0, , .		0
259	Effects of bending in a stacked, parallel-plate blumlein pulse forming line. , 0, , .		0
260	Plasma-filled focusing cells for paraxial diodes on RITS-3. , 0, , .		0
261	Interaction of a high-current electron beam with hybrid waveguide and plasma modes in a dielectric Cherenkov maser with a plasma layer. Plasma Physics Reports, 2004, 30, 587-594.	0.9	0
262	Measurements of secondary electron yield from materials with application to depressed collectors. , 0, , .		0
263	Plasma-filled focusing cell for radiographic paraxial diodes on RITs. , 0, , .		0
264	Numerical Simulations of an X-Band Antenna-Amplifier: Investigations of Gain, Bandwidth, and Drive Frequency Harmonics Generation. IEEE International Conference on Plasma Science, 2005, , .	0.0	0
265	Characterization of Materials with Low Secondary Electron Emission Yield for High-Power Microwave Devices. IEEE International Conference on Plasma Science, 2005, , .	0.0	0
266	A Graded-Conductivity Dielectric for Mitigation of Breakdown in a Pulse-Forming Line. , 2005, , .		0
267	Design and Optimization of a Low-Impedance Pulsed-Power Marx Generator to Drive High-Power Relativistic X-Band Magnetron. , 2005, , .		0
268	First Demonstration of the Simplest Cross-field Ubitron. International Power Modulator Symposium and High-Voltage Workshop, 2006, , .	0.0	0
269	Design and Optimization of a Low-impedance Pulsed-Power Marx Generator to Drive High-Power Relativistic X-Band Magnetron. International Power Modulator Symposium and High-Voltage Workshop, 2006, , .	0.0	0
270	Improvement of the Output Characteristics of a Relativistic Magnetron using a Small Diameter Cathode Surrounded by a Transparent Cathode. , 0, , .		0



#	ARTICLE	IF	CITATIONS
271	Design and optimization of a low impedance pulsed power marx generator to drive a relativistic x-band magnetron. , 2006, , .		0
272	Characterization of materials with low secondary electron yield for use in high-power microwave devices. , 2006, , .		0
273	Efficiency enhancement in a6 magnetron with transparent cathode. , 2006, , .		0
274	Efficiency enhancement in AG magnetron with transparent cathode. , 2006, , .		0
275	Rapid Startup In Magnetrons Using The Transparent Cathode. , 0, , .		0
276	Analytical and numerical calculation for the focal waveform of a prolate-spheroidal IRA. , 2007, , .		0
277	Impulsive field near the second focus along the symmetry axis of a prolate-spheroidal IRA. , 2007, , .		0
278	Study of Statistical Electromagnetics and Modeling of Surrogate IED Blasting Caps. , 2007, , .		0
279	Impulsive Field Near the Second Focus Along the Symmetry Axis of a Prolate-Spheroidal IRA. , 2007, , .		0
280	Characterization of the Dose Effect in Secondary Electron Emission. , 2007, , .		0
281	Investigation of Interaction of an Electron Beam and Metallic Grating in a Smith-Purcell Free Electron Laser (SPFEL). , 2007, , .		0
282	Academician Sergei D. Korovin: A Shortened Career in High Power Microwaves. , 2007, , .		0
283	Amplification and frequency-locking in a TWT using cyclotron depression of positive feedback. , 2008, , .		0
284	Short-Pulse Accelerators at UNM for Magnetron Experiments. , 2008, , .		0
285	Recent paraxial diode experiments on RITS-6. , 2008, , .		0
286	High efficiency relativistic magnetron with diffraction output. , 2009, , .		0
287	An iterative search algorithm for designing the bend of an H -plane bend radiator. International Journal of RF and Microwave Computer-Aided Engineering, 2010, 20, 567-576.	1.2	0
288	Experimental results for a graded dielectric focusing lens. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
289	Dispersion relation of the electron beam inside reltron cavity. , 2010, , .		0
290	Photon Initiated Thyristor Switches. , 2010, , .		0
291	Studies of 2D child langmuir space-charge-limited current using ICEPIC. , 2010, , .		0
292	Graded dielectric lens to match 100 ps pulses into biological targets. , 2010, , .		0
293	Investigation of switch designs for a prolate-spheroidal impulse radiating antenna. , 2010, , .		0
294	RF input for relativistic sectioned amplifiers. , 2011, , .		0
295	3D ICEPIC simulations of a pulsed relativistic magnetron with transparent cathode: A comparative study. , 2011, , .		0
296	Hysteresis dependence of mode separation on time-varying applied voltage in a magnetron with diffraction output. , 2011, , .		0
297	Compact relativistic magnetron with gaussian beam radiation pattern. , 2011, , .		0
298	Carl E. Baum: The University of New Mexico years. , 2011, , .		0
299	Recent advances in relativistic A6 magnetron research - mode control. , 2012, , .		0
300	Locked generation in a relativistic TWT near the region of cyclotron suppression of parasitic feedback. , 2013, , .		0
301	A survey of narrowband IEMI global threats. , 2013, , .		0
302	Generating RF pulses using a nonlinear hybrid line. , 2013, , .		0
303	Design considerations in lossy dielectric nonlinear transmission lines. , 2013, , .		0
304	Design considerations in lossy dielectric nonlinear transmission lines. , 2013, , .		0
305	Mode purification in a relativistic magnetron with diffraction output. , 2013, , .		0
306	PPPS-2013: UNM transparent cathode experiments revisited. , 2013, , .		0

