

Rainer Waser

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4993991/rainer-waser-publications-by-year.pdf>
Version: 2024-04-09

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

702 papers	42,153 citations	93 h-index	184 g-index
738 ext. papers	45,929 ext. citations	4.7 avg, IF	7.69 L-index

#	Paper	IF	Citations
702	Stabilizing amplifier with a programmable load line for characterization of nanodevices with negative differential resistance.. <i>Review of Scientific Instruments</i> , 2022 , 93, 024705	1.7	0
701	Application of the Quantum-Point-Contact Formalism to Model the Filamentary Conduction in Ta ₂ O ₃ . <i>Physical Review Applied</i> , 2022 , 17,	4.3	2
700	Oxygen Diffusion in Platinum Electrodes: A Molecular Dynamics Study of the Role of Extended Defects. <i>Advanced Materials Interfaces</i> , 2022 , 9, 2101257	4.6	0
699	Standards for the Characterization of Endurance in Resistive Switching Devices. <i>ACS Nano</i> , 2021 ,	16.7	36
698	Impact of the Ohmic Electrode on the Endurance of Oxide-Based Resistive Switching Memory. <i>IEEE Transactions on Electron Devices</i> , 2021 , 68, 1024-1030	2.9	12
697	Current-limiting amplifier for high speed measurement of resistive switching data. <i>Review of Scientific Instruments</i> , 2021 , 92, 054701	1.7	5
696	Utilizing the Switching Stochasticity of HfO ₂ /TiO ₂ -Based ReRAM Devices and the Concept of Multiple Device Synapses for the Classification of Overlapping and Noisy Patterns. <i>Frontiers in Neuroscience</i> , 2021 , 15, 661856	5.1	8
695	Trade-Off Between Data Retention and Switching Speed in Resistive Switching ReRAM Devices. <i>Advanced Electronic Materials</i> , 2021 , 7, 2000815	6.4	10
694	Comments on Experimental Demonstration of Memristor-Aided Logic (MAGIC) Using Valence Change Memory (VCM) <i>IEEE Transactions on Electron Devices</i> , 2021 , 1-1	2.9	
693	Carbonate formation lowers the electrocatalytic activity of perovskite oxides for water electrolysis. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 19940-19948	13	5
692	Tuning electrochemically driven surface transformation in atomically flat LaNiO ₃ thin films for enhanced water electrolysis. <i>Nature Materials</i> , 2021 , 20, 674-682	27	46
691	Determining the Electrical Charging Speed Limit of ReRAM Devices. <i>IEEE Journal of the Electron Devices Society</i> , 2021 , 9, 667-678	2.3	1
690	Intrinsic RESET Speed Limit of Valence Change Memories. <i>ACS Applied Electronic Materials</i> , 2021 , 3, 556345572 3		
689	Design of defect-chemical properties and device performance in memristive systems. <i>Science Advances</i> , 2020 , 6, eaaz9079	14.3	31
688	Study of the SET switching event of VCM-based memories on a picosecond timescale. <i>Journal of Applied Physics</i> , 2020 , 127, 204501	2.5	8
687	Experimental Demonstration of Memristor-Aided Logic (MAGIC) Using Valence Change Memory (VCM). <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 3115-3122	2.9	26
686	Effect of Cationic Interface Defects on Band Alignment and Contact Resistance in Metal/Oxide Heterojunctions. <i>Advanced Electronic Materials</i> , 2020 , 6, 1900808	6.4	5

685	HRS Instability in Oxide-Based Bipolar Resistive Switching Cells. <i>IEEE Transactions on Electron Devices</i> , 2020 , 67, 4208-4215	2.9	13
684	Comprehensive model for the electronic transport in Pt/SrTiO ₃ analog memristive devices. <i>Physical Review B</i> , 2020 , 102,	3.3	7
683	Variability-Aware Modeling of Filamentary Oxide-Based Bipolar Resistive Switching Cells Using SPICE Level Compact Models. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020 , 67, 4618-4630	2.9	17
682	In-Memory Binary Vector-Matrix Multiplication Based on Complementary Resistive Switches. <i>Advanced Intelligent Systems</i> , 2020 , 2, 2000134	6	3
681	Defect chemistry of donor-doped BaTiO with BaO-excess for reduction resistant PTCR thermistor applications - redox-behaviour. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 8219-8232	3.6	1
680	Metallic filamentary conduction in valence change-based resistive switching devices: the case of TaO thin film with x~ 1. <i>Nanoscale</i> , 2019 , 11, 16978-16990	7.7	10
679	Exploiting the switching dynamics of HfO ₂ -based ReRAM devices for reliable analog memristive behavior. <i>APL Materials</i> , 2019 , 7, 091105	5.7	37
678	Analyses of a 1-layer neuromorphic network using memristive devices with non-continuous resistance levels. <i>APL Materials</i> , 2019 , 7, 091110	5.7	4
677	Spectroscopic elucidation of ionic motion processes in tunnel oxide-based memristive devices. <i>Faraday Discussions</i> , 2019 , 213, 215-230	3.6	4
676	Electrochemical metallization ReRAMs (ECM) - Experiments and modelling: general discussion. <i>Faraday Discussions</i> , 2019 , 213, 115-150	3.6	4
675	Phase-change memories (PCM) - Experiments and modelling: general discussion. <i>Faraday Discussions</i> , 2019 , 213, 393-420	3.6	3
674	Compact Modeling of Complementary Switching in Oxide-Based ReRAM Devices. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 1268-1275	2.9	22
673	Heavily donor-doped, optically translucent ferroelectric barium titanate ceramics through defect chemical engineering. <i>CrystEngComm</i> , 2019 , 21, 2854-2862	3.3	3
672	Introduction to new memory paradigms: memristive phenomena and neuromorphic applications. <i>Faraday Discussions</i> , 2019 , 213, 11-27	3.6	17
671	On the universality of the I-V switching characteristics in non-volatile and volatile resistive switching oxides. <i>Faraday Discussions</i> , 2019 , 213, 183-196	3.6	13
670	Topotactic Phase Transition Driving Memristive Behavior. <i>Advanced Materials</i> , 2019 , 31, e1903391	24	32
669	Mott-transition-based RRAM. <i>Materials Today</i> , 2019 , 28, 63-80	21.8	24
668	Mechanism of memristive switching in OxRAM 2019 , 137-170		5

667	Stateful Three-Input Logic with Memristive Switches. <i>Scientific Reports</i> , 2019 , 9, 14618	4.9	31
666	Chemical control of the electrical surface properties in donor-doped transition metal oxides. <i>Physical Review Materials</i> , 2019 , 3,	3.2	11
665	Electric transport properties of rare earth doped YbxCa1-xMnO3 ceramics (part I: Optimization of ceramic processing). <i>Journal of the European Ceramic Society</i> , 2019 , 39, 1245-1250	6	3
664	In-Gap States and Band-Like Transport in Memristive Devices. <i>Nano Letters</i> , 2019 , 19, 54-60	11.5	19
663	Electrically controlled transformation of memristive titanates into mesoporous titanium oxides via incongruent sublimation. <i>Scientific Reports</i> , 2018 , 8, 3774	4.9	8
662	Valence change detection in memristive oxide based heterostructure cells by hard X-ray photoelectron emission spectroscopy. <i>APL Materials</i> , 2018 , 6, 046106	5.7	11
661	Different threshold and bipolar resistive switching mechanisms in reactively sputtered amorphous undoped and Cr-doped vanadium oxide thin films. <i>Journal of Applied Physics</i> , 2018 , 123, 044502	2.5	24
660	ReRAM: Role of the Electrode Material on the RESET Limitation in Oxide ReRAM Devices (Adv. Electron. Mater. 2/2018). <i>Advanced Electronic Materials</i> , 2018 , 4, 1870011	6.4	1
659	Role of the Electrode Material on the RESET Limitation in Oxide ReRAM Devices. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700243	6.4	17
658	Multi-valued and Fuzzy Logic Realization using TaOx Memristive Devices. <i>Scientific Reports</i> , 2018 , 8, 8	4.9	92
657	Nanoarchitectonics for Controlling the Number of Dopant Atoms in Solid Electrolyte Nanodots. <i>Advanced Materials</i> , 2018 , 30, 1703261	24	37
656	Degradation Kinetics during Oxygen Electrocatalysis on Perovskite-Based Surfaces in Alkaline Media. <i>Langmuir</i> , 2018 , 34, 1347-1352	4	15
655	Improved Switching Stability and the Effect of an Internal Series Resistor in HfO2/TiOx Bilayer ReRAM Cells. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 3229-3236	2.9	53
654	Reduction of the forming voltage through tailored oxygen non-stoichiometry in tantalum oxide ReRAM devices. <i>Scientific Reports</i> , 2018 , 8, 10861	4.9	27
653	Understanding the Coexistence of Two Bipolar Resistive Switching Modes with Opposite Polarity in Pt/TiO/Ti/Pt Nanosized ReRAM Devices. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 29766-29778	9.5	44
652	A Theoretical and Experimental View on the Temperature Dependence of the Electronic Conduction through a Schottky Barrier in a Resistively Switching SrTiO3-Based Memory Cell. <i>Advanced Electronic Materials</i> , 2018 , 4, 1800062	6.4	24
651	Oxygen Exchange Processes between Oxide Memristive Devices and Water Molecules. <i>Advanced Materials</i> , 2018 , 30, e1800957	24	41
650	Resistive switching in optoelectronic III-V materials based on deep traps. <i>Scientific Reports</i> , 2018 , 8, 94834.9	4.9	2

649	Field-enhanced route to generating anti-Frenkel pairs in HfO ₂ . <i>Physical Review Materials</i> , 2018 , 2,	3.2	23
648	A SIMS study of cation and anion diffusion in tantalum oxide. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 989-996	3.6	20
647	Processes and Effects of Oxygen and Moisture in Resistively Switching TaOx and HfOx. <i>Advanced Electronic Materials</i> , 2018 , 4, 1700458	6.4	65
646	Atomistic Investigation of the Schottky Contact Conductance Limits at SrTiO ₃ based Resistive Switching Devices 2018 ,		1
645	The influence of interfacial (sub)oxide layers on the properties of pristine resistive switching devices 2018 ,		2
644	Field-Driven Hopping Transport of Oxygen Vacancies in Memristive Oxide Switches with Interface-Mediated Resistive Switching. <i>Physical Review Applied</i> , 2018 , 10,	4.3	17
643	Addressing Multiple Resistive States of Polyoxovanadates: Conductivity as a Function of Individual Molecular Redox States. <i>Journal of the American Chemical Society</i> , 2018 , 140, 16635-16640	16.4	24
642	Self-limited single nanowire systems combining all-in-one memristive and neuromorphic functionalities. <i>Nature Communications</i> , 2018 , 9, 5151	17.4	83
641	Nanospectroscopy of Infrared Phonon Resonance Enables Local Quantification of Electronic Properties in Doped SrTiO ₃ Ceramics. <i>Advanced Functional Materials</i> , 2018 , 28, 1802834	15.6	25
640	Crossover From Deterministic to Stochastic Nature of Resistive-Switching Statistics in a Tantalum Oxide Thin Film. <i>IEEE Transactions on Electron Devices</i> , 2018 , 65, 4320-4325	2.9	8
639	Correlation between the transport mechanisms in conductive filaments inside Ta ₂ O ₅ -based resistive switching devices and in substoichiometric TaOx thin films. <i>Applied Physics Letters</i> , 2018 , 112, 213504	3.4	12
638	Structure and orbital ordering of ultrathin LaVO ₃ probed by atomic resolution electron microscopy and Raman spectroscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2017 , 11, 1600350	2.5	2
637	Coexistence of Grain-Boundaries-Assisted Bipolar and Threshold Resistive Switching in Multilayer Hexagonal Boron Nitride. <i>Advanced Functional Materials</i> , 2017 , 27, 1604811	15.6	149
636	Energy Level Alignment at the Fullerene/Titanium Oxide Ultrathin Film Interface. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 2815-2821	3.8	4
635	3-bit Resistive RAM Write-Read Scheme Based on Complementary Switching Mechanism. <i>IEEE Electron Device Letters</i> , 2017 , 38, 449-452	4.4	17
634	Ion migration in crystalline and amorphous HfOX. <i>Journal of Chemical Physics</i> , 2017 , 146, 094508	3.9	29
633	SET kinetics of electrochemical metallization cells: influence of counter-electrodes in SiO/Ag based systems. <i>Nanotechnology</i> , 2017 , 28, 135205	3.4	37
632	Anomalous Resistance Hysteresis in Oxide ReRAM: Oxygen Evolution and Reincorporation Revealed by In Situ TEM. <i>Advanced Materials</i> , 2017 , 29, 1700212	24	129

631	Thin film proton conducting membranes for micro-solid oxide fuel cells by chemical solution deposition. <i>Thin Solid Films</i> , 2017 , 636, 446-457	2.2	6
630	Interface-driven formation of a two-dimensional dodecagonal fullerene quasicrystal. <i>Nature Communications</i> , 2017 , 8, 15367	17.4	13
629	Overcoming the RESET Limitation in Tantalum Oxide-Based ReRAM Using an Oxygen-Blocking Layer 2017 ,		1
628	Oxygen partial pressure dependence of surface space charge formation in donor-doped SrTiO ₃ . <i>APL Materials</i> , 2017 , 5, 056106	5.7	16
627	Nanosized Conducting Filaments Formed by Atomic-Scale Defects in Redox-Based Resistive Switching Memories. <i>Chemistry of Materials</i> , 2017 , 29, 3164-3173	9.6	48
626	Thermodynamic Ground States of Complex Oxide Heterointerfaces. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 1086-1092	9.5	27
625	Improvement of SET variability in TaO based resistive RAM devices. <i>Nanotechnology</i> , 2017 , 28, 465203	3.4	5
624	Electrochemical Tantalum Oxide for Resistive Switching Memories. <i>Advanced Materials</i> , 2017 , 29, 1703357	5.4	52
623	Spectroscopic Indications of Tunnel Barrier Charging as the Switching Mechanism in Memristive Devices. <i>Advanced Functional Materials</i> , 2017 , 27, 1702282	15.6	20
622	Volatile HRS asymmetry and subloops in resistive switching oxides. <i>Nanoscale</i> , 2017 , 9, 14414-14422	7.7	8
621	Design rules for threshold switches based on a field triggered thermal runaway mechanism. <i>Journal of Computational Electronics</i> , 2017 , 16, 1175-1185	1.8	7
620	Ordering and Phase Control in Epitaxial Double-Perovskite Catalysts for the Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2017 , 7, 7029-7037	13.1	30
619	Investigation of the Impact of High Temperatures on the Switching Kinetics of Redox-Based Resistive Switching Cells using a High-Speed Nanoheater. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700294	6.4	26
618	Interaction between depolarization effects, interface layer, and fatigue behavior in PZT thin film capacitors. <i>Journal of Applied Physics</i> , 2017 , 122, 024105	2.5	10
617	Understanding on the selective carbon monoxide sensing characteristics of copper oxide-zinc oxide composite thin films. <i>Sensors and Actuators B: Chemical</i> , 2017 , 253, 685-696	8.5	26
616	Subfilamentary Networks Cause Cycle-to-Cycle Variability in Memristive Devices. <i>ACS Nano</i> , 2017 , 11, 6921-6929	16.7	55
615	Physical modeling of the electroforming process in resistive-switching devices 2017 ,		8
614	Thermal effects on the I-V characteristics of filamentary VCM based ReRAM-cells using a nanometer-sized heater 2017 ,		1

