

Patrick Fiorenza

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

150
papers

2,174
citations

26
h-index

40
g-index

163
ext. papers

2,599
ext. citations

2.5
avg, IF

5.08
L-index

#	Paper	IF	Citations
150	Structural and Insulating Behaviour of High-Permittivity Binary Oxide Thin Films for Silicon Carbide and Gallium Nitride Electronic Devices.. <i>Materials</i> , 2022 , 15,	3.5	2
149	Early Growth Stages of Aluminum Oxide (Al ₂ O ₃) Insulating Layers by Thermal- and Plasma-Enhanced Atomic Layer Deposition on AlGa _N /Ga _N Heterostructures. <i>ACS Applied Electronic Materials</i> , 2022 , 4, 406-415	4	2
148	Temperature and time dependent electron trapping in Al ₂ O ₃ thin films onto AlGa _N /Ga _N heterostructures. <i>Applied Surface Science</i> , 2022 , 579, 152136	6.7	2
147	Status and Prospects of Cubic Silicon Carbide Power Electronics Device Technology. <i>Materials</i> , 2021 , 14,	3.5	2
146	Forward and reverse current transport mechanisms in tungsten carbide Schottky contacts on AlGa _N /Ga _N heterostructures. <i>Journal of Applied Physics</i> , 2021 , 129, 234501	2.5	3
145	High-Resolution Two-Dimensional Imaging of the 4H-SiC MOSFET Channel by Scanning Capacitance Microscopy. <i>Nanomaterials</i> , 2021 , 11,	5.4	3
144	Selective Doping in Silicon Carbide Power Devices. <i>Materials</i> , 2021 , 14,	3.5	7
143	Interfacial electrical and chemical properties of deposited SiO ₂ layers in lateral implanted 4H-SiC MOSFETs subjected to different nitridations. <i>Applied Surface Science</i> , 2021 , 557, 149752	6.7	6
142	Ni Schottky barrier on heavily doped phosphorous implanted 4H-SiC. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 445107	3	8
141	Gold nanoparticle assisted synthesis of MoS ₂ monolayers by chemical vapor deposition. <i>Nanoscale Advances</i> , 2021 , 3, 4826-4833	5.1	5
140	Nanolaminated Al ₂ O ₃ /HfO ₂ dielectrics for silicon carbide based devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020 , 38, 032410	2.9	2
139	Impact of Stacking Faults and Domain Boundaries on the Electronic Transport in Cubic Silicon Carbide Probed by Conductive Atomic Force Microscopy. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901171	6.4	16
138	Correlating electron trapping and structural defects in Al ₂ O ₃ thin films deposited by plasma enhanced atomic layer deposition. <i>AIP Advances</i> , 2020 , 10, 125017	1.5	7
137	On the origin of the premature breakdown of thermal oxide on 3C-SiC probed by electrical scanning probe microscopy. <i>Applied Surface Science</i> , 2020 , 526, 146656	6.7	4
136	Understanding the role of threading dislocations on 4H-SiC MOSFET breakdown under high temperature reverse bias stress. <i>Nanotechnology</i> , 2020 , 31, 125203	3.4	9
135	Active dopant profiling and Ohmic contacts behavior in degenerate n-type implanted silicon carbide. <i>Applied Physics Letters</i> , 2020 , 117, 013502	3.4	6
134	Nanoscale Insights on the Origin of the Power MOSFETs Breakdown after Extremely Long High Temperature Reverse Bias Stress. <i>Materials Science Forum</i> , 2020 , 1004, 433-438	0.4	1

