Luigi Frunzio

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/2525132/luigi-frunzio-publications-by-year.pdf

Version: 2024-04-28

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.

166	16,867	61	129
papers	citations	h-index	g-index
173	19,564 ext. citations	10.9	6.16
ext. papers		avg, IF	L-index

#	Paper	IF	Citations
166	Frequency-tunable Kerr-free three-wave mixing with a gradiometric SNAIL. <i>Applied Physics Letters</i> , 2022 , 120, 184002	3.4	1
165	Single-shot number-resolved detection of microwave photons with error mitigation. <i>Physical Review A</i> , 2021 , 103,	2.6	1
164	Error-Detected State Transfer and Entanglement in a Superconducting Quantum Network. <i>PRX Quantum</i> , 2021 , 2,	6.1	4
163	High coherence superconducting microwave cavities with indium bump bonding. <i>Applied Physics Letters</i> , 2020 , 116, 154002	3.4	11
162	Efficient Multiphoton Sampling of Molecular Vibronic Spectra on a Superconducting Bosonic Processor. <i>Physical Review X</i> , 2020 , 10,	9.1	28
161	Error-corrected gates on an encoded qubit. <i>Nature Physics</i> , 2020 , 16, 822-826	16.2	20
160	Free-standing silicon shadow masks for transmon qubit fabrication. <i>AIP Advances</i> , 2020 , 10, 065120	1.5	7
159	High-Fidelity Measurement of Qubits Encoded in Multilevel Superconducting Circuits. <i>Physical Review X</i> , 2020 , 10,	9.1	21
158	Quantum error correction of a qubit encoded in grid states of an oscillator. <i>Nature</i> , 2020 , 584, 368-372	50.4	86
157	Gated Conditional Displacement Readout of Superconducting Qubits. <i>Physical Review Letters</i> , 2019 , 122, 080502	7.4	37
156	Direct Dispersive Monitoring of Charge Parity in Offset-Charge-Sensitive Transmons. <i>Physical Review Applied</i> , 2019 , 12,	4.3	33
155	Entanglement of bosonic modes through an engineered exchange interaction. <i>Nature</i> , 2019 , 566, 509-5	15 0.4	47
154	On-demand quantum state transfer and entanglement between remote microwave cavity memories. <i>Nature Physics</i> , 2018 , 14, 705-710	16.2	82
153	A CNOT gate between multiphoton qubits encoded in two cavities. <i>Nature Communications</i> , 2018 , 9, 652	17.4	61
152	Coherent Oscillations inside a Quantum Manifold Stabilized by Dissipation. <i>Physical Review X</i> , 2018 , 8,	9.1	39
151	Fault-tolerant detection of a quantum error. <i>Science</i> , 2018 , 361, 266-270	33.3	65
150	RETICULA: Real-time code quality assessment 2018 ,		1

(2016-2018)

