

Yue Ying Lau

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/12954/yue-ying-lau-publications-by-year.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

127
papers

2,998
citations

29
h-index

49
g-index

194
ext. papers

3,639
ext. citations

2.6
avg, IF

5.14
L-index

#	Paper	IF	Citations
127	Explicit Brillouin Flow Solutions in Magnetrons, Magnetically Insulated Line Oscillators, and Radial Magnetically Insulated Transmission Lines. <i>IEEE Transactions on Plasma Science</i> , 2021 , 1-20	1.3	7
126	Analysis of Anode Current From a Thermionic Cathode With a 2-D Work Function Distribution. <i>IEEE Transactions on Plasma Science</i> , 2021 , 49, 749-755	1.3	7
125	A Relativistic and Electromagnetic Correction to the Ramo-Shockley Theorem. <i>IEEE Transactions on Plasma Science</i> , 2021 , 49, 2661-2669	1.3	1
124	Theory, simulation, and experiments on a magnetically insulated line oscillator (MILO) at 10 kA, 240 kV near Hull cutoff condition. <i>Physics of Plasmas</i> , 2021 , 28, 123102	2.1	2
123	Multipactor experiments on an S-band coaxial test cell.. <i>Review of Scientific Instruments</i> , 2021 , 92, 124706.7		1
122	. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 1894-1901	1.3	6
121	Theory of Traveling-Wave Tube Including Space Charge Effects on the Circuit Mode and Distributed Cold Tube Loss. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 665-668	1.3	3
120	Effect of Nonuniform Emission on Miram Curves. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 146-155	1.3	15
119	CST Particle Studio Simulations of Coaxial Multipactor and Comparison With Experiments. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 1942-1949	1.3	8
118	High-Power Amplification Experiments on a Recirculating Planar Crossed-Field Amplifier. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 1917-1922	1.3	1
117	Frequency and Power Measurements on the Harmonic Recirculating Planar Magnetron. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 1868-1878	1.3	0
116	Thermal Electron Flow in a Planar Crossed-Field Diode. <i>IEEE Transactions on Plasma Science</i> , 2020 , 48, 3109-3114	1.3	5
115	Extensions of Johnson's Theory of Backward-Wave Oscillations in a Traveling-Wave Tube. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 1519-1524	2.9	2
114	The effects of multipactor on the quality of a complex signal propagating in a transmission line. <i>Physics of Plasmas</i> , 2019 , 26, 112114	2.1	12
113	Evolution of sausage and helical modes in magnetized thin-foil cylindrical liners driven by a Z-pinch. <i>Physics of Plasmas</i> , 2018 , 25, 056307	2.1	19
112	. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 710-715	2.9	4
111	Pulse Shortening in Recirculating Planar Magnetrons. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 2354-2360	2.9	4

