Marcel Bruijn

List of Publications by Year
in descending order

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52	720	567281	610901
papers	citations	15 h-index	24 g-index

52	52	52	401
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The SPICA-SAFARI Detector System: TES Detector Arrays With Frequency-Division Multiplexed SQUID Readout. IEEE Transactions on Terahertz Science and Technology, 2012, 2, 12-21.	3.1	59
2	Thermal fluctuation noise in a voltage biased superconducting transition edge thermometer. Applied Physics Letters, 2000, 77, 4422-4424.	3.3	57
3	Radiative ballistic phonon transport in silicon-nitride membranes at low temperatures. Applied Physics Letters, 2005, 86, 251903.	3.3	56
4	Development of a Ti/Au TES Microcalorimeter Array as a Backup Sensor for the Athena/X-IFU Instrument. Journal of Low Temperature Physics, 2020, 199, 943-948.	1.4	32
5	Josephson effects in an alternating current biased transition edge sensor. Applied Physics Letters, 2014, 105, .	3.3	28
6	Characterization of a High-Performance Ti/Au TES Microcalorimeter with a Central Cu Absorber. Journal of Low Temperature Physics, 2008, 151, 161-166.	1.4	27
7	High-Q LC Filters for FDM Read out of Cryogenic Sensor Arrays. Journal of Low Temperature Physics, 2012, 167, 695-700.	1.4	24
8	Performance of X-ray microcalorimeters with an energy resolution below 4.5 eV and 100 Î¼s response time. , 2002, , .		22
9	Frequency Domain Multiplexed Readout of TES Detector Arrays With Baseband Feedback. IEEE Transactions on Applied Superconductivity, 2011, 21, 289-293.	1.7	22
10	High aspect ratio transition edge sensors for x-ray spectrometry. Journal of Applied Physics, 2020, 128, .	2.5	20
11	Tailoring the High-Q LC Filter Arrays for Readout of Kilo-Pixel TES Arrays in the SPICA-SAFARI Instrument. Journal of Low Temperature Physics, 2014, 176, 421.	1.4	19
12	Development of the superconducting detectors and read-out for the X-IFU instrument on board of the X-ray observatory Athena. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 824, 622-625.	1.6	18
13	Josephson Effects in Frequency-Domain Multiplexed TES Microcalorimeters and Bolometers. Journal of Low Temperature Physics, 2018, 193, 209-216.	1.4	18
14	Complex impedance of TESs under AC bias using FDM readout system. AIP Advances, 2019, 9, .	1.3	18
15	Low-noise microwave SQUID multiplexed readout of 38 x-ray transition-edge sensor microcalorimeters. Applied Physics Letters, 2020, 117, 122601.	3.3	18
16	Fabrication of Low-Noise TES Arrays for the SAFARI Instrument on SPICA. Journal of Low Temperature Physics, 2016, 184, 60-65.	1.4	17
17	Progress in the Development of Frequency-Domain Multiplexing for the X-ray Integral Field Unit on Board the Athena Mission. Journal of Low Temperature Physics, 2020, 199, 737-744.	1.4	15
18	Development of frequency domain multiplexing for the X-ray Integral Field unit (X-IFU) on the Athena. Proceedings of SPIE, 2016, , .	0.8	14

