

# Kazuya Terabe

## List of Publications by Year in descending order

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192  
papers

9,652  
citations

50276

46  
h-index

38395

95  
g-index

197  
all docs

197  
docs citations

197  
times ranked

7282  
citing authors

#	ARTICLE	IF	CITATIONS
1	Short-term plasticity and long-term potentiation mimicked in single inorganic synapses. Nature Materials, 2011, 10, 591-595.	27.5	1,480
2	Quantized conductance atomic switch. Nature, 2005, 433, 47-50.	27.8	1,115
3	Atomic Switch: Atom/Ion Movement Controlled Devices for Beyond Vonâ€Neumann Computers. Advanced Materials, 2012, 24, 252-267.	21.0	338
4	Learning Abilities Achieved by a Single Solidâ€State Atomic Switch. Advanced Materials, 2010, 22, 1831-1834.	21.0	274
5	Forming and switching mechanisms of a cation-migration-based oxide resistive memory. Nanotechnology, 2010, 21, 425205.	2.6	267
6	Effects of Moisture on the Switching Characteristics of Oxideâ€Based, Gaplessâ€Type Atomic Switches. Advanced Functional Materials, 2012, 22, 70-77.	14.9	247
7	Electronic transport in Ta2O5 resistive switch. Applied Physics Letters, 2007, 91, .	3.3	213
8	Synaptic Metaplasticity Realized in Oxide Memristive Devices. Advanced Materials, 2016, 28, 377-384.	21.0	210
9	A nonvolatile programmable solid-electrolyte nanometer switch. IEEE Journal of Solid-State Circuits, 2005, 40, 168-176.	5.4	198
10	Domain growth kinetics in lithium niobate single crystals studied by piezoresponse force microscopy. Applied Physics Letters, 2005, 86, 012906.	3.3	196
11	Tbit/inch <sup>2</sup> ferroelectric data storage based on scanning nonlinear dielectric microscopy. Applied Physics Letters, 2002, 81, 4401-4403.	3.3	186
12	On-Demand Nanodevice with Electrical and Neuromorphic Multifunction Realized by Local Ion Migration. ACS Nano, 2012, 6, 9515-9521.	14.6	186
13	Controlling the Synaptic Plasticity of a Cu <sub>2</sub> S Gapâ€Type Atomic Switch. Advanced Functional Materials, 2012, 22, 3606-3613.	14.9	160
14	Conductance quantization and synaptic behavior in a Ta <sub>2</sub> O <sub>5</sub> -based atomic switch. Nanotechnology, 2012, 23, 435705.	2.6	157
15	Microstructure and crystallization behaviour of TiO <sub>2</sub> precursor prepared by the sol-gel method using metal alkoxide. Journal of Materials Science, 1994, 29, 1617-1622.	3.7	150
16	A Polymerâ€Electrolyteâ€Based Atomic Switch. Advanced Functional Materials, 2011, 21, 93-99.	14.9	130
17	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.	3.0	121
18	Formation and disappearance of a nanoscale silver cluster realized by solid electrochemical reaction. Journal of Applied Physics, 2002, 91, 10110.	2.5	119