110	The electro-thermal stability of tantalum relative to aluminum and titanium in cylindrical liner ablation experiments at 550 kA. <i>Physics of Plasmas</i> , 2018 , 25, 032701	2.1	12
109	Absolute instability and transient growth near the band edges of a traveling wave tube. <i>Physics of Plasmas</i> , 2018 , 25, 072102	2.1	7
108	High-Power Recirculating Planar Crossed-Field Amplifier Design and Development. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 2361-2365	2.9	5
107	Temperature Comparison of Looped and Vertical Carbon Nanotube Fibers during Field Emission. <i>Applied Sciences (Switzerland)</i> , 2018 , 8, 1175	2.6	26
106	. <i>IEEE Transactions on Plasma Science</i> , 2018 , 46, 3928-3967	1.3	38
105	Modification of Pierce's Classical Theory of Traveling-Wave Tubes. <i>IEEE Electron Device Letters</i> , 2018 , 39, 1238-1241	4.4	7
104	The Electrothermal Instability on Pulsed Power Ablations of Thin Foils. <i>IEEE Transactions on Plasma Science</i> , 2018 , 46, 3753-3765	1.3	11
103	Diagnostic and Power Feed Upgrades to the MAIZE Facility. <i>IEEE Transactions on Plasma Science</i> , 2018 , 46, 3973-3981	1.3	9
102	Harmonic Frequency Locking in the Multifrequency Recirculating Planar Magnetron. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 2347-2353	2.9	5
101	On the evaluation of Pierce parameters C and Q in a traveling wave tube. <i>Physics of Plasmas</i> , 2017 , 24, 033114	2.1	11
100	100 years of the physics of diodes. <i>Applied Physics Reviews</i> , 2017 , 4, 011304	17.3	104
99	Pulse-shortening in recirculating planar magnetrons 2017 ,		1
98	Electric field distribution and current emission in a miniaturized geometrical diode. <i>Journal of Applied Physics</i> , 2017 , 121, 244301	2.5	33
97	Stability of Brillouin flow in the presence of slow-wave structure. <i>Physics of Plasmas</i> , 2016 , 23, 092101	2.1	8
96	Ultrafast strong-field photoelectron emission from biased metal surfaces: exact solution to time-dependent Schrödinger Equation. <i>Scientific Reports</i> , 2016 , 6, 19894	4.9	38
95	Constriction Resistance and Current Crowding in Electrically Pumped Semiconductor Nanolasers with the Presence of Undercut and Sidewall Tilt. <i>IEEE Journal of Quantum Electronics</i> , 2016 , 52, 1-7	2	9
94	Multi-frequency recirculating planar magnetrons. <i>Applied Physics Letters</i> , 2016 , 109, 074101	3.4	8
93	Discrete helical modes in imploding and exploding cylindrical, magnetized liners. <i>Physics of Plasmas</i> , 2016 , 23, 124502	2.1	21

92	Seeded and unseeded helical modes in magnetized, non-imploding cylindrical liner-plasmas. <i>Physics of Plasmas</i> , 2016 , 23, 101205	2.1	22
91	Ultrafast and nanoscale diodes. <i>Journal of Plasma Physics</i> , 2016 , 82,	2.7	31
90	Microwave Power and Phase Measurements on a Recirculating Planar Magnetron. <i>IEEE Transactions on Plasma Science</i> , 2015 , 43, 1675-1682	1.3	9
89	Technique for fabrication of ultrathin foils in cylindrical geometry for liner-plasma implosion experiments with sub-megaampere currents. <i>Review of Scientific Instruments</i> , 2015 , 86, 113506	1.7	11
88	Absolute Instability near the Band Edge of Traveling-Wave Amplifiers. <i>Physical Review Letters</i> , 2015 , 115, 124801	7.4	22
87	Harmonic Content in the Beam Current in a Traveling-Wave Tube. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 4285-4292	2.9	12
86	An exact field solution of contact resistance and comparison with the transmission line model. <i>Applied Physics Letters</i> , 2014 , 104, 204102	3.4	19
85	Passive mode control in the recirculating planar magnetron. <i>Physics of Plasmas</i> , 2013 , 20, 033108	2.1	10
84	Recirculating-Planar-Magnetron Simulations and Experiment. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 639-645	1.3	18
83	Impact of Random Fabrication Errors on Fundamental Forward-Wave Small-Signal Gain and Bandwidth in Traveling-Wave Tubes With Finite-Space-Charge Electron Beams. <i>IEEE Transactions on Electron Devices</i> , 2013 , 60, 1221-1227	2.9	33
82	Impact of random fabrication errors on backward-wave small-signal gain in traveling wave tubes with finite space charge electron beams. <i>Journal of Applied Physics</i> , 2013 , 113, 074905	2.5	5
81	Effects of Random Circuit Fabrication Errors on the Mean and Standard Deviation of Small Signal Gain and Phase of a Traveling Wave Tube. <i>IEEE Journal of the Electron Devices Society</i> , 2013 , 1, 117-128	2.3	8
80	Constriction Resistance and Current Crowding in Vertical Thin Film Contact. <i>IEEE Journal of the Electron Devices Society</i> , 2013 , 1, 83-90	2.3	10
79	Development of a compact LTD pulse generator for X-ray backlighting of planar foil ablation experiments 2013 ,		1
78	On the Spreading Resistance of Thin-Film Contacts. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 1936-1940	2.9	31
77	Effects of Multiple Internal Reflections on the Small-Signal Gain and Phase of a TWT. <i>IEEE Transactions on Electron Devices</i> , 2012 , 59, 1542-1550	2.9	12
76	Magneto-Rayleigh-Taylor experiments on a MegaAmpere linear transformer driver. <i>Physics of Plasmas</i> , 2012 , 19, 032701	2.1	20
75	Excitation of a slow wave structure. <i>Physics of Plasmas</i> , 2012 , 19, 123104	2.1	3

