

# Patrick Fiorenza

## List of Publications by Citations

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163  
ext. papers

2,599  
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#	Paper	IF	Citations
150	Emerging trends in wide band gap semiconductors (SiC and GaN) technology for power devices. <i>Microelectronic Engineering</i> , <b>2018</b> , 187-188, 66-77	2.5	163
149	Recent advances on dielectrics technology for SiC and GaN power devices. <i>Applied Surface Science</i> , <b>2014</b> , 301, 9-18	6.7	97
148	An Overview of Normally-Off GaN-Based High Electron Mobility Transistors. <i>Materials</i> , <b>2019</b> , 12,	3.5	92
147	Challenges for energy efficient wide band gap semiconductor power devices. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 2063-2071	1.6	78
146	Non-stoichiometry in $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ (CCTO) ceramics. <i>RSC Advances</i> , <b>2013</b> , 3, 14580	3.7	75
145	SiO <sub>2</sub> /4H-SiC interface doping during post-deposition-annealing of the oxide in N <sub>2</sub> O or POCl <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2013</b> , 103, 153508	3.4	61
144	Silica-Added, Composite Poly(vinyl alcohol) Membranes for Fuel Cell Application. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A2400	3.9	59
143	Critical issues for interfaces to p-type SiC and GaN in power devices. <i>Applied Surface Science</i> , <b>2012</b> , 258, 8324-8333	6.7	47
142	Limiting mechanism of inversion channel mobility in Al-implanted lateral 4H-SiC metal-oxide semiconductor field-effect transistors. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 072117	3.4	47
141	Characterization of SiO <sub>2</sub> /4H-SiC Interfaces in 4H-SiC MOSFETs: A Review. <i>Energies</i> , <b>2019</b> , 12, 2310	3.1	44
140	Correlating macroscopic and nanoscale electrical modifications of SiO <sub>2</sub> /4H-SiC interfaces upon post-oxidation-annealing in N <sub>2</sub> O and POCl <sub>3</sub> . <i>Applied Physics Letters</i> , <b>2012</b> , 101, 193501	3.4	44
139	Localized electrical characterization of the giant permittivity effect in CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> ceramics. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 182907	3.4	44
138	Fowler-Nordheim tunneling at SiO <sub>2</sub> /4H-SiC interfaces in metal-oxide-semiconductor field effect transistors. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 142108	3.4	39
137	Conductive atomic force microscopy studies of thin SiO <sub>2</sub> layer degradation. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 222104	3.4	38
136	Epitaxial NiO gate dielectric on AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 063511	3.4	35
135	Interface Electrical Properties of AlO Thin Films on Graphene Obtained by Atomic Layer Deposition with an in Situ Seedlike Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 7761-7771	9.5	33
134	Breakdown kinetics of Pr <sub>2</sub> O <sub>3</sub> films by conductive-atomic force microscopy. <i>Applied Physics Letters</i> , <b>2005</b> , 87, 231913	3.4	32