#	ARTICLE	IF	CITATIONS
19	Microscale to nanoscale ferroelectric domain and surface engineering of a near-stoichiometric LiNbO <sub>3</sub> crystal. Applied Physics Letters, 2003, 82, 433-435.	3.3	117
20	Synaptic plasticity and memory functions achieved in a WO <sub>3</sub> -based nanoionics device by using the principle of atomic switch operation. Nanotechnology, 2013, 24, 384003.	2.6	117
21	Rate-Limiting Processes Determining the Switching Time in a Ag <sub>2</sub> S Atomic Switch. Journal of Physical Chemistry Letters, 2010, 1, 604-608.	4.6	99
22	Resistance switching of an individual Ag <sub>2</sub> S/Ag nanowire heterostructure. Nanotechnology, 2007, 18, 485202.	2.6	89
23	Structural studies of copper sulfide films: effect of ambient atmosphere. Science and Technology of Advanced Materials, 2008, 9, 035011.	6.1	83
24	Optical Damage Resistance and Refractive Indices in Near-Stoichiometric MgO-Doped LiNbO <sub>3</sub> . Japanese Journal of Applied Physics, 2002, 41, L49-L51.	1.5	80
25	In Situ and Non-Volatile Bandgap Tuning of Multilayer Graphene Oxide in an All-Solid-State Electric Double-Layer Transistor. Advanced Materials, 2014, 26, 1087-1091.	21.0	80
26	In Situ Tuning of Magnetization and Magnetoresistance in Fe <sub>3</sub> O <sub>4</sub> Thin Film Achieved with All-Solid-State Redox Device. ACS Nano, 2016, 10, 1655-1661.	14.6	80
27	Temperature effects on the switching kinetics of a Cu-Ta <sub>2</sub> O <sub>5</sub> -based atomic switch. Nanotechnology, 2011, 22, 254013.	2.6	75
28	A general strategy toward transition metal carbide/carbon core/shell nanospheres and their application for supercapacitor electrode. Carbon, 2016, 100, 590-599.	10.3	75
29	Switching kinetics of a Cu <sub>2</sub> S-based gap-type atomic switch. Nanotechnology, 2011, 22, 235201.	2.6	73
30	Photocatalytic nanoparticle deposition on LiNbO <sub>3</sub> nanodomain patterns via photovoltaic effect. Applied Physics Letters, 2007, 91, .	3.3	64
31	Ionic-Electronic Conductor Nanostructures: Template-Confined Growth and Nonlinear Electrical Transport. Small, 2005, 1, 971-975.	10.0	62
32	Rearrangement of ferroelectric domain structure induced by chemical etching. Applied Physics Letters, 2005, 87, 022905.	3.3	60
33	Effect of Ion Diffusion on Switching Voltage of Solid-Electrolyte Nanometer Switch. Japanese Journal of Applied Physics, 2006, 45, 3666-3668.	1.5	60
34	Fabrication of nanoscale gaps using a combination of self-assembled molecular and electron beam lithographic techniques. Applied Physics Letters, 2006, 88, 223111.	3.3	60
35	Determination of Nonstoichiometry in YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> . Japanese Journal of Applied Physics, 1988, 27, L179-L181.	1.5	59
36	Imaging and engineering the nanoscale-domain structure of a Sr <sub>0.61</sub> Ba <sub>0.39</sub> Nb <sub>2</sub> O <sub>6</sub> crystal using a scanning force microscope. Applied Physics Letters, 2002, 81, 2044-2046.	3.3	57