74	Effects of magnetic shear on magneto-Rayleigh-Taylor instability. <i>Physics of Plasmas</i> , 2012 , 19, 022703	2.1	26
73	An unnoticed property of the cylindrical relativistic Brillouin flow. <i>Physics of Plasmas</i> , 2012 , 19, 043103	2.1	7
72	Anisotropy and feedthrough in magneto-Rayleigh-Taylor instability. <i>Physical Review E</i> , 2011 , 83, 066405	2.4	42
71	Contact Resistance with Dissimilar Materials: Bulk Contacts and Thin Film Contacts 2011 ,		3
70	Recirculating planar magnetrons: Simulations and experiment 2011 ,		2
69	Multipactor susceptibility on a dielectric with a bias dc electric field and a background gas. <i>Physics of Plasmas</i> , 2011 , 18, 053508	2.1	49
68	Peer-to-peer locking of magnetrons: Analysis and experiment 2010 ,		1
67	. <i>IEEE Transactions on Plasma Science</i> , 2010 , 38, 704-713	1.3	84
66	Temporal and spatial locking of nonlinear systems. <i>Applied Physics Letters</i> , 2010 , 97, 171502	3.4	5
65	Negative, positive, and infinite mass properties of a rotating electron beam. <i>Applied Physics Letters</i> , 2010 , 97, 111501	3.4	11
64	High power nonlinear transmission lines with nonlinear inductance 2010 ,		5
63	A re-examination of the Buneman-Bartree condition in a cylindrical smooth-bore relativistic magnetron. <i>Physics of Plasmas</i> , 2010 , 17, 033102	2.1	28
62	Three-Dimensional Simulations of Magnetic Priming of a Relativistic Magnetron. <i>IEEE Transactions on Plasma Science</i> , 2010 , 38, 1292-1301	1.3	9
61	Azimuthally correlated ablation between z-pinch wire cores. <i>Physics of Plasmas</i> , 2009 , 16, 102702	2.1	8
60	Lumped circuit elements, statistical analysis, and radio frequency properties of electrical contact. <i>Journal of Applied Physics</i> , 2009 , 106, 084904	2.5	2
59	Schottky's conjecture on multiplication of field enhancement factors. <i>Journal of Applied Physics</i> , 2009 , 106, 104903	2.5	41
58	Experimental validation of a higher dimensional theory of electrical contact resistance. <i>Applied Physics Letters</i> , 2009 , 95, 072103	3.4	15
57	Conductive versus capacitive coupling for cell electroporation with nanosecond pulses. <i>Journal of Applied Physics</i> , 2009 , 106, 074701	2.5	9

