Stephan Menzel

List of Publications by Year
in descending order

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163 papers	5,804 citations	81743 39 h-index	88477 70 g-index
170 all docs	170 docs citations	170 times ranked	4431 citing authors

#	Article	IF	Citations
1	Origin of the Ultraâ€nonlinear Switching Kinetics in Oxideâ€Based Resistive Switches. Advanced Functional Materials, 2011, 21, 4487-4492.	7.8	300
2	Towards Oxide Electronics: a Roadmap. Applied Surface Science, 2019, 482, 1-93.	3.1	236
3	Physics of the Switching Kinetics in Resistive Memories. Advanced Functional Materials, 2015, 25, 6306-6325.	7.8	233
4	2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501.	2.8	217
5	Understanding the switching-off mechanism in Ag+ migration based resistively switching model systems. Applied Physics Letters, 2007, 91, .	1.5	210
6	Evidence for oxygen vacancies movement during wake-up in ferroelectric hafnium oxide. Applied Physics Letters, 2016, 108, .	1.5	204
7	Anomalous Resistance Hysteresis in Oxide ReRAM: Oxygen Evolution and Reincorporation Revealed by In Situ TEM. Advanced Materials, 2017, 29, 1700212.	11.1	166
8	Switching kinetics of electrochemical metallization memory cells. Physical Chemistry Chemical Physics, 2013, 15, 6945.	1.3	156
9	Simulation of multilevel switching in electrochemical metallization memory cells. Journal of Applied Physics, 2012, 111, .	1.1	151
10	Nanoionic Resistive Switching Memories: On the Physical Nature of the Dynamic Reset Process. Advanced Electronic Materials, 2016, 2, 1500233.	2.6	141
11	Standards for the Characterization of Endurance in Resistive Switching Devices. ACS Nano, 2021, 15, 17214-17231.	7.3	128
12	Realization of Boolean Logic Functionality Using Redoxâ€Based Memristive Devices. Advanced Functional Materials, 2015, 25, 6414-6423.	7.8	127
13	Impact of oxygen exchange reaction at the ohmic interface in Ta₂O₅-based ReRAM devices. Nanoscale, 2016, 8, 17774-17781.	2.8	116
14	A Complementary Resistive Switch-Based Crossbar Array Adder. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 64-74.	2.7	100
15	Multidimensional Simulation of Threshold Switching in NbO₂ Based on an Electric Field Triggered Thermal Runaway Model. Advanced Electronic Materials, 2016, 2, 1600169.	2.6	95
16	Subfilamentary Networks Cause Cycle-to-Cycle Variability in Memristive Devices. ACS Nano, 2017, 11, 6921-6929.	7.3	95
17	Improved Switching Stability and the Effect of an Internal Series Resistor in HfO₂/TiO_{<italic>x</italic>} Bilayer ReRAM Cells. IEEE Transactions on Electron Devices, 2018, 65, 3229-3236.	1.6	95
18	Exploiting the switching dynamics of HfO2-based ReRAM devices for reliable analog memristive behavior. APL Materials, 2019, 7, .	2.2	94