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37	Polarization reversal in congruent and stoichiometric lithium tantalate. Applied Physics Letters, 2001, 79, 3146-3148.	3.3	56
38	Ionic/electronic mixed conductor tip of a scanning tunneling microscope as a metal atom source for nanostructuring. Applied Physics Letters, 2002, 80, 4009-4011.	3.3	56
39	Nanoionics Switching Devices: "Atomic Switches" MRS Bulletin, 2009, 34, 929-934.	3.5	55
40	Refractive Indices in Undoped and MgO-Doped Near-Stoichiometric LiTaO <sub>3</sub> Crystals. Japanese Journal of Applied Physics, 2002, 41, L465-L467.	1.5	52
41	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	52
42	High responsivity in MoS <sub>2</sub> phototransistors based on charge trapping HfO <sub>2</sub> dielectrics. Communications Materials, 2020, 1, .	6.9	51
43	Effect of sulfurization conditions on structural and electrical properties of copper sulfide films. Journal of Applied Physics, 2008, 103, .	2.5	50
44	AgI/Ag Heterojunction Nanowires: Facile Electrochemical Synthesis, Photoluminescence, and Enhanced Ionic Conductivity. Advanced Functional Materials, 2007, 17, 1466-1472.	14.9	49
45	Temperature effects on the switching kinetics of a Cu-Ta <sub>2</sub> O <sub>5</sub> -based atomic switch. Nanotechnology, 2011, 22, 379502.	2.6	48
46	Domain Shape in Congruent and Stoichiometric Lithium Tantalate. Ferroelectrics, 2002, 269, 195-200.	0.6	47
47	All-solid-state electric-double-layer transistor based on oxide ion migration in Gd-doped CeO <sub>2</sub> on SrTiO <sub>3</sub> single crystal. Applied Physics Letters, 2013, 103, .	3.3	47
48	Oxygen migration process in the interfaces during bipolar resistance switching behavior of WO <sub>3</sub> -based nanoionics devices. Applied Physics Letters, 2012, 100, .	3.3	46
49	Down-scaling of resistive switching to nanoscale using porous anodic alumina membranes. Journal of Materials Chemistry C, 2014, 2, 349-355.	5.5	46
50	Memristive operations demonstrated by gap-type atomic switches. Applied Physics A: Materials Science and Processing, 2011, 102, 811-815.	2.3	43
51	Volatile/Nonvolatile Dual-Functional Atom Transistor. Applied Physics Express, 2011, 4, 015204.	2.4	42
52	Terabit inch <sup>2</sup> ferroelectric data storage using scanning nonlinear dielectric microscopy nanodomain engineering system. Nanotechnology, 2003, 14, 637-642.	2.6	40
53	Atomic switches: atomic-movement-controlled nanodevices for new types of computing. Science and Technology of Advanced Materials, 2011, 12, 013003.	6.1	39
54	Nanoscale domain switching at crystal surfaces of lithium niobate. Chemical Physics Letters, 2003, 377, 475-480.	2.6	38

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55	Effect of Ionic Conductivity on Response Speed of SrTiO <sub>3</sub> -Based All-Solid-State Electric-Double-Layer Transistor. ACS Applied Materials & Interfaces, 2015, 7, 12254-12260.	8.0	37
56	Surface potential imaging of nanoscale LiNbO <sub>3</sub> domains investigated by electrostatic force microscopy. Applied Physics Letters, 2006, 89, 132905.	3.3	36
57	<i>In Situ</i> and Nonvolatile Photoluminescence Tuning and Nanodomain Writing Demonstrated by All-Solid-State Devices Based on Graphene Oxide. ACS Nano, 2015, 9, 2102-2110.	14.6	36
58	Switching Property of Atomic Switch Controlled by Solid Electrochemical Reaction. Japanese Journal of Applied Physics, 2006, 45, L364-L366.	1.5	35
59	Near-Stoichiometric LiTaO <sub>3</sub> for Bulk Quasi-Phase-Matched Devices. Ferroelectrics, 2002, 273, 199-204.	0.6	33
60	Nanoscale chemical etching of near-stoichiometric lithium tantalate. Journal of Applied Physics, 2005, 97, 064308.	2.5	33
61	I-V characteristics of single electron tunneling from symmetric and asymmetric double-barrier tunneling junctions. Applied Physics Letters, 2007, 90, 223112.	3.3	32
62	High-Temperature Resistivity Measurements of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> . Japanese Journal of Applied Physics, 1988, 27, L220-L222.	1.5	31
63	Control of local ion transport to create unique functional nanodevices based on ionic conductors. Science and Technology of Advanced Materials, 2007, 8, 536-542.	6.1	31
64	Quantum Conductance in Memristive Devices: Fundamentals, Developments, and Applications. Advanced Materials, 2022, 34, e2201248.	21.0	31
65	Atomic Layer Deposition of a Magnesium Phosphate Solid Electrolyte. Chemistry of Materials, 2019, 31, 5566-5575.	6.7	30
66	Solid-Electrolyte Nanometer Switch. IEICE Transactions on Electronics, 2006, E89-C, 1492-1498.	0.6	30
67	Flexible resistive switching memory using inkjet printing of a solid polymer electrolyte. AIP Advances, 2012, 2, .	1.3	29
68	Thermal stability of LiTaO <sub>3</sub> domains engineered by scanning force microscopy. Applied Physics Letters, 2006, 89, 142906.	3.3	28
69	Origin of green emission from ZnS nanobelts as revealed by scanning near-field optical microscopy. Applied Physics Letters, 2008, 92, .	3.3	28
70	Ionic decision-maker created as novel, solid-state devices. Science Advances, 2018, 4, eaau2057.	10.3	28
71	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.	1.5	27
72	Modulation of superconducting critical temperature in niobium film by using all-solid-state electric-double-layer transistor. Applied Physics Letters, 2015, 107, .	3.3	26