149	Creation and control of multi-phonon Fock states in a bulk acoustic-wave resonator. <i>Nature</i> , 2018 , 563, 666-670	50.4	100
148	Hot Nonequilibrium Quasiparticles in Transmon Qubits. <i>Physical Review Letters</i> , 2018 , 121, 157701	7.4	62
147	Deterministic teleportation of a quantum gate between two logical qubits. <i>Nature</i> , 2018 , 561, 368-373	50.4	86
146	Deterministic Remote Entanglement of Superconducting Circuits through Microwave Two-Photon Transitions. <i>Physical Review Letters</i> , 2018 , 120, 200501	7.4	62
145	Driving Forbidden Transitions in the Fluxonium Artificial Atom. Physical Review Applied, 2018, 9,	4.3	14
144	Simultaneous Monitoring of Fluxonium Qubits in a Waveguide. Physical Review Applied, 2018 , 9,	4.3	19
143	Programmable Interference between Two Microwave Quantum Memories. <i>Physical Review X</i> , 2018 , 8,	9.1	27
142	Fluxonium-Based Artificial Molecule with a Tunable Magnetic Moment. <i>Physical Review X</i> , 2017 , 7,	9.1	22
141	Quantum acoustics with superconducting qubits. <i>Science</i> , 2017 , 358, 199-202	33-3	176
140	Implementing a universal gate set on a logical qubit encoded in an oscillator. <i>Nature Communications</i> , 2017 , 8, 94	17.4	110
139	Micromachined Integrated Quantum Circuit Containing a Superconducting Qubit. <i>Physical Review Applied</i> , 2017 , 7,	4.3	16
138	Controlled release of multiphoton quantum states from a microwave cavity memory. <i>Nature Physics</i> , 2017 , 13, 882-887	16.2	67
137	Continuous Quantum Nondemolition Measurement of the Transverse Component of a Qubit. <i>Physical Review Letters</i> , 2016 , 117, 133601	7.4	23
136	Extending the lifetime of a quantum bit with error correction in superconducting circuits. <i>Nature</i> , 2016 , 536, 441-5	50.4	379
135	Quantum memory with millisecond coherence in circuit QED. <i>Physical Review B</i> , 2016 , 94,	3.3	146
134	Comparing and Combining Measurement-Based and Driven-Dissipative Entanglement Stabilization*. <i>Physical Review X</i> , 2016 , 6,	9.1	40
133	Planar Multilayer Circuit Quantum Electrodynamics. Physical Review Applied, 2016, 5,	4.3	27
132	Multilayer microwave integrated quantum circuits for scalable quantum computing. <i>Npj Quantum Information</i> , 2016 , 2,	8.6	92

131	An architecture for integrating planar and 3D cQED devices. <i>Applied Physics Letters</i> , 2016 , 109, 042601	3.4	35
130	Quantization of inductively shunted superconducting circuits. <i>Physical Review B</i> , 2016 , 94,	3.3	20
129	Suspending superconducting qubits by silicon micromachining. <i>Applied Physics Letters</i> , 2016 , 109, 1126	03.4	22
128	Implementing and Characterizing Precise Multiqubit Measurements. <i>Physical Review X</i> , 2016 , 6,	9.1	22
127	A Schrdinger cat living in two boxes. <i>Science</i> , 2016 , 352, 1087-91	33.3	160
126	Robust Concurrent Remote Entanglement Between Two Superconducting Qubits. <i>Physical Review X</i> , 2016 , 6,	9.1	61
125	Cavity State Manipulation Using Photon-Number Selective Phase Gates. <i>Physical Review Letters</i> , 2015 , 115, 137002	7.4	78
124	Single-Photon-Resolved Cross-Kerr Interaction for Autonomous Stabilization of Photon-Number States. <i>Physical Review Letters</i> , 2015 , 115, 180501	7.4	52
123	Surface participation and dielectric loss in superconducting qubits. <i>Applied Physics Letters</i> , 2015 , 107, 162601	3.4	102
122	Characterizing entanglement of an artificial atom and a cavity cat state with Bell's inequality. <i>Nature Communications</i> , 2015 , 6, 8970	17.4	29
121	Demonstration of superconducting micromachined cavities. <i>Applied Physics Letters</i> , 2015 , 107, 192603	3.4	31
120	Reconfigurable Josephson Circulator/Directional Amplifier. <i>Physical Review X</i> , 2015 , 5,	9.1	117
119	Quantum engineering. Confining the state of light to a quantum manifold by engineered two-photon loss. <i>Science</i> , 2015 , 347, 853-7	33.3	223
118	Josephson directional amplifier for quantum measurement of superconducting circuits. <i>Physical Review Letters</i> , 2014 , 112, 167701	7.4	61
117	Tracking photon jumps with repeated quantum non-demolition parity measurements. <i>Nature</i> , 2014 , 511, 444-8	50.4	151
116	Non-Poissonian quantum jumps of a fluxonium qubit due to quasiparticle excitations. <i>Physical Review Letters</i> , 2014 , 113, 247001	7.4	71
115	Wireless Josephson amplifier. <i>Applied Physics Letters</i> , 2014 , 104, 232605	3.4	10
114	Measurement and control of quasiparticle dynamics in a superconducting qubit. <i>Nature Communications</i> , 2014 , 5, 5836	17.4	88