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19	TES-Based X-ray Microcalorimeter Performances Under AC Bias and FDM for Athena. Journal of Low Temperature Physics, 2016, 184, 436-442.	1.4	14
20	The focal plane assembly for the Athena X-ray Integral Field Unit instrument. Proceedings of SPIE, 2016, , .	0.8	14
21	Demonstration of MHz frequency domain multiplexing readout of 37 transition edge sensors for high-resolution x-ray imaging spectrometers. Applied Physics Letters, 2021, 119, .	3.3	14
22	Development of an array of transition edge sensors for application in X-ray astronomy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 520, 443-445.	1.6	13
23	LC Filters for FDM Readout of the X-IFU TES Calorimeter Instrument on Athena. Journal of Low Temperature Physics, 2018, 193, 661-667.	1.4	13
24	A six-degree-of-freedom micro-vibration acoustic isolator for low-temperature radiation detectors based on superconducting transition-edge sensors. Review of Scientific Instruments, 2019, 90, 055107.	1.3	13
25	Nearly Quantum Limited Two-Stage SQUID Amplifiers for the Frequency Domain Multiplexing of TES Based X-ray and Infrared Detectors. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-4.	1.7	12
26	Study of Dissipative Losses in AC-Biased Mo/Au Bilayer Transition-Edge Sensors. Journal of Low Temperature Physics, 2018, 193, 356-364.	1.4	12
27	Performance and uniformity of a kilo-pixel array of Ti/Au transition-edge sensor microcalorimeters. Review of Scientific Instruments, 2021, 92, 023101.	1.3	10
28	Superconducting LC Filter Circuits for Frequency Division Multiplexed Readout of TES Detectors. IEEE Transactions on Applied Superconductivity, 2011, 21, 294-297.	1.7	9
29	Progress in fabrication of microcalorimeter arrays: X-ray absorbers and high-density stripline wiring. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 559, 444-446.	1.6	8
30	Study of TES Detector Transition Curve to Optimize the Pixel Design for Frequency-Division Multiplexing Readout. Journal of Low Temperature Physics, 2020, 199, 962-967.	1.4	8
31	AC biased TES-based X-ray microcalorimeter with an energy resolution of 6.3 eV at 5.89 keV. IEEE Transactions on Applied Superconductivity, 2003, 13, 638-642.	1.7	7
32	Development of arrays of transition edge sensors for application in X-ray astronomy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 513, 143-146.	1.6	6
33	Progress on the FDM Development at SRON: Toward 160 Pixels. Journal of Low Temperature Physics, 2014, 176, 439.	1.4	6
34	FDM Readout Assembly with Flexible, Superconducting Connection to Cryogenic kilo-Pixel TES Detectors. Journal of Low Temperature Physics, 2016, 184, 369-373.	1.4	6
35	AC/DC Characterization of a Ti/Au TES with Au/Bi Absorber for X-ray Detection. Journal of Low Temperature Physics, 2020, 199, 102-109.	1.4	6
36	Frequency shift algorithm: Application to a frequency-domain multiplexing readout of x-ray transition-edge sensor microcalorimeters. Review of Scientific Instruments, 2021, 92, 033103.	1.3	6

#	Article	IF	Citations
37	The SAFARI detector system. , 2018, , .		6
38	Understanding TES microcalorimeter noise and energy resolution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 520, 329-332.	1.6	5
39	Modeling Inductances of Wiring for a TES Array Read by FDM. IEEE Transactions on Applied Superconductivity, 2015, 25, 1-5.	1.7	5
40	Ti/Au TES 32 Ã— 32 Pixel Array: Uniformity, Thermal Crosstalk and Performance at Different X-Ray Energies. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	5
41	Frequency division multiplexed readout of TES detectors with baseband feedback. Proceedings of SPIE, 2012, , .	0.8	4
42	Development of TES-based detectors array for the X-ray Integral Field Unit (X-IFU) on the future x-ray observatory ATHENA. Proceedings of SPIE, 2014, , .	0.8	4
43	Electrical cross talk of a frequency division multiplexing readout for a transition edge sensor bolometer array. Review of Scientific Instruments, 2021, 92, 014710.	1.3	4
44	Impact of the Absorber-Coupling Design for Transition-Edge-Sensor X-Ray Calorimeters. Physical Review Applied, 2021, 16, .	3.8	4
45	Thermal Crosstalk of X-Ray Transition-Edge Sensor Micro-Calorimeters Under Frequency Domain Multiplexing Readout. IEEE Transactions on Applied Superconductivity, 2022, 32, 1-7.	1.7	4
46	Steepness, noise and instabilities of Ti/Au transition edge thermometers. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 559, 709-711.	1.6	3
47	Advances in Fabrication of TES Î¼-Calorimeter Arrays and Associated Filter Structures for AC-Biased ReadÂOut. Journal of Low Temperature Physics, 2008, 151, 500-505.	1.4	3
48	Development of frequency domain multiplexing for the x-ray Integral Field Unit (X-IFU) (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5		3
49	Small Size Transition-Edge Sensors for Future X-Ray Applications. Journal of Low Temperature Physics, 2022, 209, 256-262.	1.4	3
50	Limitations of heat conductivity in cryogenic sensors due to surface roughness [X-ray detection]. , 0, , .		2
51	Single Pixel Performance of a 32 Ã— 32 Ti/Au TES Array With Broadband X-Ray Spectra. IEEE Transactions on Applied Superconductivity, 2021, 31, 1-5.	1.7	2
52	Frequency division multiplexing readout of 60 low-noise transition-edge sensor bolometers. Applied Physics Letters, 2021, 119, .	3.3	2