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73	Shapes of isolated domains and field induced evolution of regular and random 2D domain structures in LiNbO <sub>3</sub> and LiTaO <sub>3</sub> . <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 120, 109-113.	3.5	25
74	A Ta <sub>2</sub> O <sub>5</sub> solid-electrolyte switch with improved reliability. , 2007, , .		25
75	Size-dependent single electron tunneling effect in Au nanoparticles. <i>Surface Science</i> , 2007, 601, 3907-3911.	1.9	25
76	Mechanical twinning in stoichiometric lithium niobate single crystal. <i>Journal of Crystal Growth</i> , 1997, 180, 101-104.	1.5	24
77	Self-Organization in LiNbO <sub>3</sub> and LiTaO <sub>3</sub> : Formation of Micro- and Nano-Scale Domain Patterns. <i>Ferroelectrics</i> , 2004, 304, 111-116.	0.6	24
78	Volatile and nonvolatile selective switching of a photo-assisted initialized atomic switch. <i>Nanotechnology</i> , 2013, 24, 384006.	2.6	24
79	Nanoionic devices enabling a multitude of new features. <i>Nanoscale</i> , 2016, 8, 13873-13879.	5.6	24
80	Operating mechanism and resistive switching characteristics of two- and three-terminal atomic switches using a thin metal oxide layer. <i>Journal of Electroceramics</i> , 2017, 39, 143-156.	2.0	24
81	Nano-Domain Engineering in LiNbO <sub>3</sub> by Focused Ion Beam. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L1550-L1552.	1.5	23
82	Domain patterning in LiNbO <sub>3</sub> and LiTaO <sub>3</sub> by focused electron beam. <i>Journal of Crystal Growth</i> , 2006, 292, 324-327.	1.5	23
83	Anomalous phase transition and ionic conductivity of AgI nanowire grown using porous alumina template. <i>Journal of Applied Physics</i> , 2007, 102, 124308.	2.5	23
84	Resistance Switching in Anodic Oxidized Amorphous TiO <sub>2</sub> Films. <i>Applied Physics Express</i> , 2008, 1, 064002.	2.4	23
85	Micro x-ray photoemission and Raman spectroscopic studies on bandgap tuning of graphene oxide achieved by solid state ionics device. <i>Applied Physics Letters</i> , 2014, 105, 183101.	3.3	23
86	Formation and crystallization of beta-alumina from precursor prepared by sol-gel method using metal alkoxides. <i>Solid State Ionics</i> , 1987, 25, 171-176.	2.7	22
87	A comparative study on the domain switching characteristics of near stoichiometric lithium niobate and lithium tantalate single crystals. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 120, 125-129.	3.5	22
88	Size-Controlled AgI/Ag Heteronanowires in Highly Ordered Alumina Membranes: Superionic Phase Stabilization and Conductivity. <i>Nano Letters</i> , 2015, 15, 5161-5167.	9.1	22
89	Decision maker based on atomic switches. <i>AIMS Materials Science</i> , 2016, 3, 245-259.	1.4	22
90	A Variety of Functional Devices Realized by Ionic Nanoarchitectonics, Complementing Electronics Components. <i>Advanced Electronic Materials</i> , 2022, 8, 2100645.	5.1	22

