Regina Dittmann

List of Publications by Year
in descending order

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176	11,202	53660 45	30848 102
papers	citations	h-index	g-index

184	184	184	8966
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Redoxâ€Based Resistive Switching Memories â€“ Nanoionic Mechanisms, Prospects, and Challenges. Advanced Materials, 2009, 21, 2632-2663.	11.1	4,447
2	Coexistence of Filamentary and Homogeneous Resistive Switching in Feâ€Doped SrTiO₃ Thinâ€Film Memristive Devices. Advanced Materials, 2010, 22, 4819-4822.	11.1	334
3	In situ observation of filamentary conducting channels in an asymmetric Ta2O5â^'x/TaO2â^'x bilayer structure. Nature Communications, 2013, 4, 2382.	5.8	308
4	Origin of the Ultraâ€nonlinear Switching Kinetics in Oxideâ€Based Resistive Switches. Advanced Functional Materials, 2011, 21, 4487-4492.	7.8	300
5	Towards Oxide Electronics: a Roadmap. Applied Surface Science, 2019, 482, 1-93.	3.1	236
6	2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501.	2.8	217
7	Impact of Defect Distribution on Resistive Switching Characteristics of Sr₂TiO₄ Thin Films. Advanced Materials, 2010, 22, 411-414.	11.1	214
8	Anomalous Resistance Hysteresis in Oxide ReRAM: Oxygen Evolution and Reincorporation Revealed by In Situ TEM. Advanced Materials, 2017, 29, 1700212.	11.1	166
9	Identification of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi></mml:math>- and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>B</mml:mi></mml:math>-Site Cation Vacancy Defects in Perovskite Oxide Thin Films. Physical Review Letters, 2010, 105, 226102.	2.9	160
10	Nanoscale resistive switching in SrTiO3 thin films. Physica Status Solidi - Rapid Research Letters, 2007, 1, R86-R88.	1.2	151
11	Do dislocations act as atomic autobahns for oxygen in the perovskite oxide SrTiO₃?. Nanoscale, 2014, 6, 12864-12876.	2.8	118
12	Resistive switching and data reliability of epitaxial (Ba,Sr)TiO3 thin films. Applied Physics Letters, 2006, 88, 042901.	1.5	115
13	Improved endurance behavior of resistive switching in (Ba,Sr)TiO3 thin films with W top electrode. Applied Physics Letters, 2008, 93, .	1.5	113
14	Pulsed laser ablation of complex oxides: The role of congruent ablation and preferential scattering for the film stoichiometry. Applied Physics Letters, 2012, 101, .	1.5	105
15	Tuning electrochemically driven surface transformation in atomically flat LaNiO3 thin films for enhanced water electrolysis. Nature Materials, 2021, 20, 674-682.	13.3	105
16	Spectromicroscopic insights for rational design of redox-based memristive devices. Nature Communications, 2015, 6, 8610.	5.8	100
17	Resistive Switching Mechanisms on TaO_x and SrRuO₃ Thin-Film Surfaces Probed by Scanning Tunneling Microscopy. ACS Nano, 2016, 10, 1481-1492.	7.3	100
18	Separation of bulk and interface contributions to electroforming and resistive switching behavior of epitaxial Fe-doped SrTiO3. Journal of Applied Physics, 2009, 105, .	1.1	99

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19	Subfilamentary Networks Cause Cycle-to-Cycle Variability in Memristive Devices. ACS Nano, 2017, 11, 6921-6929.	7.3	95
20	Spectroscopic Proof of the Correlation between Redoxâ€State and Chargeâ€Carrier Transport at the Interface of Resistively Switching Ti/PCMO Devices. Advanced Materials, 2014, 26, 2730-2735.	11.1	88
21	Quantifying redox-induced Schottky barrier variations in memristive devices via in operando spectromicroscopy with graphene electrodes. Nature Communications, 2016, 7, 12398.	5.8	87
22	Impact of the electroforming process on the device stability of epitaxial Fe-doped SrTiO3 resistive switching cells. Journal of Applied Physics, 2009, 106, .	1.1	70
