

# Hirotake Yamamori

## List of Publications by Year in descending order

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110  
papers

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516710

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docs citations

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times ranked

436  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnetic tunnel junctions with single-crystal electrodes: A crystal anisotropy of tunnel magneto-resistance. <i>Europhysics Letters</i> , 2000, 52, 344-350.	2.0	92
2	10V programmable Josephson voltage standard circuits using NbN/TiNx/NbN double-junction stacks. <i>Applied Physics Letters</i> , 2006, 88, 042503.	3.3	84
3	Practical High-Resolution Programmable Josephson Voltage Standards Using Double- and Triple-Stacked $\text{MoSi}_2$ -Barrier Junctions. <i>IEEE Transactions on Applied Superconductivity</i> , 2005, 15, 461-464.	1.7	53
4	A 10 V programmable Josephson voltage standard circuit with a maximum output voltage of 20 V. <i>Superconductor Science and Technology</i> , 2008, 21, 105007.	3.5	52
5	Experimental formation of a fractional vortex in a superconducting bi-layer. <i>Physica C: Superconductivity and Its Applications</i> , 2018, 548, 44-49.	1.2	43
6	Operation of a NbN-based programmable Josephson voltage standard chip with a compact refrigeration system. <i>IEEE Transactions on Applied Superconductivity</i> , 2003, 13, 919-921.	1.7	37
7	Flexible Cryo-Packages for Josephson Devices. <i>IEEE Transactions on Applied Superconductivity</i> , 2005, 15, 465-468.	1.7	33
8	All-NbN digital-to-analog converters for a programmable voltage standard. <i>Superconductor Science and Technology</i> , 2001, 14, 1048-1051.	3.5	31
9	Operation of a Josephson arbitrary waveform synthesizer with optical data input. <i>Superconductor Science and Technology</i> , 2009, 22, 114012.	3.5	22
10	Terahertz electrodynamics and superconducting energy gap of NbTiN. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	22
11	Microwave SQUID Multiplexer for TES Readout. <i>IEEE Transactions on Applied Superconductivity</i> , 2013, 23, 2500405-2500405.	1.7	22
12	NbN-Based Overdamped Josephson Junctions for Quantum Voltage Standards. <i>IEICE Transactions on Electronics</i> , 2012, E95-C, 329-336.	0.6	21
13	NbN/TiNx/NbN/TiNx/NbN double-barrier junction arrays for programmable voltage standards. <i>Applied Physics Letters</i> , 2002, 80, 1415-1417.	3.3	20
14	Operating Margins of a 10 V Programmable Josephson Voltage Standard Circuit Using $\text{NbN}/\text{TiN}/\text{NbN}$ Double-Junction Stacks. <i>IEEE Transactions on Applied Superconductivity</i> , 2007, 17, 858-863.	1.7	19
15	Precision AC-DC Difference Measurement System Based on a Programmable Josephson Voltage Standard. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2011, 60, 2439-2444.	4.7	18
16	Low-noise microwave SQUID multiplexed readout of 38 x-ray transition-edge sensor microcalorimeters. <i>Applied Physics Letters</i> , 2020, 117, 122601.	3.3	18
17	Comparison of a Multichip 10-V Programmable Josephson Voltage Standard System With a Superconductor-Insulator-Superconductor-Based Conventional System. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2009, 58, 832-837.	4.7	16
18	Evaluation of Low-Frequency Characteristic of a Thermal Converter Using Programmable Josephson Voltage Standard. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2010, 59, 2930-2935.	4.7	16