133	Slow and fast traps in metal-oxide-semiconductor capacitors fabricated on recessed AlGaIn/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 142903	3.4	30
132	Calcium copper-titanate thin film growth: tailoring of the operational conditions through nanocharacterization and substrate nature effects. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 17460-7	3.4	30
131	Poole-Frenkel emission in epitaxial nickel oxide on AlGaIn/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 172901	3.4	29
130	Comparative study of gate oxide in 4H-SiC lateral MOSFETs subjected to post-deposition-annealing in N <sub>2</sub> O and POCl <sub>3</sub> . <i>Applied Physics A: Materials Science and Processing</i> , <b>2014</b> , 115, 333-339	2.6	28
129	Negative charge trapping effects in Al <sub>2</sub> O <sub>3</sub> films grown by atomic layer deposition onto thermally oxidized 4H-SiC. <i>AIP Advances</i> , <b>2016</b> , 6, 075021	1.5	28
128	Channel Mobility in GaN Hybrid MOS-HEMT Using SiO <sub>2</sub> as Gate Insulator. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 2893-2899	2.9	27
127	Defect formation and evolution in the step-flow growth of silicon carbide: A Monte Carlo study. <i>Journal of Crystal Growth</i> , <b>2008</b> , 310, 971-975	1.6	27
126	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> , <b>2012</b> , 112, 084501	2.5	26
125	Micro- and nanoscale electrical characterization of large-area graphene transferred to functional substrates. <i>Beilstein Journal of Nanotechnology</i> , <b>2013</b> , 4, 234-42	3	26
124	Reliability of thermally oxidized SiO <sub>2</sub> /4H-SiC by conductive atomic force microscopy. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 212112	3.4	26
123	Near interface traps in SiO <sub>2</sub> /4H-SiC metal-oxide-semiconductor field effect transistors monitored by temperature dependent gate current transient measurements. <i>Applied Physics Letters</i> , <b>2016</b> , 109, 012102	3.4	26
122	Metal Organic Chemical Vapor Deposition of nickel oxide thin films for wide band gap device technology. <i>Thin Solid Films</i> , <b>2014</b> , 563, 50-55	2.2	25
121	Perovskite CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films for capacitive applications: From the growth to the nanoscopic imaging of the permittivity. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 061634	2.5	24
120	Direct imaging of the core-shell effect in positive temperature coefficient of resistance-BaTiO <sub>3</sub> ceramics. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 142904	3.4	24
119	From micro- to nanotransport properties in Pr <sub>2</sub> O <sub>3</sub> -based thin layers. <i>Journal of Applied Physics</i> , <b>2005</b> , 98, 044312	2.5	23
118	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 &amp; Interfaces</i> , <b>2017</b> , 9, 35383-35390	9.5	21
117	High capacitance density by CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 074103	2.5	21
116	Preferential oxidation of stacking faults in epitaxial off-axis (111) 3C-SiC films. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 111905	3.4	21

115	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> , <b>2019</b> , 93, 274-279	4.3	20
114	Experimental characterization of proteins immobilized on Si-based materials. <i>Microelectronic Engineering</i> , <b>2007</b> , 84, 468-473	2.5	20
113	Nanoscale electrical and structural modification induced by rapid thermal oxidation of AlGaIn/GaN heterostructures. <i>Nanotechnology</i> , <b>2014</b> , 25, 025201	3.4	19
112	High permittivity cerium oxide thin films on AlGaIn/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 112905	3.4	18
111	Nanoscale electrical probing of heterogeneous ceramics: the case of giant permittivity calcium copper titanate (CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> ). <i>Nanoscale</i> , <b>2011</b> , 3, 1171-5	7.7	18
110	Carbonization and transition layer effects on 3C-SiC film residual stress. <i>Journal of Crystal Growth</i> , <b>2017</b> , 473, 11-19	1.6	17
109	Temperature-dependent Fowler-Nordheim electron barrier height in SiO <sub>2</sub> /4H-SiC MOS capacitors. <i>Materials Science in Semiconductor Processing</i> , <b>2018</b> , 78, 38-42	4.3	17
108	Chemical stability of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films grown by MOCVD on different substrates. <i>Thin Solid Films</i> , <b>2007</b> , 515, 6470-6473	2.2	17
107	Effects of interface states and near interface traps on the threshold voltage stability of GaN and SiC transistors employing SiO <sub>2</sub> as gate dielectric. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2017</b> , 35, 01A101	1.3	16
106	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> , <b>2019</b> , 30, 284003	3.4	16
105	Raman probing of hydrogen-intercalated graphene on Si-face 4H-SiC. <i>Materials Science in Semiconductor Processing</i> , <b>2019</b> , 96, 145-152	4.3	16
104	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> , <b>2020</b> , 6, 1901171	6.4	16
103	A look underneath the SiO <sub>2</sub> /4H-SiC interface after N <sub>2</sub> O thermal treatments. <i>Beilstein Journal of Nanotechnology</i> , <b>2013</b> , 4, 249-54	3	16
102	Theoretical Monte Carlo Study of the Formation and Evolution of Defects in the Homoepitaxial Growth of SiC. <i>Materials Science Forum</i> , <b>2008</b> , 600-603, 135-138	0.4	16
101	Silicon nitride surfaces as active substrate for electrical DNA biosensors. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 252, 492-502	8.5	14
100	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> , <b>2015</b> , 198, 14-19	3.1	14
99	Effects of high temperature annealing on MOCVD grown CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> films on LaAlO <sub>3</sub> substrates. <i>Surface and Coatings Technology</i> , <b>2007</b> , 201, 9243-9247	4.4	13
98	Barrier Inhomogeneity of Ni Schottky Contacts to Bulk GaN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700613	1.6	11