23	Nanosized Conducting Filaments Formed by Atomic-Scale Defects in Redox-Based Resistive Switching Memories. Chemistry of Materials, 2017, 29, 3164-3173.	3.2	70
24	Morphological and electrical changes in TiO₂ memristive devices induced by electroforming and switching. Physica Status Solidi - Rapid Research Letters, 2010, 4, 16-18.	1.2	67
25	Verification of redox-processes as switching and retention failure mechanisms in Nb:SrTiO₃/metal devices. Nanoscale, 2016, 8, 13967-13975.	2.8	65
26	Scaling Potential of Local Redox Processes in Memristive SrTiO $_{3}$ Thin-Film Devices. Proceedings of the IEEE, 2012, 100, 1979-1990.	16.4	64
27	Topotactic Phase Transition Driving Memristive Behavior. Advanced Materials, 2019, 31, e1903391.	11.1	61
28	Fluctuation specific heat and thermal expansion of YBaCuO and DyBaCuO. Physica C: Superconductivity and Its Applications, 1990, 168, 465-474.	0.6	58
29	Oxygen Exchange Processes between Oxide Memristive Devices and Water Molecules. Advanced Materials, 2018, 30, e1800957.	11.1	57
30	Realization of regular arrays of nanoscale resistive switching blocks in thin films of Nb-doped SrTiO3. Applied Physics Letters, 2008, 93, 023110.	1.5	56
31	Reversible alternation between bipolar and unipolar resistive switching in polycrystalline barium strontium titanate thin films. Journal of Applied Physics, 2010, 107, .	1.1	56
32	Formation and Movement of Cationic Defects During Forming and Resistive Switching in SrTiO₃ Thin Film Devices. Advanced Functional Materials, 2015, 25, 6360-6368.	7.8	56
33	Mott-transition-based RRAM. Materials Today, 2019, 28, 63-80.	8.3	56
34	Redox-based memristive devices for new computing paradigm. APL Materials, 2019, 7, 110903.	2.2	55
35	Nonstoichiometry accommodation in SrTiO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>thin films studied by positron annihilation and electron microscopy. Physical Review B, 2013, 87, .	1.1	52
36	Insights into Nanoscale Electrochemical Reduction in a Memristive Oxide: the Role of Threeâ€Phase Boundaries. Advanced Functional Materials, 2014, 24, 4466-4472.	7.8	52

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37	Detection of filament formation in forming-free resistive switching SrTiO3 devices with Ti top electrodes. Applied Physics Letters, 2012, 100, .	1.5	51
38	Impact of the interplay between nonstoichiometry and kinetic energy of the plume species on the growth mode of SrTiO₃thin films. Journal Physics D: Applied Physics, 2014, 47, 034009.	1.3	51
39	Space charges and defect concentration profiles at complex oxide interfaces. Physical Review B, 2016, 93, .	1.1	51
40	Growth dynamics and strain relaxation mechanisms inBaTiO3pulsed laser deposited onSrRuO3âˆ•SrTiO3. Physical Review B, 2006, 73, .	1.1	48
41	Spectroscopic study of the electric field induced valence change of Fe-defect centers in SrTiO3. Physical Chemistry Chemical Physics, 2011, 13, 20779.	1.3	48
42	Influence of charge compensation mechanisms on the sheet electron density at conducting LaAlO3/SrTiO3-interfaces. Applied Physics Letters, 2012, 100, .	1.5	48
43	Early self-assembled stages in epitaxial SrRuO3 on LaAlO3. Applied Physics Letters, 2003, 82, 2497-2499.	1.5	47
44	Finite-size versus interface-proximity effects in thin-film epitaxial<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mtext>SrTiO</mml:mtext><mml:mn>3</mml:mn> Physical Review B, 2014, 89, .	1.1	47
45	Function by defects at the atomic scale â€“ New concepts for non-volatile memories. Solid-State Electronics, 2010, 54, 830-840.	0.8	46
46	Correlation between growth kinetics and nanoscale resistive switching properties of SrTiO3 thin films. Journal of Applied Physics, 2010, 108, .	1.1	45