133 Technologies for Normally-off GaN HEMTs **2020**, 137-175

132	Identification of two trapping mechanisms responsible of the threshold voltage variation in SiO ₂ /4H-SiC MOSFETs. <i>Applied Physics Letters</i> , 2020 , 117, 103502	3-4	5
131	Effect of high temperature annealing (T > 1650 °C) on the morphological and electrical properties of p-type implanted 4H-SiC layers. <i>Materials Science in Semiconductor Processing</i> , 2019 , 93, 274-279	4-3	20
130	Characterization of SiO ₂ /4H-SiC Interfaces in 4H-SiC MOSFETs: A Review. <i>Energies</i> , 2019 , 12, 2310	3-1	44
129	An Overview of Normally-Off GaN-Based High Electron Mobility Transistors. <i>Materials</i> , 2019 , 12,	3-5	92
128	Properties of Al ₂ O ₃ thin films deposited on 4H-SiC by reactive ion sputtering. <i>Materials Science in Semiconductor Processing</i> , 2019 , 93, 290-294	4-3	7
127	Probing the uniformity of hydrogen intercalation in quasi-free-standing epitaxial graphene on SiC by micro-Raman mapping and conductive atomic force microscopy. <i>Nanotechnology</i> , 2019 , 30, 284003	3-4	16
126	Raman probing of hydrogen-intercalated graphene on Si-face 4H-SiC. <i>Materials Science in Semiconductor Processing</i> , 2019 , 96, 145-152	4-3	16
125	Effects of Thermal Annealing Processes in Phosphorous Implanted 4H-SiC Layers. <i>Materials Science Forum</i> , 2019 , 963, 407-411	0-4	6
124	Fabrication and Characterization of Ohmic Contacts to 3C-SiC Layers Grown on Silicon. <i>Materials Science Forum</i> , 2019 , 963, 485-489	0-4	2
123	SiO ₂ /SiC MOSFETs Interface Traps Probed by Nanoscale Analyses and Transient Current and Capacitance Measurements. <i>Materials Science Forum</i> , 2019 , 963, 230-235	0-4	
122	Electrical Properties of Thermal Oxide on 3C-SiC Layers Grown on Silicon. <i>Materials Science Forum</i> , 2019 , 963, 479-482	0-4	2
121	Temperature-dependent Fowler-Nordheim electron barrier height in SiO ₂ /4H-SiC MOS capacitors. <i>Materials Science in Semiconductor Processing</i> , 2018 , 78, 38-42	4-3	17
120	Determining oxide trapped charges in Al ₂ O ₃ insulating films on recessed AlGaN/GaN heterostructures by gate capacitance transients measurements. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 050307	1-4	9
119	Barrier Inhomogeneity of Ni Schottky Contacts to Bulk GaN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700613	1-6	11
118	Electron trapping at SiO ₂ /4H-SiC interface probed by transient capacitance measurements and atomic resolution chemical analysis. <i>Nanotechnology</i> , 2018 , 29, 395702	3-4	10
117	Growth of 4H-SiC Epitaxial Layer through Optimization of Buffer Layer. <i>Materials Science Forum</i> , 2018 , 924, 84-87	0-4	5
116	Temperature-Dependence Study of the Gate Current SiO ₂ /4H-SiC MOS Capacitors. <i>Materials Science Forum</i> , 2018 , 924, 473-476	0-4	