613	Impact of oxygen exchange reaction at the ohmic interface in TaO-based ReRAM devices. <i>Nanoscale</i> , 2016 , 8, 17774-17781	7.7	92
612	Introduction to Nanoionic Elements for Information Technology 2016 , 1-30		9
611	Physics and Chemistry of Nanoionic Cells 2016 , 253-288		4
610	Space charges and defect concentration profiles at complex oxide interfaces. <i>Physical Review B</i> , 2016 , 93,	3.3	42
609	Multistate Memristive Tantalum Oxide Devices for Ternary Arithmetic. <i>Scientific Reports</i> , 2016 , 6, 36652	4.9	41
608	Quantifying redox-induced Schottky barrier variations in memristive devices via in operando spectromicroscopy with graphene electrodes. <i>Nature Communications</i> , 2016 , 7, 12398	17.4	68
607	Energy dissipation during pulsed switching of strontium-titanate based resistive switching memory devices 2016 ,		4
606	A 2D axisymmetric dynamic drift-diffusion model for numerical simulation of resistive switching phenomena in metal oxides 2016 ,		10
605	Simulation of threshold switching based on an electric field induced thermal runaway 2016 ,		3
604	Humidity effects on the redox reactions and ionic transport in a Cu/Ta2O5/Pt atomic switch structure. <i>Japanese Journal of Applied Physics</i> , 2016 , 55, 06GJ09	1.4	41
603	Realization of Minimum and Maximum Gate Function in Ta2O5-based Memristive Devices. <i>Scientific Reports</i> , 2016 , 6, 23967	4.9	27
602	Internal Cell Resistance as the Origin of Abrupt Reset Behavior in HfO2-Based Devices Determined from Current Compliance Series 2016 ,		8
601	Tuning the surface electronic structure of a Pt3Ti(111) electro catalyst. <i>Nanoscale</i> , 2016 , 8, 13924-33	7.7	12
600	3-Bit Multilevel Switching by Deep Reset Phenomenon in Pt/W/TaOX/Pt-ReRAM Devices. <i>IEEE Electron Device Letters</i> , 2016 , 37, 564-567	4.4	43
599	Nonlinearity analysis of TaOX redox-based RRAM. <i>Microelectronic Engineering</i> , 2016 , 154, 38-41	2.5	11
598	PrxBa1-xCoO3Oxide Electrodes for Oxygen Evolution Reaction in Alkaline Solutions by Chemical Solution Deposition. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F166-F170	3.9	16
597	Resistive Switching Mechanisms on TaOx and SrRuO3 Thin-Film Surfaces Probed by Scanning Tunneling Microscopy. <i>ACS Nano</i> , 2016 , 10, 1481-92	16.7	79
596	Nanoscale cation motion in TaO(x), HfO(x) and TiO(x) memristive systems. <i>Nature Nanotechnology</i> , 2016 , 11, 67-74	28.7	419

595	Threshold Switching in Amorphous Cr-Doped Vanadium Oxide for New Crossbar Selector 2016 ,		7
594	Multidimensional Simulation of Threshold Switching in NbO ₂ Based on an Electric Field Triggered Thermal Runaway Model. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600169	6.4	73
593	Dependence of the SET switching variability on the initial state in HfO _x -based ReRAM. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 316-319	1.6	13
592	Resistance switching behavior of atomic layer deposited SrTiO ₃ film through possible formation of Sr ₂ Ti ₆ O ₁₃ or Sr ₁ Ti ₁₁ O ₂₀ phases. <i>Scientific Reports</i> , 2016 , 6, 20550	4.9	16
591	The influence of non-stoichiometry on the switching kinetics of strontium-titanate ReRAM devices. <i>Journal of Applied Physics</i> , 2016 , 120, 244502	2.5	8
590	Probing orbital ordering in LaVO ₃ epitaxial films by Raman scattering. <i>APL Materials</i> , 2016 , 4, 046103	5.7	8
589	Resistive Switching in Aqueous Nanopores by Shock Electrodeposition. <i>Electrochimica Acta</i> , 2016 , 222, 370-375	6.7	8
588	Forming-free metal-oxide ReRAM by oxygen ion implantation process 2016 ,		8
587	Homogeneity and variation of donor doping in Verneuil-grown SrTiO ₃ :Nb single crystals. <i>Scientific Reports</i> , 2016 , 6, 32250	4.9	25
586	Hafnium carbide formation in oxygen deficient hafnium oxide thin films. <i>Applied Physics Letters</i> , 2016 , 108, 252903	3.4	4
585	Verification of redox-processes as switching and retention failure mechanisms in Nb:SrTiO ₃ /metal devices. <i>Nanoscale</i> , 2016 , 8, 13967-75	7.7	57
584	Synthesis of nitrogen and lanthanum codoped barium titanate with a novel thermal ammonolysis reactor. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 2719-2725	6	2
583	Nanoionic Resistive Switching Memories: On the Physical Nature of the Dynamic Reset Process. <i>Advanced Electronic Materials</i> , 2016 , 2, 1500233	6.4	110
582	Hydroxyl Defect Effect on Reoxidation of Sc-Doped (Ba,Ca)(Ti,Zr)O ₃ Fired in Reducing Atmospheres. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 1311-1317	3.8	5
581	Hydroxyl defect effect on the resistance degradation behavior in Y-doped (Ba,Ca)(Ti,Zr)O ₃ bulk ceramics. <i>Journal of the European Ceramic Society</i> , 2016 , 36, 3147-3155	6	2
580	Dynamics of the metal-insulator transition of donor-doped SrTiO ₃ . <i>Physical Review B</i> , 2016 , 94,	3.3	37
579	(Invited) Mobile Ions, Transport and Redox Processes in Memristive Devices. <i>ECS Transactions</i> , 2016 , 75, 27-39	1	11
578	Stability and Degradation of Perovskite Electrocatalysts for Oxygen Evolution Reaction. <i>Electrochimica Acta</i> , 2016 , 218, 156-162	6.7	26

577	Ultrafast switching in Ta2O5-based resistive memories 2016 ,		6
576	A Complementary Resistive Switch-Based Crossbar Array Adder. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2015 , 5, 64-74	5.2	75
575	Understanding the conductive channel evolution in Na:WO(3-x)-based planar devices. <i>Nanoscale</i> , 2015 , 7, 6023-30	7.7	13
574	The influence of the local oxygen vacancy concentration on the piezoresponse of strontium titanate thin films. <i>Nanoscale</i> , 2015 , 7, 14351-7	7.7	21
573	Understanding filamentary growth in electrochemical metallization memory cells using kinetic Monte Carlo simulations. <i>Nanoscale</i> , 2015 , 7, 12673-81	7.7	66
572	Atomic structure and chemistry of dislocation cores at low-angle tilt grain boundary in SrTiO3 bicrystals. <i>Acta Materialia</i> , 2015 , 89, 344-351	8.4	49
571	Effect of RESET Voltage on Distribution of SET Switching Time of Bipolar Resistive Switching in a Tantalum Oxide Thin Film. <i>IEEE Transactions on Electron Devices</i> , 2015 , 62, 1561-1567	2.9	21
570	Study of Memristive Associative Capacitive Networks for CAM Applications. <i>IEEE Journal on Emerging and Selected Topics in Circuits and Systems</i> , 2015 , 5, 153-161	5.2	6
569	Low-current operations in 4F(2)-compatible Ta2O5-based complementary resistive switches. <i>Nanotechnology</i> , 2015 , 26, 415202	3.4	17
568	Spectromicroscopic insights for rational design of redox-based memristive devices. <i>Nature Communications</i> , 2015 , 6, 8610	17.4	82
567	Phase-Change and Redox-Based Resistive Switching Memories. <i>Proceedings of the IEEE</i> , 2015 , 103, 1274-1288	14.9	112
566	Physical simulation of dynamic resistive switching in metal oxides using a Schottky contact barrier model 2015 ,		18
565	Processes and Limitations during Filament Formation and Dissolution in GeSx-based ReRAM Memory Cells. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18678-18685	3.8	18
564	In-memory adder functionality in 1S1R arrays 2015 ,		12
563	Critical ReRAM Stack Parameters Controlling Complimentary versus Bipolar Resistive Switching 2015 ,		9
562	Transport limits in defect-engineered LaAlO3/SrTiO3 bilayers. <i>Nanoscale</i> , 2015 , 7, 1013-22	7.7	35
561	Formation and Movement of Cationic Defects During Forming and Resistive Switching in SrTiO3 Thin Film Devices. <i>Advanced Functional Materials</i> , 2015 , 25, 6360-6368	15.6	47
560	Redox Reactions at Cu,Ag/Ta2O5 Interfaces and the Effects of Ta2O5 Film Density on the Forming Process in Atomic Switch Structures. <i>Advanced Functional Materials</i> , 2015 , 25, 6374-6381	15.6	133

559	Realization of Boolean Logic Functionality Using Redox-Based Memristive Devices. <i>Advanced Functional Materials</i> , 2015 , 25, 6414-6423	15.6	109
558	A HfO ₂ -Based Complementary Switching Crossbar Adder. <i>Advanced Electronic Materials</i> , 2015 , 1, 15001384	38.4	43
557	Resistive Switching of Individual, Chemically Synthesized TiO ₂ Nanoparticles. <i>Small</i> , 2015 , 11, 6444-56	11	22
556	Avalanche-Discharge-Induced Electrical Forming in Tantalum Oxide-Based Metal/Insulator/Metal Structures. <i>Advanced Functional Materials</i> , 2015 , 25, 7154-7162	15.6	23
555	Enhanced fullerene-Au(111) coupling in (2D/2D)R ₃₀ superstructures with intermolecular interactions. <i>Beilstein Journal of Nanotechnology</i> , 2015 , 6, 1421-31	3	12
554	Modeling of Quantized Conductance Effects in Electrochemical Metallization Cells. <i>IEEE Nanotechnology Magazine</i> , 2015 , 14, 505-512	2.6	30
553	Impedance spectroscopy study of the unipolar and bipolar resistive switching states of atomic layer deposited polycrystalline ZrO ₂ thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 751-766	1.6	18
552	Determination of the electrostatic potential distribution in Pt/Fe:SrTiO ₃ /Nb:SrTiO ₃ thin-film structures by electron holography. <i>Scientific Reports</i> , 2014 , 4, 6975	4.9	24
551	Insights into Nanoscale Electrochemical Reduction in a Memristive Oxide: the Role of Three-Phase Boundaries. <i>Advanced Functional Materials</i> , 2014 , 24, 4466-4472	15.6	43
550	Spectroscopic proof of the correlation between redox-state and charge-carrier transport at the interface of resistively switching Ti/PCMO devices. <i>Advanced Materials</i> , 2014 , 26, 2730-5	24	73
549	Influence of stoichiometry on the performance of MIM capacitors from plasma-assisted ALD Sr _x Ti _y O _z films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014 , 211, 389-396	1.6	10
548	Interrelation of Sweep and Pulse Analysis of the SET Process in SrTiO ₃ Resistive Switching Memories. <i>IEEE Electron Device Letters</i> , 2014 , 35, 924-926	4.4	17
547	Impact of composition and crystallization behavior of atomic layer deposited strontium titanate films on the resistive switching of Pt/STO/TiN devices. <i>Journal of Applied Physics</i> , 2014 , 116, 064503	2.5	10
546	Volatile resistance states in electrochemical metallization cells enabling non-destructive readout of complementary resistive switches. <i>Nanotechnology</i> , 2014 , 25, 425202	3.4	55
545	Live demonstration: An associative capacitive network based on nanoscale complementary resistive switches 2014 ,		1
544	Do dislocations act as atomic autobahns for oxygen in the perovskite oxide SrTiO ₃ ?. <i>Nanoscale</i> , 2014 , 6, 12864-76	7.7	101
543	Understanding the role of single molecular ZnS precursors in the synthesis of In(Zn)P/ZnS nanocrystals. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 18233-42	9.5	23
542	Simulation and comparison of two sequential logic-in-memory approaches using a dynamic electrochemical metallization cell model. <i>Microelectronics Journal</i> , 2014 , 45, 1416-1428	1.8	14

541	Physical origins and suppression of Ag dissolution in GeS(x)-based ECM cells. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 18217-25	3.6	25
540	Applicability of Well-Established Memristive Models for Simulations of Resistive Switching Devices. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2014 , 61, 2402-2410	3.9	66
539	Atomic Layer Deposition of TiOx/Al2O3 Bilayer Structures for Resistive Switching Memory Applications. <i>Chemical Vapor Deposition</i> , 2014 , 20, 282-290		10
538	Band alignment at memristive metal-oxide interfaces investigated by hard x-ray photoemission spectroscopy. <i>Physical Review B</i> , 2014 , 90,	3.3	8
537	A Simulation Study of Oxygen-Vacancy Behavior in Strontium Titanate: Beyond Nearest-Neighbor Interactions. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 15185-15192	3.8	56
536	Electrochemical dynamics of nanoscale metallic inclusions in dielectrics. <i>Nature Communications</i> , 2014 , 5, 4232	17.4	411
535	Study of atomic layer deposited ZrO2 and ZrO2/TiO2 films for resistive switching application. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014 , 211, 301-309	1.6	13
534	Redox-based Resistive Memory 2014 , 137-161		3
533	On the SET/RESET current asymmetry in electrochemical metallization memory cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014 , 8, 540-544	2.5	12
532	Origin of the SET Kinetics of the Resistive Switching in Tantalum Oxide Thin Films. <i>IEEE Electron Device Letters</i> , 2014 , 35, 259-261	4.4	42
531	Nanobattery Effect in RRAMs—Implications on Device Stability and Endurance. <i>IEEE Electron Device Letters</i> , 2014 , 35, 208-210	4.4	51
530	(Keynote) Atomic Scale and Interface Interactions in Redox-Based Resistive Switching Memories. <i>ECS Transactions</i> , 2014 , 64, 3-18	1	8
529	Quantum size effects and non-equilibrium states in nanoscale silicon dioxide based resistive switches 2014 ,		2
528	An experimental associative capacitive network based on complementary resistive switches for memory-intensive computing 2014 ,		1
527	Fast mapping of inhomogeneities in the popular metallic perovskite Nb:SrTiO3 by confocal Raman microscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014 , 08, 781-784	2.5	5
526	Statistical modeling of electrochemical metallization memory cells 2014 ,		4
525	Directed Immobilization of Janus-AuNP in Heterometallic Nanogaps: a Key Step Toward Integration of Functional Molecular Units in Nanoelectronics. <i>Journal of Physical Chemistry C</i> , 2014 , 118, 27142-27149	3.8	15
524	Impact of the Counter-Electrode Material on Redox Processes in Resistive Switching Memories. <i>ChemElectroChem</i> , 2014 , 1, 1287-1292	4.3	68