47	Probing the oxygen vacancy distribution in resistive switching Fe-SrTiO3 metal-insulator-metal-structures by micro-x ray absorption near-edge structure. Journal of Applied Physics, 2012, 111, .	1.1	44
48	Chemical insight into electroforming of resistive switching manganite heterostructures. Nanoscale, 2013, 5, 3954.	2.8	44
49	High temperature conductance characteristics of LaAlO3/SrTiO3-heterostructures under equilibrium oxygen atmospheres. Applied Physics Letters, 2010, 97, .	1.5	43
50	Reduction of the forming voltage through tailored oxygen non-stoichiometry in tantalum oxide ReRAM devices. Scientific Reports, 2018, 8, 10861.	1.6	43
51	Defect Control of Conventional and Anomalous Electron Transport at Complex Oxide Interfaces. Physical Review X, 2016, 6, .	2.8	42
52	Impact of the top-electrode material on the permittivity of single-crystalline Ba0.7Sr0.3TiO3 thin films. Applied Physics Letters, 2005, 86, 202908.	1.5	41
53	Analysis of shape effects on the piezoresponse in ferroelectric nanograins with and without adsorbates. Applied Physics Letters, 2005, 87, 082901.	1.5	40
54	Transport limits in defect-engineered LaAlO₃/SrTiO₃ bilayers. Nanoscale, 2015, 7, 1013-1022.	2.8	39

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55	Sharp ferroelectric phase transition in strained single-crystalline SrRuO3/Ba0.7Sr0.3TiO3/SrRuO3 capacitors. Applied Physics Letters, 2003, 83, 5011-5013.	1.5	38
56	Unraveling the enhanced Oxygen Vacancy Formation in Complex Oxides during Annealing and Growth. Scientific Reports, 2017, 7, 39953.	1.6	37
57	UV radiation enhanced oxygen vacancy formation caused by the PLD plasma plume. Scientific Reports, 2018, 8, 8846.	1.6	36
58	Rapid singleâ€fluxâ€quantum balanced comparator based on highâ€Tc bicrystal Josephson junctions. Applied Physics Letters, 1996, 68, 2732-2734.	1.5	35
59	Ordering and Phase Control in Epitaxial Double-Perovskite Catalysts for the Oxygen Evolution Reaction. ACS Catalysis, 2017, 7, 7029-7037.	5.5	35
60	Introduction to new memory paradigms: memristive phenomena and neuromorphic applications. Faraday Discussions, 2019, 213, 11-27.	1.6	35
61	Sr2TiO4 layered perovskite thin films grown by pulsed laser deposition. Applied Physics Letters, 2008, 92, 241918.	1.5	34
62	Thermodynamic Ground States of Complex Oxide Heterointerfaces. ACS Applied Materials & Interfaces, 2017, 9, 1086-1092.	4.0	34
63	Evidence for multifilamentary valence changes in resistive switching SrTiO3 devices detected by transmission X-ray microscopy. APL Materials, 2013, 1, .	2.2	33
64	Surface Termination Conversion during SrTiO3 Thin Film Growth Revealed by X-ray Photoelectron Spectroscopy. Scientific Reports, 2015, 5, 11829.	1.6	33
65	Different threshold and bipolar resistive switching mechanisms in reactively sputtered amorphous undoped and Cr-doped vanadium oxide thin films. Journal of Applied Physics, 2018, 123, .	1.1	33
66	Stoichiometry dependence and thermal stability of conducting NdGaO3/SrTiO3 heterointerfaces. Applied Physics Letters, 2013, 102, .	1.5	32
67	Detection of Fe2+ valence states in Fe doped SrTiO3 epitaxial thin films grown by pulsed laser deposition. Physical Chemistry Chemical Physics, 2013, 15, 8311.	1.3	32
68	Nanospectroscopy of Infrared Phonon Resonance Enables Local Quantification of Electronic Properties in Doped SrTiO₃ Ceramics. Advanced Functional Materials, 2018, 28, 1802834.	7.8	32
69	Impact of the cation-stoichiometry on the resistive switching and data retention of SrTiO3 thin films. AIP Advances, 2015, 5, .	0.6	31
70	Disentanglement of growth dynamic and thermodynamic effects in LaAlO3/SrTiO3 heterostructures. Scientific Reports, 2016, 6, 22410.	1.6	31
