Kazuya Terabe

List of Publications by Citations

183 papers	8,019 citations	43 h-index	86 g-index
197 ext. papers	8,829 ext. citations	5 avg, IF	5.83 L-index

#	Paper	IF	Citations
183	Short-term plasticity and long-term potentiation mimicked in single inorganic synapses. *Nature Materials*, **2011**, 10, 591-5	27	1159
182	Quantized conductance atomic switch. *Nature*, **2005**, 433, 47-50	50.4	960
181	Atomic switch: atom/ion movement controlled devices for beyond von-neumann computers. *Advanced Materials*, **2012**, 24, 252-67	24	295
180	Learning abilities achieved by a single solid-state atomic switch. *Advanced Materials*, **2010**, 22, 1831-4	24	244
179	Forming and switching mechanisms of a cation-migration-based oxide resistive memory. *Nanotechnology*, **2010**, 21, 425205	3.4	242
178	Effects of Moisture on the Switching Characteristics of Oxide-Based, Gapless-Type Atomic Switches. *Advanced Functional Materials*, **2012**, 22, 70-77	15.6	217
177	Electronic transport in Ta2O5 resistive switch. *Applied Physics Letters*, **2007**, 91, 092110	3.4	196
176	Domain growth kinetics in lithium niobate single crystals studied by piezoresponse force microscopy. *Applied Physics Letters*, **2005**, 86, 012906	3.4	183
175	A nonvolatile programmable solid-electrolyte nanometer switch. *IEEE Journal of Solid-State Circuits*, **2005**, 40, 168-176	5.5	176
174	Synaptic Metaplasticity Realized in Oxide Memristive Devices. *Advanced Materials*, **2016**, 28, 377-84	24	164
173	Tbit/inch2 ferroelectric data storage based on scanning nonlinear dielectric microscopy. *Applied Physics Letters*, **2002**, 81, 4401-4403	3.4	161
172	On-demand nanodevice with electrical and neuromorphic multifunction realized by local ion migration. *ACS Nano*, **2012**, 6, 9515-21	16.7	153
171	Conductance quantization and synaptic behavior in a Ta2O5-based atomic switch. *Nanotechnology*, **2012**, 23, 435705	3.4	135
170	Controlling the Synaptic Plasticity of a Cu2S Gap-Type Atomic Switch. *Advanced Functional Materials* , **2012**, 22, 3606-3613	15.6	132
169	Microstructure and crystallization behaviour of TiO2 precursor prepared by the sol-gel method using metal alkoxide. *Journal of Materials Science*, **1994**, 29, 1617-1622	4.3	127
168	A Polymer-Electrolyte-Based Atomic Switch. *Advanced Functional Materials*, **2011**, 21, 93-99	15.6	117
167	Diffusivity of Cu Ions in Solid Electrolyte and Its Effect on the Performance of Nanometer-Scale Switch. *IEEE Transactions on Electron Devices*, **2008**, 55, 3283-3287	2.9	109

166	Microscale to nanoscale ferroelectric domain and surface engineering of a near-stoichiometric LiNbO3 crystal. *Applied Physics Letters*, **2003**, 82, 433-435	3.4	104
165	Formation and disappearance of a nanoscale silver cluster realized by solid electrochemical reaction. *Journal of Applied Physics*, **2002**, 91, 10110	2.5	100
164	Synaptic plasticity and memory functions achieved in a WO3-x-based nanoionics device by using the principle of atomic switch operation. *Nanotechnology*, **2013**, 24, 384003	3.4	92
163	Rate-Limiting Processes Determining the Switching Time in a Ag2S Atomic Switch. *Journal of Physical Chemistry Letters*, **2010**, 1, 604-608	6.4	90
162	Resistance switching of an individual Ag2S/Ag nanowire heterostructure. *Nanotechnology*, **2007**, 18, 485202	3.4	72
161	In situ and non-volatile bandgap tuning of multilayer graphene oxide in an all-solid-state electric double-layer transistor. *Advanced Materials*, **2014**, 26, 1087-91	24	70