115	Emerging trends in wide band gap semiconductors (SiC and GaN) technology for power devices. <i>Microelectronic Engineering</i> , 2018 , 187-188, 66-77	2.5	163
114	Oxide Traps Probed by Transient Capacitance Measurements on Lateral SiO ₂ /4H-SiC MOSFETs. <i>Materials Science Forum</i> , 2018 , 924, 285-288	0.4	2
113	Processing Issues in SiC and GaN Power Devices Technology: The Cases of 4H-SiC Planar MOSFET and Recessed Hybrid GaN MISHEMT 2018 ,		2
112	Interface Electrical Properties of AlO Thin Films on Graphene Obtained by Atomic Layer Deposition with an in Situ Seedlike Layer. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 7761-7771	9.5	33
111	Channel Mobility in GaN Hybrid MOS-HEMT Using SiO ₂ as Gate Insulator. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 2893-2899	2.9	27
110	Properties of SiO ₂ /4H-SiC Interfaces with an Oxide Deposited by a High-Temperature Process. <i>Materials Science Forum</i> , 2017 , 897, 331-334	0.4	2
109	Silicon nitride surfaces as active substrate for electrical DNA biosensors. <i>Sensors and Actuators B: Chemical</i> , 2017 , 252, 492-502	8.5	14
108	Carbonization and transition layer effects on 3C-SiC film residual stress. <i>Journal of Crystal Growth</i> , 2017 , 473, 11-19	1.6	17
107	Anomalous Fowler-Nordheim Tunneling through SiO ₂ /4H-SiC Barrier Investigated by Temperature and Time Dependent Gate Current Measurements. <i>Materials Science Forum</i> , 2017 , 897, 123-126	0.4	
106	Effect of SiO ₂ interlayer on the properties of Al ₂ O ₃ thin films grown by plasma enhanced atomic layer deposition on 4H-SiC substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600365	1.6	7
105	Plasma enhanced atomic layer deposition of Al ₂ O ₃ gate dielectric thin films on AlGaIn/GaN substrates: The role of surface predeposition treatments. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2017 , 35, 01B140	2.9	5
104	Effects of interface states and near interface traps on the threshold voltage stability of GaN and SiC transistors employing SiO ₂ as gate dielectric. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2017 , 35, 01A101	1.3	16
103	Conductive Atomic Force Microscopy of Two-Dimensional Electron Systems: From AlGaIn/GaN Heterostructures to Graphene and MoS ₂ 2017 , 163-185		7
102	Conduction Mechanisms at Interface of AlN/SiN Dielectric Stacks with AlGaIn/GaN Heterostructures for Normally-off High Electron Mobility Transistors: Correlating Device Behavior with Nanoscale Interfaces Properties. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 35383-35390	9.5	21
101	Electrical characterization of trapping phenomena at SiO ₂ /SiC and SiO ₂ /GaN in MOS-based devices. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600366	1.6	4
100	Processing and Characterization of MOS Capacitors Fabricated on 2 nd -Off Axis 4H-SiC Epilayers. <i>Materials Science Forum</i> , 2016 , 858, 663-666	0.4	
99	Conduction Mechanisms at SiO ₂ /4H-SiC Interfaces in MOS-Based Devices Subjected to Post Deposition Annealing in N ₂ O. <i>Materials Science Forum</i> , 2016 , 858, 705-708	0.4	
98	Hydrogen Flux Influence on Homo-Epitaxial 4H-SiC Doping Concentration Profile for High Power Application. <i>Materials Science Forum</i> , 2016 , 858, 197-200	0.4	1

97	Nanoscale probing of the lateral homogeneity of donors concentration in nitridated SiO ₂ /4H-SiC interfaces. <i>Nanotechnology</i> , 2016 , 27, 315701	3.4	9
96	X-Ray Irradiation on 4H-SiC MOS Capacitors Processed under Different Annealing Conditions. <i>Materials Science Forum</i> , 2016 , 858, 659-662	0.4	1
95	Impact of Phosphorus Implantation on the Electrical Properties of SiO ₂ /4H-SiC Interfaces Annealed in N ₂ O. <i>Materials Science Forum</i> , 2016 , 858, 701-704	0.4	1
94	Atomic Layer Deposition of Al ₂ O ₃ Thin Films for Metal Insulator Semiconductor Applications on 4H-SiC. <i>Materials Science Forum</i> , 2016 , 858, 685-688	0.4	2
93	Electrical properties of SiO ₂ /SiC interfaces on 2°-off axis 4H-SiC epilayers. <i>Applied Surface Science</i> , 2016 , 364, 892-895	6.7	5
92	Trapping States in SiO ₂ /GaN MOS Capacitors Fabricated on Recessed AlGaN/GaN Heterostructures. <i>Materials Science Forum</i> , 2016 , 858, 1178-1181	0.4	
91	Laminated Al ₂ O ₃ /HfO ₂ layers grown by atomic layer deposition for microelectronics applications. <i>Thin Solid Films</i> , 2016 , 601, 68-72	2.2	9
90	Surface treatments on AlGaN/GaN heterostructures for gate dielectric Al ₂ O ₃ thin films grown by Atomic Layer Deposition. <i>Thin Solid Films</i> , 2016 , 617, 138-142	2.2	8
89	Near interface traps in SiO ₂ /4H-SiC metal-oxide-semiconductor field effect transistors monitored by temperature dependent gate current transient measurements. <i>Applied Physics Letters</i> , 2016 , 109, 012102	3.4	26
88	Negative charge trapping effects in Al ₂ O ₃ films grown by atomic layer deposition onto thermally oxidized 4H-SiC. <i>AIP Advances</i> , 2016 , 6, 075021	1.5	28
87	Voids-Free 3C-SiC/Si Interface for High Quality Epitaxial Layer. <i>Materials Science Forum</i> , 2016 , 858, 159-162		2
86	An insight into the epitaxial nanostructures of NiO and CeO ₂ thin film dielectrics for AlGaN/GaN heterostructures. <i>Materials Chemistry and Physics</i> , 2015 , 162, 461-468	4.4	10
85	Interface state density evaluation of high quality hetero-epitaxial 3C-SiC(001) for high-power MOSFET applications. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015 , 198, 14-19	3.1	14
84	Slow and fast traps in metal-oxide-semiconductor capacitors fabricated on recessed AlGaN/GaN heterostructures. <i>Applied Physics Letters</i> , 2015 , 106, 142903	3.4	30
83	Epitaxial Growth on 150 mm 2°-off Wafers. <i>Materials Science Forum</i> , 2015 , 821-823, 157-160	0.4	1
82	Industrial Approach for Next Generation of Power Devices Based on 4H-SiC. <i>Materials Science Forum</i> , 2015 , 821-823, 660-666	0.4	4
81	Electrical Properties Evaluation on High Quality Hetero-Epitaxial 3C-SiC(001) for MOSFET Applications. <i>Materials Science Forum</i> , 2015 , 821-823, 773-776	0.4	3
80	Effects of surface nature of different semiconductor substrates on the plasma enhanced atomic layer deposition growth of Al ₂ O ₃ gate dielectric thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2015 , 12, 980-984		5