71	A Theoretical and Experimental View on the Temperature Dependence of the Electronic Conduction through a Schottky Barrier in a Resistively Switching SrTiO₃â€Based Memory Cell. Advanced Electronic Materials, 2018, 4, 1800062.	2.6	31
72	The influence of the local oxygen vacancy concentration on the piezoresponse of strontium titanate thin films. Nanoscale, 2015, 7, 14351-14357.	2.8	30

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73	Formation mechanism of Ruddlesden-Popper-type antiphase boundaries during the kinetically limited growth of Sr rich SrTiO3 thin films. Scientific Reports, 2016, 6, 38296.	1.6	29
74	Spectroscopic Indications of Tunnel Barrier Charging as the Switching Mechanism in Memristive Devices. Advanced Functional Materials, 2017, 27, 1702282.	7.8	29
75	Avalancheâ€Dischargeâ€Induced Electrical Forming in Tantalum Oxideâ€Based Metalâ€“Insulatorâ€“Metal Structures. Advanced Functional Materials, 2015, 25, 7154-7162.	7.8	28
76	Utilizing the Switching Stochasticity of HfO2/TiOx-Based ReRAM Devices and the Concept of Multiple Device Synapses for the Classification of Overlapping and Noisy Patterns. Frontiers in Neuroscience, 2021, 15, 661856.	1.4	26
77	Thickness dependence of intrinsic dielectric response and apparent interfacial capacitance in ferroelectric thin films. Journal of Applied Physics, 2007, 101, 074102.	1.1	25
78	Identification of screw dislocations as fast-forming sites in Fe-doped SrTiO₃. Applied Physics Letters, 2013, 102, 183504.	1.5	25
79	Determination of the electrostatic potential distribution in Pt/Fe:SrTiO3/Nb:SrTiO3 thin-film structures by electron holography. Scientific Reports, 2014, 4, 6975.	1.6	25
80	Atomic-Scale Measurement of Structure and Chemistry of a Single-Unit-Cell Layer of LaAlO₃ Embedded in SrTiO₃. Microscopy and Microanalysis, 2013, 19, 310-318.	0.2	24
81	Complex behaviour of vacancy point-defects in SrRuO₃ thin films. Physical Chemistry Chemical Physics, 2015, 17, 1060-1069.	1.3	23
82	Electrolysis of Water at Atomically Tailored Epitaxial Cobaltite Surfaces. Chemistry of Materials, 2019, 31, 2337-2346.	3.2	22
83	In-Gap States and Band-Like Transport in Memristive Devices. Nano Letters, 2019, 19, 54-60.	4.5	22
84	Identifying Ionic and Electronic Charge Transfer at Oxide Heterointerfaces. Advanced Materials, 2021, 33, e2004132.	11.1	22
85	Fabrication of stacked intrinsic Josephson junctions from Bi2Sr2CaCu2O8+x thin films. Superconductor Science and Technology, 1996, 9, A22-A25.	1.8	21
86	Fabrication of arrays of SrZrO3nanowires by pulsed laser deposition. Nanotechnology, 2004, 15, S122-S125.	1.3	21
87	Pulsed laser deposition of SrRuO3 thin-films: The role of the pulse repetition rate. APL Materials, 2016, 4, .	2.2	21
88	Oxygen partial pressure dependence of surface space charge formation in donor-doped SrTiO₃. APL Materials, 2017, 5, 056106.	2.2	21
89	Correlation between ramp morphology and properties of ramp-type junctions. IEEE Transactions on Applied Superconductivity, 1997, 7, 2844-2847.	1.1	20
90	Comprehensive model for the electronic transport in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mtext>Pt/SrTi</mml:mtext><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> analog memristive devices. Physical Review B, 2020, 102, .	1.1	20

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91	Tradeâ€Off Between Data Retention and Switching Speed in Resistive Switching ReRAM Devices. Advanced Electronic Materials, 2021, 7, 2000815.	2.6	20
92	Chemical Structure of Conductive Filaments in Tantalum Oxide Memristive Devices and Its Implications for the Formation Mechanism. Advanced Electronic Materials, 2022, 8, .	2.6	20