160	Switching kinetics of a Cu2S-based gap-type atomic switch. *Nanotechnology*, **2011**, 22, 235201	3.4	68
159	Optical Damage Resistance and Refractive Indices in Near-Stoichiometric MgO-Doped LiNbO3. *Japanese Journal of Applied Physics*, **2002**, 41, L49-L51	1.4	67
158	Temperature effects on the switching kinetics of a Cu-Ta2O5-based atomic switch. *Nanotechnology*, **2011**, 22, 254013	3.4	66
157	Structural studies of copper sulfide films: effect of ambient atmosphere. *Science and Technology of Advanced Materials*, **2008**, 9, 035011	7.1	65
156	In Situ Tuning of Magnetization and Magnetoresistance in Fe3O4 Thin Film Achieved with All-Solid-State Redox Device. *ACS Nano*, **2016**, 10, 1655-61	16.7	64
155	Ionic-electronic conductor nanostructures: template-confined growth and nonlinear electrical transport. *Small*, **2005**, 1, 971-5	11	59
154	Photocatalytic nanoparticle deposition on LiNbO3 nanodomain patterns via photovoltaic effect. *Applied Physics Letters*, **2007**, 91, 044101	3.4	58
153	Effect of Ion Diffusion on Switching Voltage of Solid-Electrolyte Nanometer Switch. *Japanese Journal of Applied Physics*, **2006**, 45, 3666-3668	1.4	57
152	Fabrication of nanoscale gaps using a combination of self-assembled molecular and electron beam lithographic techniques. *Applied Physics Letters*, **2006**, 88, 223111	3.4	56
151	Rearrangement of ferroelectric domain structure induced by chemical etching. *Applied Physics Letters*, **2005**, 87, 022905	3.4	55
150	A general strategy toward transition metal carbide/carbon core/shell nanospheres and their application for supercapacitor electrode. *Carbon*, **2016**, 100, 590-599	10.4	54
149	Determination of Nonstoichiometry in YBa2Cu3O7-x. *Japanese Journal of Applied Physics*, **1988**, 27, L179-L181	1.4	53

148	Nanoionics Switching Devices: Atomic Switches. *MRS Bulletin*, **2009**, 34, 929-934	3.2	52
147	Polarization reversal in congruent and stoichiometric lithium tantalate. *Applied Physics Letters*, **2001**, 79, 3146-3148	3.4	51
146	Ionic/electronic mixed conductor tip of a scanning tunneling microscope as a metal atom source for nanostructuring. *Applied Physics Letters*, **2002**, 80, 4009-4011	3.4	50
145	Domain Shape in Congruent and Stoichiometric Lithium Tantalate. *Ferroelectrics*, **2002**, 269, 195-200	0.6	47
144	Imaging and engineering the nanoscale-domain structure of a Sr0.61Ba0.39Nb2O6 crystal using a scanning force microscope. *Applied Physics Letters*, **2002**, 81, 2044-2046	3.4	46
143	Effect of sulfurization conditions and post-deposition annealing treatment on structural and electrical properties of silver sulfide films. *Journal of Applied Physics*, **2006**, 99, 103501	2.5	45
142	Oxygen migration process in the interfaces during bipolar resistance switching behavior of WO3-based nanoionics devices. *Applied Physics Letters*, **2012**, 100, 231603	3.4	43
141	AgI/Ag Heterojunction Nanowires: Facile Electrochemical Synthesis, Photoluminescence, and Enhanced Ionic Conductivity. *Advanced Functional Materials*, **2007**, 17, 1466-1472	15.6	43
140	Refractive Indices in Undoped and MgO-Doped Near-Stoichiometric LiTaO3 Crystals. *Japanese Journal of Applied Physics*, **2002**, 41, L465-L467	1.4	42
139	Down-scaling of resistive switching to nanoscale using porous anodic alumina membranes. *Journal of Materials Chemistry C*, **2014**, 2, 349-355	7.1	39