79	Metal Organic Chemical Vapor Deposition of nickel oxide thin films for wide band gap device technology. <i>Thin Solid Films</i> , 2014 , 563, 50-55	2.2	25
78	Nanoscale electrical and structural modification induced by rapid thermal oxidation of AlGaIn/GaN heterostructures. <i>Nanotechnology</i> , 2014 , 25, 025201	3.4	19
77	Challenges for energy efficient wide band gap semiconductor power devices. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014 , 211, 2063-2071	1.6	78
76	Probing at Nanoscale Underneath the Gate Oxides in 4H-SiC MOS-Based Devices Annealed in N ₂ O and POCl ₃ . <i>Materials Science Forum</i> , 2014 , 806, 143-147	0.4	
75	Fowler-Nordheim tunneling at SiO ₂ /4H-SiC interfaces in metal-oxide-semiconductor field effect transistors. <i>Applied Physics Letters</i> , 2014 , 105, 142108	3.4	39
74	Origin of the Current Transport Anisotropy in Epitaxial Graphene Grown on Vicinal 4H-SiC (0001) Surfaces. <i>Materials Science Forum</i> , 2014 , 806, 103-107	0.4	1
73	Nanoscale Characterization of SiC Interfaces and Devices. <i>Materials Science Forum</i> , 2014 , 778-780, 407-413	0.4	1
72	Effects of the Growth Rate on the Quality of 4H Silicon Carbide Films for MOSFET Applications. <i>Materials Science Forum</i> , 2014 , 778-780, 95-98	0.4	1
71	Characterization of SiO ₂ /SiC Interfaces Annealed in N ₂ O or POCl ₃ . <i>Materials Science Forum</i> , 2014 , 778-780, 623-626	0.4	6
70	Recent advances on dielectrics technology for SiC and GaN power devices. <i>Applied Surface Science</i> , 2014 , 301, 9-18	6.7	97
69	Comparative study of gate oxide in 4H-SiC lateral MOSFETs subjected to post-deposition-annealing in N ₂ O and POCl ₃ . <i>Applied Physics A: Materials Science and Processing</i> , 2014 , 115, 333-339	2.6	28
68	Non-stoichiometry in LaCu ₃ Ti ₄ O ₁₂ (CCTO) ceramics. <i>RSC Advances</i> , 2013 , 3, 14580	3.7	75
67	Binary and complex oxide thin films for microelectronic applications: An insight into their growth and advanced nanoscopic investigation. <i>Surface and Coatings Technology</i> , 2013 , 230, 152-162	4.4	4
66	Impact of the Morphological and Electrical Properties of SiO ₂ /4H-SiC Interfaces on the Behavior of 4H-SiC MOSFETs. <i>ECS Journal of Solid State Science and Technology</i> , 2013 , 2, N3006-N3011	2	10
65	Nanoscale Probing of Interfaces in GaN for Devices Applications. <i>ECS Transactions</i> , 2013 , 50, 439-446	1	2
64	A Nanoscale Look in the Channel of 4H-SiC Lateral MOSFETs. <i>Materials Science Forum</i> , 2013 , 740-742, 699-702	0.4	1
63	Impact of Substrate Steps and of Monolayer-Bilayer Junctions on the Electronic Transport in Epitaxial Graphene on 4H-SiC (0001). <i>Materials Science Forum</i> , 2013 , 740-742, 113-116	0.4	2
62	Potentialities of Nickel Oxide as Dielectric for GaN and SiC Devices. <i>Materials Science Forum</i> , 2013 , 740-742, 777-780	0.4	2