93	Investigation of SrRuO3barriers in SNS junctions. Superconductor Science and Technology, 1994, 7, 277-280.	1.8	19
94	Influence of ramp shape and morphology on the properties of YBa2Cu3O7âˆ'Î´-ramp-type junctions. Physica C: Superconductivity and Its Applications, 1998, 302, 176-182.	0.6	19
95	Antiphase Boundaries Constitute Fast Cation Diffusion Paths in SrTiO₃ Memristive Devices. Advanced Functional Materials, 2020, 30, 2004118.	7.8	19
96	Validity of magnetotransport detection of skyrmions in epitaxial SrRuO3 heterostructures. Physical Review Materials, 2020, 4, .	0.9	19
97	Atomic Structure of Antiphase Nanodomains in Feâ€Doped SrTiO₃ Films. Advanced Functional Materials, 2015, 25, 6369-6373.	7.8	18
98	Engineering Oxygen Migration for Homogeneous Volume Resistive Switching in 3â€Terminal Devices. Advanced Electronic Materials, 2019, 5, 1800629.	2.6	18
99	Origin of the hump anomalies in the Hall resistance loops of ultrathin <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>SrRuO</mml:mi><mml:mn>3</mml:mn><mml:mn> multilayers. Physical Review Materials, 2021, 5, .	0.9	18
100	Exsolution of Embedded Nanoparticles in Defect Engineered Perovskite Layers. ACS Nano, 2021, 15, 4546-4560.	7.3	18
101	Subgap conductance features ofYBa2Cu3O7âˆ'Î´edge Josephson junctions. Physical Review B, 1999, 59, 3815-3822.	1.1	17
102	Fabrication of YBa/sub 2/Cu/sub 3/O/sub 7/ ramp-type junctions by interface treatments. IEEE Transactions on Applied Superconductivity, 1999, 9, 3440-3443.	1.1	16
103	Electronic Inhomogeneity Influence on the Anomalous Hall Resistivity Loops of SrRuO₃ Epitaxially Interfaced with 5d Perovskites. ACS Omega, 2020, 5, 5824-5833.	1.6	16
104	SrZrO3Nanopatterning Using Self-Organized SrRuO3as a Template. Advanced Materials, 2005, 17, 281-284.	11.1	15
105	Valence change detection in memristive oxide based heterostructure cells by hard X-ray photoelectron emission spectroscopy. APL Materials, 2018, 6, .	2.2	15
106	Chemical control of the electrical surface properties in donor-doped transition metal oxides. Physical Review Materials, 2019, 3, .	0.9	15
107	Measurement of the error rate of single flux quantum circuits with high temperature superconductors. IEEE Transactions on Applied Superconductivity, 1999, 9, 3850-3853.	1.1	14
108	Current transport in ramp-type junctions with engineered interface. Journal of Applied Physics, 2001, 89, 3852-3860.	1.1	14

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109	Electronic structure of epitaxial Fe-doped SrTiO₃thin films. Phase Transitions, 2011, 84, 489-500.	0.6	14
110	Resistive Switching of Sub-10 nm TiO2 Nanoparticle Self-Assembled Monolayers. Nanomaterials, 2017, 7, 370.	1.9	14
111	SrTiO₃ termination control: a method to tailor the oxygen exchange kinetics. Materials Research Letters, 2020, 8, 31-40.	4.1	14
112	Exploring Area-Dependent Pr0.7Ca0.3MnO3-Based Memristive Devices as Synapses in Spiking and Artificial Neural Networks. Frontiers in Neuroscience, 2021, 15, 661261.	1.4	14
113	Effects of process parameters on the fabrication of edge-type YBCO Josephson junctions by interface treatments. Physica C: Superconductivity and Its Applications, 1999, 326-327, 157-169.	0.6	13
114	Local conductivity of epitaxial Fe-doped SrTiO₃thin films. Phase Transitions, 2011, 84, 483-488.	0.6	13
115	Tailoring the switching performance of resistive switching SrTiO3 devices by SrO interface engineering. Solid State Ionics, 2018, 325, 247-250.	1.3	13
116	Spectroscopic elucidation of ionic motion processes in tunnel oxide-based memristive devices. Faraday Discussions, 2019, 213, 215-230.	1.6	13