56	MAIZE: a 1 MA LTD-Driven Z-Pinch at The University of Michigan 2009 ,		30
55	Effect of Random Circuit Fabrication Errors on Small-Signal Gain and Phase in Traveling-Wave Tubes. <i>IEEE Transactions on Electron Devices</i> , 2008 , 55, 916-924	2.9	17
54	Magnetic Priming at the Cathode of a Relativistic Magnetron. <i>IEEE Transactions on Plasma Science</i> , 2008 , 36, 710-717	1.3	23
53	Analysis of peer-to-peer locking of magnetrons. <i>Physics of Plasmas</i> , 2008 , 15, 103104	2.1	12
52	Effects of frequency chirp on magnetron injection locking. <i>Physics of Plasmas</i> , 2008 , 15, 073110	2.1	13
51	Role of ions in a crossed-field diode. <i>Physical Review Letters</i> , 2007 , 98, 015002	7.4	14
50	Performance and analysis of an electron cyclotron resonance plasma cathode. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2007 , 25, 781-790	2.9	4
49	Enhancement of cancer chemotherapy in vitro by intense ultrawideband electric field pulses. <i>Journal of Applied Physics</i> , 2006 , 99, 094701	2.5	9
48	A simple physical derivation of Child-Langmuir space-charge-limited emission using vacuum capacitance. <i>American Journal of Physics</i> , 2005 , 73, 160-163	0.7	29
47	Azimuthal clumping instabilities in a Z-pinch wire array. <i>Physics of Plasmas</i> , 2005 , 12, 052701	2.1	3
46	Simulation of rapid startup in microwave magnetrons with azimuthally varying axial magnetic fields. <i>Applied Physics Letters</i> , 2004 , 84, 1016-1018	3.4	29
45	Power absorption by thin films on microwave windows. <i>IEEE Transactions on Plasma Science</i> , 2004 , 32, 1292-1297	1.3	4
44	Low-noise microwave oven magnetrons with fast start-oscillation by azimuthally varying axial magnetic fields. <i>IEEE Transactions on Plasma Science</i> , 2004 , 32, 1152-1159	1.3	28
43	Nonlinear Thomson scattering: A tutorial. <i>Physics of Plasmas</i> , 2003 , 10, 2155-2162	2.1	106
42	Efficient computation of current in multiwire Z-pinch arrays. <i>IEEE Transactions on Plasma Science</i> , 2003 , 31, 1384-1387	1.3	6
41	Limiting current in a relativistic diode under the condition of magnetic insulation. <i>Physics of Plasmas</i> , 2003 , 10, 4489-4493	2.1	13
40	Low-noise microwave magnetrons by azimuthally varying axial magnetic field. <i>Applied Physics Letters</i> , 2003 , 83, 1938-1940	3.4	45
39	Caterpillar structures in single-wire Z-pinch experiments. <i>Applied Physics Letters</i> , 2003 , 83, 4915-4917	3.4	6

38	Microwave absorption on a thin film. <i>Applied Physics Letters</i> , 2003 , 82, 1353-1355	3.4	84
37	Phase dependence of Thomson scattering in an ultraintense laser field. <i>Physics of Plasmas</i> , 2002 , 9, 4325-4329	2.1	27
36	Effects of pulse-length and emitter area on virtual cathode formation in electron guns. <i>Physics of Plasmas</i> , 2002 , 9, 2377-2382	2.1	77
35	. <i>IEEE Transactions on Plasma Science</i> , 2002 , 30, 1160-1168	1.3	27
34	Extraction of ions from the matrix sheath in ablation-plasma ion implantation. <i>Applied Physics Letters</i> , 2001 , 78, 706-708	3.4	11
33	Multipactor experiment on a dielectric surface. <i>Review of Scientific Instruments</i> , 2001 , 72, 3095-3099	1.7	18
32	Simple theory for the two-dimensional Child-Langmuir law. <i>Physical Review Letters</i> , 2001 , 87, 278301	7.4	152
31	Effects of an external magnetic field, and of oblique radio-frequency electric fields on multipactor discharge on a dielectric. <i>Physics of Plasmas</i> , 2000 , 7, 750-757	2.1	79
30	Resonant absorption of a short-pulse laser in a doped dielectric. <i>Applied Physics Letters</i> , 1999 , 74, 2912-2914	3.4	1
29	Electron beam ablation of materials. <i>Journal of Applied Physics</i> , 1999 , 86, 7129-7138	2.5	31
28	Multipactor discharge on metals and dielectrics: Historical review and recent theories. <i>Physics of Plasmas</i> , 1998 , 5, 2120-2126	2.1	236
27	Frequency response of multipactor discharge. <i>Physics of Plasmas</i> , 1998 , 5, 300-304	2.1	6
26	Collapse of cycloidal electron flows induced by misalignments in a magnetically insulated diode. <i>Physics of Plasmas</i> , 1998 , 5, 2447-2453	2.1	13
25	Absolute instability in a traveling wave tube model. <i>Physics of Plasmas</i> , 1998 , 5, 4408-4410	2.1	9
24	Steady state multipactor and dependence on material properties. <i>Physics of Plasmas</i> , 1997 , 4, 863-872	2.1	26
23	An evaluation of the intrinsic emittance of a field emitter. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1996 , 14, 2126		10
22	Two-Dimensional Child-Langmuir Law. <i>Physical Review Letters</i> , 1996 , 77, 4668-4670	7.4	138
21	One-dimensional modulational instability in a crossed-field gap. <i>Physical Review Letters</i> , 1996 , 76, 3324-3327	7.4	28

