

Cheuk-Yu Edward Tong

List of Publications by Year in descending order

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72
docs citations

72
times ranked

573
citing authors

#	ARTICLE	IF	CITATIONS
1	A wideband fixed-tuned SIS receiver for 200-GHz operation. IEEE Transactions on Microwave Theory and Techniques, 1995, 43, 933-937.	4.6	51
2	Low noise NbN lattice-cooled superconducting hot-electron bolometric mixers at submillimeter wavelengths. Applied Physics Letters, 1997, 70, 1619-1621.	3.3	38
3	Design and characterization of a 250-350-GHz fixed-tuned superconductor-insulator-superconductor receiver. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 1548-1556.	4.6	36
4	A 1-THz Superconducting Hot-Electron-Bolometer Receiver for Astronomical Observations. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 2338-2343.	4.6	33
5	Quantum limited heterodyne detection in superconducting non-linear transmission lines at sub-millimeter wavelengths. Applied Physics Letters, 1995, 67, 1304-1306.	3.3	32
6	An integrated SIS mixer and HEMT IF amplifier. IEEE Transactions on Microwave Theory and Techniques, 1996, 44, 987-990.	4.6	25
7	Study of the IF bandwidth of NbN HEB mixers based on crystalline quartz substrate with an MgO buffer layer. IEEE Transactions on Applied Superconductivity, 2003, 13, 164-167.	1.7	25
8	Terahertz-frequency waveguide NbN hot-electron bolometer mixer. IEEE Transactions on Applied Superconductivity, 2001, 11, 952-954.	1.7	22
9	An efficient algorithm for transmission line matrix analysis of electromagnetic problems using the symmetrical condensed node. IEEE Transactions on Microwave Theory and Techniques, 1991, 39, 1420-1424.	4.6	21
10	A Map of OMC-1 in CO J= 9â†’8. Astrophysical Journal, 2004, 612, 940-945.	4.5	21
11	Evidence for dynamically important magnetic fields in molecular clouds. Monthly Notices of the Royal Astronomical Society, 2011, 411, 2067-2075.	4.4	21
12	A 220-GHz SIS Mixer Tightly Integrated With a Sub-Hundred-Microwatt SiGe IF Amplifier. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 133-140.	3.1	19
13	Near field vector beam measurements at 1 THz. IEEE Microwave and Wireless Components Letters, 2003, 13, 235-237.	3.2	18
14	High-Performance WR-4.3 Optically Controlled Variable Attenuator With 60-dB Range. IEEE Microwave and Wireless Components Letters, 2018, 28, 512-514.	3.2	18
15	Investigation and Demonstration of a WR-4.3 Optically Controlled Waveguide Attenuator. IEEE Transactions on Terahertz Science and Technology, 2017, , 1-7.	3.1	17
16	Superconductive hot-electron-bolometer mixer receiver for 800-GHz operation. IEEE Transactions on Microwave Theory and Techniques, 2000, 48, 683-689. First image with the GRI Superconductive HEB Receiver. The Protostellar Outflow from IRAS	4.6	16
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#	ARTICLE	IF	CITATIONS
19	Performance of the NbTiN Hot Electron Bolometer Mixer with AlN Buffer Layer at Terahertz Frequency Range. IEEE Transactions on Applied Superconductivity, 2005, 15, 476-479.	1.7	14
20	A Distributed Lumped-Element SIS Mixer With Very Wide Instantaneous Bandwidth. IEEE Transactions on Applied Superconductivity, 2005, 15, 490-494.	1.7	14
21	A Low-Loss Edge-Mode Isolator With Improved Bandwidth for Cryogenic Operation. IEEE Transactions on Microwave Theory and Techniques, 2018, 66, 2154-2160.	4.6	14
22	A Compact Machinable 90° Waveguide Twist for Broadband Applications. IEEE Transactions on Microwave Theory and Techniques, 2020, 68, 2515-2520.	4.6	13
23	A Wide-Band High-Gain Compact SIS Receiver Utilizing a 300- μ W SiGe IF LNA. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	12
24	Performance of NbN lattice-cooled hot-electron bolometric mixers. Journal of Applied Physics, 1996, 80, 4232-4234.	2.5	11
25	Theory of distributed mixing and amplification in a superconducting quasi-particle nonlinear transmission line. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 1086-1092.	4.6	11
26	Stabilization Scheme for Hot-Electron Bolometer Receivers Using Microwave Radiation. IEEE Transactions on Applied Superconductivity, 2009, 19, 14-19.	1.7	11
27	Large-Signal Frequency Response of an HEB Mixer: From 300 MHz to Terahertz. IEEE Transactions on Applied Superconductivity, 2011, 21, 628-631.	1.7	11
28	A self-diplexing quasi-optical magic slot balanced mixer. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 383-388.	4.6	10
29	An 800 GHz NbN phonon-cooled hot-electron bolometer mixer receiver. IEEE Transactions on Applied Superconductivity, 1999, 9, 3753-3756.	1.7	9
30	Design and Performance of a 3-Junction Series Distributed SIS Mixer for Wide IF Applications. IEEE Transactions on Applied Superconductivity, 2013, 23, 1400404-1400404.	1.7	9
31	Harmonic mixing in a superconducting tunnel junction. Journal of Applied Physics, 1990, 68, 4192-4198.	2.5	8
32	Submillimeter Array Observations of CS J = 14-13 Emission from the Evolved Star IRC +10216. Astrophysical Journal, 2004, 616, L51-L54.	4.5	8
33	Temperature Resolution of an HEB Receiver at 810 GHz. IEEE Transactions on Applied Superconductivity, 2009, 19, 293-296.	1.7	8
34	Microwave characteristics of high-speed traveling-wave electrooptic modulators on III-V semiconductors. Journal of Lightwave Technology, 1991, 9, 1295-1304.	4.6	7
35	Scaled model measurement of the embedding impedance of a 660-GHz waveguide SIS mixer with a 3-standard deembedding method. IEEE Microwave and Wireless Components Letters, 2003, 13, 376-378.	3.2	7
36	Wideband SIS Receivers Using Series Distributed SIS Junction Array. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 428-432.	3.1	7