117	Engineering antiphase boundaries in epitaxial SrTiO3 to achieve forming free memristive devices. APL Materials, 2019, 7, .	2.2	13
118	Trade-off between variability and retention of memristive epitaxial SrTiO3 devices. APL Materials, 2021, 9, .	2.2	13
119	Measurement of the dynamic error rate of a high temperature superconductor rapid single flux quantum comparator. Applied Physics Letters, 1998, 72, 2328-2330.	1.5	12
120	The role of defects in resistively switching chalcogenides. International Journal of Materials Research, 2010, 101, 182-198.	0.1	12
121	Competing strain relaxation mechanisms in epitaxially grown Pr0.48Ca0.52MnO3 on SrTiO3. APL Materials, 2014, 2, 106106.	2.2	12
122	Mobility Modulation and Suppression of Defect Formation in Two-Dimensional Electron Systems by Charge-Transfer Management. ACS Applied Materials & Interfaces, 2017, 9, 10888-10896.	4.0	12
123	Faster Diffusion of Oxygen Along Dislocations in (La,Sr)MnO_{3+Î´} Is a Spaceâ€Charge Phenomenon. Advanced Functional Materials, 2021, 31, 2105647.	7.8	12
124	Filamentary TaO_x/HfO₂ ReRAM Devices for Neural Networks Training with Analog Inâ€Memory Computing. Advanced Electronic Materials, 2022, 8, .	2.6	12
125	Current transport across YBa2Cu3O7â€“Au interfaces. Applied Physics Letters, 1996, 69, 696-698.	1.5	11
126	Probing orbital ordering in LaVO3 epitaxial films by Raman scattering. APL Materials, 2016, 4, .	2.2	11

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127	Impact of Fe doping on the electronic structure of SrTiO3 thin films determined by resonant photoemission. Journal of Chemical Physics, 2018, 148, 154702.	1.2	11
128	Magnetic coupling of ferromagnetic SrRuO3 epitaxial layers separated by ultrathin non-magnetic SrZrO3/SrIrO3. Applied Physics Letters, 2018, 113, .	1.5	10
129	First order sigmaâ€“delta modulator in HTS bicrystal technology. Physica C: Superconductivity and Its Applications, 1999, 326-327, 170-176.	0.6	9
130	Influence of La-doping of YBa/sub 2/Cu/sub 3/O/sub 7/ on transport properties of interface-engineered ramp-edge junctions. IEEE Transactions on Applied Superconductivity, 2001, 11, 795-798.	1.1	9
131	Effect of the magnetic-field orientation on the modulation period of the critical current of ramp-type Josephson junctions. Journal of Applied Physics, 2001, 90, 4623-4631.	1.1	9
132	Bipolar resistive switching in oxides: Mechanisms and scaling. Current Applied Physics, 2011, 11, e75-e78.	1.1	9
133	X-ray absorption and resonant photoemission studies of Mn doped SrTiO3 epitaxial films. Radiation Physics and Chemistry, 2013, 93, 123-128.	1.4	9
134	Band alignment at memristive metal-oxide interfaces investigated by hard x-ray photoemission spectroscopy. Physical Review B, 2014, 90, .	1.1	9
135	Au Nanoparticles as Template for Defect Formation in Memristive SrTiO3 Thin Films. Nanomaterials, 2018, 8, 869.	1.9	9
136	Effect of Cationic Interface Defects on Band Alignment and Contact Resistance in Metal/Oxide Heterojunctions. Advanced Electronic Materials, 2020, 6, 1900808.	2.6	9
137	Photoemission electron microscopy of magneto-ionic effects in La0.7Sr0.3MnO3. APL Materials, 2020, 8, .	2.2	9
138	Measurement of the static error rate of a storage cell for single magnetic flux quanta, fabricated from high-Tc multilayer bicrystal Josephson junctions. Applied Physics Letters, 1998, 72, 1513-1515.	1.5	8
139	HTS basic RSFQ cells for an optimal bit-error rate. Superconductor Science and Technology, 2002, 15, 483-487.	1.8	8
140	Microstructure of epitaxial Ba0.7Sr0.3TiO3â^•SrRuO3 bilayer films on SrTiO3 substrates. Journal of Applied Physics, 2005, 97, 104907.	1.1	8