138	All-solid-state electric-double-layer transistor based on oxide ion migration in Gd-doped CeO2 on SrTiO3 single crystal. *Applied Physics Letters*, **2013**, 103, 073110	3.4	39
137	Volatile/Nonvolatile Dual-Functional Atom Transistor. *Applied Physics Express*, **2011**, 4, 015204	2.4	39
136	Effect of sulfurization conditions on structural and electrical properties of copper sulfide films. *Journal of Applied Physics*, **2008**, 103, 073523	2.5	39
135	Memristive operations demonstrated by gap-type atomic switches. *Applied Physics A: Materials Science and Processing*, **2011**, 102, 811-815	2.6	38
134	Atomic switches: atomic-movement-controlled nanodevices for new types of computing. *Science and Technology of Advanced Materials*, **2011**, 12, 013003	7.1	37
133	Terabit inch2 ferroelectric data storage using scanning nonlinear dielectric microscopy nanodomain engineering system. *Nanotechnology*, **2003**, 14, 637-642	3.4	37
132	Nanoscale domain switching at crystal surfaces of lithium niobate. *Chemical Physics Letters*, **2003**, 377, 475-480	2.5	35
131	In situ and nonvolatile photoluminescence tuning and nanodomain writing demonstrated by all-solid-state devices based on graphene oxide. *ACS Nano*, **2015**, 9, 2102-10	16.7	33

130	Switching Property of Atomic Switch Controlled by Solid Electrochemical Reaction. *Japanese Journal of Applied Physics*, **2006**, 45, L364-L366	1.4	32
129	Surface potential imaging of nanoscale LiNbO3 domains investigated by electrostatic force microscopy. *Applied Physics Letters*, **2006**, 89, 132905	3.4	32
128	Control of local ion transport to create unique functional nanodevices based on ionic conductors. *Science and Technology of Advanced Materials*, **2007**, 8, 536-542	7.1	31
127	Effect of Ionic Conductivity on Response Speed of SrTiO3-Based All-Solid-State Electric-Double-Layer Transistor. *ACS Applied Materials & Interfaces*, **2015**, 7, 12254-60	9.5	30
126	I-V characteristics of single electron tunneling from symmetric and asymmetric double-barrier tunneling junctions. *Applied Physics Letters*, **2007**, 90, 223112	3.4	30
125	High-Temperature Resistivity Measurements of YBa2Cu3O7-x. *Japanese Journal of Applied Physics*, **1988**, 27, L220-L222	1.4	28
124	Solid-Electrolyte Nanometer Switch. *IEICE Transactions on Electronics*, **2006**, E89-C, 1492-1498	0.4	28
123	Nanoscale chemical etching of near-stoichiometric lithium tantalate. *Journal of Applied Physics*, **2005**, 97, 064308	2.5	27
122	Flexible resistive switching memory using inkjet printing of a solid polymer electrolyte. *AIP Advances*, **2012**, 2, 022144	1.5	26
121	Thermal stability of LiTaO3 domains engineered by scanning force microscopy. *Applied Physics Letters*, **2006**, 89, 142906	3.4	25
120	Shapes of isolated domains and field induced evolution of regular and random 2D domain structures in LiNbO3 and LiTaO3. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2005**, 120, 109-113	3.1	25
119	Origin of green emission from ZnS nanobelts as revealed by scanning near-field optical microscopy. *Applied Physics Letters*, **2008**, 92, 091908	3.4	24
118	Formation of Metastable Silver Nanowires of Hexagonal Structure and Their Structural Transformation under Electron Beam Irradiation. *Japanese Journal of Applied Physics*, **2006**, 45, 6046-6048	1.4	24