#	ARTICLE	IF	CITATIONS
37	Direct Measurement of the Gain and Noise Bandwidths of HEB Mixers. IEEE Transactions on Applied Superconductivity, 2011, 21, 645-648.	1.7	6
38	A Microwave Reflection Readout Scheme for Hot Electron Bolometric Direct Detector. IEEE Transactions on Terahertz Science and Technology, 2015, , 1-4.	3.1	6
39	A 650 GHz fixed-tuned waveguide SIS distributed mixer with no integrated tuning circuit. IEEE Transactions on Applied Superconductivity, 2003, 13, 680-683.	1.7	5
40	Wideband submillimeter receivers based on series distributed SIS junctions. , 2012, , .		5
41	A Silicon Chip-Based Waveguide Directional Coupler for Terahertz Applications. IEEE Transactions on Terahertz Science and Technology, 2020, 10, 698-703.	3.1	5
42	Gain stabilization of a submillimeter SIS heterodyne receiver. IEEE Transactions on Microwave Theory and Techniques, 2005, 53, 389-395.	4.6	4
43	Fundamental and harmonic mixing at 500 GHz using a superconductor-insulator-normal metal junction. Journal of Applied Physics, 1992, 72, 3829-3831.	2.5	3
44	An Investigation of the Performance of the Superconducting HEB Mixer as a Function of Its RF Embedding Impedance. IEEE Transactions on Applied Superconductivity, 2005, 15, 472-475.	1.7	3
45	Study of the Effect of Microwave Radiation on the Operation of HEB Mixers in the Terahertz Frequency Range. IEEE Transactions on Applied Superconductivity, 2007, 17, 391-394.	1.7	3
46	Gain Expansion and Compression of SIS Mixers. IEEE Transactions on Applied Superconductivity, 2009, 19, 309-312.	1.7	3
47	Microwave stabilization of HEB mixer by a microchip controller. , 2012, , .		3
48	Microwave Stabilization of a HEB Mixer in a Pulse-Tube Cryocooler. IEEE Transactions on Applied Superconductivity, 2013, 23, 1501504-1501504.	1.7	3
49	A Microwave-Operated Hot-Electron-Bolometric Power Detector for Terahertz Radiation. IEEE Transactions on Applied Superconductivity, 2014, , 1-1.	1.7	3
50	Probing the Stability of HEB Mixers With Microwave Injection. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.7	3
51	Operation of Mixer Comprising a Series-Connected Distributed Superconductor-insulator-Superconductor Junction Array. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.7	3
52	Quasi-Optical Characterization of Low-Loss Polymers at 300 GHz for Vacuum Window Applications. IEEE Transactions on Terahertz Science and Technology, 2020, 10, 713-720.	3.1	3
53	Transverse transmission theory for multilayer planar microwave circuits. International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 1994, 7, 225-238.	1.9	2
54	A quasi-optical image separation scheme for millimeter and submillimeter waves. IEEE Transactions on Microwave Theory and Techniques, 1994, 42, 2174-2177.	4.6	2