20	A novel phase focusing mechanism in multipactor discharge. <i>Physics of Plasmas</i> , 1996 , 3, 1481-1483	2.1	36
19	Resistive destabilization of cycloidal electron flow and universality of (near-) Brillouin flow in a crossed-field gap. <i>Physics of Plasmas</i> , 1996 , 3, 4455-4462	2.1	27
18	Effects of a series resistor on electron emission from a field emitter. <i>Applied Physics Letters</i> , 1996 , 69, 2770-2772	3.4	27
17	Interaction of multipactor discharge and rf circuit. <i>Physical Review Letters</i> , 1995 , 75, 1218-1221	7.4	71
16	Kinetic Alfvén mode and kinetic magnetosonic mode from a fluid description. <i>Physics of Plasmas</i> , 1995 , 2, 1367-1371	2.1	1
15	Transition to turbulence in a crossed-field gap. <i>Physics of Plasmas</i> , 1994 , 1, 3725-3727	2.1	36
14	Fluid description of kinetic modes. <i>Physics of Plasmas</i> , 1994 , 1, 2816-2821	2.1	4
13	Beam breakup growth and reduction experiments in long-pulse electron beam transport. <i>Journal of Applied Physics</i> , 1994 , 75, 1258-1266	2.5	1
12	Beam breakup instability in an annular electron beam. <i>Journal of Applied Physics</i> , 1993 , 74, 5877-5879	2.5	1
11	A review of the ac space-charge effect in electron-circuit interactions. <i>Physics of Fluids B</i> , 1992 , 4, 3473-3497	4.0	
10	Model of cavity coupling for beam breakup control. <i>Journal of Applied Physics</i> , 1992 , 72, 3874-3877	2.5	3
9	Beam breakup in recirculating induction accelerators. <i>Applied Physics Letters</i> , 1989 , 55, 2673-2675	3.4	3
8	Effects of frequency spreads on beam breakup instabilities in linear accelerators. <i>Applied Physics Letters</i> , 1989 , 55, 27-29	3.4	10
7	Externally modulated intense relativistic electron beams. <i>Journal of Applied Physics</i> , 1988 , 64, 3353-3379	2.5	99
6	Beam breakup instabilities in linear accelerators: Transition, phase mixing, and nonlinear focusing. <i>Applied Physics Letters</i> , 1988 , 53, 2602-2604	3.4	8
5	Modulation of an intense beam by an external microwave source: Theory and simulation. <i>Applied Physics Letters</i> , 1988 , 52, 431-433	3.4	14
4	Some design considerations on using modulated intense annular electron beams for particle acceleration. <i>Journal of Applied Physics</i> , 1987 , 62, 351-356	2.5	15
3	Effects of cathode surface roughness on the quality of electron beams. <i>Journal of Applied Physics</i> , 1987 , 61, 36-44	2.5	56

- 2 Gyrotron travelling wave amplifier: IV. Analysis of launching losses. *Journal of Infrared, Millimeter and Terahertz Waves*, **1982**, 3, 45-62 6
- 1 Theory of a low magnetic field gyrotron (gyromagnetron). *Journal of Infrared, Millimeter and Terahertz Waves*, **1982**, 3, 619-644 89