523	Simulation of TaOx-based complementary resistive switches by a physics-based memristive model 2014 ,		20
522	Chemical solution deposition of ferroelectric yttrium-doped hafnium oxide films on platinum electrodes. <i>Applied Physics Letters</i> , 2014 , 104, 202903	3.4	106
521	Generic relevance of counter charges for cation-based nanoscale resistive switching memories. <i>ACS Nano</i> , 2013 , 7, 6396-402	16.7	183
520	Growth and Crystallization of TiO ₂ Thin Films by Atomic Layer Deposition Using a Novel Amido Guanidinate Titanium Source and Tetrakis-dimethylamido-titanium. <i>Chemistry of Materials</i> , 2013 , 25, 2934-2943	9.6	65
519	In situ observation of filamentary conducting channels in an asymmetric Ta _{0.5-x} /TaO _{2-x} bilayer structure. <i>Nature Communications</i> , 2013 , 4, 2382	17.4	249
518	Quasi-two-dimensional conducting layer on TiO ₂ (110) introduced by sputtering as a template for resistive switching. <i>Applied Physics Letters</i> , 2013 , 102, 131604	3.4	26
517	Electrical Characterization of 4-Mercaptophenylamine-Capped Nanoparticles in a Heterometallic Nanoelectrode Gap. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 22002-22009	3.8	10
516	Chemically-inactive interfaces in thin film Ag/AgI systems for resistive switching memories. <i>Scientific Reports</i> , 2013 , 3, 1169	4.9	18
515	Dysprosium-Doped (Ba,Sr)TiO ₃ Thin Films on Nickel Foils for Capacitor Applications. <i>Journal of the American Ceramic Society</i> , 2013 , 96, 1228-1233	3.8	5
514	Switching kinetics of electrochemical metallization memory cells. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 6945-52	3.6	126
513	New insights into redox based resistive switches 2013 ,		3
512	Analytical analysis of the generic SET and RESET characteristics of electrochemical metallization memory cells. <i>Nanoscale</i> , 2013 , 5, 11003-10	7.7	32
511	Bond nature of active metal ions in SiO ₂ -based electrochemical metallization memory cells. <i>Nanoscale</i> , 2013 , 5, 1781-4	7.7	41
510	Grain growth and crystallinity of ultrafine barium titanate particles prepared by various routes. <i>Ceramics International</i> , 2013 , 39, 6673-6680	5.1	6
509	Preparation and characterization of GeS _x thin-films for resistive switching memories. <i>Thin Solid Films</i> , 2013 , 527, 299-302	2.2	20
508	Proton defects in BaTiO ₃ : New aspects regarding the re-oxidation of dielectric materials fired in reducing atmospheres. <i>Journal of the European Ceramic Society</i> , 2013 , 33, 3007-3013	6	7
507	Electro-degradation and resistive switching of Fe-doped SrTiO ₃ single crystal. <i>Journal of Applied Physics</i> , 2013 , 113, 083713	2.5	41
506	Stoichiometry dependence and thermal stability of conducting NdGaO ₃ /SrTiO ₃ heterointerfaces. <i>Applied Physics Letters</i> , 2013 , 102, 071601	3.4	27

505	Nanobatteries in redox-based resistive switches require extension of memristor theory. <i>Nature Communications</i> , 2013 , 4, 1771	17.4	395
504	Detection of Fe ²⁺ valence states in Fe doped SrTiO ₃ epitaxial thin films grown by pulsed laser deposition. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 8311-7	3.6	29
503	Comment on Dynamic Processes of Resistive Switching in Metallic Filament-Based Organic Memory Devices. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11878-11880	3.8	10
502	Identification of screw dislocations as fast-forming sites in Fe-doped SrTiO ₃ . <i>Applied Physics Letters</i> , 2013 , 102, 183504	3.4	23
501	An associative capacitive network based on nanoscale complementary resistive switches for memory-intensive computing. <i>Nanoscale</i> , 2013 , 5, 5119-28	7.7	39
500	. <i>IEEE Electron Device Letters</i> , 2013 , 34, 114-116	4.4	35
499	Structure and thermoelectric properties of EuTi(O,N) ₃ . <i>Journal of Applied Physics</i> , 2013 , 114, 033701	2.5	19
498	Current Compliance-Dependent Nonlinearity in TiO_2 ReRAM. <i>IEEE Electron Device Letters</i> , 2013 , 34, 996-998	4.4	29
497	Energy-efficient redox-based non-volatile memory devices and logic circuits 2013 ,		4
496	Surface deformations as a necessary requirement for resistance switching at the surface of SrTiO ₃ :N. <i>Nanotechnology</i> , 2013 , 24, 475701	3.4	3
495	Compact modeling of CRS devices based on ECM cells for memory, logic and neuromorphic applications. <i>Nanotechnology</i> , 2013 , 24, 384008	3.4	29
494	Cluster-like resistive switching of SrTiO ₃ :Nb surface layers. <i>New Journal of Physics</i> , 2013 , 15, 103017	2.9	40
493	(Invited) The Role of Electrochemical Interfaces in ReRAM Memory Cells. <i>ECS Transactions</i> , 2013 , 58, 189-196	1	2
492	Inhomogeneity of donor doping in SrTiO ₃ substrates studied by fluorescence-lifetime imaging microscopy. <i>Applied Physics Letters</i> , 2013 , 103, 162904	3.4	15
491	Feasibility studies for filament detection in resistively switching SrTiO ₃ devices by employing grazing incidence small angle X-ray scattering. <i>Journal of Applied Physics</i> , 2013 , 113, 064509	2.5	6
490	Resistive switching near electrode interfaces: Estimations by a current model. <i>Journal of Applied Physics</i> , 2013 , 113, 053716	2.5	3
489	Insulator-to-metal transition of SrTiO ₃ :Nb single crystal surfaces induced by Ar ⁺ bombardment. <i>Applied Physics Letters</i> , 2013 , 102, 101603	3.4	21
488	Comment on real-time observation on dynamic growth/dissolution of conductive filaments in oxide-electrolyte- based ReRAM. <i>Advanced Materials</i> , 2013 , 25, 162-4	24	30

487	Evidence for multifilamentary valence changes in resistive switching SrTiO ₃ devices detected by transmission X-ray microscopy. <i>APL Materials</i> , 2013 , 1, 042102	5.7	25
486	Tuning cationic composition of La:EuTiO ₃ films. <i>APL Materials</i> , 2013 , 1, 052111	5.7	7
485	Simulation of polarity independent RESET in electrochemical metallization memory cells 2013 ,		9
484	Ag/GeS _x /Pt-based complementary resistive switches for hybrid CMOS/nanoelectronic logic and memory architectures. <i>Scientific Reports</i> , 2013 , 3, 2856	4.9	40
483	Structural stratification of Sr _{1-x} CaxRuO ₃ thin films: Influence of aging process. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2013 , 210, 239-254	1.6	
482	Rate-limiting processes in the fast SET operation of a gapless-type Cu-Ta ₂ O ₅ atomic switch. <i>AIP Advances</i> , 2013 , 3, 032114	1.5	37
481	Effects of Moisture on the Switching Characteristics of Oxide-Based, Gapless-Type Atomic Switches. <i>Advanced Functional Materials</i> , 2012 , 22, 70-77	15.6	217
480	Molecular dynamics simulations of oxygen vacancy diffusion in SrTiO ₃ . <i>Journal of Physics Condensed Matter</i> , 2012 , 24, 485002	1.8	16
479	Scaling Potential of Local Redox Processes in Memristive SrTiO ₃ Thin-Film Devices. <i>Proceedings of the IEEE</i> , 2012 , 100, 1979-1990	14.3	57
478	Memristors: Devices, Models, and Applications. <i>Proceedings of the IEEE</i> , 2012 , 100, 1911-1919	14.3	107
477	Simulation of multilevel switching in electrochemical metallization memory cells. <i>Journal of Applied Physics</i> , 2012 , 111, 014501	2.5	129
476	Electrical Transport through Single Nanoparticles and Nanoparticle Arrays. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 20657-20665	3.8	24
475	Recent progress in redox-based resistive switching 2012 ,		6
474	Columnar self-assembly of a 3D-persulfurated coronene asterisk. The dominant role of aryl-sulfur bonds. <i>New Journal of Chemistry</i> , 2012 , 36, 477-483	3.6	11
473	Beyond von Neumann--logic operations in passive crossbar arrays alongside memory operations. <i>Nanotechnology</i> , 2012 , 23, 305205	3.4	252
472	Quantum conductance and switching kinetics of AgI-based microcrossbar cells. <i>Nanotechnology</i> , 2012 , 23, 145703	3.4	118
471	Electrochemical metallization cellsBlending nanoionics into nanoelectronics?. <i>MRS Bulletin</i> , 2012 , 37, 124-130	3.2	96
470	Influence of charge compensation mechanisms on the sheet electron density at conducting LaAlO ₃ /SrTiO ₃ -interfaces. <i>Applied Physics Letters</i> , 2012 , 100, 052103	3.4	45

469	Nanoionic transport and electrochemical reactions in resistively switching silicon dioxide. <i>Nanoscale</i> , 2012 , 4, 3040-3	7.7	93
468	Arylthio-substituted coronenes as tailored building blocks for molecular electronics. <i>Physical Chemistry Chemical Physics</i> , 2012 , 14, 1635-41	3.6	2
467	Atomically controlled electrochemical nucleation at superionic solid electrolyte surfaces. <i>Nature Materials</i> , 2012 , 11, 530-5	27	187
466	Direct observation of charge transfer in solid electrolyte for electrochemical metallization memory. <i>Advanced Materials</i> , 2012 , 24, 4552-6	24	39
465	Reliable fabrication of 3 nm gaps between nanoelectrodes by electron-beam lithography. <i>Nanotechnology</i> , 2012 , 23, 125302	3.4	34
464	Detection of filament formation in forming-free resistive switching SrTiO ₃ devices with Ti top electrodes. <i>Applied Physics Letters</i> , 2012 , 100, 223503	3.4	46
463	Redox-based resistive switching memories. <i>Journal of Nanoscience and Nanotechnology</i> , 2012 , 12, 7628-403	4.3	42
462	Redox processes in silicon dioxide thin films using copper microelectrodes. <i>Applied Physics Letters</i> , 2011 , 99, 203103	3.4	61
461	Capacity based nondestructive readout for complementary resistive switches. <i>Nanotechnology</i> , 2011 , 22, 395203	3.4	39
460	. <i>IEEE Electron Device Letters</i> , 2011 , 32, 191-193	4.4	92
459	Relation Between Enhancement in Growth and Thickness-Dependent Crystallization in ALD TiO ₂ Thin Films. <i>Journal of the Electrochemical Society</i> , 2011 , 158, D6	3.9	38
458	TiO ₂ --a prototypical memristive material. <i>Nanotechnology</i> , 2011 , 22, 254001	3.4	237
457	Electrochemical metallization memories--fundamentals, applications, prospects. <i>Nanotechnology</i> , 2011 , 22, 254003	3.4	565
456	Thermochemical resistive switching: materials, mechanisms, and scaling projections. <i>Phase Transitions</i> , 2011 , 84, 570-602	1.3	124
455	Electrochemical metallization memories--fundamentals, applications, prospects. <i>Nanotechnology</i> , 2011 , 22, 289502	3.4	193
454	Bipolar resistive switching in oxides: Mechanisms and scaling. <i>Current Applied Physics</i> , 2011 , 11, e75-e78	2.6	8
453	Crossbar Logic Using Bipolar and Complementary Resistive Switches. <i>IEEE Electron Device Letters</i> , 2011 , 32, 710-712	4.4	62
452	PbTiO ₃ nanoparticle precursors for chemical solution deposited electroceramic thin films. <i>Journal of Sol-Gel Science and Technology</i> , 2011 , 57, 36-42	2.3	2

451	Materials, technologies, and circuit concepts for nanocrossbar-based bipolar RRAM. <i>Applied Physics A: Materials Science and Processing</i> , 2011 , 102, 791-809	2.6	42
450	Origin of the Ultra-nonlinear Switching Kinetics in Oxide-Based Resistive Switches. <i>Advanced Functional Materials</i> , 2011 , 21, 4487-4492	15.6	267
449	Spectroscopic study of the electric field induced valence change of Fe-defect centers in SrTiO ₃ . <i>Physical Chemistry Chemical Physics</i> , 2011 , 13, 20779-86	3.6	43
448	Nanocomposite thin films for miniaturized multi-layer ceramic capacitors prepared from barium titanate nanoparticle based hybrid solutions. <i>Journal of Materials Chemistry</i> , 2011 , 21, 7953		17
447	Forming-Free TiO_2 -Based Resistive Switching Devices on CMOS-Compatible W-Plugs. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1588-1590	4.4	35
446	Analysis of Transient Currents During Ultrafast Switching of TiO_2 Nanocrossbar Devices. <i>IEEE Electron Device Letters</i> , 2011 , 32, 1116-1118	4.4	40
445	Electronic structure of epitaxial Fe-doped SrTiO ₃ thin films. <i>Phase Transitions</i> , 2011 , 84, 489-500	1.3	12
444	Single Electron Tunneling through a Tailored Arylthio-coronene. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 9204-9209	3.8	9
443	The thermal stability of Pt/Ir coated AFM tips for resistive switching measurements. <i>Applied Surface Science</i> , 2011 , 257, 7627-7632	6.7	11
442	Synthesis, spark plasma sintering and electrical conduction mechanism in BaTiO ₃ /Cu composites. <i>Journal of the European Ceramic Society</i> , 2011 , 31, 773-782	6	18
441	Spark plasma sintering of nanocrystalline BaTiO ₃ -powders: Consolidation behavior and dielectric characteristics. <i>Journal of the European Ceramic Society</i> , 2011 , 31, 1723-1731	6	37
440	Local conductivity of epitaxial Fe-doped SrTiO ₃ thin films. <i>Phase Transitions</i> , 2011 , 84, 483-488	1.3	13
439	Electroforming and Resistance Switching Characteristics of Silver-Doped MSQ With Inert Electrodes. <i>IEEE Nanotechnology Magazine</i> , 2011 , 10, 338-343	2.6	11
438	On the stochastic nature of resistive switching in Cu doped Ge _{0.3} Se _{0.7} based memory devices. <i>Journal of Applied Physics</i> , 2011 , 110, 054509	2.5	52
437	Nanostructured resistive memory cells based on 8-nm-thin TiO ₂ films deposited by atomic layer deposition. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2011 , 29, 01AD01	1.3	18
436	High Growth Rate in Atomic Layer Deposition of TiO ₂ thin films by UV Irradiation. <i>Electrochemical and Solid-State Letters</i> , 2011 , 14, H146		14
435	Compositional Substitutions and Aliovalent Doping of BaTiO ₃ -Based Thin Films on Nickel Foils Prepared by Chemical Solution Deposition. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 506-515	3.8	18
434	Electronic Conduction Mechanisms in BaTiO ₃ /Ni Composites with Ultrafine Microstructure Obtained by Spark Plasma Sintering. <i>Journal of the American Ceramic Society</i> , 2010 , 93, 4075-4080	3.8	9