#	ARTICLE	IF	CITATIONS
19	Improved Fabrication Yield for 10-V Programmable Josephson Voltage Standard Circuit Including 524288 NbN/TiN/NbN Josephson Junctions. IEEE Transactions on Applied Superconductivity, 2010, 20, 71-75.	1.7	16
20	2.6-V High-Resolution Programmable Josephson Voltage Standard Circuits Using Double-Stacked MoSi <sub>2</sub> -Barrier Junctions. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 616-619.	4.7	15
21	White noise of Nb-based microwave superconducting quantum interference device multiplexers with NbN coplanar resonators for readout of transition edge sensors. Journal of Applied Physics, 2014, 115, .	2.5	15
22	Decomposition of a unit quantum and isolation of a fractional quantum by an externally injected soliton in an ultra-thin superconducting bi-layer film. Physica C: Superconductivity and Its Applications, 2017, 538, 12-19.	1.2	15
23	Demonstration of a 10 V programmable Josephson voltage standard system based on a multi-chip technique. Superconductor Science and Technology, 2008, 21, 035002.	3.5	14
24	Single-Chip 10-V Programmable Josephson Voltage Standard System Based on a Refrigerator and Its Precision Evaluation. IEEE Transactions on Applied Superconductivity, 2010, 20, 21-25.	1.7	13
25	Preparation of overdamped NbTiN Josephson junctions with bilayered Ti <sup>δ</sup> -TiN barriers. Journal of Applied Physics, 2010, 108, 113904.	2.5	12
26	Calibration System for Zener Voltage Standards Using a 10 V Programmable Josephson Voltage Standard at NMIJ. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 1606-1612.	4.7	12
27	Chip-to-chip communication using a single flux quantum pulse. IEEE Transactions on Applied Superconductivity, 2000, 10, 1603-1605.	1.7	11
28	Fabrication and critical currents of thin-film-type Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> intrinsic Josephson junctions. Physica C: Superconductivity and Its Applications, 2001, 362, 256-260.	1.2	10
29	Boltzmann Constant Measurements Using QVNS-Based Johnson Noise Thermometry at NMIJ, AIST. International Journal of Thermophysics, 2014, 35, 985-998.	2.1	10
30	Fabrication of niobium-carbonitride Josephson junctions on magnesium-oxide substrates using chemical-mechanical polishing. IEEE Transactions on Applied Superconductivity, 1999, 9, 4464-4466.	1.7	9
31	Flux-flow cavity resonance modes in intrinsic Josephson junctions by Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>x</sub> thin films. Physica C: Superconductivity and Its Applications, 2002, 367, 404-409.	1.2	9
32	Programmable Josephson Voltage Standard Circuits Using Arrays of NbN/TiN/NbN/TiN/NbN Double-Junction Stacks Operated at 10 K. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 620-623.	4.7	9
33	Adjustable SQUID-resonator direct coupling in microwave SQUID multiplexer for TES microcalorimeter array. IEICE Electronics Express, 2017, 14, 20170271-20170271.	0.8	9
34	Effective method of forming and detecting a fractional magnetic flux quantum. Physica C: Superconductivity and Its Applications, 2021, 589, 1353932.	1.2	9
35	Fabrication of all-NbN Josephson junctions using semiconductive amorphous barriers. Superconductor Science and Technology, 1996, 9, A30-A33.	3.5	8
36	Magnetic Isolation on a Superconducting Ground Plane. Japanese Journal of Applied Physics, 1999, 38, 5869-5870.	1.5	8