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19	Applicability of Well-Established Memristive Models for Simulations of Resistive Switching Devices. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 2402-2410.	3.5	91
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	Understanding filamentary growth in electrochemical metallization memory cells using kinetic Monte Carlo simulations. Nanoscale, 2015, 7, 12673-12681.	2.8	85
23	Redox processes in silicon dioxide thin films using copper microelectrodes. Applied Physics Letters, 2011, 99, .	1.5	77
24	Variability-Aware Modeling of Filamentary Oxide-Based Bipolar Resistive Switching Cells Using SPICE Level Compact Models. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 4618-4630.	3.5	72
25	Understanding the Coexistence of Two Bipolar Resistive Switching Modes with Opposite Polarity in Pt/TiO₂/Ti/Pt Nanosized ReRAM Devices. ACS Applied Materials & Interfaces, 2018, 10, 29766-29778.	4.0	71
26	Uniting Gradual and Abrupt set Processes in Resistive Switching Oxides. Physical Review Applied, 2016, 6, .	1.5	61
27	3-Bit Multilevel Switching by Deep Reset Phenomenon in Pt/W/TaO_X/Pt-ReRAM Devices. IEEE Electron Device Letters, 2016, 37, 564-567.	2.2	58
28	Experimental Demonstration of Memristor-Aided Logic (MAGIC) Using Valence Change Memory (VCM). IEEE Transactions on Electron Devices, 2020, 67, 3115-3122.	1.6	58
29	Oxygen Exchange Processes between Oxide Memristive Devices and Water Molecules. Advanced Materials, 2018, 30, e1800957.	11.1	57
30	SET kinetics of electrochemical metallization cells: influence of counter-electrodes in SiO₂/Ag based systems. Nanotechnology, 2017, 28, 135205.	1.3	55
31	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
32	A HfO₂â€Based Complementary Switching Crossbar Adder. Advanced Electronic Materials, 2015, 1, 1500138.	2.6	51
33	Memory Devices: Energyâ€"Spaceâ€"Time Tradeoffs. Proceedings of the IEEE, 2010, 98, 2185-2200.	16.4	50
34	Pulse wake-up and breakdown investigation of ferroelectric yttrium doped HfO2. Journal of Applied Physics, 2017, 121, .	1.1	48
35	The ultimate switching speed limit of redox-based resistive switching devices. Faraday Discussions, 2019, 213, 197-213.	1.6	48
36	Comprehensive Model of Electron Conduction in Oxide-Based Memristive Devices. ACS Applied Electronic Materials, 2021, 3, 3674-3692.	2.0	48

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37	Origin of the SET Kinetics of the Resistive Switching in Tantalum Oxide Thin Films. IEEE Electron Device Letters, 2014, 35, 259-261.	2.2	47
38	Analysis of Transient Currents During Ultrafast Switching of $hbox{TiO}_{2}$ Nanocrossbar Devices. IEEE Electron Device Letters, 2011, 32, 1116-1118.	2.2	46
39	Stateful Three-Input Logic with Memristive Switches. Scientific Reports, 2019, 9, 14618.	1.6	44
40	Investigation of the Impact of High Temperatures on the Switching Kinetics of Redoxâ€Based Resistive Switching Cells using a Highâ€Speed Nanoheater. Advanced Electronic Materials, 2017, 3, 1700294.	2.6	41
41	Picosecond multilevel resistive switching in tantalum oxide thin films. Scientific Reports, 2020, 10, 16391.	1.6	41
42	Compact Modeling of Complementary Switching in Oxide-Based ReRAM Devices. IEEE Transactions on Electron Devices, 2019, 66, 1268-1275.	1.6	39
43	Analytical analysis of the generic SET and RESET characteristics of electrochemical metallization memory cells. Nanoscale, 2013, 5, 11003.	2.8	37
44	A new test facility for efficient evaluation of MEMS contact materials. Journal of Micromechanics and Microengineering, 2007, 17, 1788-1795.	1.5	35
45	Introduction to new memory paradigms: memristive phenomena and neuromorphic applications. Faraday Discussions, 2019, 213, 11-27.	1.6	35
46	Field-Driven Hopping Transport of Oxygen Vacancies in Memristive Oxide Switches with Interface-Mediated Resistive Switching. Physical Review Applied, 2018, 10, .	1.5	34
47	Compact modeling of CRS devices based on ECM cells for memory, logic and neuromorphic applications. Nanotechnology, 2013, 24, 384008.	1.3	33
48	Simulation of TaO<inf>x</inf>-based complementary resistive switches by a physics-based memristive model. , 2014, , .		33
49	Modeling of Quantized Conductance Effects in Electrochemical Metallization Cells. IEEE Nanotechnology Magazine, 2015, 14, 505-512.	1.1	33
50	Effect of the Threshold Kinetics on the Filament Relaxation Behavior of Agâ€Based Diffusive Memristors. Advanced Functional Materials, 2022, 32, .	7.8	33
51	HRS Instability in Oxide-Based Bipolar Resistive Switching Cells. IEEE Transactions on Electron Devices, 2020, 67, 4208-4215.	1.6	32
52	Field-enhanced route to generating anti-Frenkel pairs in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>HfO</mml:mi><mml:mn>2</mml:mn></mml:msub></mm Physical Review Materials, 2018, 2, .	0.9	32
53	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
54	Spectroscopic Indications of Tunnel Barrier Charging as the Switching Mechanism in Memristive Devices. Advanced Functional Materials, 2017, 27, 1702282.	7.8	29