#	ARTICLE	IF	CITATIONS
307	Single-flow electron motion in a magnetized coaxial diode. , 2013, , .		0
308	Operating characteristics of modes in an A6 relativistic magnetron with a stepped cavity. , 2013, , .		0
309	Microwave breakdown of air at low pressure with a 5 ns, 35 GHz pulse. , 2014, , .		0
310	Numerical simulations of microwave energy extraction from a high-gain, high-power pulse compressor with a plasma switch. , 2014, , .		0
311	Operation characteristics of a 12-cavity relativistic magnetron with diffraction output when considering secondary and backscattered electrons emission. , 2014, , .		0
312	Comparative study of lithium niobate crystal cuts for use as high-voltage acoustic wave sensors. , 2014, , .		0
313	Relativistic vircator with an electromagnetic bandgap medium. , 2015, , .		0
314	High power microwave source loaded by a two-spiral metamaterial structure for Cherenkov radiation. , 2015, , .		0
315	Testing of the A6 magnetron with radial extraction on the pulserad electron beam accelerator. , 2015, , .		0
316	Evolution of wave dispersion in periodic structures with increasing amplitude of corrugation. , 2015, , .		0
317	High efficiency relativistic magnetron with diffraction output operating with a virtual cathode. , 2015, , .		0
318	Compact A6 magnetron with a neodymium permanent magnet. , 2015, , .		0
319	Lengthy virtual cathode as key to repetitive operation of relativistic magnetrons. , 2016, , .		0
320	High power soliton generation using hybrid nonlinear transmission lines. , 2017, , .		0
321	Experimental Hot Test Results from a Compact Metamaterial Slow Wave Structure*. , 2017, , .		0
322	Novel Relativistic Magnetron With Lengthy Virtual Cathode And Magnetic Mirror. , 2017, , .		0
323	Realization of a Low Energy State of an Electron Beam in Uniform Channel. , 2018, , .		0
324	Analysis of Pulsed RF Signals Radiated from a Capacitive NLTL. , 2018, , .		0

#	ARTICLE	IF	CITATIONS
325	Relativistic magnetron with diffraction output (MDO) with a permanent magnet anode block configuration. , 2018, , .		0
326	Simulations of a W-Band Circular TWT. , 2019, , .		0
327	Recent Advances in Relativistic MDOs. , 2019, , .		0
328	Operating characteristics of a clamp klystron oscillator with a sloping cavity at W-band. AIP Advances, 2020, 10, .	1.3	0
329	Dispersion diagrams of linear slow-wave structures. Identification of electromagnetic waves, all electromagnetic waves: forward-traveling, backward-traveling and standing electromagnetic waves. Journal of Electromagnetic Waves and Applications, 0, , 1-14.	1.6	0
330	Computational study of an overmoded, with diameter to wavelength ratio $\hat{a} \approx 8$ , slow-wave structure (SWS) of a relativistic backward-wave oscillator (BWO) operating in the E-band frequency range. , 2021, , .		0
331	Calculation of Secondary Electron Yield of Alloys: Single Pole Approximation. , 2021, , .		0
332	Research Status on Nonlinear Transmission Lines for RF Generation. , 2020, , .		0
333	Central University Research Consortium. , 0, , .		0
334	Density Functional Theory Calculations Coupled with Monte Carlo Simulations for Prediction of Secondary Electron Yield from Metals, Alloys and Metal Oxides. , 2022, , .		0
335	Faraday Cup Measurements of Multiple Nanosecond Pulsed High-Current Electron Beam Generation from MICDS. , 2022, , .		0