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37	A novel approach to chip-to-chip communication using a single flux quantum pulse. IEEE Transactions on Applied Superconductivity, 1999, 9, 4049-4052.	1.7	8
38	Critical current control and microwave-induced characteristics of (NbN/TiN/sub x)/sub n//NbN stacked junction arrays. IEEE Transactions on Applied Superconductivity, 2003, 13, 1093-1095.	1.7	8
39	Interchannel Crosstalk and Nonlinearity of Microwave SQUID Multiplexers. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	8
40	Voltage-less alternating current (AC) Josephson effect in two-band superconductors. Physica C: Superconductivity and Its Applications, 2017, 538, 6-11.	1.2	8
41	Abnormal Meissner state in a superconducting bilayer. Physica C: Superconductivity and Its Applications, 2018, 551, 41-47.	1.2	8
42	Simultaneous Switching on Vertically Stacked Josephson Junctions with Very Thin Intermediate Electrode. Japanese Journal of Applied Physics, 1994, 33, L846-L849.	1.5	7
43	Generation of AC waveforms using a NbN-based programmable Josephson voltage standard system with a 10-K cooler. , 2010, , .		7
44	Heat transfer analysis of a programmable Josephson voltage standard chip operated with a mechanical cooler. Physica C: Superconductivity and Its Applications, 2015, 518, 89-95.	1.2	7
45	Fabrication of Voltage Standard Circuits Utilizing a Serial-Parallel Power Divider. IEEE Transactions on Applied Superconductivity, 2016, 26, 1-4.	1.7	7
46	Johnson Noise Thermometry Based On Integrated Quantum Voltage Noise Source. IEEE Transactions on Applied Superconductivity, 2016, , 1-1.	1.7	7
47	Dependence of Electrical Characteristics of NbN/TiN/NbN Josephson Junctions on Barrier Thickness and Temperature. Japanese Journal of Applied Physics, 2000, 39, L1289-L1291.	1.5	6
48	A direct comparison of a 10 V Josephson voltage standard between a refrigerator-based multi-chip programmable system and a conventional system. Superconductor Science and Technology, 2009, 22, 095010.	3.5	6
49	Dual radiofrequency drive quantum voltage standard with nanovolt resolution based on a closed-loop refrigeration cycle. Measurement Science and Technology, 2012, 23, 124003.	2.6	6
50	Generation of 10 Vrms waveforms using AC-programmable Josephson voltage standard system with 10 K cooler. , 2014, , .		6
51	An unconventional vortex state in a superconducting bilayer where one layer has a hole. Solid State Communications, 2018, 277, 39-44.	1.9	6
52	Investigation of Large Coupling Between TES X-Ray Microcalorimeter and Microwave Multiplexer Based on Microstrip SQUID. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-5.	1.7	6
53	Uniformity of Overdamped NbCN/TiN/NbCN Josephson Junctions. Japanese Journal of Applied Physics, 1999, 38, L734-L736.	1.5	5
54	Demonstration of chip-to-chip propagation of single flux quantum pulses. IEEE Transactions on Applied Superconductivity, 2001, 11, 337-340.	1.7	5