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55	Avalancheâ€Dischargeâ€Induced Electrical Forming in Tantalum Oxideâ€Based Metalâ€“Insulatorâ€“Metal Structures. Advanced Functional Materials, 2015, 25, 7154-7162.	7.8	28
56	Interrelation of Sweep and Pulse Analysis of the SET Process in SrTiO₃ Resistive Switching Memories. IEEE Electron Device Letters, 2014, 35, 924-926.	2.2	27
57	Comprehensive modeling of electrochemical metallization memory cells. Journal of Computational Electronics, 2017, 16, 1017-1037.	1.3	26
58	Impact of the Ohmic Electrode on the Endurance of Oxide-Based Resistive Switching Memory. IEEE Transactions on Electron Devices, 2021, 68, 1024-1030.	1.6	26
59	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
60	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
61	Effect of RESET Voltage on Distribution of SET Switching Time of Bipolar Resistive Switching in a Tantalum Oxide Thin Film. IEEE Transactions on Electron Devices, 2015, 62, 1561-1567.	1.6	24
62	A Simulation Model of Resistive Switching in Electrochemical Metallization Memory Cells (ECM). Materials Research Society Symposia Proceedings, 2009, 1160, 1.	0.1	23
63	In-Gap States and Band-Like Transport in Memristive Devices. Nano Letters, 2019, 19, 54-60.	4.5	22
64	Physical simulation of dynamic resistive switching in metal oxides using a Schottky contact barrier model. , 2015, , .		21
65	KMC Simulation of the Electroforming, Set and Reset Processes in Redox-Based Resistive Switching Devices. IEEE Nanotechnology Magazine, 2018, 17, 1181-1188.	1.1	21
66	Low-current operations in 4F²-compatible Ta₂O₅-based complementary resistive switches. Nanotechnology, 2015, 26, 415202.	1.3	20
67	Processes and Limitations during Filament Formation and Dissolution in GeS_{<i>x</i>}-based ReRAM Memory Cells. Journal of Physical Chemistry C, 2015, 119, 18678-18685.	1.5	20
68	3-bit Resistive RAM Write-Read Scheme Based on Complementary Switching Mechanism. IEEE Electron Device Letters, 2017, 38, 449-452.	2.2	20
69	Role of the Electrode Material on the RESET Limitation in Oxide ReRAM Devices. Advanced Electronic Materials, 2018, 4, 1700243.	2.6	20
70	Current channeling along extended defects during electroreduction of SrTiO3. Scientific Reports, 2019, 9, 2502.	1.6	20
71	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
72	Study of the SET switching event of VCM-based memories on a picosecond timescale. Journal of Applied Physics, 2020, 127, .	1.1	20