97	CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> single crystals: insights on growth and nanoscopic investigation. <i>CrystEngComm</i> , <b>2011</b> , 13, 3900	3.3	11
96	Praseodymium based high-k dielectrics grown on Si and SiC substrates. <i>Materials Science in Semiconductor Processing</i> , <b>2006</b> , 9, 1073-1078	4.3	11
95	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> , <b>2005</b> , 118, 117-121	3.1	11
94	An insight into the epitaxial nanostructures of NiO and CeO <sub>2</sub> thin film dielectrics for AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures. <i>Materials Chemistry and Physics</i> , <b>2015</b> , 162, 461-468	4.4	10
93	Electron trapping at SiO <sub>2</sub> /4H-SiC interface probed by transient capacitance measurements and atomic resolution chemical analysis. <i>Nanotechnology</i> , <b>2018</b> , 29, 395702	3.4	10
92	Impact of the Morphological and Electrical Properties of SiO <sub>2</sub> /4H-SiC Interfaces on the Behavior of 4H-SiC MOSFETs. <i>ECS Journal of Solid State Science and Technology</i> , <b>2013</b> , 2, N3006-N3011	2	10
91	On the Step Bunching Phenomena Observed on Etched and Homoepitaxially Grown 4H Silicon Carbide. <i>Materials Science Forum</i> , <b>2011</b> , 679-680, 358-361	0.4	10
90	Determining oxide trapped charges in Al <sub>2</sub> O <sub>3</sub> insulating films on recessed AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures by gate capacitance transients measurements. <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 050307	1.4	9
89	Nanoscale probing of the lateral homogeneity of donors concentration in nitridated SiO <sub>2</sub> /4H-SiC interfaces. <i>Nanotechnology</i> , <b>2016</b> , 27, 315701	3.4	9
88	Laminated Al <sub>2</sub> O <sub>3</sub> /SiO <sub>2</sub> layers grown by atomic layer deposition for microelectronics applications. <i>Thin Solid Films</i> , <b>2016</b> , 601, 68-72	2.2	9
87	Breakdown kinetics at nanometer scale of innovative MOS devices by conductive atomic force microscopy. <i>Microelectronic Engineering</i> , <b>2007</b> , 84, 441-445	2.5	9
86	Understanding the role of threading dislocations on 4H-SiC MOSFET breakdown under high temperature reverse bias stress. <i>Nanotechnology</i> , <b>2020</b> , 31, 125203	3.4	9
85	Surface treatments on AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures for gate dielectric Al <sub>2</sub> O <sub>3</sub> thin films grown by Atomic Layer Deposition. <i>Thin Solid Films</i> , <b>2016</b> , 617, 138-142	2.2	8
84	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> , <b>2013</b> , 740-742, 229-234	0.4	8
83	Ni Schottky barrier on heavily doped phosphorous implanted 4H-SiC. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 445107	3	8
82	Effect of SiO <sub>2</sub> interlayer on the properties of Al <sub>2</sub> O <sub>3</sub> thin films grown by plasma enhanced atomic layer deposition on 4H-SiC substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2017</b> , 214, 1600365	1.6	7
81	Properties of Al <sub>2</sub> O <sub>3</sub> thin films deposited on 4H-SiC by reactive ion sputtering. <i>Materials Science in Semiconductor Processing</i> , <b>2019</b> , 93, 290-294	4.3	7
80	Conductive Atomic Force Microscopy of Two-Dimensional Electron Systems: From AlGa <sub>N</sub> /Ga <sub>N</sub> Heterostructures to Graphene and MoS <sub>2</sub> <b>2017</b> , 163-185		7