433	Complementary resistive switches for passive nanocrossbar memories. <i>Nature Materials</i> , 2010 , 9, 403-6	27	1057
432	Reversible alternation between bipolar and unipolar resistive switching in polycrystalline barium strontium titanate thin films. <i>Journal of Applied Physics</i> , 2010 , 107, 094506	2.5	55
431	Ferroelectric field effect transistors using very thin ferroelectric polyvinylidene fluoride copolymer films as gate dielectrics. <i>Journal of Applied Physics</i> , 2010 , 107, 124119	2.5	26
430	Probing Cu doped Ge _{0.3} Se _{0.7} based resistance switching memory devices with random telegraph noise. <i>Journal of Applied Physics</i> , 2010 , 107, 024517	2.5	81
429	Voltage-time dilemma of pure electronic mechanisms in resistive switching memory cells. <i>Journal of Applied Physics</i> , 2010 , 107, 054517	2.5	79
428	SrTiO ₃ thin film capacitors on silicon substrates with insignificant interfacial passive layers. <i>Applied Physics Letters</i> , 2010 , 97, 132907	3.4	22
427	Bipolar Resistive Switching in Oxides for Memory Applications 2010 , 131-167		5
426	Formation Sequence of Lead Platinum Interfacial Phases in Chemical Solution Deposition Derived Pb(Zr _{1-x} Ti _x)O ₃ Thin Films. <i>Chemistry of Materials</i> , 2010 , 22, 6209-6211	9.6	10
425	Investigation of the electroforming process in resistively switching TiO ₂ nanocrosspoint junctions. <i>Applied Physics Letters</i> , 2010 , 96, 122902	3.4	76
424	Electronic transport properties of individual 4,4'-bis(mercaptoalkyl)-biphenyl derivatives measured in STM-based break junctions. <i>Physical Chemistry Chemical Physics</i> , 2010 , 12, 10518-24	3.6	8
423	High temperature conductance characteristics of LaAlO ₃ /SrTiO ₃ -heterostructures under equilibrium oxygen atmospheres. <i>Applied Physics Letters</i> , 2010 , 97, 012103	3.4	41
422	Morphological and electrical changes in TiO ₂ memristive devices induced by electroforming and switching. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010 , 4, 16-18	2.5	59
421	Comments on the processing of the niobium component for chemical solution derived niobium oxide-based thin-films. <i>Journal of Sol-Gel Science and Technology</i> , 2010 , 56, 236-243	2.3	5
420	Memory Devices: Energy-Space-Time Tradeoffs. <i>Proceedings of the IEEE</i> , 2010 , 98, 2185-2200	14.3	45
419	Impact of defect distribution on resistive switching characteristics of Sr ₂ TiO ₄ thin films. <i>Advanced Materials</i> , 2010 , 22, 411-4	24	197
418	Coexistence of filamentary and homogeneous resistive switching in Fe-doped SrTiO ₃ thin-film memristive devices. <i>Advanced Materials</i> , 2010 , 22, 4819-22	24	291
417	Percolative BaTiO ₃ -Ni composite nanopowders from alkoxide-mediated synthesis. <i>Journal of the European Ceramic Society</i> , 2010 , 30, 561-567	6	19
416	Observation of unipolar resistance switching in silver doped methyl-silsesquioxane. <i>Microelectronic Engineering</i> , 2010 , 87, 1531-1533	2.5	5

415	Study on the dynamic resistance switching properties of NiO thin films. <i>Thin Solid Films</i> , 2010 , 518, 2258-2260	18
414	Function by defects at the atomic scale [New concepts for non-volatile memories. <i>Solid-State Electronics</i> , 2010 , 54, 830-840	1.7 42
413	The influence of copper top electrodes on the resistive switching effect in TiO ₂ thin films studied by conductive atomic force microscopy. <i>Applied Physics Letters</i> , 2009 , 95, 013109	3.4 64
412	Emerging Non-Volatile Memories by Exploiting Redox Reactions on the Nanoscale. <i>ECS Transactions</i> , 2009 , 25, 441-446	1 1
411	Impact of the electroforming process on the device stability of epitaxial Fe-doped SrTiO ₃ resistive switching cells. <i>Journal of Applied Physics</i> , 2009 , 106, 114507	2.5 62
410	Embedded ferroelectric nanostructure arrays. <i>Nanotechnology</i> , 2009 , 20, 075305	3.4 7
409	Liquid Injection Atomic Layer Deposition of Metallic Ru Thin Films from Ru(tmhd) ₃ and of High-k TiO ₂ Thin Films from Ti(O-i-Pr) ₂ (tmhd) ₂ . <i>ECS Transactions</i> , 2009 , 25, 289-298	1 3
408	Liquid Injection Atomic Layer Deposition of Crystalline TiO[sub 2] Thin Films with a Smooth Morphology from Ti(O-i-Pr)[sub 2](DPM)[sub 2]. <i>Journal of the Electrochemical Society</i> , 2009 , 156, D296	3.9 23
407	Electrochemical Reactions in Nanoionics - Towards Future Resistive Switching Memories. <i>ECS Transactions</i> , 2009 , 25, 431-437	1 7
406	Redox-Based Resistive Switching Memories [Nanoionic Mechanisms, Prospects, and Challenges. <i>Advanced Materials</i> , 2009 , 21, 2632-2663	24 3799
405	An integrated microelectromechanical microwave switch based on piezoelectric actuation. <i>Journal of Electroceramics</i> , 2009 , 22, 145-149	1.5 11
404	Self-neutralization via electroreduction in photoemission from SrTiO ₃ single crystals. <i>Applied Physics A: Materials Science and Processing</i> , 2009 , 97, 449-454	2.6 8
403	Dielectric properties of highly c-axis oriented chemical solution deposition derived SrBi ₄ Ti ₄ O ₁₅ thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009 , 206, 157-166	1.6 4
402	Field-emission resonances at tip/alpha,omega-mercaptoalkyl ferrocene/Au interfaces studied by STM. <i>Small</i> , 2009 , 5, 496-502	11 30
401	Integration of [TexSe1 [k]n crossbar arrays for non-volatile memory applications. <i>Microelectronic Engineering</i> , 2009 , 86, 1054-1056	2.5 21
400	Electrical properties of Pt interconnects for passive crossbar memory arrays. <i>Microelectronic Engineering</i> , 2009 , 86, 2275-2278	2.5 5
399	High density 3D memory architecture based on the resistive switching effect. <i>Solid-State Electronics</i> , 2009 , 53, 1287-1292	1.7 126
398	Structural ordering of [Ferrocenylalkanethiol monolayers on Au(111) studied by scanning tunneling microscopy. <i>Surface Science</i> , 2009 , 603, 716-722	1.8 15

397	Translational transitions at domain boundaries in octanethiol monolayers on Au(1 1 1). <i>Surface Science</i> , 2009 , 603, 1156-1159	1.8	4
396	Resistively switching Pt/spin-on glass/Ag nanocells for non-volatile memories fabricated with UV nanoimprint lithography. <i>Microelectronic Engineering</i> , 2009 , 86, 1060-1062	2.5	21
395	Resistive non-volatile memory devices (Invited Paper). <i>Microelectronic Engineering</i> , 2009 , 86, 1925-1928	2.5	109
394	Abnormal bipolar-like resistance change behavior induced by symmetric electroforming in Pt/TiO ₂ /Pt resistive switching cells. <i>Nanotechnology</i> , 2009 , 20, 375201	3.4	29
393	Growth of Noble Metal Ru Thin Films by Liquid Injection Atomic Layer Deposition. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 11329-11335	3.8	24
392	A Nonvolatile Memory With Resistively Switching Methyl-Silsesquioxane. <i>IEEE Electron Device Letters</i> , 2009 , 30, 8-10	4.4	29
391	Cu-adatom-mediated bonding in close-packed benzoate/Cu(110)-systems. <i>Langmuir</i> , 2009 , 25, 856-64	4	26
390	Electrode kinetics of CuBiO ₂ -based resistive switching cells: Overcoming the voltage-time dilemma of electrochemical metallization memories. <i>Applied Physics Letters</i> , 2009 , 94, 072109	3.4	268
389	Mechanism for bipolar switching in a Pt/TiO ₂ /Pt resistive switching cell. <i>Physical Review B</i> , 2009 , 79,	3.3	152
388	Phenomenological considerations of resistively switching TiO ₂ in nano crossbar arrays 2009 ,		3
387	Faradaic currents during electroforming of resistively switching Ag-Ge-Se type electrochemical metallization memory cells. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 5974-9	3.6	43
386	A multilayer RRAM nanoarchitecture with resistively switching Ag-doped spin-on glass 2009 ,		5
385	Reliability analysis of the low resistance state stability of Ge _{0.3} Se _{0.7} based solid electrolyte nonvolatile memory cells. <i>Applied Physics Letters</i> , 2009 , 94, 123503	3.4	20
384	Low current resistive switching in CuBiO ₂ cells. <i>Applied Physics Letters</i> , 2008 , 92, 122910	3.4	167
383	Realization of regular arrays of nanoscale resistive switching blocks in thin films of Nb-doped SrTiO ₃ . <i>Applied Physics Letters</i> , 2008 , 93, 023110	3.4	53
382	Characteristic electroforming behavior in Pt/TiO ₂ /Pt resistive switching cells depending on atmosphere. <i>Journal of Applied Physics</i> , 2008 , 104, 123716	2.5	231
381	Tungsten coatings by chemical solution deposition for ceramic electrodes in fluorescent tubes. <i>Journal of Materials Chemistry</i> , 2008 , 18, 3501		5
380	Dynamics of ferroelectric nanodomains in BaTiO ₃ epitaxial thin films via piezoresponse force microscopy. <i>Nanotechnology</i> , 2008 , 19, 375703	3.4	71

379	Electrochemical and thermochemical memories 2008 ,		30
378	Size effects in nanoscale ferroelectrics. <i>Journal of Alloys and Compounds</i> , 2008 , 449, 2-6	5.7	22
377	Growth Behavior of Atomic-Layer-Deposited Pb(Zr,Ti)O _x Thin Films on Planar Substrate and Three-Dimensional Hole Structures. <i>Journal of the Electrochemical Society</i> , 2008 , 155, D715	3.9	24
376	Liquid injection atomic layer deposition of perovskite-type multi-component oxide thin films for ferroelectric and higher-k three dimensional capacitor structures 2008 ,		2
375	From micrometric to nanometric scale switching of CuTCNQ-based non-volatile memory structures 2008 ,		2
374	Striped phase of mercaptoalkylferrocenes on Au(111) with a potential for nanoscale surface patterning. <i>Langmuir</i> , 2008 , 24, 4577-80	4	10
373	THIN FILMS OF UNDOPED LEAD TITANATE: MORPHOLOGY AND ELECTRICAL PROPERTIES. <i>Integrated Ferroelectrics</i> , 2008 , 98, 3-10	0.8	6
372	LARGE AREA PIEZOELECTRIC ACTUATORS USING METAL FOIL SUBSTRATES WITH Pb(Zr _x Ti _{1-x})O ₃ THIN FILMS. <i>Integrated Ferroelectrics</i> , 2008 , 100, 254-262	0.8	3
371	Method to distinguish ferroelectric from nonferroelectric origin in case of resistive switching in ferroelectric capacitors. <i>Applied Physics Letters</i> , 2008 , 92, 062907	3.4	83
370	Improved endurance behavior of resistive switching in (Ba,Sr)TiO ₃ thin films with W top electrode. <i>Applied Physics Letters</i> , 2008 , 93, 222102	3.4	103
369	Direct electrical characterization of embedded ferroelectric lead titanate nanoislands. <i>Journal of Applied Physics</i> , 2008 , 103, 034113	2.5	7
368	Effect of in-plane shear strain on phase states and dielectric properties of epitaxial ferroelectric thin films. <i>Journal of Applied Physics</i> , 2008 , 104, 054118	2.5	14
367	Wedgelike ultrathin epitaxial BaTiO ₃ films for studies of scaling effects in ferroelectrics. <i>Applied Physics Letters</i> , 2008 , 93, 072902	3.4	29
366	Radiofrequency sputter deposition of germanium selenide thin films for resistive switching. <i>Thin Solid Films</i> , 2008 , 516, 1223-1226	2.2	24
365	Investigation of the amorphous to crystalline phase transition of chemical solution deposited Pb(Zr _{0.3} Ti _{0.7})O ₃ thin films by soft X-ray absorption and soft X-ray emission spectroscopy. <i>Journal of Sol-Gel Science and Technology</i> , 2008 , 48, 239-252	2.3	20
364	Nanoimprint for future non-volatile memory and logic devices. <i>Microelectronic Engineering</i> , 2008 , 85, 870-872	2.5	23
363	Thin films of high-k dysprosium scandate prepared by metal organic chemical vapor deposition for metal-insulator-metal capacitor applications. <i>Solid State Communications</i> , 2008 , 147, 332-335	1.6	17
362	Reduction of film thickness for chemical solution deposited PbZr _{0.3} Ti _{0.7} O ₃ thin films revealing no size effects and maintaining high remanent polarization and low coercive field. <i>Thin Solid Films</i> , 2008 , 516, 4713-4719	2.2	9

361	Electrical and optical properties of chemical solution deposited barium hafnate titanate thin films. <i>Thin Solid Films</i> , 2008 , 516, 4970-4976	2.2	16
360	Controlled local filament growth and dissolution in AgTeSe. <i>Physica Status Solidi - Rapid Research Letters</i> , 2008 , 2, 129-131	2.5	27
359	Non-Volatile Memory Concepts Based on Resistive Switching. <i>Applications of Ferroelectrics, IEEE International Symposium on</i> , 2007 ,		1
358	The influence of non-ferroelectric interface layers and inclusions on the imprint behavior of ferroelectric thin film capacitors. <i>Applications of Ferroelectrics, IEEE International Symposium on</i> , 2007 ,		1
357	Temperature-induced Phase Transitions in Micro-, Submicro-, and Nanocrystalline NaNbO ₃ . <i>Journal of Physical Chemistry C</i> , 2007 , 111, 18493-18502	3.8	66
356	Electrical and Structural Characterization of Biphenylethanethiol SAMs. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 6392-6397	3.8	18
355	Thickness dependence of intrinsic dielectric response and apparent interfacial capacitance in ferroelectric thin films. <i>Journal of Applied Physics</i> , 2007 , 101, 074102	2.5	23
354	Polarization and lattice strains in epitaxial BaTiO ₃ films grown by high-pressure sputtering. <i>Journal of Applied Physics</i> , 2007 , 101, 114106	2.5	51
353	Growth of ternary PbTiO _x films in a combination of binary oxide atomic layer depositions. <i>Journal of Applied Physics</i> , 2007 , 101, 014114	2.5	26
352	Raman scattering studies on nanocrystalline BaTiO ₃ Part II: Consolidated polycrystalline ceramics. <i>Journal of Raman Spectroscopy</i> , 2007 , 38, 1300-1306	2.3	54
351	Raman scattering studies on nanocrystalline BaTiO ₃ Part I: Isolated particles and aggregates. <i>Journal of Raman Spectroscopy</i> , 2007 , 38, 1288-1299	2.3	175
350	Liquid injection MOCVD of TiO ₂ and SrTiO ₃ thin films from [Ti(OPri) ₂ (tbaaac) ₂]: Film properties and compatibility with [Sr(thd) ₂]. <i>Surface and Coatings Technology</i> , 2007 , 201, 9135-9140	4.4	10
349	LI-MOCVD of HfO ₂ thin films using engineered amide based Hf precursors. <i>Surface and Coatings Technology</i> , 2007 , 201, 9109-9116	4.4	17
348	Morphology control of highly-transparent indium tin oxide thin films prepared by a chlorine-reduced metallo-organic decomposition technique. <i>Thin Solid Films</i> , 2007 , 515, 3797-3801	2.2	10
347	Comparison of three different architectures for active resistive memories. <i>AEU - International Journal of Electronics and Communications</i> , 2007 , 61, 345-352	2.8	6
346	Unit-cell scale mapping of ferroelectricity and tetragonality in epitaxial ultrathin ferroelectric films. <i>Nature Materials</i> , 2007 , 6, 64-9	27	322
345	Nanoionics-based resistive switching memories. <i>Nature Materials</i> , 2007 , 6, 833-40	27	3976
344	Bipolar and Unipolar Resistive Switching in Cu-Doped SiO_2 . <i>IEEE Transactions on Electron Devices</i> , 2007 , 54, 2762-2768	2.9	308

