

Jun-ichi Shirakashi

List of Publications by Year in descending order

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Version: 2024-02-01

50
papers

519
citations

840776

11
h-index

713466

21
g-index

50
all docs

50
docs citations

50
times ranked

279
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-electron charging effects in Nb/Nb oxide-based single-electron transistors at room temperature. <i>Applied Physics Letters</i> , 1998, 72, 1893-1895.	3.3	100
2	Scratching properties of nickel-iron thin film and silicon using atomic force microscopy. <i>Journal of Applied Physics</i> , 2009, 106, 044314.	2.5	43
3	Control of Tunnel Resistance of Nanogaps by Field-Emission-Induced Electromigration. <i>Japanese Journal of Applied Physics</i> , 2007, 46, L907-L909.	1.5	35
4	Room Temperature Nb-Based Single-Electron Transistors. <i>Japanese Journal of Applied Physics</i> , 1998, 37, 1594-1598.	1.5	28
5	Fabrication of nanogap electrodes by field-emission-induced electromigration. <i>Journal of Vacuum Science & Technology B</i> , 2009, 27, 813-816.	1.3	28
6	Fabrication of Single-Electron Transistors Using Field-Emission-Induced Electromigration. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 7239-7243.	0.9	22
7	Wide-range control of tunnel resistance on metallic nanogaps using migration. <i>Journal of Physics: Conference Series</i> , 2008, 100, 052022.	0.4	19
8	Field-emission-induced electromigration method for the integration of single-electron transistors. <i>Applied Surface Science</i> , 2012, 258, 2153-2156.	6.1	19
9	Gesture Prediction Using Wearable Sensing Systems with Neural Networks for Temporal Data Analysis. <i>Sensors</i> , 2019, 19, 710.	3.8	17
10	298 K operation of Nb/Nb oxide-based single-electron transistors with reduced size of tunnel junctions by thermal oxidation. <i>Journal of Applied Physics</i> , 1998, 83, 5567-5569.	2.5	14
11	Tunnel magnetoresistance on ferromagnetic single-electron transistors with multiple tunnel junction. <i>Journal of Applied Physics</i> , 2001, 89, 7365-7367.	2.5	13
12	Scanning Probe Microscope Lithography at the Micro- and Nano-Scales. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 4486-4494.	0.9	12
13	Influence of Feedback Parameters on Resistance Control of Metal Nanowires by Stepwise Feedback-Controlled Electromigration. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 7464-7468.	0.9	11
14	Integration of Single-Electron Transistors Using Field-Emission-Induced Electromigration. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 6258-6261.	0.9	11
15	Ultrafast feedback-controlled electromigration using a field-programmable gate array. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, 02B106.	1.2	11
16	Magnetoresistance effect of planar-type ferromagnetic tunnel junctions. <i>Journal of Applied Physics</i> , 2006, 99, 08T312.	2.5	10
17	Structural tuning of nanogaps using electromigration induced by field emission current with bipolar biasing. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	9
18	High-throughput nanogap formation by field-emission-induced electromigration. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, 051801.	1.2	9