61	Effects of a Post-Oxidation Annealing in Nitrous Oxide on the Morphological and Electrical Properties of SiO ₂ /4H-SiC Interfaces. <i>Materials Science Forum</i> , 2013 , 740-742, 715-718	0.4	1
60	Effects of a Post-Oxidation Annealing in Nitrous Oxide on the Morphological and Electrical Properties of SiO ₂ /4H-SiC Interfaces. <i>Materials Science Forum</i> , 2013 , 740-742, 719-722	0.4	3
59	Study of the Effects of Growth Rate, Miscut Direction and Postgrowth Argon Annealing on the Surface Morphology of Homoepitaxially Grown 4H Silicon Carbide Films. <i>Materials Science Forum</i> , 2013 , 740-742, 229-234	0.4	8
58	SiO ₂ /4H-SiC interface doping during post-deposition-annealing of the oxide in N ₂ O or POCl ₃ . <i>Applied Physics Letters</i> , 2013 , 103, 153508	3.4	61
57	High permittivity cerium oxide thin films on AlGa _N /Ga _N heterostructures. <i>Applied Physics Letters</i> , 2013 , 103, 112905	3.4	18
56	Scanning probe microscopy investigation of the mechanisms limiting electronic transport in substrate-supported graphene. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2013 , 10, 1188-1192		
55	A look underneath the SiO ₂ /4H-SiC interface after N ₂ O thermal treatments. <i>Beilstein Journal of Nanotechnology</i> , 2013 , 4, 249-54	3	16
54	Micro- and nanoscale electrical characterization of large-area graphene transferred to functional substrates. <i>Beilstein Journal of Nanotechnology</i> , 2013 , 4, 234-42	3	26
53	CaCu ₃ Ti ₄ O ₁₂ thin films on conductive oxide electrode: A comparative study between chemical and physical vapor deposition routes. <i>Materials Chemistry and Physics</i> , 2012 , 133, 1108-1115	4.4	3
52	Correlating macroscopic and nanoscale electrical modifications of SiO ₂ /4H-SiC interfaces upon post-oxidation-annealing in N ₂ O and POCl ₃ . <i>Applied Physics Letters</i> , 2012 , 101, 193501	3.4	44
51	Critical issues for interfaces to p-type SiC and Ga _N in power devices. <i>Applied Surface Science</i> , 2012 , 258, 8324-8333	6.7	47
50	Influence of the surface morphology on the channel mobility of lateral implanted 4H-SiC(0001) metal-oxide-semiconductor field-effect transistors. <i>Journal of Applied Physics</i> , 2012 , 112, 084501	2.5	26
49	Poole-Frenkel emission in epitaxial nickel oxide on AlGa _N /Ga _N heterostructures. <i>Applied Physics Letters</i> , 2012 , 101, 172901	3.4	29
48	Epitaxial NiO gate dielectric on AlGa _N /Ga _N heterostructures. <i>Applied Physics Letters</i> , 2012 , 100, 063511	3.4	35
47	Study of the Impact of Growth and Post-Growth Processes on the Surface Morphology of 4H Silicon Carbide Films. <i>Materials Science Forum</i> , 2012 , 717-720, 149-152	0.4	2
46	Nanoscale electrical probing of heterogeneous ceramics: the case of giant permittivity calcium copper titanate (CaCu ₃ Ti ₄ O ₁₂). <i>Nanoscale</i> , 2011 , 3, 1171-5	7.7	18
45	CaCu ₃ Ti ₄ O ₁₂ single crystals: insights on growth and nanoscopic investigation. <i>CrystEngComm</i> , 2011 , 13, 3900	3.3	11
44	On the Step Bunching Phenomena Observed on Etched and Homoepitaxially Grown 4H Silicon Carbide. <i>Materials Science Forum</i> , 2011 , 679-680, 358-361	0.4	10