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91	Material dependence of switching speed of atomic switches made from silver sulfide and from copper sulfide. <i>Journal of Physics: Conference Series</i> , 2007, 61, 1157-1161.	0.4	21
92	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. <i>Solid State Ionics</i> , 2013, 253, 110-118.	2.7	21
93	Room temperature redox reaction by oxide ion migration at carbon/Gd-doped CeO <sub>2</sub> heterointerface probed by an in situ hard x-ray photoemission and soft x-ray absorption spectroscopies. <i>Science and Technology of Advanced Materials</i> , 2013, 14, 045001.	6.1	21
94	Electron-Beam Domain Writing in Stoichiometric LiTaO <sub>3</sub> Single Crystal by Utilizing Resist Layer. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L399-L402.	1.5	20
95	Magnetic Control of Magneto-Electrochemical Cell and Electric Double Layer Transistor. <i>Scientific Reports</i> , 2017, 7, 10534.	3.3	20
96	Preparation of layered Si materials as anode for lithium-ion batteries. <i>Chemical Physics Letters</i> , 2019, 730, 198-205.	2.6	18
97	Ferroelectric Nanodomain Properties in Near-Stoichiometric and Congruent LiNbO <sub>3</sub> Crystals Investigated by Scanning Force Microscopy. <i>Japanese Journal of Applied Physics</i> , 2005, 44, 7012-7014.	1.5	17
98	Template synthesis of M/M <sub>2</sub> S (M=Ag, Cu) hetero-nanowires by electrochemical technique. <i>Solid State Ionics</i> , 2006, 177, 2527-2531.	2.7	17
99	Domain patterning thin crystalline ferroelectric film with focused ion beam for nonlinear photonic integrated circuits. <i>Journal of Applied Physics</i> , 2006, 100, 106103.	2.5	17
100	Nanoionic devices: Interface nanoarchitectonics for physical property tuning and enhancement. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 1102A4.	1.5	17
101	Effect of substrates on the crystallinity and morphology of sol-gel-derived epitaxial LiNbO <sub>3</sub> films. <i>Journal of Materials Research</i> , 1995, 10, 1779-1783.	2.6	16
102	Defect chemical study of Nd <sub>2-x</sub> Ce <sub>x</sub> CuO <sub>4</sub> . <i>Solid State Ionics</i> , 1991, 49, 63-70.	2.7	15
103	Significant roles of the polymer matrix in the resistive switching behavior of polymer-based atomic switches. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 445301.	2.8	15
104	The electric double layer effect and its strong suppression at Li <sup>+</sup> solid electrolyte/hydrogenated diamond interfaces. <i>Communications Chemistry</i> , 2021, 4, .	4.5	15
105	Transmission electron microscopy observation and optical property of sol-gel derived LiNbO <sub>3</sub> films. <i>Journal of Materials Research</i> , 1996, 11, 3152-3157.	2.6	14
106	Theoretical investigation of kinetics of a Cu <sub>2</sub> S-based gap-type atomic switch. <i>Applied Physics Letters</i> , 2011, 98, 233501.	3.3	14
107	Neuromorphic System for Edge Information Encoding: Emulating Retinal Center-Surround Antagonism by Li-Ion-Mediated Highly Interactive Devices. <i>Nano Letters</i> , 2021, 21, 7938-7945.	9.1	14
108	Phase Relation of ZrO <sub>2</sub> -YO <sub>1.5</sub> -TiO <sub>2</sub> Ceramics Prepared by Sol-Gel Method. <i>Journal of the Ceramic Society of Japan</i> , 1998, 106, 860-866.	1.3	13