343	Nanoscale resistive switching in SrTiO ₃ thin films. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007 , 1, R86-R88	2.5	131
342	Enhanced stability of platinized silicon substrates using an unconventional adhesion layer deposited by CSD for high temperature dielectric thin film deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2007 , 87, 705-708	2.6	25
341	Photoemission study of SrTiO ₃ surface layers instability upon metal deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2007 , 89, 451-455	2.6	23
340	Ferromagnetic π -Josephson junctions. <i>Applied Physics A: Materials Science and Processing</i> , 2007 , 89, 613-617	2.6	13
339	Microstructure and electrical properties of BaTiO ₃ and (Ba,Sr)TiO ₃ ferroelectric thin films on nickel electrodes. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 42, 203-207	2.3	13
338	Chemical modifications of Pb(Zr _{0.3} Ti _{0.7})O ₃ precursor solutions and their influence on the morphological and electrical properties of the resulting thin films. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 42, 337-352	2.3	48
337	Noncentrosymmetric phase of submicron NaNbO ₃ crystallites. <i>Journal of Electroceramics</i> , 2007 , 19, 273-280	2.3	12
336	Aging-induced dielectric relaxation in barium titanate ceramics. <i>Applied Physics Letters</i> , 2007 , 90, 112902	3.4	27
335	Resistive Switching in Ge _{0.3} Se _{0.7} Films by Means of Copper Ion Migration. <i>Zeitschrift Fur Physikalische Chemie</i> , 2007 , 221, 1469-1478	3.1	7
334	Liquid Injection Atomic Layer Deposition of TiO _x Films Using Ti[OCH(CH ₃)] ₂ [CH ₃] ₄ . <i>Journal of the Electrochemical Society</i> , 2007 , 154, G134	3.9	18
333	Comment on Dielectric tunability of (110) oriented barium strontium titanate epitaxial films on (100) orthorhombic substrates[Appl. Phys. Lett. 89, 042903 (2006)]. <i>Applied Physics Letters</i> , 2007 , 90, 036101	3.4	2
332	On the origin of bistable resistive switching in metal organic charge transfer complex memory cells. <i>Applied Physics Letters</i> , 2007 , 91, 083506	3.4	71
331	Surface layer of SrRuO ₃ epitaxial thin films under oxidizing and reducing conditions. <i>Journal of Applied Physics</i> , 2007 , 101, 023701	2.5	20
330	Effects of Thermal Annealing on Lead Zirconate Titanate Thin Film Capacitors with Platinum Electrodes. <i>Journal of the Electrochemical Society</i> , 2007 , 154, G251	3.9	3
329	Liquid Injection ALD of Pb(Zr,Ti)O _x Thin Films by a Combination of Self-Regulating Component Oxide Processes. <i>Journal of the Electrochemical Society</i> , 2007 , 154, G262	3.9	26
328	Thin Films of HfO ₂ for High-k Gate Oxide Applications from Engineered Alkoxide- and Amide-Based MOCVD Precursors. <i>Journal of the Electrochemical Society</i> , 2007 , 154, G77	3.9	24
327	Self Assembly of Mixed Monolayers of Mercaptoundecylferrocene and Undecanethiol studied by STM. <i>Journal of Physics: Conference Series</i> , 2007 , 61, 852-855	0.3	10
326	Coexistence of Bipolar and Unipolar Resistive Switching Behaviors in a Pt/TiO ₂ /Pt Stack. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, G51		268

325	Liquid Injection MOCVD of Dysprosium Scandate Films. <i>Journal of the Electrochemical Society</i> , 2007 , 154, G147	3.9	30
324	Liquid Injection Atomic Layer Deposition of Pb(Zr,Ti)O ₃ Thin Films on Three Dimensional Structures. <i>Applications of Ferroelectrics, IEEE International Symposium on</i> , 2007 ,		2
323	Electrical properties of the grain boundaries of oxygen ion conductors: Acceptor-doped zirconia and ceria. <i>Progress in Materials Science</i> , 2006 , 51, 151-210	42.2	507
322	MOCVD of ZrO ₂ and HfO ₂ Thin Films from Modified Monomeric Precursors. <i>Chemical Vapor Deposition</i> , 2006 , 12, 172-180		18
321	Liquid-Injection MOCVD of ZrO ₂ Thin Films using Zirconium Bis(diethylamido)-bis(di-tert-butylmalonato) as a Novel Precursor. <i>Chemical Vapor Deposition</i> , 2006 , 12, 295-300		24
320	Mechanical crosstalk between vertical and lateral piezoresponse force microscopy. <i>Review of Scientific Instruments</i> , 2006 , 77, 036103	1.7	27
319	Microemulsion mediated synthesis of nanocrystalline BaTiO ₃ : possibilities, potential and perspectives. <i>International Journal of Materials Research</i> , 2006 , 97, 499-507		13
318	0- π Josephson tunnel junctions with ferromagnetic barrier. <i>Physical Review Letters</i> , 2006 , 97, 247001	7.4	133
317	Dysprosium scandate thin films as an alternate amorphous gate oxide prepared by metal-organic chemical vapor deposition. <i>Applied Physics Letters</i> , 2006 , 89, 232902	3.4	40
316	Fatigue effect in ferroelectric PbZr _{1-x} Ti _x O ₃ thin films. <i>Journal of Applied Physics</i> , 2006 , 99, 114104	2.5	34
315	Hysteretic resistance concepts in ferroelectric thin films. <i>Journal of Applied Physics</i> , 2006 , 100, 051611	2.5	56
314	Scaling of structure and electrical properties in ultrathin epitaxial ferroelectric heterostructures. <i>Journal of Applied Physics</i> , 2006 , 100, 051609	2.5	101
313	Density inhomogeneity in ferroelectric thin films. <i>Applied Physics Letters</i> , 2006 , 89, 052901	3.4	6
312	Composition influences on the electrical and electromechanical properties of lead zirconate titanate thin films. <i>Journal of Applied Physics</i> , 2006 , 100, 124105	2.5	19
311	Low-voltage operation of metal-ferroelectric-insulator-semiconductor diodes incorporating a ferroelectric polyvinylidene fluoride copolymer Langmuir-Blodgett film. <i>Journal of Applied Physics</i> , 2006 , 100, 024110	2.5	46
310	Liquid-Injection Atomic Layer Deposition of TiO _x and PbTiO ₃ Films. <i>Journal of the Electrochemical Society</i> , 2006 , 153, F199	3.9	17
309	Resistive switching and data reliability of epitaxial (Ba,Sr)TiO ₃ thin films. <i>Applied Physics Letters</i> , 2006 , 88, 042901	3.4	103
308	Structural investigations of PtTiO _x electrode stacks for ferroelectric thin film devices. <i>Journal of Applied Physics</i> , 2006 , 99, 114107	2.5	16

307	Polarization states of polydomain epitaxial Pb(Zr _{1-x} Ti _x)O ₃ thin films and their dielectric properties. <i>Physical Review B</i> , 2006 , 73,	3.3	63
306	Piezoelectric Actuated MEMS for Integrated RF Switches Based on PZT Thin Film Bridges. <i>Ferroelectrics</i> , 2006 , 338, 89-95	0.6	5
305	Sample-tip interaction of piezoresponse force microscopy in ferroelectric nanostructures. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2006 , 53, 2253-60	3.2	18
304	Impedance spectroscopy of TiO ₂ thin films showing resistive switching. <i>Applied Physics Letters</i> , 2006 , 89, 082909	3.4	94
303	Influence of Thickness and Zr Content on Ba(Ti _x Zr _{1-x})O ₃ Thin Films. <i>Ferroelectrics</i> , 2006 , 332, 153-157	0.6	2
302	Mixed amidehalonate compound of hafnium as a novel monomeric precursor for MOCVD of HfO ₂ thin films. <i>Journal of Materials Chemistry</i> , 2006 , 16, 437-440		18
301	A Novel Reference Scheme for Reading Passive Resistive Crossbar Memories. <i>IEEE Nanotechnology Magazine</i> , 2006 , 5, 687-691	2.6	49
300	On the Existence of Two Different Resistive Switching Mechanisms in Metal Organic Charge Transfer Complex Thin Films 2006 ,		2
299	Polymorphism in Micro-, Submicro-, and Nanocrystalline NaNbO ₃ . <i>Journal of Physical Chemistry B</i> , 2006 , 110, 16801-16801	3.4	2
298	STM study of mixed alkanethiol/biphenylthiol self-assembled monolayers on Au(111). <i>Langmuir</i> , 2006 , 22, 3021-7	4	51
297	Consolidation, Microstructure and Crystallography of Dense NaNbO ₃ Ceramics with Ultra-Fine Grain Size. <i>Journal of the Ceramic Society of Japan</i> , 2006 , 114, 995-1000		15
296	Resistive switching of rose bengal devices: A molecular effect?. <i>Journal of Applied Physics</i> , 2006 , 100, 094504	2.5	47
295	Influence of adsorbates on the piezoresponse of KNbO ₃ . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 616-621	1.6	10
294	Molecular structure of ferrocenethiol islands embedded into alkanethiol self-assembled monolayers by UHV-STM. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006 , 203, 1448-1452	1.6	18
293	Effects of Thermal Annealing on the Structure of Ferroelectric Thin Films. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 1321-1325	3.8	12
292	Preparation, Processing, and Characterization of Nano-Crystalline BaTiO ₃ Powders and Ceramics Derived from Microemulsion-Mediated Synthesis. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 060623005134004	3.8	5
291	Electrical Conductivity of Epitaxial SrTiO ₃ Thin Films as a Function of Oxygen Partial Pressure and Temperature. <i>Journal of the American Ceramic Society</i> , 2006 , 89, 2845-2852	3.8	57
290	Switching the electrical resistance of individual dislocations in single-crystalline SrTiO ₃ . <i>Nature Materials</i> , 2006 , 5, 312-20	27	1406

289	Capacitive-resistive nondriven plateline cell architecture for RRAM technology. <i>AEU - International Journal of Electronics and Communications</i> , 2006 , 60, 459-461	2.8	
288	Protected nanoelectrodes of two different metals with 30nm gapwidth and access window. <i>Microelectronic Engineering</i> , 2006 , 83, 1702-1705	2.5	7
287	Metallic nanogaps with access windows for liquid based systems. <i>Microelectronics Journal</i> , 2006 , 37, 591-594	5.9	8
286	Laser annealing of BST thin films with reduced cracking at an elevated temperature. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006 , 133, 235-240	3.1	14
285	Transport of hydrogen species in a single crystal SrTiO ₃ . <i>Solid State Ionics</i> , 2006 , 177, 1469-1476	3.3	16
284	Preparation and characterisation of amorphous Cu:7,7,8,8-Tetracyanoquinodimethane thin films with low surface roughness via thermal co-deposition. <i>Thin Solid Films</i> , 2006 , 515, 1893-1896	2.2	25
283	Variable size and shape distribution of ferroelectric nanoislands by chemical mechanical polishing. <i>Small</i> , 2006 , 2, 500-2	11	7
282	Structural, dielectric and electromechanical study of Hf-substituted BaTiO ₃ thin films fabricated by CSD. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 83, 285-288	2.6	9
281	Simultaneous measurement of the piezoelectric and dielectric response of nanoscale ferroelectric capacitors by an atomic force microscopy based approach. <i>Applied Physics A: Materials Science and Processing</i> , 2006 , 84, 67-71	2.6	8
280	A DYNAMIC REFERENCE SCHEME FOR NONVOLATILE FERROELECTRIC RAM. <i>Integrated Ferroelectrics</i> , 2005 , 72, 31-37	0.8	
279	Dynamic leakage current compensation in ferroelectric thin-film capacitor structures. <i>Applied Physics Letters</i> , 2005 , 86, 142907	3.4	108
278	Effects of reversible and irreversible ferroelectric switchings on the piezoelectric large-signal response of lead zirconate titanate thin films. <i>Journal of Applied Physics</i> , 2005 , 98, 124101	2.5	10
277	High-k Dielectric Materials by Metalorganic Chemical Vapor Deposition: Growth and Characterization. <i>Ferroelectrics</i> , 2005 , 327, 111-119	0.6	4
276	Low Temperature Microwave Properties of Bismuth Based Dielectric Ceramics. <i>Ferroelectrics</i> , 2005 , 327, 33-37	0.6	3
275	Nonlinear Electrical Properties of Grain Boundaries in Oxygen Ion Conductors. <i>Electrochemical and Solid-State Letters</i> , 2005 , 8, E67		15
274	Oxygen vacancy migration and time-dependent leakage current behavior of Ba _{0.3} Sr _{0.7} TiO ₃ thin films. <i>Applied Physics Letters</i> , 2005 , 86, 112904	3.4	77
273	Resistive switching mechanism of TiO ₂ thin films grown by atomic-layer deposition. <i>Journal of Applied Physics</i> , 2005 , 98, 033715	2.5	938
272	SrTa ₂ O ₆ thin films for high-K dielectric applications grown by chemical vapor deposition on different substrates. <i>Journal of Applied Physics</i> , 2005 , 97, 073521	2.5	40

271	Comparison of in-plane and out-of-plane optical amplification in AFM measurements. <i>Review of Scientific Instruments</i> , 2005 , 76, 046101	1.7	33
270	Theoretical current-voltage characteristics of ferroelectric tunnel junctions. <i>Physical Review B</i> , 2005 , 72,	3.3	314
269	Phase states of nanocrystalline ferroelectric ceramics and their dielectric properties. <i>Journal of Applied Physics</i> , 2005 , 97, 114315	2.5	26
268	Misfit dislocations in nanoscale ferroelectric heterostructures. <i>Applied Physics Letters</i> , 2005 , 86, 192910	3.4	116
267	Mechanical force sensors using organic thin-film transistors. <i>Journal of Applied Physics</i> , 2005 , 97, 093708	2.5	85
266	Polymorphism in micro-, submicro-, and nanocrystalline NaNbO ₃ . <i>Journal of Physical Chemistry B</i> , 2005 , 109, 20122-30	3.4	98
265	A new phase of the c(4 x 2) superstructure of alkanethiols grown by vapor phase deposition on gold. <i>Langmuir</i> , 2005 , 21, 5256-8	4	54
264	Searching the Ferroelectric Limit by PFM 2005 , 343-354		
263	Contact mode potentiometric measurements with an atomic force microscope on high resistive perovskite thin films. <i>Journal of the European Ceramic Society</i> , 2005 , 25, 2353-2356	6	4
262	Improved PbZr _{0.52} Ti _{0.48} O ₃ film quality on SrRuO ₃ /SrTiO ₃ substrates. <i>Journal of Crystal Growth</i> , 2005 , 277, 210-217	1.6	11
261	Microemulsion mediated synthesis of nanocrystalline (K _x ,Na _{1-x})NbO ₃ powders. <i>Journal of Crystal Growth</i> , 2005 , 280, 191-200	1.6	40
260	Current status and challenges of ferroelectric memory devices. <i>Microelectronic Engineering</i> , 2005 , 80, 296-304	2.5	120
259	Integration of stacked capacitor module with ultra-thin ferroelectric SrBi ₂ Ta ₂ O ₉ film for high density ferroelectric random access memory applications at low voltage operation. <i>Thin Solid Films</i> , 2005 , 473, 328-334	2.2	5
258	Ionic conduction in zirconia films of nanometer thickness. <i>Acta Materialia</i> , 2005 , 53, 5161-5166	8.4	96
257	Influence of the morphology of ferroelectric SrBi ₂ Ta ₂ O ₉ thin films deposited by metal organic decomposition on its electrical characteristics. <i>Applied Surface Science</i> , 2005 , 249, 23-30	6.7	15
256	The origin of faceting of ultraflat gold films epitaxially grown on mica. <i>Applied Surface Science</i> , 2005 , 249, 197-202	6.7	54
255	Grain-Boundary Defect Chemistry of Acceptor-Doped Titanates: Inversion Layer and Low-Field Conduction. <i>Journal of the American Ceramic Society</i> , 2005 , 80, 2301-2314	3.8	103
254	Characterization of Chemical Solution Deposition-Derived Lead Hafnate Titanate Thin Films. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 1312-1314	3.8	10