79	Nanoscale probing of dielectric breakdown at SiO <sub>2</sub> /3C-SiC interfaces. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 013707	2.5	7
78	Template-free and seedless growth of Pt nanocolumns: imaging and probing their nanoelectrical properties. <i>ACS Nano</i> , <b>2007</b> , 1, 183-90	16.7	7
77	Correlating electron trapping and structural defects in Al <sub>2</sub> O <sub>3</sub> thin films deposited by plasma enhanced atomic layer deposition. <i>AIP Advances</i> , <b>2020</b> , 10, 125017	1.5	7
76	Selective Doping in Silicon Carbide Power Devices. <i>Materials</i> , <b>2021</b> , 14,	3.5	7
75	Characterization of SiO <sub>2</sub> /SiC Interfaces Annealed in N <sub>2</sub> O or POCl <sub>3</sub> . <i>Materials Science Forum</i> , <b>2014</b> , 778-780, 623-626	0.4	6
74	Scanning Probe Microscopy on heterogeneous CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 118	5	6
73	Active dopant profiling and Ohmic contacts behavior in degenerate n-type implanted silicon carbide. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 013502	3.4	6
72	Effects of Thermal Annealing Processes in Phosphorous Implanted 4H-SiC Layers. <i>Materials Science Forum</i> , <b>2019</b> , 963, 407-411	0.4	6
71	Interfacial electrical and chemical properties of deposited SiO <sub>2</sub> layers in lateral implanted 4H-SiC MOSFETs subjected to different nitridations. <i>Applied Surface Science</i> , <b>2021</b> , 557, 149752	6.7	6
70	Plasma enhanced atomic layer deposition of Al <sub>2</sub> O <sub>3</sub> gate dielectric thin films on AlGaN/GaN substrates: The role of surface predeposition treatments. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2017</b> , 35, 01B140	2.9	5
69	Electrical properties of SiO <sub>2</sub> /SiC interfaces on 2 $\theta$ -off axis 4H-SiC epilayers. <i>Applied Surface Science</i> , <b>2016</b> , 364, 892-895	6.7	5
68	Growth of 4H-SiC Epitaxial Layer through Optimization of Buffer Layer. <i>Materials Science Forum</i> , <b>2018</b> , 924, 84-87	0.4	5
67	Effects of surface nature of different semiconductor substrates on the plasma enhanced atomic layer deposition growth of Al <sub>2</sub> O <sub>3</sub> gate dielectric thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2015</b> , 12, 980-984		5
66	Nanoscale characterization of electrical transport at metal/3C-SiC interfaces. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 120	5	5
65	3C-SiC Heteroepitaxy on (100), (111) and (110) Si Using Trichlorosilane (TCS) as the Silicon Precursor.. <i>Materials Science Forum</i> , <b>2008</b> , 600-603, 243-246	0.4	5
64	Conductive Atomic Force Microscopy Studies on the Reliability of Thermally Oxidized SiO <sub>2</sub> /4H-SiC. <i>Materials Science Forum</i> , <b>2007</b> , 556-557, 501-504	0.4	5
63	Identification of two trapping mechanisms responsible of the threshold voltage variation in SiO <sub>2</sub> /4H-SiC MOSFETs. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 103502	3.4	5
62	Gold nanoparticle assisted synthesis of MoS <sub>2</sub> monolayers by chemical vapor deposition. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 4826-4833	5.1	5