(2010-2013)

113	Deterministically encoding quantum information using 100-photon Schridinger cat states. <i>Science</i> , 2013 , 342, 607-10	33.3	339
112	Autonomously stabilized entanglement between two superconducting quantum bits. <i>Nature</i> , 2013 , 504, 419-22	50.4	210
111	Reaching 10 ms single photon lifetimes for superconducting aluminum cavities. <i>Applied Physics Letters</i> , 2013 , 102, 192604	3.4	126
110	Observation of quantum state collapse and revival due to the single-photon Kerr effect. <i>Nature</i> , 2013 , 495, 205-9	50.4	304
109	Directional Amplification with a Josephson Circuit. <i>Physical Review X</i> , 2013 , 3,	9.1	51
108	Quantum back-action of an individual variable-strength measurement. <i>Science</i> , 2013 , 339, 178-81	33.3	178
107	Full coherent frequency conversion between two propagating microwave modes. <i>Physical Review Letters</i> , 2013 , 110, 173902	7.4	47
106	Demonstrating a driven reset protocol for a superconducting qubit. <i>Physical Review Letters</i> , 2013 , 110, 120501	7.4	118
105	Realization of three-qubit quantum error correction with superconducting circuits. <i>Nature</i> , 2012 , 482, 382-5	50.4	404
104	Improving the quality factor of microwave compact resonators by optimizing their geometrical parameters. <i>Applied Physics Letters</i> , 2012 , 100, 192601	3.4	65
103	Black-box superconducting circuit quantization. <i>Physical Review Letters</i> , 2012 , 108, 240502	7.4	166
102	Measurements of quasiparticle tunneling dynamics in a band-gap-engineered transmon qubit. <i>Physical Review Letters</i> , 2012 , 108, 230509	7.4	63
101	Photon shot noise dephasing in the strong-dispersive limit of circuit QED. <i>Physical Review B</i> , 2012 , 86,	3.3	78
100	Two-mode correlation of microwave quantum noise generated by parametric down-conversion. <i>Physical Review Letters</i> , 2012 , 108, 123902	7.4	31
99	Mesoscopic resistor as a self-calibrating quantum noise source. <i>Applied Physics Letters</i> , 2012 , 100, 2035	03.4	1
98	Observation of high coherence in Josephson junction qubits measured in a three-dimensional circuit QED architecture. <i>Physical Review Letters</i> , 2011 , 107, 240501	7.4	696
97	Quasiparticle relaxation of superconducting qubits in the presence of flux. <i>Physical Review Letters</i> , 2011 , 106, 077002	7.4	92
96	Phase-preserving amplification near the quantum limit with a Josephson ring modulator. <i>Nature</i> , 2010 , 465, 64-8	50.4	294