253	Progress in the Synthesis of Nanocrystalline BaTiO ₃ Powders for MLCC. <i>International Journal of Applied Ceramic Technology</i> , 2005 , 2, 1-14	2	218
252	SrZrO ₃ Nanopatterning Using Self-Organized SrRuO ₃ as a Template. <i>Advanced Materials</i> , 2005 , 17, 281-284	2.4	15
251	Registered Deposition of Nanoscale Ferroelectric Grains by Template-Controlled Growth. <i>Advanced Materials</i> , 2005 , 17, 1357-1361	24	56
250	Experimental and numerical investigations of heat transport and crystallization kinetics in laser-induced modification of barium strontium titanate thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 80, 1553-1562	2.6	14
249	Fabrication and electrical characterisation of Zr-substituted BaTiO ₃ thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 81, 25-29	2.6	22
248	Nanosize ferroelectric oxides [Tracking down the superparaelectric limit. <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 80, 1247-1255	2.6	111
247	Electromechanical properties of Ba(Ti _{1-x} Zr _x)O ₃ thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2005 , 81, 11-13	2.6	20
246	Crystallization Temperature Limit of (Ba,Sr)TiO ₃ Thin Films Prepared by a Non Oxocarbonate Phase Forming CSD Route. <i>Journal of Sol-Gel Science and Technology</i> , 2005 , 33, 299-306	2.3	16
245	Scaling of Ferroelectric-based Memory Concepts 2005 , 149-161		1
244	A NOVEL DESIGN FOR INTEGRATED RF-MEM SWITCHES USING FERROELECTRIC THIN FILMS. <i>Integrated Ferroelectrics</i> , 2005 , 76, 59-67	0.8	4
243	NEW RESULTS ON FATIGUE AND IMPRINT EFFECT. <i>Integrated Ferroelectrics</i> , 2005 , 73, 83-92	0.8	3
242	Rectangular (3 x 2 square root of 3) superlattice of a dodecanethiol self-assembled monolayer on Au(111) observed by ultra-high-vacuum scanning tunneling microscopy. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 11424-6	3.4	17
241	Nonlinear Electrical Properties of Grain Boundaries in Oxygen Ion Conductors: Acceptor-Doped Ceria. <i>Electrochemical and Solid-State Letters</i> , 2005 , 8, J1		40
240	Analysis of shape effects on the piezoresponse in ferroelectric nanograins with and without adsorbates. <i>Applied Physics Letters</i> , 2005 , 87, 082901	3.4	37
239	Schottky barrier formed by network of screw dislocations in SrTiO ₃ . <i>Applied Physics Letters</i> , 2005 , 87, 162105	3.4	21
238	Effects of ferroelectric fatigue on the piezoelectric properties (d ₃₃) of tetragonal lead zirconate titanate thin films. <i>Applied Physics Letters</i> , 2005 , 86, 112908	3.4	15
237	Monte Carlo simulations of imprint behavior in ferroelectrics. <i>Applied Physics Letters</i> , 2005 , 87, 242902	3.4	13
236	Impact of the top-electrode material on the permittivity of single-crystalline Ba _{0.7} Sr _{0.3} TiO ₃ thin films. <i>Applied Physics Letters</i> , 2005 , 86, 202908	3.4	38

- 235 Enhancement of p-type conductivity in nanocrystalline BaTiO₃ ceramics. *Applied Physics Letters*, **2005**, 86, 082110 3-4 53
- 234 Contributions to in-plane piezoresponse on axially symmetrical samples. *Review of Scientific Instruments*, **2005**, 76, 106108 1-7 10
- 233 Effect of anisotropic in-plane strains on phase states and dielectric properties of epitaxial ferroelectric thin films. *Applied Physics Letters*, **2005**, 86, 052903 3-4 75
- 232 Effect of ozone treatment on the electrical properties of (Ba_{0.7}Sr_{0.3})TiO₃ thin films. *Journal of Applied Physics*, **2005**, 97, 114904 2-5 5
- 231 Integration of ferroelectric lead titanate nanoislands for direct hysteresis measurements. *Applied Physics Letters*, **2005**, 87, 142904 3-4 25
- 230 Scaling the Ferroelectric Field Effect Transistor. *Integrated Ferroelectrics*, **2005**, 70, 29-44 0-8 3
- 229 Metal-organic chemical-vapor deposition of (Ba,Sr)TiO₃: Nucleation and growth on Pt-(111). *Journal of Applied Physics*, **2005**, 98, 084904 2-5 14
- 228 Nanoscale polarization relaxation in a polycrystalline ferroelectric thin film: Role of local environments. *Applied Physics Letters*, **2005**, 86, 262910 3-4 25
- 227 MOCVD GROWTH OF (Pb,Ba)(Zr,Ti)O₃ THIN FILMS FOR MEMORY APPLICATIONS. *Integrated Ferroelectrics*, **2005**, 75, 225-233 0-8 1
- 226 Fabrication of arrays of SrZrO₃ nanowires by pulsed laser deposition. *Nanotechnology*, **2004**, 15, S122-S125 3-4 20
- 225 Effect of interfaces in Monte Carlo computer simulations of ferroelectric materials. *Applied Physics Letters*, **2004**, 84, 2379-2381 3-4 13
- 224 Interface-related thickness dependence of the tunability in BaSrTiO₃ thin films. *Applied Physics Letters*, **2004**, 85, 4708-4710 3-4 25
- 223 Use of reactive gases with broad-beam radio frequency ion sources for industrial applications. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2004**, 22, 1493-1499 2-9 4
- 222 Effects of ferroelectric switching on the piezoelectric small-signal response (d₃₃) and electrostriction (M₃₃) of lead zirconate titanate thin films. *Journal of Applied Physics*, **2004**, 95, 4976-4980 2-5 29
- 221 Electrostrictive resonances in (Ba_{0.7}Sr_{0.3})TiO₃ thin films at microwave frequencies. *Applied Physics Letters*, **2004**, 85, 624-626 3-4 60
- 220 A New Concept for Using Ferroelectric Transistors in Nonvolatile Memories. *Integrated Ferroelectrics*, **2004**, 60, 45-58 0-8 3
- 219 MOCVD of SrTa₂O₆ Thin Films for High-k Applications. *Materials Research Society Symposia Proceedings*, **2004**, 811, 375 2
- 218 Effect of different annealing procedures on the microstructure and the electrical properties of CSD derived (Ba,Sr)TiO₃ thin films.. *Materials Research Society Symposia Proceedings*, **2004**, 811, 248 5

217	Finite-Element Analysis of Ceramic Multilayer Capacitors: Modeling and Electrical Impedance Spectroscopy for a Nondestructive Failure Test. <i>Journal of the American Ceramic Society</i> , 2004 , 83, 1153-1159	3.8	14
216	Finite-Element Analysis of Ceramic Multilayer Capacitors: Failure Probability Caused by Wave Soldering and Bending Loads. <i>Journal of the American Ceramic Society</i> , 2004 , 83, 1433-1440	3.8	39
215	Recrystallization of Oxygen Ion Implanted Ba _{0.7} Sr _{0.3} TiO ₃ Thin Films. <i>Journal of the American Ceramic Society</i> , 2004 , 83, 436-438	3.8	10
214	Scaling Effect on the Dielectric Constant in Ba(Ti _x Zr _{1-x})O ₃ Thin Films. <i>Journal of Electroceramics</i> , 2004 , 13, 101-104	1.5	3
213	Nanocrystalline Alkaline Earth Titanates and Their Conductivity Characteristics Under Changing Oxygen Ambients. <i>Journal of Electroceramics</i> , 2004 , 13, 599-603	1.5	3
212	Fabrication of stress-induced SrRuO ₃ nanostructures by pulsed laser deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2004 , 79, 1461-1464	2.6	7
211	(Ba,Sr)TiO ₃ thin film growth in a batch processing MOCVD reactor. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 271-276	6	10
210	Reversible and irreversible piezoelectric and ferroelectric response in ferroelectric ceramics and thin films. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 725-732	6	39
209	Characterization of Ba(Ti,Zr)O ₃ ceramics sintered under reducing conditions. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 1473-1477	6	15
208	In-situ compensation of the parasitic capacitance for nanoscale hysteresis measurements. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 1145-1147	6	19
207	Interfacial reactions and microstructure of BaTiO ₃ films prepared using fluoride precursor method. <i>Applied Surface Science</i> , 2004 , 221, 178-183	6.7	8
206	Bismuth zinc niobate (Bi _{1.5} ZnNb _{1.5} O ₇) ceramics derived from metallo-organic decomposition precursor solution. <i>Solid State Communications</i> , 2004 , 132, 481-486	1.6	39
205	Space charge concept for acceptor-doped zirconia and ceria and experimental evidences. <i>Solid State Ionics</i> , 2004 , 173, 63-67	3.3	51
204	Laser crystallization studies of barium strontium titanate thin films. <i>Journal of the European Ceramic Society</i> , 2004 , 24, 3013-3020	6	17
203	Resistive donor-doped SrTiO ₃ sensors: I, basic model for a fast sensor response. <i>Sensors and Actuators B: Chemical</i> , 2004 , 101, 335-345	8.5	39
202	Microstructure and interfaces of HfO ₂ thin films grown on silicon substrates. <i>Journal of Crystal Growth</i> , 2004 , 262, 295-303	1.6	21
201	Chemical solution deposition of electronic oxide films. <i>Comptes Rendus Chimie</i> , 2004 , 7, 433-461	2.7	385
200	Mononuclear precursor for MOCVD of HfO ₂ thin films. <i>Chemical Communications</i> , 2004 , 1610-1	5.8	27

199	Inhomogeneous Local Conductivity Induced by Thermal Reduction in BaTiO ₃ Thin Films and Single Crystals. <i>Integrated Ferroelectrics</i> , 2004 , 61, 43-49	0.8	3
198	Size effects in ultrathin epitaxial ferroelectric heterostructures. <i>Applied Physics Letters</i> , 2004 , 84, 5225-5227	3.4	100
197	Piezoresponse in the light of surface adsorbates: Relevance of defined surface conditions for perovskite materials. <i>Applied Physics Letters</i> , 2004 , 85, 2896-2898	3.4	64
196	Effects of the top-electrode size on the piezoelectric properties (d ₃₃ and S) of lead zirconate titanate thin films. <i>Journal of Applied Physics</i> , 2004 , 96, 2800-2804	2.5	27
195	Structured oxide ceramics by a sodium chloride moulding technique. <i>Materials Letters</i> , 2004 , 58, 3348-3349	3.4	2
194	Non-Linear Imprint Behavior of PZT Thin Films. <i>Integrated Ferroelectrics</i> , 2003 , 53, 361-369	0.8	18
193	High Speed and High Resolution Measurements on Submicron Capacitors for FeRAM Application. <i>Integrated Ferroelectrics</i> , 2003 , 53, 371-378	0.8	
192	Shift of Phase Transition Temperature in Strontium Titanate Thin Films. <i>Integrated Ferroelectrics</i> , 2003 , 58, 1371-1379	0.8	16
191	Preparation and Characterisation of High Density, High Purity Lanthanum Aluminate Bulk Ceramics 2003 , 10, 193-202		12
190	SrBi ₂ Ta ₂ O ₉ ferroelectric thin film capacitors: degradation in a hydrogen ambient. <i>Applied Physics A: Materials Science and Processing</i> , 2003 , 77, 571-579	2.6	20
189	Mononuclear Mixed β -ketoester-alkoxide Compound of Titanium as a Promising Precursor for Low-Temperature MOCVD of TiO ₂ Thin Films. <i>Chemical Vapor Deposition</i> , 2003 , 9, 295-298		22
188	An interfacial defect layer observed at (Ba,Sr)TiO ₃ /Pt interface. <i>Thin Solid Films</i> , 2003 , 429, 282-285	2.2	23
187	Lamellar ferroelectric domains in PbTiO ₃ grains imaged and manipulated by AFM. <i>Surface Science</i> , 2003 , 532-535, 483-487	1.8	12
186	Transmission Electron Microscopy Investigation of Pt/Ba _{0.7} Sr _{0.3} TiO ₃ /Pt Capacitors with Different Annealing Processes. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 1190-1195	3.8	7
185	Short-time piezoelectric measurements in ferroelectric thin films using a double-beam laser interferometer. <i>Review of Scientific Instruments</i> , 2003 , 74, 2613-2615	1.7	43
184	Resistive switching in metal/ferroelectric/metal junctions. <i>Applied Physics Letters</i> , 2003 , 83, 4595-4597	3.4	248
183	Phase diagrams and physical properties of single-domain epitaxial Pb(Zr _{1-x} Ti _x)O ₃ thin films. <i>Physical Review B</i> , 2003 , 67,	3.3	263
182	Frequency and temperature dependence of the relative permittivity in ferroelectrics: Monte-Carlo simulation study. <i>Journal of Applied Physics</i> , 2003 , 93, 2890-2894	2.5	3