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109	A nonvolatile programmable solid electrolyte nanometer switch. , 0, , .		13
110	Effect of nonstoichiometric defects on antiparallel domain formation in LiNbO <sub>3</sub> . Applied Physics Letters, 2007, 91, 232913.	3.3	13
111	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.	3.1	13
112	Structure analysis of stoichiometric LiNbO <sub>3</sub> (0 0 0 1) surfaces using low-energy neutral scattering spectroscopy. Surface Science, 2003, 538, L500-L504.	1.9	11
113	Fabrication of graphene/MoS <sub>2</sub> alternately stacked structure for enhanced lithium storage. Materials Chemistry and Physics, 2020, 239, 121987.	4.0	11
114	Room-Temperature Manipulation of Magnetization Angle, Achieved with an All-Solid-State Redox Device. ACS Nano, 2020, 14, 16065-16072.	14.6	11
115	A floating gate negative capacitance MoS <sub>2</sub> phototransistor with high photosensitivity. Nanoscale, 2022, 14, 2013-2022.	5.6	11
116	Nanoscale Domain Engineering of a Sr <sub>0.61</sub> Ba <sub>0.39</sub> Nb <sub>2</sub> O <sub>6</sub> Single Crystal Using a Scanning Force Microscope. Ferroelectrics, 2003, 292, 83-89.	0.6	10
117	Optical waveguide properties of single indium oxide nanofibers. Journal of Optics, 2008, 10, 055201.	1.5	10
118	Three terminal solid-electrolyte nanometer switch. , 0, , .		9
119	SIMS-depth profile and microstructure studies of Ti-diffused Mg-doped near-stoichiometric lithium niobate waveguide. Journal of Crystal Growth, 2006, 287, 472-477.	1.5	9
120	Comparison of subthreshold swing in SrTiO <sub>3</sub> -based all-solid-state electric-double-layer transistors with Li <sub>4</sub> SiO <sub>4</sub> or Y-stabilized-ZrO <sub>2</sub> solid electrolyte. Japanese Journal of Applied Physics, 2016, 55, 06GJ03.	1.5	9
121	Oxide ion and proton conduction controlled in nano-grained yttria stabilized ZrO <sub>2</sub> thin films prepared by pulse laser deposition. Japanese Journal of Applied Physics, 2019, 58, SDDG01.	1.5	9
122	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.	8.0	9
123	Metastable Phase Relationship in the ZrO <sub>2</sub> -YO <sub>1.5</sub> , ZrO <sub>2</sub> -TiO <sub>2</sub> ; and YO <sub>1.5</sub> -TiO <sub>2</sub> Systems. Journal of the Ceramic Society of Japan, 1998, 106, 782-786.	1.3	8
124	Stability of engineered domains in ferroelectric LiNbO <sub>3</sub> and LiTaO <sub>3</sub> crystals. Physica Scripta, 2007, T129, 103-107.	2.5	8
125	Theoretical modeling of electrode impedance for an oxygen ion conductor and metallic electrode system based on the interfacial conductivity theory. Part II: Case of the limiting process by non-steady-state surface diffusion. Solid State Ionics, 2013, 249-250, 78-85.	2.7	8
126	Atomic switches: atomic-movement-controlled nanodevices for new types of computing. Science and Technology of Advanced Materials, 2011, 12, 013003.	6.1	8