117	Size-dependent single electron tunneling effect in Au nanoparticles. *Surface Science*, **2007**, 601, 3907-3911	1.8	23
116	Self-Organization in LiNbO3 and LiTaO3: Formation of Micro- and Nano-Scale Domain Patterns. *Ferroelectrics*, **2004**, 304, 111-116	0.6	23
115	Resistance Switching in Anodic Oxidized Amorphous TiO2Films. *Applied Physics Express*, **2008**, 1, 064002	2.4	22
114	Near-Stoichiometric LiTaO 3 for Bulk Quasi-Phase-Matched Devices. *Ferroelectrics*, **2002**, 273, 199-204	0.6	22
113	Operating mechanism and resistive switching characteristics of two- and three-terminal atomic switches using a thin metal oxide layer. *Journal of Electroceramics*, **2017**, 39, 143-156	1.5	21

112	Mechanical twinning in stoichiometric lithium niobate single crystal. *Journal of Crystal Growth*, **1997**, 180, 101-104	1.6	21
111	Modulation of superconducting critical temperature in niobium film by using all-solid-state electric-double-layer transistor. *Applied Physics Letters*, **2015**, 107, 013104	3.4	20
110	Micro x-ray photoemission and Raman spectroscopic studies on bandgap tuning of graphene oxide achieved by solid state ionics device. *Applied Physics Letters*, **2014**, 105, 183101	3.4	20
109	Volatile and nonvolatile selective switching of a photo-assisted initialized atomic switch. *Nanotechnology*, **2013**, 24, 384006	3.4	20
108	Material dependence of switching speed of atomic switches made from silver sulfide and from copper sulfide. *Journal of Physics: Conference Series*, **2007**, 61, 1157-1161	0.3	20
107	Anomalous phase transition and ionic conductivity of AgI nanowire grown using porous alumina template. *Journal of Applied Physics*, **2007**, 102, 124308	2.5	20
106	Atomic Layer Deposition of a Magnesium Phosphate Solid Electrolyte. *Chemistry of Materials*, **2019**, 31, 5566-5575	9.6	19
105	A Ta2O5 solid-electrolyte switch with improved reliability **2007**,		19
104	Domain patterning in LiNbO3 and LiTaO3 by focused electron beam. *Journal of Crystal Growth*, **2006**, 292, 324-327	1.6	19
103	Formation and crystallization of beta-alumina from precursor prepared by sol-gel method using metal alkoxides. *Solid State Ionics*, **1987**, 25, 171-176	3.3	19
102	Ionic decision-maker created as novel, solid-state devices. *Science Advances*, **2018**, 4, eaau2057	14.3	19
101	Electron-Beam Domain Writing in Stoichiometric LiTaO3Single Crystal by Utilizing Resist Layer. *Japanese Journal of Applied Physics*, **2006**, 45, L399-L402	1.4	18
100	Nano-Domain Engineering in LiNbO3by Focused Ion Beam. *Japanese Journal of Applied Physics*, **2005**, 44, L1550-L1552	1.4	17
99	Nanoionic devices enabling a multitude of new features. *Nanoscale*, **2016**, 8, 13873-9	7.7	17
98	Direct observation of redox state modulation at carbon/amorphous tantalum oxide thin film hetero-interface probed by means of in situ hard X-ray photoemission spectroscopy. *Solid State Ionics*, **2013**, 253, 110-118	3.3	16
97	Room temperature redox reaction by oxide ion migration at carbon/Gd-doped CeO heterointerface probed by an hard x-ray photoemission and soft x-ray absorption spectroscopies. *Science and Technology of Advanced Materials*, **2013**, 14, 045001	7.1	16
96	Template synthesis of M/M2S (M = Ag, Cu) hetero-nanowires by electrochemical technique. *Solid State Ionics*, **2006**, 177, 2527-2531	3.3	16
95	Size-Controlled AgI/Ag Heteronanowires in Highly Ordered Alumina Membranes: Superionic Phase Stabilization and Conductivity. *Nano Letters*, **2015**, 15, 5161-7	11.5	15

