

Ulrich Boettger

List of Publications by Year in descending order

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31
papers

1,386
citations

471509

17
h-index

501196

28
g-index

31
all docs

31
docs citations

31
times ranked

1689
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of the processing temperature on the laser-based crystallization of chemical solution deposited lead zirconate titanate thin films on short timescales. Journal of Applied Physics, 2022, 131, .	2.5	1
2	Impact of the Ohmic Electrode on the Endurance of Oxide-Based Resistive Switching Memory. IEEE Transactions on Electron Devices, 2021, 68, 1024-1030.	3.0	26
3	Determining the Electrical Charging Speed Limit of ReRAM Devices. IEEE Journal of the Electron Devices Society, 2021, 9, 667-678.	2.1	11
4	Intrinsic RESET Speed Limit of Valence Change Memories. ACS Applied Electronic Materials, 2021, 3, 5563-5572.	4.3	15
5	Study of the SET switching event of VCM-based memories on a picosecond timescale. Journal of Applied Physics, 2020, 127, .	2.5	20
6	Exploiting the switching dynamics of HfO ₂ -based ReRAM devices for reliable analog memristive behavior. APL Materials, 2019, 7, .	5.1	94
7	The ultimate switching speed limit of redox-based resistive switching devices. Faraday Discussions, 2019, 213, 197-213.	3.2	48
8	Local atomic structure of thin and ultrathin films <i>via</i> rapid high-energy X-ray total scattering at grazing incidence. IUCr, 2019, 6, 290-298.	2.2	40
9	Investigation of the Impact of High Temperatures on the Switching Kinetics of Redox-Based Resistive Switching Cells using a High-Speed Nanoheater. Advanced Electronic Materials, 2017, 3, 1700294.	5.1	41
10	The influence of non-stoichiometry on the switching kinetics of strontium-titanate ReRAM devices. Journal of Applied Physics, 2016, 120, .	2.5	9
11	Uniting Gradual and Abrupt set Processes in Resistive Switching Oxides. Physical Review Applied, 2016, 6, .	3.8	61
12	Physics of the Switching Kinetics in Resistive Memories. Advanced Functional Materials, 2015, 25, 6306-6325.	14.9	233
13	Origin of the SET Kinetics of the Resistive Switching in Tantalum Oxide Thin Films. IEEE Electron Device Letters, 2014, 35, 259-261.	3.9	47
14	Nanobattery Effect in RRAMs—Implications on Device Stability and Endurance. IEEE Electron Device Letters, 2014, 35, 208-210.	3.9	56
15	Statistical modeling of electrochemical metallization memory cells. , 2014, , .		4
16	Interrelation of Sweep and Pulse Analysis of the SET Process in SrTiO ₃ Resistive Switching Memories. IEEE Electron Device Letters, 2014, 35, 924-926.	3.9	27
17	Fabrication of Multilayer Pb(Zr _{0.53} Ti _{0.47})O ₃ Film Crystallized by Laser Annealing. Japanese Journal of Applied Physics, 2013, 52, 09KA06.	1.5	4
18	Simulation of multilevel switching in electrochemical metallization memory cells. Journal of Applied Physics, 2012, 111, .	2.5	151

#	ARTICLE	IF	CITATIONS
19	Analysis of Transient Currents During Ultrafast Switching of TiO_2 Nanocrossbar Devices. IEEE Electron Device Letters, 2011, 32, 1116-1118.	3.9	46
20	Origin of the Ultrafast Nonlinear Switching Kinetics in Oxide-Based Resistive Switches. Advanced Functional Materials, 2011, 21, 4487-4492.	14.9	300
21	Signal Form Influences on the Fatigue Behavior of PZT Thin Film Capacitors. Applications of Ferroelectrics, IEEE International Symposium on, 2007, , .	0.0	0
22	On the Existence of Two Different Resistive Switching Mechanisms in Metal Organic Charge Transfer Complex Thin Films. , 2006, , .		2
23	Composition influences on the electrical and electromechanical properties of lead zirconate titanate thin films. Journal of Applied Physics, 2006, 100, 124105.	2.5	22
24	Characterization of Chemical Solution Deposition-Derived Lead Hafnate Titanate Thin Films. Journal of the American Ceramic Society, 2005, 88, 1312-1314.	3.8	11
25	Effects of ferroelectric fatigue on the piezoelectric properties (d_{33}) of tetragonal lead zirconate titanate thin films. Applied Physics Letters, 2005, 86, 112908.	3.3	15
26	Monte Carlo simulations of imprint behavior in ferroelectrics. Applied Physics Letters, 2005, 87, 242902.	3.3	13
27	Effects of ferroelectric switching on the piezoelectric small-signal response (d_{33}) and electrostriction (M_{33}) of lead zirconate titanate thin films. Journal of Applied Physics, 2004, 95, 4976-4980.	2.5	29
28	Short-time piezoelectric measurements in ferroelectric thin films using a double-beam laser interferometer. Review of Scientific Instruments, 2003, 74, 2613-2615.	1.3	48
29	Integration of Piezoelectric PZT Thin Films with Internal Electrodes into an Actuator Structure for MEMS Applications. Integrated Ferroelectrics, 2002, 50, 21-32.	0.7	10
30	Fabrication and Characterization of a PZT thin Film Actuator for a Micro Electromechanical Switch Application. Materials Research Society Symposia Proceedings, 2001, 688, 1.	0.1	1
31	PZT and PMN-PT Thin Film Cantilevers: Comparison between Monomorph and Bimorph Structures. Materials Research Society Symposia Proceedings, 2001, 688, 1.	0.1	1