43	Limiting mechanism of inversion channel mobility in Al-implanted lateral 4H-SiC metal-oxide semiconductor field-effect transistors. <i>Applied Physics Letters</i> , 2011 , 99, 072117	3.4	47
42	Scanning Probe Microscopy on heterogeneous CaCu ₃ Ti ₄ O ₁₂ thin films. <i>Nanoscale Research Letters</i> , 2011 , 6, 118	5	6
41	Nanoscale characterization of electrical transport at metal/3C-SiC interfaces. <i>Nanoscale Research Letters</i> , 2011 , 6, 120	5	5
40	Nanoscale probing of dielectric breakdown at SiO ₂ /3C-SiC interfaces. <i>Journal of Applied Physics</i> , 2011 , 109, 013707	2.5	7
39	Probing dielectric ceramics surface at sub-micrometer scale. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010 , 8, 012038	0.4	
38	Reliability of Thin Thermally Grown SiO ₂ on 3C-SiC Studied by Scanning Probe Microscopy. <i>Materials Science Forum</i> , 2010 , 645-648, 833-836	0.4	1
37	High capacitance density by CaCu ₃ Ti ₄ O ₁₂ thin films. <i>Journal of Applied Physics</i> , 2010 , 108, 074103	2.5	21
36	Impact of Morphological Features on the Dielectric Breakdown at SiO ₂ /3C-SiC Interfaces 2010 ,		2
35	Probing heterogeneity in ptcr-BaTiO ₃ thermistors by local probe electrical measurements. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010 , 8, 012037	0.4	
34	Detection of heterogeneities in single-crystal CaCu ₃ Ti ₄ O ₁₂ using conductive atomic force microscopy. <i>IOP Conference Series: Materials Science and Engineering</i> , 2010 , 8, 012018	0.4	2
33	Colossal Permittivity in Advanced Functional Heterogeneous Materials: The Relevance of the Local Measurements at Submicron Scale. <i>Nanoscience and Technology</i> , 2010 , 613-646	0.6	
32	Perovskite CaCu ₃ Ti ₄ O ₁₂ thin films for capacitive applications: From the growth to the nanoscopic imaging of the permittivity. <i>Journal of Applied Physics</i> , 2009 , 105, 061634	2.5	24
31	Preferential oxidation of stacking faults in epitaxial off-axis (111) 3C-SiC films. <i>Applied Physics Letters</i> , 2009 , 95, 111905	3.4	21
30	Direct imaging of the core-shell effect in positive temperature coefficient of resistance-BaTiO ₃ ceramics. <i>Applied Physics Letters</i> , 2009 , 95, 142904	3.4	24
29	CaCu ₃ Ti ₄ O ₁₂ Thin Films for Capacitive Applications: MOCVD Synthesis and Nanoscopic/microscopic Characterization. <i>ECS Transactions</i> , 2009 , 25, 135-142	1	2
28	Conductive atomic force microscopy and Scanning impedance microscopy for the imaging of electrical domain in CaCu ₃ Ti ₄ O ₁₂ perovskite oxide. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1232, 70101		
27	Localized electrical characterization of the giant permittivity effect in CaCu ₃ Ti ₄ O ₁₂ ceramics. <i>Applied Physics Letters</i> , 2008 , 92, 182907	3.4	44
26	Theoretical Monte Carlo Study of the Formation and Evolution of Defects in the Homoepitaxial Growth of SiC. <i>Materials Science Forum</i> , 2008 , 600-603, 135-138	0.4	16