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73	Tradeâ€Off Between Data Retention and Switching Speed in Resistive Switching ReRAM Devices. Advanced Electronic Materials, 2021, 7, 2000815.	2.6	20
74	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
75	Dependence of the SET switching variability on the initial state in HfO<i>_x</i>â€based ReRAM. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 316-319.	0.8	19
76	Correlation between the transport mechanisms in conductive filaments inside Ta2O5-based resistive switching devices and in substoichiometric TaOx thin films. Applied Physics Letters, 2018, 112, .	1.5	19
77	A Consistent Model for Short-Term Instability and Long-Term Retention in Filamentary Oxide-Based Memristive Devices. ACS Applied Materials & Interfaces, 2021, 13, 58066-58075.	4.0	19
78	On the universality of the <i>I</i>â€“<i>V</i> switching characteristics in non-volatile and volatile resistive switching oxides. Faraday Discussions, 2019, 213, 183-196.	1.6	18
79	Simulation and comparison of two sequential logic-in-memory approaches using a dynamic electrochemical metallization cell model. Microelectronics Journal, 2014, 45, 1416-1428.	1.1	17
80	Exploring the Dynamics of Real-World Memristors on the Basis of Circuit Theoretic Model Predictions. IEEE Circuits and Systems Magazine, 2018, 18, 48-76.	2.6	17
81	In-memory adder functionality in 1S1R arrays. , 2015, , .		16
82	Metallic filamentary conduction in valence change-based resistive switching devices: the case of TaO_x thin film with <i>x</i> âˆ¼ 1. Nanoscale, 2019, 11, 16978-16990.	2.8	16
83	Memristive Device Modeling and Circuit Design Exploration for Computation-in-Memory. , 2019, , .		16
84	Sklansky tree adder realization in 1S1R resistive switching memory architecture. European Physical Journal: Special Topics, 2019, 228, 2269-2285.	1.2	15
85	Theory and experimental verification of configurable computing with stochastic memristors. Scientific Reports, 2021, 11, 4218.	1.6	15
86	Intrinsic RESET Speed Limit of Valence Change Memories. ACS Applied Electronic Materials, 2021, 3, 5563-5572.	2.0	15
87	Nonlinearity analysis of TaOX redox-based RRAM. Microelectronic Engineering, 2016, 154, 38-41.	1.1	14
88	Reliability aspects of binary vector-matrix-multiplications using ReRAM devices. Neuromorphic Computing and Engineering, 2022, 2, 034001.	2.8	14
89	Simulation of polarity independent RESET in electrochemical metallization memory cells. , 2013, , .		13
90	On the SET/RESET current asymmetry in electrochemical metallization memory cells. Physica Status Solidi - Rapid Research Letters, 2014, 8, 540-544.	1.2	13

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91	Critical ReRAM Stack Parameters Controlling Complimentary versus Bipolar Resistive Switching. , 2015, , .		13
92	Forming-free metal-oxide ReRAM by oxygen ion implantation process. , 2016, , .		13
93	Internal Cell Resistance as the Origin of Abrupt Reset Behavior in HfO2-Based Devices Determined from Current Compliance Series. , 2016, , .		13
94	Spectroscopic elucidation of ionic motion processes in tunnel oxide-based memristive devices. Faraday Discussions, 2019, 213, 215-230.	1.6	13
95	A 2D axisymmetric dynamic drift-diffusion model for numerical simulation of resistive switching phenomena in metal oxides. , 2016, , .		12
96	Physical modeling of the electroforming process in resistive-switching devices. , 2017, , .		12
97	Volatile HRS asymmetry and subloops in resistive switching oxides. Nanoscale, 2017, 9, 14414-14422.	2.8	11
98	Determining the Electrical Charging Speed Limit of ReRAM Devices. IEEE Journal of the Electron Devices Society, 2021, 9, 667-678.	1.2	11
99	Toward Simplified Physics-Based Memristor Modeling of Valence Change Mechanism Devices. IEEE Transactions on Circuits and Systems II: Express Briefs, 2022, 69, 2473-2477.	2.2	11
100	Modeling Complementary Resistive Switches by nonlinear memristive systems. , 2011, , .		10
101	Recent progress in redox-based resistive switching. , 2012, , .		10
102	Design rules for threshold switches based on a field triggered thermal runaway mechanism. Journal of Computational Electronics, 2017, 16, 1175-1185.	1.3	10
103	Crossover From Deterministic to Stochastic Nature of Resistive-Switching Statistics in a Tantalum Oxide Thin Film. IEEE Transactions on Electron Devices, 2018, 65, 4320-4325.	1.6	10
104	Requirements and Challenges for Modelling Redox-based Memristive Devices. , 2018, , .		10
105	Studying the switching variability in redox-based resistive switching devices. Journal of Computational Electronics, 2020, 19, 1426-1432.	1.3	10
106	Study of Memristive Associative Capacitive Networks for CAM Applications. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2015, 5, 153-161.	2.7	9
107	The role of the interface reactions in the electroforming of redox-based resistive switching devices using KMC simulations. , 2015, , .		9
108	The influence of non-stoichiometry on the switching kinetics of strontium-titanate ReRAM devices. Journal of Applied Physics, 2016, 120, .	1.1	9