181	Coercive field of ultrathin Pb(Zr _{0.52} Ti _{0.48})O ₃ epitaxial films. <i>Applied Physics Letters</i> , 2003 , 83, 3356-3358	3.4	105
180	Influence of Asymmetric Oxide Electrode Structures on the Interface Capacity and the Failure Mechanisms in PZT Thin Films. <i>Integrated Ferroelectrics</i> , 2003 , 52, 63-71	0.8	8
179	Theoretical calculations and performance results of a PZT thin film actuator. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2003 , 50, 1240-6	3.2	21
178	Towards the limit of ferroelectric nanosized grains. <i>Nanotechnology</i> , 2003 , 14, 250-253	3.4	66
177	Thickness Dependence of Piezoelectric Properties for PZT Thin Films with Regard to MEMS Applications. <i>Integrated Ferroelectrics</i> , 2003 , 54, 527-535	0.8	13
176	Early self-assembled stages in epitaxial SrRuO ₃ on LaAlO ₃ . <i>Applied Physics Letters</i> , 2003 , 82, 2497-2499	3.4	43
175	Reversible and irreversible polarization processes in ferroelectric ceramics and thin films. <i>Journal of Applied Physics</i> , 2003 , 93, 1735-1742	2.5	61
174	Surface treatment effects on the thickness dependence of the remanent polarization of PbZr _{0.52} Ti _{0.48} O ₃ capacitors. <i>Applied Physics Letters</i> , 2003 , 83, 126-128	3.4	27
173	Observation of vacancy defect migration in the cation sublattice of complex oxides by ¹⁸ O tracer experiments. <i>Physical Review Letters</i> , 2003 , 90, 105901	7.4	99
172	Sharp ferroelectric phase transition in strained single-crystalline SrRuO ₃ /Ba _{0.7} Sr _{0.3} TiO ₃ /SrRuO ₃ capacitors. <i>Applied Physics Letters</i> , 2003 , 83, 5011-5013	3.4	35
171	PZT thin films for piezoelectric microactuator applications. <i>Sensors and Actuators A: Physical</i> , 2002 , 97-98, 680-684	3.9	78
170	Modelling and numerical simulation of the electrical, mechanical, and thermal coupled behaviour of Multilayer capacitors (MLCs). <i>Journal of the European Ceramic Society</i> , 2002 , 22, 1285-1296	6	25
169	Grain-Boundary Effect on the Curie-Weiss Law of Ferroelectric Ceramics and Polycrystalline Thin Films: Calculation by the Method of Effective Medium		70
168	A Mathematical-Physical Model for the Charge Transport in p-Type SrTiO ₃ Ceramics Under dc Load: Maxwell-Wagner Relaxation		18
167	Simulation of the charge transport across grain boundaries in p-type SrTiO ₃ ceramics under dc load: Debye relaxation and dc bias dependence of long-term conductivity. <i>Journal of Applied Physics</i> , 2002 , 91, 3037-3043	2.5	22
166	Piezoresponse force microscopy of lead titanate nanograins possibly reaching the limit of ferroelectricity. <i>Applied Physics Letters</i> , 2002 , 81, 5231-5233	3.4	151
165	The interface screening model as origin of imprint in PbZr _x Ti _{1-x} O ₃ thin films. II. Numerical simulation and verification. <i>Journal of Applied Physics</i> , 2002 , 92, 2688-2696	2.5	83
164	Integration of Piezoelectric PZT Thin Films with Internal Electrodes into an Actuator Structure for MEMS Applications. <i>Integrated Ferroelectrics</i> , 2002 , 50, 21-32	0.8	9

163	Structural and morphologic evolution of Pt/Ba _{0.7} Sr _{0.3} TiO ₃ /Pt capacitors with annealing processes. <i>Applied Physics Letters</i> , 2002 , 80, 2728-2730	3-4	12
162	Ultrathin epitaxial ferroelectric films grown on compressive substrates: Competition between the surface and strain effects. <i>Journal of Applied Physics</i> , 2002 , 91, 2247-2254	2-5	125
161	Depolarizing-field-mediated 180° switching in ferroelectric thin films with 90° domains. <i>Applied Physics Letters</i> , 2002 , 80, 1424-1426	3-4	94
160	The interface screening model as origin of imprint in PbZr _x Ti _{1-x} O ₃ thin films. I. Dopant, illumination, and bias dependence. <i>Journal of Applied Physics</i> , 2002 , 92, 2680-2687	2-5	182
159	Interface-related decrease of the permittivity in PbZr _x Ti _{1-x} O ₃ thin films. <i>Applied Physics Letters</i> , 2002 , 80, 1427-1429	3-4	26
158	Influence of the Film-Electrode Interface in Thin-Film Capacitors. <i>Ferroelectrics</i> , 2002 , 271, 315-320	0-6	17
157	Interfacial and microstructural properties of SrTiO ₃ thin films grown on Si(001) substrates. <i>Journal of Applied Physics</i> , 2002 , 92, 7200-7205	2-5	25
156	Kinetic of phase transformation of SrBi ₂ Ta ₂ O ₉ deposited by metalorganic decomposition on platinum electrodes. <i>Applied Physics Letters</i> , 2002 , 81, 4410-4412	3-4	5
155	(Pb 1-x Ba x)TiO 3 Thin Films Prepared by Liquid Delivery MOCVD: Influence of the Process Parameters on Film Formation and Electrical Properties. <i>Ferroelectrics</i> , 2002 , 268, 143-148	0-6	
154	Influence of Defects on the Properties of a 2D Ferroelectric: A Monte-Carlo Simulation Study. <i>Japanese Journal of Applied Physics</i> , 2002 , 41, 7202-7210	1-4	11
153	Compensation of the Parasitic Capacitance of a Scanning Force Microscope Cantilever Used for Measurements on Ferroelectric Capacitors of Submicron Size by Means of Finite Element Simulations. <i>Japanese Journal of Applied Physics</i> , 2002 , 41, 7198-7201	1-4	15
152	On-Chip Integration of Pt/(Ba,Sr)TiO 3 /Pt Thin Film Capacitors. <i>Integrated Ferroelectrics</i> , 2002 , 48, 245-254		
151	Integration, electrical, and electromechanical properties of PZT and PMN-PT thin films for MEMS applications 2002 ,		8
150	Growth of (Ba,Sr)TiO 3 Thin Films by MOCVD: Stoichiometry Effects. <i>Integrated Ferroelectrics</i> , 2002 , 45, 59-68	0-8	7
149	Influence of Excitation Frequency and Amplitude on the Switching Properties of SBT and PZT Thin Films at 10 MHZ Hysteresis Frequency. <i>Integrated Ferroelectrics</i> , 2002 , 47, 101-111	0-8	4
148	Chemical Solution Deposition of Ferroelectric Thin Films - State of the Art and Recent Trends. <i>Ferroelectrics</i> , 2002 , 267, 293-301	0-6	42
147	Origin of soft-mode stiffening and reduced dielectric response in SrTiO ₃ thin films. <i>Physical Review B</i> , 2002 , 66,	3-3	99
146	Simulation of the Charge Transport Across Grain Boundaries in p-Type SrTiO 3 Ceramics. <i>Ferroelectrics</i> , 2002 , 268, 215-220	0-6	

145	Imaging three-dimensional polarization in epitaxial polydomain ferroelectric thin films. <i>Journal of Applied Physics</i> , 2002 , 91, 1477-1481	2.5	125
144	Lattice strain and lattice expansion of the SrRuO ₃ layers in SrRuO ₃ /PbZr _{0.52} Ti _{0.48} O ₃ /SrRuO ₃ multilayer thin films. <i>Journal of Applied Physics</i> , 2002 , 92, 101-105	2.5	24
143	Relaxation effects and steady-state conduction in non-stoichiometric SBT films. <i>Integrated Ferroelectrics</i> , 2001 , 33, 245-252	0.8	2
142	Segregation phenomena in thin films of BaTiO ₃ . <i>Integrated Ferroelectrics</i> , 2001 , 33, 303-310	0.8	4
141	BST thin films grown in a multiwafer MOCVD reactor. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1547-1551	6	17
140	Morphology and electrical properties of SrTiO ₃ -films on conductive oxide films. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1597-1600	6	15
139	Electrical conductivity and segregation effects of doped SrTiO ₃ thin films. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1673-1676	6	17
138	Advances in point defect chemistry: space charge controlled surface reactions. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1743-1747	6	10
137	Electrical characterization of grain boundary decorated SrTiO ₃ ceramics. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1753-1757	6	1
136	Development of oxygen-permeable ceramic membranes for NO _x -sensors. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 1971-1975	6	8
135	Polar grain boundaries in undoped SrTiO ₃ ceramics. <i>Journal of the European Ceramic Society</i> , 2001 , 21, 2681-2686	6	15
134	Dielectric Properties of Ba(Zr,Ti)O ₃ -Based Ferroelectrics for Capacitor Applications. <i>Journal of the American Ceramic Society</i> , 2001 , 84, 759-766	3.8	166
133	Electrical measurements on capacitor sizes in the submicron regime for the characterization of real memory cell capacitors. <i>Integrated Ferroelectrics</i> , 2001 , 37, 163-172	0.8	4
132	Basic investigations on a piezoelectric bending actuator for micro-electro-mechanical applications. <i>Integrated Ferroelectrics</i> , 2001 , 35, 269-281	0.8	10
131	Phase formation and crystal growth of SrBiTaO ₇ thin films grown by metalorganic chemical vapor deposition. <i>Journal of Materials Research</i> , 2001 , 16, 2966-2973	2.5	0
130	Size Effects on Polarization in Epitaxial Ferroelectric Films and the Concept of Ferroelectric Tunnel Junctions Including First Results. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 688, 1		15
129	Optimization of Pt/SBT/CeO ₂ /Si(100) gate stacks for low voltage ferroelectric field effect devices. <i>Integrated Ferroelectrics</i> , 2001 , 34, 47-54	0.8	1
128	Relaxation mechanisms in ferroelectric thin film capacitors for feram application. <i>Integrated Ferroelectrics</i> , 2001 , 33, 39-48	0.8	4

127	High temperature conductivity behavior of doped SrTiO ₃ thin films. <i>Integrated Ferroelectrics</i> , 2001 , 33, 363-372	0.8	7
126	Domain switching, rotation processes and dielectric response of polycrystalline Pb(Zr _x Ti _{1-x})O ₃ thin films. <i>Journal Physics D: Applied Physics</i> , 2001 , 34, 711-716	3	3
125	Chemical deposition methods for ferroelectric thin films. <i>Ferroelectrics</i> , 2001 , 259, 205-214	0.6	6
124	Thickness dependent morphology and electrical characteristics of SrBi ₂ Ta ₂ O ₉ deposited by metal organic decomposition. <i>Integrated Ferroelectrics</i> , 2001 , 37, 125-134	0.8	
123	Finite element simulations of interdigital electrode structures on high permittivity thin films. <i>Integrated Ferroelectrics</i> , 2001 , 32, 63-72	0.8	4
122	Status and future aspects in nanoscale surface inspection of ferroics by scanning probe microscopy. <i>Ferroelectrics</i> , 2001 , 251, 11-20	0.6	11
121	Dielectric, infrared, and Raman response of undoped SrTiO ₃ ceramics: Evidence of polar grain boundaries. <i>Physical Review B</i> , 2001 , 64,	3.3	219
120	In-plane polarization states and their instabilities in polydomain epitaxial ferroelectric thin films. <i>Applied Physics Letters</i> , 2001 , 78, 530-532	3.4	19
119	Direct hysteresis measurements of single nanosized ferroelectric capacitors contacted with an atomic force microscope. <i>Applied Physics Letters</i> , 2001 , 79, 3678-3680	3.4	71
118	Relaxation mechanism of ferroelectric switching in Pb(Zr,Ti)O ₃ thin films. <i>Journal of Applied Physics</i> , 2001 , 89, 2332-2336	2.5	113
117	Influence of the measurement parameters on the reliability of ferroelectric thin films. <i>Integrated Ferroelectrics</i> , 2001 , 32, 1-9	0.8	3
116	Advanced chemical deposition techniques - from research to production. <i>Integrated Ferroelectrics</i> , 2001 , 36, 3-20	0.8	56
115	Digital reflection-type phase shifter based on a ferroelectric planar capacitor. <i>IEEE Microwave and Wireless Components Letters</i> , 2001 , 11, 407-409	2.6	25
114	Structure property relations of BST thin films. <i>Integrated Ferroelectrics</i> , 2001 , 38, 211-220	0.8	9
113	Thermodynamic theory of epitaxial ferroelectric thin films with dense domain structures. <i>Physical Review B</i> , 2001 , 64,	3.3	205
112	Interfacial layers and their effect on leakage current in moccvd-deposited SBT thin films. <i>Integrated Ferroelectrics</i> , 2001 , 39, 189-198	0.8	3
111	Imprint in Ferroelectric Thin Films Caused by Screening of an Electric Field in a Thin Surface Layer. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 688, 1		2
110	Investigation of the Role of Carbonylchemistry to Pattern Platinum Electrodes. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 688, 1		

109	Fabrication and Characterization of a PZT thin Film Actuator for a Micro Electromechanical Switch Application. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 688, 1		1
108	PZT and PMN-PT Thin Film Cantilevers: Comparison between Monomorph and Bimorph Structures. <i>Materials Research Society Symposia Proceedings</i> , 2001 , 688, 1		1
107	Far infrared and Raman spectroscopy of ferroelectric soft mode in SrTiO ₃ thin films and ceramics. <i>Integrated Ferroelectrics</i> , 2001 , 32, 11-20	0.8	8
106	PZT thin films for piezoelectric micro-actuator applications 2001 , 990-993		
105	Three-Dimensional Electric Field Probing of Ferroelectrics on the Nanometer Scale Using Scanning Force Microscopy 2001 , 287-298		23
104	MOCVD of perovskite thin films using an aerosol-assisted liquid delivery system. <i>Advanced Materials for Optics and Electronics</i> , 2000 , 10, 169-175		11
103	Study of electrical and mechanical contribution to switching in ferroelectric/ferroelastic polycrystals. <i>Acta Materialia</i> , 2000 , 48, 3271-3282	8.4	41
102	Electroceramic materials. <i>Acta Materialia</i> , 2000 , 48, 151-178	8.4	329
101	Grain boundaries in dielectric and mixed-conducting ceramics. <i>Acta Materialia</i> , 2000 , 48, 797-825	8.4	192
100	Deposition of thin BST films in a multi-wafer planetary reactor. <i>Integrated Ferroelectrics</i> , 2000 , 30, 183-192	0.8	17
99	Degradation mechanisms of SrBi ₂ Ta ₂ O ₉ ferroelectric thin film capacitors during forming gas annealing. <i>Integrated Ferroelectrics</i> , 2000 , 31, 341-350	0.8	6
98	Reversible and irreversible processes in donor-doped Pb(Zr,Ti)O ₃ . <i>Applied Physics Letters</i> , 2000 , 77, 3830-3832	3.4	66
97	Lifetime estimation due to imprint failure in ferroelectric SrBi ₂ Ta ₂ O ₉ thin films. <i>Applied Physics Letters</i> , 2000 , 76, 363-365	3.4	31
96	Curie-Weiss-type law for the strain and stress effects on the dielectric response of ferroelectric thin films. <i>Applied Physics Letters</i> , 2000 , 77, 2596-2598	3.4	38
95	Low temperature process and thin SBT films for ferroelectric memory devices. <i>Integrated Ferroelectrics</i> , 2000 , 30, 235-244	0.8	12
94	Formation of micro-crystals on the (100) surface of SrTiO ₃ at elevated temperatures. <i>Surface Science</i> , 2000 , 460, 112-128	1.8	113
93	Differentiating 180° and 90° switching of ferroelectric domains with three-dimensional piezoresponse force microscopy. <i>Applied Physics Letters</i> , 2000 , 77, 3444-3446	3.4	154
92	Capacitance and admittance spectroscopy analysis of hydrogen-degraded Pt/(Ba, Sr)TiO ₃ /Pt thin-film capacitors. <i>Applied Physics Letters</i> , 2000 , 77, 2045-2047	3.4	35