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55	A new coding technique in serial data transmission and demodulation with Josephson junctions array. Journal of Physics: Conference Series, 2010, 234, 042037.	0.4	5
56	Readout of X-ray Pulses from a Single-pixel TES Microcalorimeter with Microwave Multiplexer Based on SQUIDs Directly Coupled to Resonators. Journal of Low Temperature Physics, 2018, 193, 618-625.	1.4	5
57	Synchronous switching in vertically stacked Josephson junctions. IEEE Transactions on Applied Superconductivity, 1995, 5, 3102-3105.	1.7	4
58	Measurement of thermoelectric effects in a thermal converter using a NbN/TiN/NbN Josephson junction array. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 359-362.	4.7	4
59	Precise Measurement of a 20-V Programmable Josephson Voltage Standard System. Japanese Journal of Applied Physics, 2009, 48, 076510.	1.5	4
60	Large constant voltage generated with a single array including 65% <sup>536</sup> Nb/TiN/Nb Josephson junctions. Superconductor Science and Technology, 2010, 23, 075011.	3.5	4
61	Development of zener calibration system using 10 V programmable Josephson voltage standard at NMIJ, 2014, , .		4
62	Terahertz electrodynamics and superconducting energy gap of NbN. Journal of the Korean Physical Society, 2017, 71, 571-574.	0.7	4
63	Reliable packaging of Josephson voltage standard circuit for cryocooler operation. IEICE Electronics Express, 2019, 16, 20190219-20190219.	0.8	4
64	Flattened remnant-field distribution in superconducting bilayer. Physica C: Superconductivity and Its Applications, 2019, 567, 1253489.	1.2	4
65	High-Quality Nb/AlOx-Al/Nb Josephson Junctions with Gap Voltage of 2.95 mV. Japanese Journal of Applied Physics, 1993, 32, L1609-L1611.	1.5	3
66	Improvement of uniformity of NbCN/MgO/NbCN Josephson junctions for large-scale circuit applications. Superconductor Science and Technology, 1999, 12, 877-879.	3.5	3
67	Description of intrinsic Josephson junctions by the inductive coupling theory. Physica C: Superconductivity and Its Applications, 2001, 362, 1-9.	1.2	3
68	A Precise Evaluation of NbN-Based 1-V Programmable Josephson Voltage Standard Arrays. IEEE Transactions on Instrumentation and Measurement, 2005, 54, 645-648.	4.7	3
69	Fabrication of Stacked $\{m \text{ NbN}\}/\{m \text{ TiN}\}_{m \times}/\{m \text{ NbN}\}$ Josephson Junctions Using an Inductively Coupled Plasma Etching Technique. IEEE Transactions on Applied Superconductivity, 2007, 17, 210-213.	1.7	3
70	Development of 10-Vrms sampling measurement system using AC-programmable Josephson voltage standard. , 2014, , .		3
71	Study of Nb and NbN Resonators at 0.1 K for Low-Noise Microwave SQUID Multiplexers. IEEE Transactions on Applied Superconductivity, 2017, 27, 1-5.	1.7	3
72	Microwave SQUID Multiplexer for Readout of Optical Transition Edge Sensor Array. Journal of Low Temperature Physics, 2020, 199, 206-211.	1.4	3

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73	Microcalorimetry of Carbon Ion Beam for Medical Treatment by Transition Edge Sensor. Journal of Low Temperature Physics, 2020, 199, 1012-1017.	1.4	3
74	Thermal management of a 3D packaging structure for superconducting quantum annealing machines. Applied Physics Letters, 2021, 118, 174004.	3.3	3
75	Phase shifter based on an ultrathin superconducting bilayer with a through-hole for a superconducting device. Physica C: Superconductivity and Its Applications, 2022, 595, 1354029.	1.2	3
76	Observation of multiple fractional quanta in a superconducting bilayer disk with a pinhole. Physica C: Superconductivity and Its Applications, 2022, 600, 1354103.	1.2	3
77	Microwave Characteristics of NbN/NbN <sub>x</sub> /NbN Josephson Junctions for Quantum Voltage Standards. Japanese Journal of Applied Physics, 2005, 44, L1326-L1328.	1.5	2
78	Comparison between a 1-V NbN-Based Programmable and a Conventional Josephson Array. Japanese Journal of Applied Physics, 2007, 46, 7912-7915.	1.5	2
79	Microwave-Induced Characteristics of $\{ \{ \{ m \text{ NbN/TiN} \}_m \}_N \} / \{ m \text{ NbN} \}$ Stacked Josephson Junction Arrays. IEEE Transactions on Applied Superconductivity, 2009, 19, 987-992.	1.7	2
80	12 K operation of 2 V Josephson voltage standard circuit using NbN/TiN/NbN junctions. , 2010, , .		2
81	Cryocooler-based quantum voltage standard with dual rf drive. , 2012, , .		2
82	An X-ray TES Detector Head Assembly for a STEM-EDS System and Its Performance. Journal of Low Temperature Physics, 2018, 193, 1282-1286.	1.4	2
83	Extending voltage range to 10 V rms in AC-DC difference measurements with AC programmable Josephson voltage standard. Measurement Science and Technology, 2020, 31, 065010.	2.6	2
84	Gamma-ray transition edge sensor with a thick SiO <sub>2</sub> /Si <sub>3</sub> N <sub>4</sub> /SiO <sub>2</sub> membrane. Applied Physics Letters, 2021, 119, 222602.	3.3	2
85	Study on the transition width at gap voltage caused by the proximity effect in Nb-based Josephson junctions. Superconductor Science and Technology, 1994, 7, 284-286.	3.5	1
86	Reduction in Shapiro Step Height in Double-Barrier Josephson Junction Arrays. Japanese Journal of Applied Physics, 2005, 44, L819-L822.	1.5	1
87	Evaluation of Attenuation Constants of Superconducting NbN Coplanar Waveguides. Japanese Journal of Applied Physics, 2005, 44, L961-L963.	1.5	1
88	Investigation of Temperature Dependence of Microwave-Induced Characteristics of a NbN Josephson Junction Array. IEEE Transactions on Applied Superconductivity, 2005, 15, 205-208.	1.7	1
89	Operation of a 10-V programmable Josephson voltage standard system with a 10-K compact cryocooler. , 2008, , .		1
90	Evaluation of low-frequency characteristic of a thermal converter using a programmable Josephson voltage standard. , 2008, , .		1