94	A comparative study on the domain switching characteristics of near stoichiometric lithium niobate and lithium tantalate single crystals. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2005**, 120, 125-129	3.1	15
93	Decision maker based on atomic switches. *AIMS Materials Science*, **2016**, 3, 245-259	1.9	15
92	Theoretical investigation of kinetics of a Cu2S-based gap-type atomic switch. *Applied Physics Letters* , **2011**, 98, 233501	3.4	14
91	Transmission electron microscopy observation and optical property of sol-gel derived LiNbO3 films. *Journal of Materials Research*, **1996**, 11, 3152-3157	2.5	14
90	Defect chemical study of Nd2CexCuO4 *Solid State Ionics*, **1991**, 49, 63-70	3.3	14
89	A nonvolatile programmable solid electrolyte nanometer switch		13
88	Ferroelectric Nanodomain Properties in Near-Stoichiometric and Congruent LiNbO3Crystals Investigated by Scanning Force Microscopy. *Japanese Journal of Applied Physics*, **2005**, 44, 7012-7014	1.4	13
87	Phase Relation of ZrO2-YO1.5-TiO2 Ceramics Prepared by Sol-Gel Method. *Journal of the Ceramic Society of Japan*, **1998**, 106, 860-866		12
86	Effect of substrates on the crystallinity and morphology of sol-gel-derived epitaxial LiNbO3 films. *Journal of Materials Research*, **1995**, 10, 1779-1783	2.5	12
85	Nanoionic devices: Interface nanoarchitechtonics for physical property tuning and enhancement. *Japanese Journal of Applied Physics*, **2016**, 55, 1102A4	1.4	12
84	Significant roles of the polymer matrix in the resistive switching behavior of polymer-based atomic switches. *Journal Physics D: Applied Physics*, **2019**, 52, 445301	3	11
83	Magnetic Control of Magneto-Electrochemical Cell and Electric Double Layer Transistor. *Scientific Reports*, **2017**, 7, 10534	4.9	11
82	Effect of nonstoichiometric defects on antiparallel domain formation in LiNbO3. *Applied Physics Letters*, **2007**, 91, 232913	3.4	11
81	High responsivity in MoS2 phototransistors based on charge trapping HfO2 dielectrics. *Communications Materials*, **2020**, 1,	6	11
80	Structure analysis of stoichiometric LiNbO 3 (0 0 0 1) surfaces using low-energy neutral scattering spectroscopy. *Surface Science*, **2003**, 538, L500-L504	1.8	10
79	Optical waveguide properties of single indium oxide nanofibers. *Journal of Optics*, **2008**, 10, 055201		9
78	SIMS-depth profile and microstructure studies of Ti-diffused Mg-doped near-stoichiometric lithium niobate waveguide. *Journal of Crystal Growth*, **2006**, 287, 472-477	1.6	9
77	Three terminal solid-electrolyte nanometer switch		9

76	Preparation of layered Si materials as anode for lithium-ion batteries. *Chemical Physics Letters*, **2019**, 730, 198-205	2.5	8
75	Stability of engineered domains in ferroelectric LiNbO3and LiTaO3crystals. *Physica Scripta*, **2007**, T129, 103-107	2.6	8
74	Nanoscale Domain Engineering of a Sr 0.61 Ba 0.39 Nb 2 O 6 Single Crystal Using a Scanning Force Microscope. *Ferroelectrics*, **2003**, 292, 83-89	0.6	8
73	Fabrication of graphene/MoS2 alternately stacked structure for enhanced lithium storage. *Materials Chemistry and Physics*, **2020**, 239, 121987	4.4	8
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71	In Situ Hard X-ray Photoelectron Spectroscopy of Space Charge Layer in a ZnO-Based All-Solid-State Electric Double-Layer Transistor. *Journal of Physical Chemistry C*, **2019**, 123, 10487-10493	3.8	6