91	Correlation between switching and fatigue in PbZr _{0.3} Ti _{0.7} O ₃ thin films. <i>Applied Physics Letters</i> , 2000 , 77, 1894	3.4	48
90	Laserannealing studies of barium strontium titanate thin films using short laser pulses. <i>Integrated Ferroelectrics</i> , 2000 , 30, 129-138	0.8	5
89	Preparation of (Pb _x Ba _{1-x})TiO ₃ thin films by MOCVD using an aerosol-assisted liquid delivery system. <i>Integrated Ferroelectrics</i> , 2000 , 30, 165-173	0.8	2
88	New Approach for Boundary Conditions: Space Charge Controlled Concentrations of Cation Vacancies in Donor Doped SrTiO ₃ for Short Diffusion Length 2000 , 473-478		
87	Influence of dry etching using argon on structural and electrical properties of crystalline and non-crystalline SrBi ₂ Ta ₂ O ₉ thin films. <i>Integrated Ferroelectrics</i> , 1999 , 27, 213-225	0.8	7
86	Smart materials and structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999 , 96, 8330-1	11.5	45
85	Microstructure and properties of highly oriented PZT thin films on epitaxial ceramic electrodes prepared by CSD. <i>Ferroelectrics</i> , 1999 , 225, 107-115	0.6	1
84	Influence of crystallization kinetics on texture of sol-gel PZT and BST thin films. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 1391-1395	6	10
83	A novel integrated thin film capacitor realized by a multilayer ceramic-electrode sandwich structure. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 1413-1415	6	22
82	Modeling of electroceramics Applications and prospects. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 655-664	6	22
81	Detailed temperature dependence of the space charge layer width at grain boundaries in acceptor-doped SrTiO ₃ -ceramics. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 683-686	6	9
80	Control of the morphology of CSD-prepared (Ba,Sr)TiO ₃ thin films. <i>Journal of the European Ceramic Society</i> , 1999 , 19, 1339-1343	6	158
79	Chemical Solution Deposition of Epitaxial La _{1-x} (Ca, Sr) x MnO ₃ Thin Films 1999 , 3, 255-260		23
78	Ferroelectric thin films grown on tensile substrates: Renormalization of the Curie-Weiss law and apparent absence of ferroelectricity. <i>Journal of Applied Physics</i> , 1999 , 85, 1698-1701	2.5	135
77	Functional graded high-K (Ba _{1-x} Sr _x)TiO ₃ thin films for capacitor structures with low temperature coefficient. <i>Integrated Ferroelectrics</i> , 1999 , 24, 169-179	0.8	26
76	Reversible and irreversible domain wall contributions to the polarization in ferroelectric thin films. <i>Ferroelectrics</i> , 1999 , 221, 251-257	0.6	49
75	3-Dimensional FEM simulations of resonances in the impedance characteristic of ceramic multilayer capacitors. <i>Ferroelectrics</i> , 1999 , 224, 185-194	0.6	2
74	Frequency Dependence of the Coercive Voltage of Ferroelectric Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 596, 291		5

73	Temperature Dependence of the Reversible and Irreversible Polarization Contributions in Ferroelectric Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1999 , 596, 301		4
72	Gate Stacks for Low Voltage Ferroelectric Field Effect Devices Based on Pt/STB/CeO ₂ /Si(100). <i>Materials Research Society Symposia Proceedings</i> , 1999 , 596, 437		
71	Influence of the thickness and area of NiCr/Ag electrodes on the characteristics of BaTiO ₃ - ceramic based positive-temperature-coefficient thermistors. <i>Journal of Materials Science</i> , 1998 , 33, 4603-4608	4.3	16
70	Influence of Precursor Chemistry on the Formation of MTiO ₃ (M = Ba, Sr) Ceramic Thin Films. <i>Journal of Sol-Gel Science and Technology</i> , 1998 , 12, 67-79	2.3	111
69	Transverse magnetovoltage in epitaxial La _{0.67} Ca _{0.33} MnO ₃ thin films. <i>Solid State Communications</i> , 1998 , 109, 189-194	1.6	10
68	The effect of Zr on the microstructure of Ba(Ti _{1-x} Zr _x)O ₃ thin films prepared by chemical-solution deposition. <i>Materials Letters</i> , 1998 , 35, 375-379	3.3	6
67	Electrical characterization of ferroelectric, paraelectric, and superparaelectric thin films. <i>Integrated Ferroelectrics</i> , 1998 , 21, 27-40	0.8	22
66	Properties of SrBi ₂ Ta ₂ O ₉ thin films grown by MOCVD for high density FeRAM applications. <i>Integrated Ferroelectrics</i> , 1998 , 21, 367-379	0.8	15
65	Externally determined and intrinsic contributions to the polarization switching currents in SrBi ₂ Ta ₂ O ₉ thin films. <i>Integrated Ferroelectrics</i> , 1998 , 22, 123-131	0.8	10
64	Imprint in ferroelectric SrBi ₂ Ta ₂ O ₉ capacitors for non-volatile memory applications. <i>Integrated Ferroelectrics</i> , 1998 , 22, 95-107	0.8	10
63	Aggregate linear properties of ferroelectric ceramics and polycrystalline thin films: Calculation by the method of effective piezoelectric medium. <i>Journal of Applied Physics</i> , 1998 , 84, 1524-1529	2.5	34
62	Influence of temperature and interface charge on the grain-boundary conductivity in acceptor-doped SrTiO ₃ ceramics. <i>Journal of Applied Physics</i> , 1998 , 83, 2083-2092	2.5	73
61	Microstructure of columnar-grained SrTiO ₃ and BaTiO ₃ thin films prepared by chemical solution deposition. <i>Journal of Materials Research</i> , 1998 , 13, 2206-2217	2.5	82
60	Resistance degradation behavior of Ba _{0.7} Sr _{0.3} TiO ₃ thin films compared to mechanisms found in titanate ceramics and single crystals. <i>Integrated Ferroelectrics</i> , 1998 , 22, 83-94	0.8	24
59	Origin of Imprint in Ferroelectric CSD SrBi ₂ Ta ₂ O ₉ Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 541, 269		11
58	Crystallization Kinetics and Texture of Sol-Gel PZT Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 541, 363		
57	Dielectric relaxation phenomena in superparaelectric and ferroelectric ceramic thin films and the relevance with respect to high density DRAM and FRAM applications. <i>European Physical Journal Special Topics</i> , 1998 , 08, Pr9-117-Pr9-120		2
56	Curie-Weiss law of (Ba _{1-x} Sr _x)TiO ₃ thin films prepared by chemical solution deposition. <i>European Physical Journal Special Topics</i> , 1998 , 08, Pr9-221-Pr9-224		6

55	Simulation of Electrical Properties of Grain Boundaries in Titanate Ceramics. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1997 , 101, 1238-1241		11
54	Hot-forging of Ba ₆ -3xRE ₈ +2xTi ₁₈ O ₅₄ ceramics (RE=La, Ce, Nd, Sm). <i>Ferroelectrics</i> , 1997 , 201, 127-135	0.6	22
53	Nonlinear Charge Transport in Acceptor-Doped Titanates. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1997 , 101, 1245-1246		
52	An Important Failure Mechanism in MOCVD (Ba,Sr)TiO ₃ thin Films: Resistance Degradation. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 493, 9		6
51	Chemical Solution Deposited BaTiO ₃ and SrTiO ₃ Thin Films With Columnar Microstructure. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 474, 9		41
50	Reversible and Irreversible Contributions to the Polarization in SrBi ₂ Ta ₂ O ₉ Ferroelectric Capacitors. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 493, 267		13
49	Pulsed laser ablation synthesis and characterization of layered SrBi ₂ Ta ₂ O ₉ films and integration into capacitors for non-volatile memories. <i>Integrated Ferroelectrics</i> , 1997 , 14, 51-57	0.8	11
48	Dielectric analysis of intergrated ceramic thin film capacitors. <i>Integrated Ferroelectrics</i> , 1997 , 15, 39-51	0.8	96
47	The dielectric response as a function of temperature and film thickness of fiber-textured (Ba,Sr)TiO ₃ thin films grown by chemical vapor deposition. <i>Journal of Applied Physics</i> , 1997 , 82, 2497-2504	2.5	328
46	Leakage currents in Ba _{0.7} Sr _{0.3} TiO ₃ thin films for ultrahigh-density dynamic random access memories. <i>Journal of Applied Physics</i> , 1997 , 82, 2359-2364	2.5	302
45	Grain Boundary Defect Chemistry of Acceptor-Doped Titanates: High Field Effects 1997 , 1, 51-64		41
44	Charge injection in SrTiO ₃ thin films. <i>Thin Solid Films</i> , 1997 , 299, 53-58	2.2	71
43	Dopant influence on dielectric losses, leakage behaviour, and resistance degradation of SrTiO ₃ thin films. <i>Thin Solid Films</i> , 1997 , 305, 66-73	2.2	80
42	Nature of the surface layer in ABO ₃ -type perovskites at elevated temperatures. <i>Applied Physics A: Materials Science and Processing</i> , 1996 , 62, 335-343	2.6	11
41	Numerical simulation of the defect chemistry and electrostatics at grain boundaries in titanate ceramics. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996 , 39, 179-187	3.1	31
40	Electrical characterization of semiconducting La doped SrTiO ₃ thin films prepared by pulsed laser deposition. <i>Applied Surface Science</i> , 1996 , 96-98, 784-790	6.7	2
39	Surface layer on KNbO ₃ and the hysteresis loop anomaly. <i>Journal of Physics and Chemistry of Solids</i> , 1996 , 57, 1765-1775	3.9	19
38	Leakage Currents in CVD (Ba,Sr)TiO ₃ Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 433, 285		16

37	Grain-boundary decorated titanate ceramics: Preparation and processing. <i>Solid State Ionics</i> , 1995 , 75, 123-126	3.3	14
36	Electronic properties of grain boundaries in SrTiO ₃ and BaTiO ₃ ceramics. <i>Solid State Ionics</i> , 1995 , 75, 89-99	3.3	84
35	Investigation of grain boundary segregation in acceptor and donor doped strontium titanate. <i>Solid State Ionics</i> , 1995 , 75, 127-136	3.3	27
34	Structural and electrical properties of wet-chemically deposited Sr(Ti _{1-y} Zr _y)O ₃ (y=0.1) thin films. <i>Integrated Ferroelectrics</i> , 1995 , 10, 155-164	0.8	20
33	Electrode influence on the charge transport through SrTiO ₃ thin films. <i>Journal of Applied Physics</i> , 1995 , 78, 6113-6121	2.5	215
32	Dielectric relaxation of perovskite-type oxide thin films. <i>Integrated Ferroelectrics</i> , 1995 , 10, 231-245	0.8	37
31	How to analyse relaxation and leakage currents of dielectric thin films: Simulation of voltage-step and voltage-ramp techniques. <i>Integrated Ferroelectrics</i> , 1995 , 8, 317-332	0.8	18
30	Semiconductive Behavior of Sb Doped SnO ₂ Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 401, 67		2
29	Optical absorption relaxation applied to SrTiO ₃ and ZrO ₂ : An in-situ method to study trapping effects on chemical diffusion. <i>Solid State Ionics</i> , 1994 , 72, 41-46	3.3	15
28	Grain Boundary Defect Chemistry of Acceptor-Doped Titanates: Space Charge Layer Width. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 235-243	3.8	205
27	Charge transport in perovskite-type titanates: Space charge effects in ceramics and films. <i>Ferroelectrics</i> , 1994 , 151, 125-131	0.6	6
26	An Optical In-Situ Method to Study Redox-Kinetics in SrTiO ₃ . <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1993 , 97, 1098-1104		33
25	Processing and electrical properties of Pb (Zr _x Ti _{1-x})O ₃ (x=0.2-0.75) films: Comparison of metallo-organic decomposition and sol-gel processes. <i>Journal of Applied Physics</i> , 1992 , 72, 1566-1576	2.5	191
24	Tril4: The role of grain boundaries in conduction and breakdown of perovskite-type titanates. <i>Ferroelectrics</i> , 1992 , 133, 109-114	0.6	44
23	Optical investigation of oxygen incorporation in SrTiO ₃ . <i>Solid State Ionics</i> , 1992 , 53-56, 578-582	3.3	56
22	Kinetics of oxygen incorporation in SrTiO ₃ (Fe-doped): an optical investigation. <i>Sensors and Actuators B: Chemical</i> , 1992 , 7, 763-768	8.5	62
21	Bulk Conductivity and Defect Chemistry of Acceptor-Doped Strontium Titanate in the Quenched State. <i>Journal of the American Ceramic Society</i> , 1991 , 74, 1934-1940	3.8	344
20	Advanced dielectrics: Bulk ceramics and thin films. <i>Advanced Materials</i> , 1991 , 3, 334-340	24	130

19	dc Electrical Degradation of Perovskite-Type Titanates: I, Ceramics. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 1645-1653	3.8	539
18	dc Electrical Degradation of Perovskite-Type Titanates: II, Single Crystals. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 1654-1662	3.8	272
17	dc Electrical Degradation of Perovskite-Type Titanates: III, A Model of the Mechanism. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 1663-1673	3.8	354
16	Determination of acceptor concentrations and energy levels in oxides using an optoelectrochemical technique. <i>Solid State Communications</i> , 1990 , 76, 1077-1081	1.6	51
15	dc Field-induced resistance degradation of perovskite-type titanates: A non-linear transport phenomenon. <i>Ferroelectrics</i> , 1990 , 109, 89-94	0.6	8
14	High resolution IR absorption spectroscopy of the OH stretch modes in SrTiO ₃ :Fe. <i>Ferroelectrics</i> , 1990 , 107, 97-102	0.6	4
13	Degradation of dielectric ceramics. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1989 , 109, 171-182	5.3	39
12	Solubility of Hydrogen Defects in Doped and Undoped BaTiO ₃ . <i>Journal of the American Ceramic Society</i> , 1988 , 71, 58-63	3.8	75
11	Time Evolution of the Potential Distribution in Earth Alkaline Titanates under de Voltage Stress. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1988 , 92, 1516-1522		24
10	Diffusion of Hydrogen Defects in BaTiO ₃ Ceramics and SrTiO ₃ Single Crystals. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1986 , 90, 1223-1230		54
9	Impedance Spectroscopic Studies of the System Silver/Aqueous Chloride Solution— <i>Zeitschrift Fur Physikalische Chemie</i> , 1984 , 139, 203-215	3.1	3
8	Potential Dependence and Time Evolution of the Double Layer Structure and Topography of Silver Electrodes. Part I: Smooth Silver Films. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1984 , 88, 714-719		6
7	Potential Dependence and Time Evolution of the Double Layer Structure and Topography of Silver Electrodes Part II: Roughened Silver Films. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1984 , 88, 1177-1181		5
6	Migration of complexes at the silver/electrolyte interface. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1983 , 150, 89-95		17
5	An electrochemical study of the adsorption of pyridine and chloride ions on smooth and roughened silver surfaces. <i>Journal of Electroanalytical Chemistry and Interfacial Electrochemistry</i> , 1981 , 117, 257-266		55
4	Texture etched Al-doped ZnO: a new material for enhanced light trapping in thin film solar cells		12
3	Static and Dynamic Properties of Domains. <i>Topics in Applied Physics</i> , 31-46	0.5	2
2	The structure and formation of nanotwins in BaTiO ₃ thin films		4

1

Effect of the Threshold Kinetics on the Filament Relaxation Behavior of Ag-Based Diffusive Memristors. *Advanced Functional Materials*,2111242

15.68