141	Tuning cationic composition of La:EuTiO3â^Ï´ films. APL Materials, 2013, 1, .	2.2	8
142	Studies of Local Structural Distortions in Strained Ultrathin BaTiO₃ Films Using Scanning Transmission Electron Microscopy. Microscopy and Microanalysis, 2014, 20, 740-747.	0.2	8
143	Impact of cation stoichiometry on the early stage of growth of SrTiO3 deposited by pulsed laser deposition. Applied Surface Science, 2015, 359, 68-72.	3.1	8
144	Phononâ€Enhanced Nearâ€Field Spectroscopy to Extract the Local Electronic Properties of Buried 2D Electron Systems in Oxide Heterostructures. Advanced Functional Materials, 2020, 30, 2004767.	7.8	8

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145	Behavior of cation vacancies in single-crystal and in thin-film <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">SrTiO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math> : The importance of strontium vacancies and their defect associates. Physical Review Materials, 2020, 4, .	0.9	8
146	Fabrication of stress-induced SrRuO3 nanostructures by pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2004, 79, 1461-1464.	1.1	7
147	Stoichiometry in epitaxial oxide thin films. , 2015, , 231-261.		7
148	Interface effects on memristive devices. , 2019, , 171-202.		7
149	Competition between V2O3 phases deposited by one-step reactive sputtering process on polycrystalline conducting electrode. Thin Solid Films, 2020, 705, 138063.	0.8	7
150	Stoichiometry and Termination Control of LaAlO₃/SrTiO₃ Bilayer Interfaces. Advanced Materials Interfaces, 2021, 8, 2001477.	1.9	7
151	Geometric shadowing from rippledSrRuO3âˆ•SrTiO3surface templates induces self-organization of epitaxialSrZrO3nanowires. Physical Review B, 2006, 74, .	1.1	6
152	Feasibility studies for filament detection in resistively switching SrTiO3 devices by employing grazing incidence small angle X-ray scattering. Journal of Applied Physics, 2013, 113, 064509.	1.1	6
153	Determination of the interfacial structure of YBa₂Cu₃O₇/SrRuO₃thin-film heterostructures. Philosophical Magazine Letters, 1994, 69, 253-259.	0.5	5
154	Redox-based memristive metal-oxide devices. , 2018, , 489-522.		5
155	The atomic structure of the interface of Au on YBa2Cu3O7(001). Philosophical Magazine Letters, 1996, 74, 25-32.	0.5	4
156	In situ optical characterization of LaAlO ₃ epitaxy on SrTiO ₃ (001). Europhysics Letters, 2015, 109, 37006.	0.7	4
157	Direct Observation of Redox Switching in Resistive Memory Devices Operated In-situ in a Transmission Electron Microscope by Electron Energy Loss Spectroscopy and Off-Axis Electron Holography. Microscopy and Microanalysis, 2016, 22, 52-53.	0.2	4
158	Structure and orbital ordering of ultrathin LaVO3probed by atomic resolution electron microscopy and Raman spectroscopy. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1600350.	1.2	4
159	Charge-transfer in B-site-depleted NdGaO₃/SrTiO₃ heterostructures. APL Materials, 2018, 6, 076104.	2.2	4
160	HTS technology for implementing RSFQ cells with large noise immunity. Physica C: Superconductivity and Its Applications, 2002, 372-376, 139-142.	0.6	3
161	HTS multilayer technology for optimal bit-error rate RSFQ cells. IEEE Transactions on Applied Superconductivity, 2003, 13, 409-412.	1.1	3
162	Xâ€ray absorption and resonant photoemission studies of electroforming process in Feâ€doped SrTiO₃ epitaxial films. X-Ray Spectrometry, 2015, 44, 339-343.	0.9	2

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163	Development of Epitaxial Thin Film Model Electrodes for the Systematic Investigation of Metal Exsolution from MIEC Perovskite Oxides. ECS Transactions, 2019, 91, 1783-1789.	0.3	2
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