95	Preparation and measurement of three-qubit entanglement in a superconducting circuit. <i>Nature</i> , 2010 , 467, 574-8	50.4	418
94	Quantum non-demolition detection of single microwave photons in a circuit. <i>Nature Physics</i> , 2010 , 6, 663-667	16.2	191
93	High-fidelity readout in circuit quantum electrodynamics using the Jaynes-Cummings nonlinearity. <i>Physical Review Letters</i> , 2010 , 105, 173601	7.4	189
92	Fast reset and suppressing spontaneous emission of a superconducting qubit. <i>Applied Physics Letters</i> , 2010 , 96, 203110	3.4	150
91	Reset dynamics and latching in niobium superconducting nanowire single-photon detectors. Journal of Applied Physics, 2010 , 108, 084507	2.5	72
90	Energy resolution of terahertz single-photon-sensitive bolometric detectors. <i>Applied Physics Letters</i> , 2010 , 96, 083505	3.4	24
89	Tunable superconducting nanoinductors. <i>Nanotechnology</i> , 2010 , 21, 445202	3.4	109
88	High-cooperativity coupling of electron-spin ensembles to superconducting cavities. <i>Physical Review Letters</i> , 2010 , 105, 140501	7.4	334
87	Optimized driving of superconducting artificial atoms for improved single-qubit gates. <i>Physical Review A</i> , 2010 , 82,	2.6	107
86	Detecting highly entangled states with a joint qubit readout. <i>Physical Review A</i> , 2010 , 81,	2.6	72
85	Randomized benchmarking and process tomography for gate errors in a solid-state qubit. <i>Physical Review Letters</i> , 2009 , 102, 090502	7.4	148
84	Demonstration of two-qubit algorithms with a superconducting quantum processor. <i>Nature</i> , 2009 , 460, 240-4	50.4	773
83	Niobium Superconducting Nanowire Single-Photon Detectors. <i>IEEE Transactions on Applied Superconductivity</i> , 2009 , 19, 327-331	1.8	36
82	Characterization of Terahertz Single-Photon-Sensitive Bolometric Detectors Using a Pulsed Microwave Technique 2009 ,		1
81	Suppressing charge noise decoherence in superconducting charge qubits. <i>Physical Review B</i> , 2008 , 77,	3.3	347
80	Controlling the spontaneous emission of a superconducting transmon qubit. <i>Physical Review Letters</i> , 2008 , 101, 080502	7.4	269
79	Observation of Berrys phase in a solid-state qubit. <i>Science</i> , 2007 , 318, 1889-92	33.3	278
78	Resolving photon number states in a superconducting circuit. <i>Nature</i> , 2007 , 445, 515-8	50.4	571

77	Generating single microwave photons in a circuit. <i>Nature</i> , 2007 , 449, 328-31	50.4	321
76	Coupling superconducting qubits via a cavity bus. <i>Nature</i> , 2007 , 449, 443-7	50.4	940
75	Ultrasensitive Quantum-Limited Far-Infrared STJ Detectors. <i>IEEE Transactions on Applied Superconductivity</i> , 2007 , 17, 241-245	1.8	7
74	A far-infrared Fourier transform spectrometer with an antenna-coupled niobium bolometer. <i>Superconductor Science and Technology</i> , 2007 , 20, S398-S402	3.1	10
73	Measuring the decoherence of a quantronium qubit with the cavity bifurcation amplifier. <i>Physical Review B</i> , 2007 , 76,	3.3	52
72	Superconducting microbolometers for time-resolved terahertz spectroscopy 2007,		1
71	Sideband transitions and two-tone spectroscopy of a superconducting qubit strongly coupled to an on-chip cavity. <i>Physical Review Letters</i> , 2007 , 99, 050501	7.4	75
70	Enhancing the Energy Resolution of a Singles Photon STJ Spectrometer Using Diffusion Engineering. <i>IEEE Transactions on Applied Superconductivity</i> , 2007 , 17, 324-327	1.8	4
69	Niobium Hot Electron Bolometer Development for a Submillimeter Heterodyne Array Camera. <i>IEEE Transactions on Applied Superconductivity</i> , 2007 , 17, 403-406	1.8	7
68	Superconducting niobium nanowire single photon detectors 2006 , 6372, 239		8
68 67	Superconducting niobium nanowire single photon detectors 2006 , 6372, 239 Dispersive measurements of superconducting qubit coherence with a fast latching readout. <i>Physical Review B</i> , 2006 , 73,	3.3	8
	Dispersive measurements of superconducting qubit coherence with a fast latching readout.	3.3	
67	Dispersive measurements of superconducting qubit coherence with a fast latching readout. <i>Physical Review B</i> , 2006 , 73, Qubit-photon interactions in a cavity: Measurement-induced dephasing and number splitting.		112
67 66	Dispersive measurements of superconducting qubit coherence with a fast latching readout. <i>Physical Review B</i> , 2006 , 73, Qubit-photon interactions in a cavity: Measurement-induced dephasing and number splitting. <i>Physical Review A</i> , 2006 , 74, Quasiparticle dynamics and a new, high-resolution readout of STJ photon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and</i>	2.6	112
67 66 65	Dispersive measurements of superconducting qubit coherence with a fast latching readout. <i>Physical Review B</i> , 2006 , 73, Qubit-photon interactions in a cavity: Measurement-induced dephasing and number splitting. <i>Physical Review A</i> , 2006 , 74, Quasiparticle dynamics and a new, high-resolution readout of STJ photon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006 , 559, 676-679	2.6	1122075
67 66 65 64	Dispersive measurements of superconducting qubit coherence with a fast latching readout. <i>Physical Review B</i> , 2006 , 73, Qubit-photon interactions in a cavity: Measurement-induced dephasing and number splitting. <i>Physical Review A</i> , 2006 , 74, Quasiparticle dynamics and a new, high-resolution readout of STJ photon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006 , 559, 676-679 The Josephson Bifurcation Amplifier for Quantum Measurements 2006 , 28-37 Approaching unit visibility for control of a superconducting qubit with dispersive readout. <i>Physical</i>	2.6	112 207 5
67 66 65 64	Dispersive measurements of superconducting qubit coherence with a fast latching readout. <i>Physical Review B</i> , 2006 , 73, Qubit-photon interactions in a cavity: Measurement-induced dephasing and number splitting. <i>Physical Review A</i> , 2006 , 74, Quasiparticle dynamics and a new, high-resolution readout of STJ photon detectors. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2006 , 559, 676-679 The Josephson Bifurcation Amplifier for Quantum Measurements 2006 , 28-37 Approaching unit visibility for control of a superconducting qubit with dispersive readout. <i>Physical Review Letters</i> , 2005 , 95, 060501	2.6 1.2 7·4	112 207 5 1 386