61	Industrial Approach for Next Generation of Power Devices Based on 4H-SiC. <i>Materials Science Forum</i> , <b>2015</b> , 821-823, 660-666	0.4	4
60	Binary and complex oxide thin films for microelectronic applications: An insight into their growth and advanced nanoscopic investigation. <i>Surface and Coatings Technology</i> , <b>2013</b> , 230, 152-162	4.4	4
59	Carrier Transport in Advanced Semiconductor Materials <b>2008</b> , 63-103		4
58	On the origin of the premature breakdown of thermal oxide on 3C-SiC probed by electrical scanning probe microscopy. <i>Applied Surface Science</i> , <b>2020</b> , 526, 146656	6.7	4
57	Electrical characterization of trapping phenomena at SiO <sub>2</sub> /SiC and SiO <sub>2</sub> /GaN in MOS-based devices. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2017</b> , 214, 1600366	1.6	4
56	Electrical Properties Evaluation on High Quality Hetero-Epitaxial 3C-SiC(001) for MOSFET Applications. <i>Materials Science Forum</i> , <b>2015</b> , 821-823, 773-776	0.4	3
55	CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> thin films on conductive oxide electrode: A comparative study between chemical and physical vapor deposition routes. <i>Materials Chemistry and Physics</i> , <b>2012</b> , 133, 1108-1115	4.4	3
54	Effects of a Post-Oxidation Annealing in Nitrous Oxide on the Morphological and Electrical Properties of SiO <sub>2</sub> /4H-SiC Interfaces. <i>Materials Science Forum</i> , <b>2013</b> , 740-742, 719-722	0.4	3
53	Forward and reverse current transport mechanisms in tungsten carbide Schottky contacts on AlGaN/GaN heterostructures. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 234501	2.5	3
52	High-Resolution Two-Dimensional Imaging of the 4H-SiC MOSFET Channel by Scanning Capacitance Microscopy. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	3
51	Properties of SiO <sub>2</sub> /4H-SiC Interfaces with an Oxide Deposited by a High-Temperature Process. <i>Materials Science Forum</i> , <b>2017</b> , 897, 331-334	0.4	2
50	Nanolaminated Al <sub>2</sub> O <sub>3</sub> /HfO <sub>2</sub> dielectrics for silicon carbide based devices. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2020</b> , 38, 032410	2.9	2
49	Atomic Layer Deposition of Al <sub>2</sub> O <sub>3</sub> Thin Films for Metal Insulator Semiconductor Applications on 4H-SiC. <i>Materials Science Forum</i> , <b>2016</b> , 858, 685-688	0.4	2
48	Nanoscale Probing of Interfaces in GaN for Devices Applications. <i>ECS Transactions</i> , <b>2013</b> , 50, 439-446	1	2
47	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> , <b>2013</b> , 740-742, 113-116	0.4	2
46	Potentialities of Nickel Oxide as Dielectric for GaN and SiC Devices. <i>Materials Science Forum</i> , <b>2013</b> , 740-742, 777-780	0.4	2
45	Impact of Morphological Features on the Dielectric Breakdown at SiO <sub>2</sub> /3C-SiC Interfaces <b>2010</b> ,		2
44	CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> Thin Films for Capacitive Applications: MOCVD Synthesis and Nanoscopic/microscopic Characterization. <i>ECS Transactions</i> , <b>2009</b> , 25, 135-142	1	2

43	Study of the Impact of Growth and Post-Growth Processes on the Surface Morphology of 4H Silicon Carbide Films. <i>Materials Science Forum</i> , <b>2012</b> , 717-720, 149-152	0.4	2
42	Detection of heterogeneities in single-crystal CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> using conductive atomic force microscopy. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2010</b> , 8, 012018	0.4	2
41	Growth of 3C-SiC on Si: Influence of Process Pressure. <i>Materials Science Forum</i> , <b>2008</b> , 600-603, 211-214	0.4	2
40	Defects induced anomalous breakdown kinetics in Pr <sub>2</sub> O <sub>3</sub> by micro- and nano-characterization. <i>Microelectronics Reliability</i> , <b>2007</b> , 47, 640-644	1.2	2
39	Structural and Insulating Behaviour of High-Permittivity Binary Oxide Thin Films for Silicon Carbide and Gallium Nitride Electronic Devices.. <i>Materials</i> , <b>2022</b> , 15,	3.5	2
38	Early Growth Stages of Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> ) Insulating Layers by Thermal- and Plasma-Enhanced Atomic Layer Deposition on AlGaN/GaN Heterostructures. <i>ACS Applied Electronic Materials</i> , <b>2022</b> , 4, 406-415	4	2
37	Temperature and time dependent electron trapping in Al <sub>2</sub> O <sub>3</sub> thin films onto AlGaN/GaN heterostructures. <i>Applied Surface Science</i> , <b>2022</b> , 579, 152136	6.7	2
36	Status and Prospects of Cubic Silicon Carbide Power Electronics Device Technology. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
35	Voids-Free 3C-SiC/Si Interface for High Quality Epitaxial Layer. <i>Materials Science Forum</i> , <b>2016</b> , 858, 159-162	2	2
34	Fabrication and Characterization of Ohmic Contacts to 3C-SiC Layers Grown on Silicon. <i>Materials Science Forum</i> , <b>2019</b> , 963, 485-489	0.4	2
33	Electrical Properties of Thermal Oxide on 3C-SiC Layers Grown on Silicon. <i>Materials Science Forum</i> , <b>2019</b> , 963, 479-482	0.4	2
32	Oxide Traps Probed by Transient Capacitance Measurements on Lateral SiO <sub>2</sub> /4H-SiC MOSFETs. <i>Materials Science Forum</i> , <b>2018</b> , 924, 285-288	0.4	2
31	Processing Issues in SiC and GaN Power Devices Technology: The Cases of 4H-SiC Planar MOSFET and Recessed Hybrid GaN MISHEMT <b>2018</b> ,		2
30	Epitaxial Growth on 150 mm 2 $\mu$ off Wafers. <i>Materials Science Forum</i> , <b>2015</b> , 821-823, 157-160	0.4	1
29	Hydrogen Flux Influence on Homo-Epitaxial 4H-SiC Doping Concentration Profile for High Power Application. <i>Materials Science Forum</i> , <b>2016</b> , 858, 197-200	0.4	1
28	X-Ray Irradiation on 4H-SiC MOS Capacitors Processed under Different Annealing Conditions. <i>Materials Science Forum</i> , <b>2016</b> , 858, 659-662	0.4	1
27	Impact of Phosphorus Implantation on the Electrical Properties of SiO <sub>2</sub> /4H-SiC Interfaces Annealed in N <sub>2</sub> O. <i>Materials Science Forum</i> , <b>2016</b> , 858, 701-704	0.4	1
26	Origin of the Current Transport Anisotropy in Epitaxial Graphene Grown on Vicinal 4H-SiC (0001) Surfaces. <i>Materials Science Forum</i> , <b>2014</b> , 806, 103-107	0.4	1