#	ARTICLE	IF	CITATIONS
55	Measurement of intermediate frequency bandwidth of hot electron bolometer mixers at terahertz frequency range. IEEE Microwave and Wireless Components Letters, 2003, 13, 493-495.	3.2	2
56	Effect of microwave radiation on the stability of terahertz hot-electron bolometer mixers. , 2006, , .		2
57	Gain Enhancement in Inductively-Loaded Distributed SIS Junction Arrays. IEEE Transactions on Applied Superconductivity, 2007, 17, 371-374.	1.7	2
58	Ultra-wide IF bandwidth — The next frontier for SIS receivers. , 2015, , .		2
59	A wideband profiled corrugated horn for multichroic applications. , 2015, , .		2
60	Wideband SIS receiver development for the Submillimeter Array. , 2015, , .		2
61	Nb/Al-AlOx/Nb edge junctions for distributed mixers. IEEE Transactions on Applied Superconductivity, 1999, 9, 3878-3881.	1.7	1
62	A Dispersion-Compensated Algorithm for the Analysis of Electromagnetic Waveguides. IEEE Signal Processing Letters, 2021, 28, 1175-1179.	3.6	1
63	A stable laser-based millimeter wavelength source. SPIE Newsroom, 2007, , .	0.1	1
64	Measuring Cryogenic Waveguide Loss in the Terahertz Regime. IEEE Transactions on Terahertz Science and Technology, 2022, 12, 293-299.	3.1	1
65	An NRD fed dielectric rod antenna for the short millimeter wave band. Journal of Infrared, Millimeter and Terahertz Waves, 1989, 10, 1153-1163.	0.6	0
66	Harmonic effects in superconducting tunnel junction mixers. Journal of Infrared, Millimeter and Terahertz Waves, 1991, 12, 1265-1273.	0.6	0
67	An Nb-based waveguide SIS distributed mixer employing coplanar inductor loaded microstrip transformer for the 800 GHz frequency band. IEEE Transactions on Applied Superconductivity, 2003, 13, 668-671.	1.7	0
68	Characterization of SIS Receivers Using a Digital Spectrometer. IEEE Transactions on Applied Superconductivity, 2011, 21, 659-662.	1.7	0
69	Vector near-field beam scanner for the SMA. , 2014, , .		0
70	Noise Wave Modeling of an SIS Mixer and Its IF Circuit Using Tucker's Quantum Theory of Mixing. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	0
71	A Flexible Fabrication Process for Thin Si-Substrate chips on Millimeter Wave Applications. , 2021, , .		0
72	Science with the Upgraded ultra-wideband Submillimeter Array (wSMA) in the Next Decade. , 2019, , .		0