59	Direct observation of dynamical bifurcation between two driven oscillation states of a Josephson junction. <i>Physical Review Letters</i> , 2005 , 94, 027005	7.4	129
58	Dynamics and energy distribution of nonequilibrium quasiparticles in superconducting tunnel junctions. <i>Physical Review B</i> , 2004 , 70,	3.3	15
57	RF-driven Josephson bifurcation amplifier for quantum measurement. <i>Physical Review Letters</i> , 2004 , 93, 207002	7.4	258
56	Diffusion-engineered single-photon spectrometer for UV/visible detection. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004 , 520, 237-239	1.2	8
55	Strong coupling of a single photon to a superconducting qubit using circuit quantum electrodynamics. <i>Nature</i> , 2004 , 431, 162-7	50.4	2755
54	Superconducting tunnel junction detectors for extreme ultraviolet applications. <i>IEEE Transactions on Applied Superconductivity</i> , 2003 , 13, 1120-1123	1.8	9
53	Physical properties of the superconducting Ta film absorber of an X-ray photon detector. <i>IEEE Transactions on Applied Superconductivity</i> , 2003 , 13, 1124-1127	1.8	2
52	Quasiparticle nonequilibrium dynamics in a superconducting Ta film. <i>Journal of Applied Physics</i> , 2003 , 93, 1137-1141	2.5	21
51	Annular superconducting tunnel junction detectors: Experimental results under X-ray illumination 2002 ,		1
50	Approaching intrinsic resolution limits in optical/UV superconducting tunnel junction detectors 2002 ,		1
49	Aluminum Superconducting Tunnel Junction as X-ray detector: Technological aspects and phonon decoupling from the substrate 2002 ,		2
48	Spatial uniformity of single photon 1-D imaging detectors using superconducting tunnel junctions 2002 ,		3
47	A new noise source in superconducting tunnel junction photon detectors. <i>IEEE Transactions on Applied Superconductivity</i> , 2001 , 11, 645-648	1.8	8
46	X-ray single photon 1-D imaging spectrometers. <i>IEEE Transactions on Applied Superconductivity</i> , 2001 , 11, 685-687	1.8	13
45	Detection of single x-ray photons by an annular superconducting tunnel junction. <i>Applied Physics Letters</i> , 2001 , 79, 2103-2105	3.4	8
44	Time-resolved measurements of thermodynamic fluctuations of the particle number in a nondegenerate Fermi gas. <i>Physical Review Letters</i> , 2001 , 87, 067004	7.4	48
43	Improved energy resolution of x-ray single photon imaging spectrometers using superconducting tunnel junctions. <i>Journal of Applied Physics</i> , 2001 , 90, 3645-3647	2.5	22
42	Quasiparticle diffusion and edge losses in superconducting tunnel junction detectors with two active electrodes. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000 , 444, 15-18	1.2	7