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127	Characterization of sodium $\beta$ -alumina prepared by sol-gel method. <i>Solid State Ionics</i> , 1990, 40-41, 111-114.	2.7	7
128	Nano-Sized Inverted Domain Formation in Stoichiometric LiTaO <sub>3</sub> Single Crystal Using Scanning Nonlinear Dielectric Microscopy. <i>Integrated Ferroelectrics</i> , 2002, 49, 203-209.	0.7	7
129	Stabilization of periodically poled domain structures in a quasiphase-matching device using near-stoichiometric LiTaO <sub>3</sub> . <i>Journal of Applied Physics</i> , 2007, 102, 014101.	2.5	7
130	Electrical-pulse-induced resistivity modulation in Pt/TiO <sub>2</sub> /Pt multilayer device related to nanoionics-based neuromorphic function. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 06GH01.	1.5	7
131	Correlated Metal SrVO <sub>3</sub> Based All-Solid-State Redox Transistors Achieved by Li <sup>+</sup> or H <sup>+</sup> Transport. <i>Journal of the Physical Society of Japan</i> , 2018, 87, 034802.	1.6	7
132	A Voltage-Controlled Oscillator Using Variable Capacitors with a Thin Dielectric Electrolyte Film. <i>ACS Applied Electronic Materials</i> , 2020, 2, 2788-2797.	4.3	7
133	An ESR Study of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> and Y <sub>2</sub> BaCuO <sub>5</sub> with Oxygen Deficiencies. <i>Japanese Journal of Applied Physics</i> , 1988, 27, L2336-L2338.	1.5	6
134	Structural developments during heating in LiNbO <sub>3</sub> precursors synthesized by the sol-gel method. <i>Journal of Materials Science</i> , 1995, 30, 1993-1998.	3.7	6
135	Surface potential properties on near-stoichiometric LiNbO <sub>3</sub> crystals with nanoscale domain-engineered structures. <i>Journal of Electroceramics</i> , 2006, 16, 399-402.	2.0	6
136	Neuromorphic transistor achieved by redox reaction of WO <sub>3</sub> thin film. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 04FK01.	1.5	6
137	Oxygen-tolerant operation of all-solid-state ionic-gating devices: advantage of all-solid-state structure for ionic-gating. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SIIG09.	1.5	6
138	Impact of moisture absorption on the resistive switching characteristics of a polyethylene oxide-based atomic switch. <i>Journal of Materials Chemistry C</i> , 2021, 9, 11198-11206.	5.5	6
139	Solid state ionics for the development of artificial intelligence components. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SM0803.	1.5	6
140	In situ manipulation of perpendicular magnetic anisotropy in half-metallic NiCo <sub>2</sub> O <sub>4</sub> thin film by proton insertion. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SM1002.	1.5	6
141	Domain and Surface Structuring of LiNbO <sub>3</sub> Single Crystal by Scanning Force Microscopy. <i>Ferroelectrics</i> , 2006, 340, 121-128.	0.6	5
142	Quantized Conductance and Neuromorphic Behavior of a Gapless-Type Ag-Ta <sub>2</sub> O <sub>5</sub> Atomic Switch. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1562, 1.	0.1	5
143	Revival of "dead" memristive devices: case of WO <sub>3</sub> <sup>x</sup> . <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 1392-1396.	2.8	5
144	Unexpected metal-insulator transition in thick Ca <sub>1-x</sub> Sr <sub>x</sub> VO <sub>3</sub> film on SrTiO <sub>3</sub> (100) single crystal. <i>Applied Physics Letters</i> , 2018, 112, 133106.	3.3	5

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145	Fabrication of a magnesium-ion-conducting magnesium phosphate electrolyte film using atomic layer deposition. Japanese Journal of Applied Physics, 2020, 59, SIIG08.	1.5	5
146	Transmission electron microscopy study on epitaxial growth behaviors of sol-gel-derived LiNbO <sub>3</sub> films. Journal of Crystal Growth, 1997, 179, 577-584.	1.5	4
147	Tbit/Inch <sup>2</sup> Data Storage Using Scanning Nonlinear Dielectric Microscopy. Ferroelectrics, 2003, 292, 51-58.	0.6	4
148	Domain And Surface Engineering Of Ferroelectric Crystal LiNbO <sub>3</sub> For Novel Devices. Materials Technology, 2004, 19, 162-167.	3.0	4
149	Fabrication of microdomains at the +Z surface of near-stoichiometric lithium tantalate crystals. Journal Physics D: Applied Physics, 2006, 39, 3103-3106.	2.8	4
150	Conductivity Modulation by CaVO <sub>3</sub> -based All-solid-state Redox Transistor with Ion Transport of Li <sup>+</sup> or H <sup>+</sup> . Transactions of the Materials Research Society of Japan, 2019, 44, 57-60.	0.2	4
151	A mesoporous SiO <sub>2</sub> thin films-based ionic decision-maker for solving multi-armed bandit problems. Japanese Journal of Applied Physics, 2020, 59, SIIG01.	1.5	4
152	A graphene oxide-based ionic decision-maker for simple fabrication and stable operation. Japanese Journal of Applied Physics, 2020, 59, SIIG03.	1.5	4
153	Substrate effect on the neuromorphic function of nanoionics-based transistors fabricated using WO <sub>3</sub> thin film. Solid State Ionics, 2021, 364, 115638.	2.7	4
154	Domain patterns on ferroelectric Rh:BaTiO <sub>3</sub> single crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 120, 137-140.	3.5	3
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