

Filippo Giannazzo

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316
papers

5,505
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40
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58
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336
ext. papers

6,211
ext. citations

3.2
avg, IF

5.84
L-index

#	Paper	IF	Citations
316	Ion irradiation and defect formation in single layer graphene. <i>Carbon</i> , 2009 , 47, 3201-3207	10.4	186
315	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
314	Barrier inhomogeneity and electrical properties of Pt/TaN Schottky contacts. <i>Journal of Applied Physics</i> , 2007 , 102, 113701	2.5	143
313	Atomistic origins of CH ₃ NH ₃ PbI ₃ degradation to PbI ₂ in vacuum. <i>Applied Physics Letters</i> , 2015 , 106, 131904	3.4	141
312	Recent advances on dielectrics technology for SiC and GaN power devices. <i>Applied Surface Science</i> , 2014 , 301, 9-18	6.7	97
311	Screening length and quantum capacitance in graphene by scanning probe microscopy. <i>Nano Letters</i> , 2009 , 9, 23-9	11.5	95
310	Anchoring molecular magnets on the si(100) surface. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 4081-4	16.4	95
309	Electrical properties of the graphene/4H-SiC (0001) interface probed by scanning current spectroscopy. <i>Physical Review B</i> , 2009 , 80,	3.3	94
308	Mapping the density of scattering centers limiting the electron mean free path in graphene. <i>Nano Letters</i> , 2011 , 11, 4612-8	11.5	84
307	Electronic transport at monolayer-bilayer junctions in epitaxial graphene on SiC. <i>Physical Review B</i> , 2012 , 86,	3.3	79
306	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
305	Surface and interface issues in wide band gap semiconductor electronics. <i>Applied Surface Science</i> , 2010 , 256, 5727-5735	6.7	75
304	Similar Structural Dynamics for the Degradation of CH ₃ NH ₃ PbI ₃ in Air and in Vacuum. <i>ChemPhysChem</i> , 2015 , 16, 3064-71	3.2	68
303	XPS and AFM characterization of the enzyme glucose oxidase immobilized on SiO(2) surfaces. <i>Langmuir</i> , 2008 , 24, 1965-72	4	67
302	Delaminated graphene at silicon carbide facets: atomic scale imaging and spectroscopy. <i>ACS Nano</i> , 2013 , 7, 3045-52	16.7	65
301	Ambipolar MoS Transistors by Nanoscale Tailoring of Schottky Barrier Using Oxygen Plasma Functionalization. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 23164-23174	9.5	62
300	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

299	Self-organization of gold nanoclusters on hexagonal SiC and SiO ₂ surfaces. <i>Journal of Applied Physics</i> , 2007 , 101, 064306	2.5	59
298	Nanoscale inhomogeneity of the Schottky barrier and resistivity in MoS ₂ multilayers. <i>Physical Review B</i> , 2015 , 92,	3.3	58
297	Assessing the performance of two-dimensional dopant profiling techniques. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004 , 22, 385		58
296	Current transport in graphene/AlGaIn/GaN vertical heterostructures probed at nanoscale. <i>Nanoscale</i> , 2014 , 6, 8671-80	7.7	57
295	Structural and transport properties in alloyed Ti/Al Ohmic contacts formed on p-type Al-implanted 4H-SiC annealed at high temperature. <i>Journal Physics D: Applied Physics</i> , 2011 , 44, 255302	3	57
294	Vertical Transistors Based on 2D Materials: Status and Prospects. <i>Crystals</i> , 2018 , 8, 70	2.3	56
293	Nanoscale carrier transport in TiAlNiAu Ohmic contacts on AlGaIn epilayers grown on Si(111). <i>Applied Physics Letters</i> , 2006 , 89, 022103	3.4	56
292	Nanostructuring in Ge by self-ion implantation. <i>Journal of Applied Physics</i> , 2010 , 107, 084314	2.5	55
291	Temperature behavior of inhomogeneous Pt/GaN Schottky contacts. <i>Applied Physics Letters</i> , 2007 , 90, 092119	3.4	55
290	Role of graphene/substrate interface on the local transport properties of the two-dimensional electron gas. <i>Applied Physics Letters</i> , 2010 , 97, 132101	3.4	54
289	Nanoscale transport properties at silicon carbide interfaces. <i>Journal Physics D: Applied Physics</i> , 2010 , 43, 223001	3	51
288	Critical issues for interfaces to p-type SiC and GaN in power devices. <i>Applied Surface Science</i> , 2012 , 258, 8324-8333	6.7	47
287	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
286	Nanoscale structural characterization of epitaxial graphene grown on off-axis 4H-SiC (0001). <i>Nanoscale Research Letters</i> , 2011 , 6, 269	5	46
285	Acceptor, compensation, and mobility profiles in multiple Al implanted 4H-SiC. <i>Applied Physics Letters</i> , 2007 , 91, 202104	3.4	46
284	Microscopic mechanisms of graphene electrolytic delamination from metal substrates. <i>Applied Physics Letters</i> , 2014 , 104, 233105	3.4	45
283	Size-dependent Schottky Barrier Height in self-assembled gold nanoparticles. <i>Applied Physics Letters</i> , 2006 , 89, 243113	3.4	45
282	Characterization of SiO ₂ /4H-SiC Interfaces in 4H-SiC MOSFETs: A Review. <i>Energies</i> , 2019 , 12, 2310	3.1	44