#	ARTICLE	IF	CITATIONS
19	Simultaneous fabrication of nanogap electrodes using field-emission-induced electromigration. Journal of Applied Physics, 2015, 118, .	2.5	9
20	Investigation of electromigration induced by field emission current flowing through Au nanogaps in ambient air. Journal of Applied Physics, 2017, 122, .	2.5	8
21	Planar-type ferromagnetic tunnel junctions fabricated by SPM local oxidation. Journal of Magnetism and Magnetic Materials, 2007, 310, e641-e643.	2.3	7
22	Control Parameters for Fabrication of Single-Electron Transistors Using Field-Emission-Induced Electromigration. Journal of Nanoscience and Nanotechnology, 2013, 13, 993-996.	0.9	6
23	In situ atomic force microscopy imaging of structural changes in metal nanowires during feedback-controlled electromigration. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, 051806.	1.2	6
24	Fabrication of atomic junctions with experimental parameters optimized using ground-state searches of Ising spin computing. Scientific Reports, 2019, 9, 16211.	3.3	6
25	Memory properties of electromigrated Au nanogaps to realize reservoir computing. Applied Physics Letters, 2021, 119, .	3.3	6
26	Variational <i>Ansatz</i> preparation to avoid CNOT-gates on noisy quantum devices for combinatorial optimizations. AIP Advances, 2022, 12, .	1.3	6
27	Magnetoresistance of patterned NiFe thin films with structures modified by atomic force microscope nanolithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2390.	1.6	5
28	Fabrication of planar-type Ni/vacuum/Ni tunnel junctions based on ferromagnetic nanogaps using field-emission-induced electromigration. Journal of Applied Physics, 2011, 109, 07C919.	2.5	5
29	Tuning of Tunnel Resistance of Nanogaps by Field-Emission-Induced Electromigration Using Current Source Mode. Journal of Nanoscience and Nanotechnology, 2011, 11, 6266-6270.	0.9	5
30	Fabrication of single-electron transistors with electromigrated Ni nanogaps. AIP Advances, 2018, 8, 075210.	1.3	5
31	Quantifying Joule Heating and Mass Transport in Metal Nanowires During Controlled Electromigration. Materials, 2019, 12, 310.	2.9	5
32	Gold nanogap-based artificial synapses. Japanese Journal of Applied Physics, 2020, 59, 050601.	1.5	5
33	Evolution of local temperature in Au nanowires during feedback-controlled electromigration observed by atomic force microscopy. Applied Physics Letters, 2017, 110, .	3.3	4
34	Synaptic behaviors of electromigrated Au nanogaps. AIP Advances, 2019, 9, 055317.	1.3	4
35	Fabrication of planar-type ferromagnetic tunnel junctions using electromigration method and its magnetoresistance properties. Journal of Physics: Conference Series, 2010, 200, 062035.	0.4	3
36	Investigation of strain sensors based on thin graphite wires. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2015, 33, .	1.2	3

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37	Single-Electron Tunneling Effects in Electromigrated Coulomb Island between Au Nanogaps. , 2018, , .		3
38	Machine learning-based approach for automatically tuned feedback-controlled electromigration. AIP Advances, 2020, 10, .	1.3	3
39	In-situ observation of temperature distribution of microheaters using near-infrared CCD imaging system. , 2013, , .		2
40	AFM Nano-oxidation of NiFe Thin Films Capped with Al ₂ O ₃ Oxide Layers for Planar-type Tunnel Junction. IEEJ Transactions on Electrical and Electronic Engineering, 2008, 3, 382-385.	1.4	1
41	Simultaneous fabrication of nanogaps using field-emission-induced electromigration. , 2014, , .		1
42	Magnetization Switching of Magnetic Submicron Structure Fabricated by Atomic Force Microscope. IEEJ Transactions on Electrical and Electronic Engineering, 2008, 3, 386-389.	1.4	0
43	Simultaneous tuning of tunnel resistance of integrated nanogaps by field-emission-induced electromigration. , 2011, , .		0
44	In-situ control of quantum point contacts using scanning probe microscopy scratch lithography. , 2012, , .		0
45	Conduction mechanism of single-electron transistors fabricated by field-emission-induced electromigration. , 2013, , .		0
46	Nanoscale mechanical scratching of graphene using scanning probe microscopy. , 2013, , .		0
47	Field-emission-induced electromigration method for precise tuning of electrical properties of Ni-based single-electron transistors. , 2015, , .		0
48	Simultaneous arrayed formation of single-electron transistors using electromigration in series-connected nanogaps. AIP Advances, 2018, 8, 105005.	1.3	0
49	Multiple-Junction Single-Electron Charging in Electromigrated Series-Connected Nanogaps Operating at Room Temperature. , 2018, , .		0
50	SINGLE-ELECTRON TRANSISTORS FABRICATED BY FIELD-EMISSION-INDUCED ELECTROMIGRATION. , 2011, , .		0