70	Electrical-pulse-induced resistivity modulation in Pt/TiO2/Pt multilayer device related to nanoionics-based neuromorphic function. *Japanese Journal of Applied Physics*, **2017**, 56, 06GH01	1.4	6
69	Stabilization of periodically poled domain structures in a quasiphase-matching device using near-stoichiometric LiTaO3. *Journal of Applied Physics*, **2007**, 102, 014101	2.5	6
68	Nano-Sized Inverted Domain Formation in Stoichiometric LiTaO 3 Single Crystal Using Scanning Nonlinear Dielectric Microscopy. *Integrated Ferroelectrics*, **2002**, 49, 203-209	0.8	6
67	Metastable Phase Relationship in the ZrO2-YO1.5, ZrO2-TiO2 and YO1.5-TiO2 Systems. *Journal of the Ceramic Society of Japan*, **1998**, 106, 782-786		6
66	Characterization of sodium $beta;-alumina prepared by sol-gel method. *Solid State Ionics*, **1990**, 40-41, 111-114	3.3	6
65	An ESR Study of YBa2Cu3O7-xand Y2BaCuO5with Oxygen Deficiencies. *Japanese Journal of Applied Physics*, **1988**, 27, L2336-L2338	1.4	6
64	Comparison of subthreshold swing in SrTiO3-based all-solid-state electric-double-layer transistors with Li4SiO4or Y-stabilized-ZrO2solid electrolyte. *Japanese Journal of Applied Physics*, **2016**, 55, 06GJ03	1.4	6
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62	Revival of "dead" memristive devices: case of WO3-x. *Physical Chemistry Chemical Physics*, **2016**, 18, 13923-36	3.6	5
61	Investigation of Ag and Cu Filament Formation Inside the Metal Sulfide Layer of an Atomic Switch Based on Point-Contact Spectroscopy. *ACS Applied Materials & Interfaces*, **2019**, 11, 27178-27182	9.5	5
60	Quantized Conductance and Neuromorphic Behavior of a Gapless-Type Ag-Ta2O5 Atomic Switch. *Materials Research Society Symposia Proceedings*, **2013**, 1562, 1		5
59	Temperature effects on the switching kinetics of a Cu-Ta2O5-based atomic switch. *Nanotechnology*, **2011**, 22, 379502	3.4	5

58	Domain and Surface Structuring of LiNbO3 Single Crystal by Scanning Force Microscopy. *Ferroelectrics*, **2006**, 340, 121-128	0.6	5
57	Surface potential properties on near-stoichiometric LiNbO3 crystals with nanoscale domain-engineered structures. *Journal of Electroceramics*, **2006**, 16, 399-402	1.5	5
56	Structural developments during heating in LiNbO3 precursors synthesized by the sol-gel method. *Journal of Materials Science*, **1995**, 30, 1993-1998	4.3	5
55	Neuromorphic transistor achieved by redox reaction of WO3thin film. *Japanese Journal of Applied Physics*, **2018**, 57, 04FK01	1.4	4
54	Oxide ion and proton conduction controlled in nano-grained yttria stabilized ZrO2 thin films prepared by pulse laser deposition. *Japanese Journal of Applied Physics*, **2019**, 58, SDDG01	1.4	4
53	Tbit/Inch 2 Data Storage Using Scanning Nonlinear Dielectric Microscopy. *Ferroelectrics*, **2003**, 292, 51-58	0.6	4
52	A Voltage-Controlled Oscillator Using Variable Capacitors with a Thin Dielectric Electrolyte Film. *ACS Applied Electronic Materials*, **2020**, 2, 2788-2797	4	4
51	Quantum conductance in memristive devices: fundamentals, developments, and applications.. *Advanced Materials*, **2022**, e2201248	24	4
50	Atomic Switches **2016**, 515-546		3
49	Effect of sintering conditions on mixed ionic-electronic conducting properties of silver sulfide nanoparticles. *Journal of Applied Physics*, **2012**, 111, 053530	2.5	3