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109	Ultrafast switching in Ta<inf>2</inf>O<inf>5</inf>-based resistive memories. , 2016, , .		9
110	Forming-free Mott-oxide threshold selector nanodevice showing s-type NDR with high endurance (> 10¹² cycles), excellent V<inf>th</inf> stability (5%), fast (< 10 ns) switching, and promising scaling properties. , 2018, , .		9
111	An atomistic view on the Schottky barrier lowering applied to SrTiO3/Pt contacts. AIP Advances, 2019, 9, 045116.	0.6	9
112	Effect of Cationic Interface Defects on Band Alignment and Contact Resistance in Metal/Oxide Heterojunctions. Advanced Electronic Materials, 2020, 6, 1900808.	2.6	9
113	Inâ€Memory Binary Vectorâ€"Matrix Multiplication Based on Complementary Resistive Switches. Advanced Intelligent Systems, 2020, 2, 2000134.	3.3	9
114	Dynamics of the spatial separation of electrons and mobile oxygen vacancies in oxide heterostructures. Physical Review Materials, 2020, 4, .	0.9	9
115	A Voltage-Controlled, Oscillation-Based ADC Design for Computation-in-Memory Architectures Using Emerging ReRAMs. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-25.	1.8	9
116	(Keynote) Atomic Scale and Interface Interactions in Redox-Based Resistive Switching Memories. ECS Transactions, 2014, 64, 3-18.	0.3	8
117	Analyses of a 1-layer neuromorphic network using memristive devices with non-continuous resistance levels. APL Materials, 2019, 7, 091110.	2.2	8
118	Review of Manufacturing Process Defects and Their Effects on Memristive Devices. Journal of Electronic Testing: Theory and Applications (JETTA), 2021, 37, 427-437.	0.9	8
119	NeuroHammer: Inducing Bit-Flips in Memristive Crossbar Memories. , 2022, , .		8
120	Mechanism of memristive switching in OxRAM. , 2019, , 137-170.		7
121	Implementation of Multinary Åukasiewicz Logic Using Memristive Devices. , 2021, , .		7
122	MNEMOSENE: Tile Architecture and Simulator for Memristor-based Computation-in-memory. ACM Journal on Emerging Technologies in Computing Systems, 2022, 18, 1-24.	1.8	7
123	Oxygen Diffusion in Platinum Electrodes: A Molecular Dynamics Study of the Role of Extended Defects. Advanced Materials Interfaces, 2022, 9, .	1.9	7
124	Energy dissipation during pulsed switching of strontium-titanate based resistive switching memory devices. , 2016, , .		6
125	KMC simulation of the electroforming, set and reset processes in redox-based resistive switching devices. , 2016, , .		6
126	Kogge-Stone Adder Realization using 1S1R Resistive Switching Crossbar Arrays. ACM Journal on Emerging Technologies in Computing Systems, 2018, 14, 1-14.	1.8	6