25	Nanoscale Characterization of SiC Interfaces and Devices. <i>Materials Science Forum</i> , <b>2014</b> , 778-780, 407-413	0.4	1
24	Effects of the Growth Rate on the Quality of 4H Silicon Carbide Films for MOSFET Applications. <i>Materials Science Forum</i> , <b>2014</b> , 778-780, 95-98	0.4	1
23	A Nanoscale Look in the Channel of 4H-SiC Lateral MOSFETs. <i>Materials Science Forum</i> , <b>2013</b> , 740-742, 699-702	0.4	1
22	Effects of a Post-Oxidation Annealing in Nitrous Oxide on the Morphological and Electrical Properties of SiO <sub>2</sub> /4H-SiC Interfaces. <i>Materials Science Forum</i> , <b>2013</b> , 740-742, 715-718	0.4	1
21	Reliability of Thin Thermally Grown SiO <sub>2</sub> on 3C-SiC Studied by Scanning Probe Microscopy. <i>Materials Science Forum</i> , <b>2010</b> , 645-648, 833-836	0.4	1
20	Nanoscale Imaging of CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> Dielectric Properties: The Role of Surface Defects. <i>Solid State Phenomena</i> , <b>2007</b> , 131-133, 443-448	0.4	1
19	Nanoscale Insights on the Origin of the Power MOSFETs Breakdown after Extremely Long High Temperature Reverse Bias Stress. <i>Materials Science Forum</i> , <b>2020</b> , 1004, 433-438	0.4	1
18	Anomalous Fowler-Nordheim Tunneling through SiO <sub>2</sub> /4H-SiC Barrier Investigated by Temperature and Time Dependent Gate Current Measurements. <i>Materials Science Forum</i> , <b>2017</b> , 897, 123-126	0.4	
17	Processing and Characterization of MOS Capacitors Fabricated on 2°-Off Axis 4H-SiC Epilayers. <i>Materials Science Forum</i> , <b>2016</b> , 858, 663-666	0.4	
16	Conduction Mechanisms at SiO <sub>2</sub> /4H-SiC Interfaces in MOS-Based Devices Subjected to Post Deposition Annealing in N <sub>2</sub> O. <i>Materials Science Forum</i> , <b>2016</b> , 858, 705-708	0.4	
15	Trapping States in SiO <sub>2</sub> /GaN MOS Capacitors Fabricated on Recessed AlGaN/GaN Heterostructures. <i>Materials Science Forum</i> , <b>2016</b> , 858, 1178-1181	0.4	
14	Temperature-Dependence Study of the Gate Current SiO <sub>2</sub> /4H-SiC MOS Capacitors. <i>Materials Science Forum</i> , <b>2018</b> , 924, 473-476	0.4	
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12	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> , <b>2013</b> , 10, 1188-1192		
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8	Electron Transport and Dielectric Breakdown Kinetics in Pr <sub>2</sub> O <sub>3</sub> High K Films. <i>Advances in Science and Technology</i> , <b>2006</b> , 46, 21-26	0.1	

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