48	Transmission electron microscopy study on epitaxial growth behaviors of sol-gel-derived LiNbO3 films. *Journal of Crystal Growth*, **1997**, 179, 577-584	1.6	3
47	Effect of subgrain boundaries on domain-inverted structure in periodically poled near-stoichiometric LiTaO3 crystal. *Optical Materials*, **2008**, 31, 276-279	3.3	3
46	Fabrication of microdomains at the +Z surface of near-stoichiometric lithium tantalate crystals. *Journal Physics D: Applied Physics*, **2006**, 39, 3103-3106	3	3
45	Domain And Surface Engineering Of Ferroelectric Crystal LiNbO3 For Novel Devices. *Materials Technology*, **2004**, 19, 162-167	2.1	3
44	Domain patterns on ferroelectric Rh:BaTiO3 single crystals. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2005**, 120, 137-140	3.1	3
43	Atomic Switch-Nano Device using the Transfer of Atoms(Ions)-. *Hyomen Kagaku*, **2006**, 27, 232-238		3
42	A Variety of Functional Devices Realized by Ionic Nanoarchitectonics, Complementing Electronics Components. *Advanced Electronic Materials*,2100645	6.4	3
41	Neuromorphic System for Edge Information Encoding: Emulating Retinal Center-Surround Antagonism by Li-Ion-Mediated Highly Interactive Devices. *Nano Letters*, **2021**, 21, 7938-7945	11.5	3

40	A mesoporous SiO2 thin films-based ionic decision-maker for solving multi-armed bandit problems. *Japanese Journal of Applied Physics*, **2020**, 59, SIIG01	1.4	2
39	Oxygen-tolerant operation of all-solid-state ionic-gating devices: advantage of all-solid-state structure for ionic-gating. *Japanese Journal of Applied Physics*, **2020**, 59, SIIG09	1.4	2
38	A graphene oxide-based ionic decision-maker for simple fabrication and stable operation. *Japanese Journal of Applied Physics*, **2020**, 59, SIIG03	1.4	2
37	Unexpected metal-insulator transition in thick Ca1-xSrxVO3 film on SrTiO3 (100) single crystal. *Applied Physics Letters*, **2018**, 112, 133106	3.4	2
36	Three-terminal nanometer metal switches utilizing solid electrolytes. *Electronics and Communications in Japan*, **2011**, 94, 55-61	0.4	2
35	Development of polymer electrolytes based resistive switch **2009**,		2
34	A solid electrolyte nanometer switch. *Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi)*, **2008**, 165, 68-73	0.4	2
33	Atomic switches: atomic-movement-controlled nanodevices for new types of computing. *Science and Technology of Advanced Materials*, **2011**, 12, 013003	7.1	2
32	Invention and Development of the Atomic Switch. *Advances in Atom and Single Molecule Machines*, **2020**, 1-15	0	2
31	Room-Temperature Manipulation of Magnetization Angle, Achieved with an All-Solid-State Redox Device. *ACS Nano*, **2020**, 14, 16065-16072	16.7	2
30	Impact of moisture absorption on the resistive switching characteristics of a polyethylene oxide-based atomic switch. *Journal of Materials Chemistry C*, **2021**, 9, 11198-11206	7.1	2
29	Resonant photoemission and X-ray absorption spectroscopies of lithiated magnetite thin film. *Japanese Journal of Applied Physics*, **2017**, 56, 04CK01	1.4	1
28	Graphene: In Situ and Non-Volatile Bandgap Tuning of Multilayer Graphene Oxide in an All-Solid-State Electric Double-Layer Transistor (Adv. Mater. 7/2014). *Advanced Materials*, **2014**, 26, 1143-1143	24	1
27	Biomimetics: Controlling the Synaptic Plasticity of a Cu2S Gap-Type Atomic Switch (Adv. Funct. Mater. 17/2012). *Advanced Functional Materials*, **2012**, 22, 3605-3605	15.6	1