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91	Development of thermodynamic temperature measurement technique based on quantum standards at NMJJ/AIST. , 2012, , .		1
92	Thermal-Converter Validation of Differential Sampling Measurement Based on AC-Programmable Josephson Voltage Standard System. , 2015, , .		1
93	Development of Johnson Noise Thermometer Using Quantum Voltage Noise Source. , 2015, , .		1
94	Characterization of high-stability AC source using AC-programmable Josephson voltage standard system. , 2016, , .		1
95	Sampling Measurement of a 20-V RMS Sine Wave Using an Inductive Voltage Divider and an AC-Programmable Josephson Voltage Standard. , 2018, , .		1
96	Observation of Solder Layers for PJVS Chips Formed with Supersonic-Soldering Method. , 2018, , .		1
97	Development of microwave multiplexer for the Super DIOS mission: 38 transition-edge sensor x-ray microcalorimeter readout with microwave multiplexing. , 2020, , .		1
98	Investigation of current-voltage characteristics of vertically stacked all-NbCN Josephson junctions. Applied Superconductivity, 1997, 5, 393-398.	0.5	0
99	Numerical Analysis of Synchronous Switching in Double-Barrier Josephson Junctions. Japanese Journal of Applied Physics, 1998, 37, L505-L507.	1.5	0
100	Fast reversed DC measurements using a NbN/TiN/NbN Josephson junction array. , 0, , .		0
101	A Programmable Josephson Voltage Standard Chip using Arrays of NbN/TiN/NbN/TiN/NbN Double-Junction Stacks Operated at 10K. , 2004, , .		0
102	A Precise Measurement of a NbN-Based 1 V Programmable Josephson Voltage Standard Array. , 2004, , .		0
103	Preliminary Experiment of Comparison Between a 1-V NbN-Based Programmable and a Conventional Josephson Array. , 2004, , .		0
104	Utilization of a cryo-prober system for operation of a pulse-driven josephson junction array. Journal of Physics: Conference Series, 2010, 234, 042020.	0.4	0
105	Development of a compact Josephson voltage standard based on NbN/TiN/NbN array operating at 12K. , 2010, , .		0
106	Numerical Analysis of Thermal Stress in a Voltage Standard Chip. , 2015, , .		0
107	Investigation of Applicability of Heat Exchange Gas for Cooling of Programmable Josephson Voltage Standard Chip. , 2018, , .		0
108	Frequency-Domain Multiplexing Readout with a Self-Trigger System for Pulse Signals from Kinetic Inductance Detectors. Journal of Low Temperature Physics, 2018, 193, 518-524.	1.4	0

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109	Degradation of Quality Factor of Superconducting Resonators by Remaining Metallic Film and Improved Fabrication Process Using Caldera Planarization. IEEE Transactions on Applied Superconductivity, 2019, 29, 1-6.	1.7	0
110	Investigation of Heat Transfer in 3D Packaging for Practical-Scale Quantum Annealing Machines. , 2021, , .		0