(1997-2000)

41	Single-photon 2-D imaging X-ray spectrometer employing trapping with four tunnel junctions. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000 , 444, 228-231	1.2	2
40	Optical/UV single-photon imaging spectrometers using superconducting tunnel junctions. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000 , 444, 449-452	1.2	15
39	Annular Josephson junctions for radiation detection: fabrication and investigation of the magnetic behaviour. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2000 , 444, 476-479	1.2	1
38	Noise mechanisms in superconducting tunnel-junction detectors. <i>Applied Physics Letters</i> , 2000 , 76, 3998	8- <u>4.</u> 400	27
37	Magnetic properties of annular Josephson junctions for radiation detection: Experimental results. <i>Applied Physics Letters</i> , 1999 , 74, 3389-3391	3.4	18
36	Quasiparticle diffusion, edge losses, and back-tunneling in superconducting tunnel junctions under x-ray irradiation. <i>Journal of Applied Physics</i> , 1999 , 86, 4580-4587	2.5	17
35	Abrikosov Monopole Vortices and Their Images in a Circular Josephson Tunnel Junction. <i>International Journal of Modern Physics B</i> , 1999 , 13, 1265-1270	1.1	1
34	Effects of Quasiparticle Diffusion in Nb-Based Superconducting Tunnel Junctions Under X-Rays Irradiation. <i>International Journal of Modern Physics B</i> , 1999 , 13, 1247-1252	1.1	
33	Traversal Time in Josephson Junctions. Journal of Superconductivity and Novel Magnetism, 1999, 12, 829	9-833	8
32	Development of radiation-hard particle detectors using Josephson tunnel junctions. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 1998 , 61, 570-575		1
31	A hotspot size estimate technique by using Abrikosov vortices in Josephson tunnel junctions. <i>Applied Superconductivity</i> , 1998 , 6, 331-335		
30	Traversal Time as Deduced from Decay Time Measurements in Josephson Junctions. <i>Physica Scripta</i> , 1998 , 58, 538-542	2.6	9
29	Radiation Hardness of Josephson Devices. <i>Japanese Journal of Applied Physics</i> , 1998 , 37, 40	1.4	5
28	Effect of intense proton irradiation on properties of Josephson devices. <i>IEEE Transactions on Applied Superconductivity</i> , 1997 , 7, 2917-2920	1.8	14
27	Experimental estimation of the hot spot size in Nb-based Josephson tunnel junctions using Abrikosov vortices. <i>Journal of Applied Physics</i> , 1997 , 82, 5024-5029	2.5	9
26	The effective dissipation in Nb/AlOx/Nb Josephson tunnel junctions by return current measurements. <i>Journal of Applied Physics</i> , 1997 , 81, 7418-7426	2.5	10
25	Sidelobe suppression in arbitrarity shaped quadrangle Josephson junctions. <i>Journal of Low Temperature Physics</i> , 1997 , 106, 359-364	1.3	1
24	Proton damage on Nb-based Josephson junctions. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics,</i> 1997 , 19, 1397-1404		1

Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical 23 Physics, Biophysics, 1997, 19, 1405-1409 Estimation of Particle induced hot spot size in Nb film using Abrikosov vortices. European Physical 22 Journal D, **1996**, 46, 2881-2882 Investigation of Fiske steps of a josephson tunnel junction with trapped Abrikosov vortices. 21 European Physical Journal D, **1996**, 46, 685-686 X-ray response of STJ detectors using NbN absorbing layers. *Nuclear Instruments and Methods in* Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 20 1.2 370, 95-97 Direct measurements of relaxation time scales in Josephson junctions. Solid State Communications, 1.6 6 19 **1996**. 97. 439-444 Superconductive tunnel junction detectors: ten years ago, ten years from now. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated 18 1.2 10 *Equipment*, **1996**, 370, 26-30 Switching dynamics of Nb/AlOx/Nb Josephson junctions: Measurements for an experiment of 17 2.5 24 macroscopic quantum coherence. Journal of Applied Physics, 1996, 80, 2922-2928 On the magnetic field dependence of the critical current in small irregular polygonal Josephson 16 7 2.5 junctions. Journal of Applied Physics, 1996, 80, 3401-3407 Influence of a NbN overlayer on Nb/Al\(\text{AlO}\x/\text{Nb}\) high quality Josephson tunnel junctions for x-ray 15 3.4 4 detection. Applied Physics Letters, 1995, 67, 3340-3342 X ray response of STJs detectors with different trapping layers: Preliminary results. Nuclear Physics, 14 Section B, Proceedings Supplements, 1995, 44, 682-687 Two-particle structures in high quality Nb/AlOx/Nb Josephson tunnel junctions. Physica B: 2.8 13 Condensed Matter, **1994**, 194-196, 1681-1682 Set up of a nuclear radiation experiment with superconducting tunnel junctions in a compact3He 1.8 cryostat. Cryogenics, 1994, 34, 243-246 Investigation of subgap structures in high-quality Nb/AlOx/Nb tunnel junctions. Physical Review B, 18 11 3.3 **1994**, 49, 429-440 Nb-based Josephson junction devices for nuclear radiation detection: Design and preliminary 10 16 2.5 experimental results. Journal of Applied Physics, 1994, 75, 5210-5217 A New Fabrication Process of Superconducting Nb Tunnel Junctions with Ultralow Leakage Current 9 1.4 29 for X-Ray Detection. Japanese Journal of Applied Physics, 1993, 32, 4535-4537 X-ray detection by Nb STJs above 1.4 K. Journal of Low Temperature Physics, 1993, 93, 691-696 1.3 2 High quality Nb-based junctions for superconductive detectors. Nuclear Physics, Section B, 1 Proceedings Supplements, 1993, 32, 300-306 High-resolution energy spectroscopy and superconductive Tunnel Junction 1993, 16, 735-742

Fabrication of high-quality Josephson junctions for applications as particle detectors. *Nuovo*

LIST OF PUBLICATIONS

5	Investigation of low-temperature I-V curves of high-quality Nb/Al-AlOx/Nb Josephson junctions. Journal of Applied Physics, 1992 , 71, 1888-1892	2.5	35
4	Observation of subgap structures in high-quality Nb/Al-AlOx/Nb Josephson tunnel junctions. <i>Journal of Superconductivity and Novel Magnetism</i> , 1992 , 5, 451-455		7
3	BCS quasi-particle tunnelling current in Josephson tunnel junctions. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , 1992 , 14, 395-4	410	3
2	Thermodynamic properties of low-Tc and high-Tc superconducting barrier junction (S-SSS system) in a magnetic field. <i>Physical Review B</i> , 1991 , 44, 805-808	3.3	
1	Sweep rate effects and quantum energy levels in Josephson junctions. <i>Physica B: Condensed Matter</i> , 1990 , 165-166, 947-948	2.8	