26	Impacts of Temperature and Moisture on the Resistive Switching Characteristics of a Cu-Ta2O5-Based Atomic Switch. *Materials Research Society Symposia Proceedings*, **2012**, 1430, 25		1
25	Flexible Polymer Atomic Switches using Ink-Jet Printing Technique. *Materials Research Society Symposia Proceedings*, **2012**, 1430, 106		1
24	Basic Study on High-density Ferroelectric Data Storage Using Scanning Nonlinear Dielectric Microscopy. *Materials Research Society Symposia Proceedings*, **2002**, 748, 1		1
23	Artificial Synapses Realized by Atomic Switch Technology. *Advances in Atom and Single Molecule Machines*, **2020**, 175-199	0	1

22	Effects of Oxygen Partial Pressure and Substrate Temperature on the Structure and Morphology of Sc and Y Co-Doped ZrO Solid Electrolyte Thin Films Prepared via Pulsed Laser Deposition.. *Materials* , **2022**, 15,	3.5	1
21	Nanoionic Devices for Physical Property Tuning and Enhancement. *Advances in Atom and Single Molecule Machines*, **2020**, 161-174	0	1
20	Fabrication of a magnesium-ion-conducting magnesium phosphate electrolyte film using atomic layer deposition. *Japanese Journal of Applied Physics*, **2020**, 59, SIIG08	1.4	0
19	Sr-diffusion-induced inhibition of (100)-oriented growth Ca1 Sr x VO3 thin film on a LaAlO3 substrate in pulsed laser deposition. *Japanese Journal of Applied Physics*, **2019**, 58, SDDG08	1.4	0
18	Substrate effect on the neuromorphic function of nanoionics-based transistors fabricated using WO3 thin film. *Solid State Ionics*, **2021**, 364, 115638	3.3	0
17	Conductivity Modulation by CaVO3-based All-solid-state Redox Transistor with Ion Transport of Li+ or H+. *Transactions of the Materials Research Society of Japan*, **2019**, 44, 57-60	0.2	0
16	Atomic scale switches based on solid state ionics. *Advances in Physics: X*, **2022**, 7,	5.1	0
15	Effects of water adsorption on conductive filaments of a Ta2O5 atomic switch investigated by nondestructive electrical measurements. *Applied Physics Letters*, **2020**, 117, 233104	3.4	
14	Nanoionics Switching Devices **2011**, 1-8		
13	NANOSCALE SURFACE ENGINEERING OF LITHIUM NIOBATE SINGLE CRYSTALS. *International Journal of Nanoscience*, **2006**, 05, 737-742	0.6	
12	Ferroelectric nanodomain patterning in a stoichiometric LiNbO 3 crystal **2003**, 4970, 75		
11	Effect of Impressing Rate of Field on Polarization Reversal in Mg Doped Near Stoichiometric Lithium Tantalate Single Crystals. *Materials Research Society Symposia Proceedings*, **2004**, 848, 70		
10	Crystallization of -Alumina Precursors Prepared from Metal Alkoxides. *Journal of the Ceramic Society of Japan*, **1991**, 99, 567-573		
9	Ionic Decision-maker for Solving Multi-armed Bandit Problems. *Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan*, **2020**, 71, 453-458	0.1	
8	Ionic Nanoarchitectonics: Creation of Polymer-Based Atomic Switch and Decision-Making Device. *NIMS Monographs*, **2022**, 113-126	0.3	
7	Operating Mechanism and Resistive Switching Characteristics of Two- and Three-Terminal Atomic Switches Using a Thin Metal Oxide Layer. *Kluwer International Series in Electronic Materials: Science and Technology*, **2022**, 209-234		
6	Three-Terminal Nanometer Metal Switches Utilizing Solid Electrolytes. *IEEJ Transactions on Electronics, Information and Systems*, **2008**, 128, 890-895	0.1	
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4	Progress in the Atomic Switch66-67	
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