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127	SET and RESET Kinetics of SrTiO₃-based Resistive Memory Devices. Materials Research Society Symposia Proceedings, 2015, 1790, 7-12.	0.1	5
128	Switching Speed Analysis and Controlled Oscillatory Behavior of a Cr-Doped V₂O₃ Threshold Switching Device for Memory Selector and Neuromorphic Computing Application. , 2019, , .		5
129	Statistical Modeling and Understanding of HRS Retention in 2.5 Mb HfO₂ based ReRAM. , 2020, , .		5
130	Resistive switching memories. , 2020, , 17-61.		5
131	Application of the Quantum-Point-Contact Formalism to Model the Filamentary Conduction in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>Ta</mml:mi></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msub><mml:mi /><mml:mn>2</mml:mn></mml:msub></mml:math> <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mrow>	1.5	5
132	Energy-efficient redox-based non-volatile memory devices and logic circuits. , 2013, , .		4
133	Statistical modeling of electrochemical metallization memory cells. , 2014, , .		4
134	On the origin of the fading memory effect in ReRAMs. , 2017, , .		4
135	Random telegraph noise analysis in redox-based resistive switching devices using KMC simulations. , 2017, , .		4
136	Compact Modelling of Resistive Switching Devices based on the Valence Change Mechanism. , 2019, , .		4
137	3-bit read scheme for single layer Ta2O5 ReRAM. , 2014, , .		3
138	Simulation of threshold switching based on an electric field induced thermal runaway. , 2016, , .		3
139	Quantum size effects and non-equilibrium states in nanoscale silicon dioxide based resistive switches. , 2014, , .		2
140	Resistive Switching Memory: Nanoionic Resistive Switching Memories: On the Physical Nature of the Dynamic Reset Process (Adv. Electron. Mater. 1/2016). Advanced Electronic Materials, 2016, 2, .	2.6	2
141	Kinetic Monte Carlo modeling of the charge transport in a HfO<inf>2</inf>-based ReRAM with a rough anode. , 2017, , .		2
142	Thermal effects on the I-V characteristics of filamentary VCM based ReRAM-cells using a nanometer-sized heater. , 2017, , .		2
143	ReRAM: Role of the Electrode Material on the RESET Limitation in Oxide ReRAM Devices (Adv. Electron.) Tj ETQq1 1 0.784314 rgBT /Ove	2.6	2
144	Atomistic Investigation of the Schottky Contact Conductance Limits at SrTiO3 based Resistive Switching Devices. , 2018, , .		2

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145	The influence of interfacial (sub)oxide layers on the properties of pristine resistive switching devices. , 2018, , .		2
146	Valence change ReRAMs (VCM) - Experiments and modelling: general discussion. Faraday Discussions, 2019, 213, 259-286.	1.6	2
147	Fast pulse analysis of TiO<inf>2</inf> based RRAM nano-crossbar devices. , 2011, , .		1
148	Efficient implementation of multiplexer and priority multiplexer using 1S1R ReRAM crossbar arrays. , 2016, , .		1
149	Energy efficient computing by redox-based memristive oxide elements. , 2016, , .		1
150	Overcoming the RESET Limitation in Tantalum Oxide-Based ReRAM Using an Oxygen-Blocking Layer. , 2017, , .		1
151	A Compact Model for the Electroforming Process of Memristive Devices. , 2020, , .		1
152	Controllability of multi-level states in memristive device models using a transistor as current compliance during SET operation. , 2015, , .		0
153	Characterization of HfO<inf>2</inf>/TiO<inf>x</inf> ReRAM Cells in Pulse Operation Mode. , 2018, , .		0
154	Multiscale Simulation of ReRAMs Based on the Valence Change mechanism. , 2018, , .		0
155	Empirical Tunneling Model Describing the Retention of 2.5 Mb HfO2 based ReRAM. , 2020, , .		0
156	Comments on ˋExperimental Demonstration of Memristor-Aided Logic (MAGIC) Using Valence Change Memory (VCM)''. IEEE Transactions on Electron Devices, 2021, , 1-1.	1.6	0
157	(Invited) Tuning the Switching Behavior of Nano-Crossbar Reram Devices By Design and Process Treatment of ALD Functional Oxide Layer Stacks. ECS Meeting Abstracts, 2017, , .	0.0	0
158	Two Stable Switching Modes with Opposite Polarity in Pt/TiO2/Ti Cells Based on Concurring Phenomena Close to the Pt/TiO2 Interface. ECS Meeting Abstracts, 2017, , .	0.0	0
159	Modeling of Complementary Resistive Switches. , 2017, , 315-325.		0
160	(Invited) Impact of Stoichiometry and Interface Configuration on the Time Stability and the Speed-Limiting Step in Memristive SrTiO3 Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
161	Reliability Aspects of Memristive Devices for Computation-in-Memory Applications. , 2021, , .		0
162	System Theory Enables a Deep Exploration of ReRAM Cells' Switching Phenomena. , 2021, , .		0

#	Article	IF	Citations
163	NEUROTEC I: Neuro-inspired Artificial Intelligence Technologies for the Electronics of the Future. , 2022, , .		0