25	3C-SiC Heteroepitaxy on (100), (111) and (110) Si Using Trichlorosilane (TCS) as the Silicon Precursor.. <i>Materials Science Forum</i> , 2008 , 600-603, 243-246	0.4	5
24	Growth of 3C-SiC on Si: Influence of Process Pressure. <i>Materials Science Forum</i> , 2008 , 600-603, 211-214	0.4	2
23	Defect formation and evolution in the step-flow growth of silicon carbide: A Monte Carlo study. <i>Journal of Crystal Growth</i> , 2008 , 310, 971-975	1.6	27
22	Carrier Transport in Advanced Semiconductor Materials 2008 , 63-103		4
21	Template-free and seedless growth of Pt nanocolumns: imaging and probing their nanoelectrical properties. <i>ACS Nano</i> , 2007 , 1, 183-90	16.7	7
20	Effects of high temperature annealing on MOCVD grown CaCu ₃ Ti ₄ O ₁₂ films on LaAlO ₃ substrates. <i>Surface and Coatings Technology</i> , 2007 , 201, 9243-9247	4.4	13
19	Chemical stability of CaCu ₃ Ti ₄ O ₁₂ thin films grown by MOCVD on different substrates. <i>Thin Solid Films</i> , 2007 , 515, 6470-6473	2.2	17
18	Experimental characterization of proteins immobilized on Si-based materials. <i>Microelectronic Engineering</i> , 2007 , 84, 468-473	2.5	20
17	Defects induced anomalous breakdown kinetics in Pr ₂ O ₃ by micro- and nano-characterization. <i>Microelectronics Reliability</i> , 2007 , 47, 640-644	1.2	2
16	Breakdown kinetics at nanometer scale of innovative MOS devices by conductive atomic force microscopy. <i>Microelectronic Engineering</i> , 2007 , 84, 441-445	2.5	9
15	Nanoscale Imaging of CaCu ₃ Ti ₄ O ₁₂ Dielectric Properties: The Role of Surface Defects. <i>Solid State Phenomena</i> , 2007 , 131-133, 443-448	0.4	1
14	Conductive Atomic Force Microscopy Studies on the Reliability of Thermally Oxidized SiO ₂ /4H-SiC. <i>Materials Science Forum</i> , 2007 , 556-557, 501-504	0.4	5
13	Electron Transport and Dielectric Breakdown Kinetics in Pr ₂ O ₃ High K Films. <i>Advances in Science and Technology</i> , 2006 , 46, 21-26	0.1	
12	Conductive atomic force microscopy studies of thin SiO ₂ layer degradation. <i>Applied Physics Letters</i> , 2006 , 88, 222104	3.4	38
11	Reliability of thermally oxidized SiO ₂ /4H-SiC by conductive atomic force microscopy. <i>Applied Physics Letters</i> , 2006 , 88, 212112	3.4	26
10	Calcium copper-titanate thin film growth: tailoring of the operational conditions through nanocharacterization and substrate nature effects. <i>Journal of Physical Chemistry B</i> , 2006 , 110, 17460-7	3.4	30
9	Praseodymium based high-k dielectrics grown on Si and SiC substrates. <i>Materials Science in Semiconductor Processing</i> , 2006 , 9, 1073-1078	4.3	11
8	From micro- to nanotransport properties in Pr ₂ O ₃ -based thin layers. <i>Journal of Applied Physics</i> , 2005 , 98, 044312	2.5	23

7	Effects of deposition temperature on the microstructural and electrical properties of praseodymium oxide-based films. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005 , 118, 117-121	3.1	11
6	Current Transport by Defects in Pr ₂ O ₃ High K Films. <i>Solid State Phenomena</i> , 2005 , 108-109, 717-722	0.4	
5	Breakdown kinetics of Pr ₂ O ₃ films by conductive-atomic force microscopy. <i>Applied Physics Letters</i> , 2005 , 87, 231913	3.4	32
4	Silica-Added, Composite Poly(vinyl alcohol) Membranes for Fuel Cell Application. <i>Journal of the Electrochemical Society</i> , 2005 , 152, A2400	3.9	59
3	Charge Trapping Mechanisms in Nitridated SiO ₂ / 4H-SiC MOSFET Interfaces: Threshold Voltage Instability and Interface Chemistry. <i>Materials Science Forum</i> ,1062, 160-164	0.4	
2	Electrical Scanning Probe Microscopy Investigation of Schottky and Metal-Oxide Junctions on Hetero-Epitaxial 3C-SiC on Silicon. <i>Materials Science Forum</i> ,1062, 400-405	0.4	
1	Ni/Heavily-Doped 4H-SiC Schottky Contacts. <i>Materials Science Forum</i> ,1062, 411-416	0.4	