281	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
280	Thermal stability of the current transport mechanisms in Ni-based Ohmic contacts on n- and p-implanted 4H-SiC. <i>Semiconductor Science and Technology</i> , 2014 , 29, 075018	1.8	42
279	Toward an ideal Schottky barrier on 3C-SiC. <i>Applied Physics Letters</i> , 2009 , 95, 081907	3.4	41
278	Quantitative carrier profiling in ion-implanted 6H-SiC. <i>Applied Physics Letters</i> , 2001 , 79, 1211-1213	3.4	41
277	Transport localization in heterogeneous Schottky barriers of quantum-defined metal films. <i>Europhysics Letters</i> , 2006 , 74, 686-692	1.6	40
276	Normal and abnormal grain growth in nanostructured gold film. <i>Journal of Applied Physics</i> , 2009 , 105, 054311	2.5	39
275	Atomic Force Microscopy Study of the Kinetic Roughening in Nanostructured Gold Films on SiO ₂ . <i>Nanoscale Research Letters</i> , 2009 , 4, 262-8	5	39
274	Direct growth of quasi-free-standing epitaxial graphene on nonpolar SiC surfaces. <i>Physical Review B</i> , 2013 , 88,	3.3	38
273	Influence of high-temperature GaN annealed surface on the electrical properties of Ni/GaN Schottky contacts. <i>Journal of Applied Physics</i> , 2008 , 104, 093706	2.5	38
272	Layer uniformity in glucose oxidase immobilization on SiO ₂ surfaces. <i>Applied Surface Science</i> , 2007 , 253, 9116-9123	6.7	38
271	Study of interface states and oxide quality to avoid contrast reversal in scanning capacitance microscopy. <i>Applied Physics Letters</i> , 2002 , 81, 1824-1826	3.4	38
270	Smart high- ϵ nanodielectrics using solid supported polyoxometalate-rich nanostructures. <i>ACS Nano</i> , 2011 , 5, 9992-9	16.7	37
269	Nanoscale current transport through Schottky contacts on wide bandgap semiconductors. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 789		37
268	Graphene p-Type Doping and Stability by Thermal Treatments in Molecular Oxygen Controlled Atmosphere. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 22718-22723	3.8	36
267	Experimental aspects and modeling for quantitative measurements in scanning capacitance microscopy. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004 , 22, 2391		35
266	Nitrogen Soaking Promotes Lattice Recovery in Polycrystalline Hybrid Perovskites. <i>Advanced Energy Materials</i> , 2019 , 9, 1803450	21.8	34
265	Kinetic mechanism of the thermal-induced self-organization of Au/Si nanodroplets on Si(100): Size and roughness evolution. <i>Journal of Applied Physics</i> , 2008 , 104, 024310	2.5	34
264	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

263	Graphene integration with nitride semiconductors for high power and high frequency electronics. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600460	1.6	33
262	High-resolution scanning capacitance microscopy of silicon devices by surface beveling. <i>Applied Physics Letters</i> , 2000 , 76, 2565-2567	3.4	32
261	Dielectric thickness dependence of capacitive behavior in graphene deposited on silicon dioxide. <i>Journal of Vacuum Science & Technology B</i> , 2009 , 27, 868		31
260	Self-organization of Au nanoclusters on the SiO ₂ surface induced by 200keV-Ar ⁺ irradiation. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 257, 810-814	1.2	31
259	Microstructure of Au nanoclusters formed in and on SiO ₂ . <i>Superlattices and Microstructures</i> , 2008 , 44, 588-598	2.8	31
258	Irradiation damage in graphene on SiO ₂ probed by local mobility measurements. <i>Applied Physics Letters</i> , 2009 , 95, 263109	3.4	30
257	Impact of contact resistance on the electrical properties of MoS transistors at practical operating temperatures. <i>Beilstein Journal of Nanotechnology</i> , 2017 , 8, 254-263	3	29
256	Poole-Frenkel emission in epitaxial nickel oxide on AlGa _N /Ga _N heterostructures. <i>Applied Physics Letters</i> , 2012 , 101, 172901	3.4	29
255	Scanning capacitance microscopy on ultranarrow doping profiles in Si. <i>Applied Physics Letters</i> , 2003 , 83, 2659-2661	3.4	29
254	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
253	Nanoscale phenomena ruling deposition and intercalation of AlN at the graphene/SiC interface. <i>Nanoscale</i> , 2020 , 12, 19470-19476	7.7	28
252	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
251	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
250	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
249	Role of the Potential Barrier in the Electrical Performance of the Graphene/SiC Interface. <i>Crystals</i> , 2017 , 7, 162	2.3	25
248	Nanoscale structural and electrical evolution of Ta- and Ti-based contacts on AlGa _N /Ga _N heterostructures. <i>Journal of Applied Physics</i> , 2013 , 114, 083717	2.5	25
247	Ti/Al ohmic contacts on AlGa _N /Ga _N heterostructures with different defect density. <i>Applied Surface Science</i> , 2014 , 314, 546-551	6.7	24
246	Ion irradiation of inhomogeneous Schottky barriers on silicon carbide. <i>Journal of Applied Physics</i> , 2005 , 97, 123502	2.5	24

245	Indium Nitride at the 2D Limit. <i>Advanced Materials</i> , 2021 , 33, e2006660	24	24
244	Effect of temperature bias annealing on the hysteresis and subthreshold behavior of multilayer MoS ₂ transistors. <i>Physica Status Solidi - Rapid Research Letters</i> , 2016 , 10, 797-801	2.5	23
243	High-Performance Graphene/AlGa _N /Ga _N Schottky Junctions for Hot Electron Transistors. <i>ACS Applied Electronic Materials</i> , 2019 , 1, 2342-2354	4	23
242	A Review on Metal Nanoparticles Nucleation and Growth on/in Graphene. <i>Crystals</i> , 2017 , 7, 219	2.3	23
241	From Schottky to Ohmic graphene contacts to AlGa _N /Ga _N heterostructures: Role of the AlGa _N layer microstructure. <i>Applied Physics Letters</i> , 2014 , 105, 063117	3.4	23
240	Genesis and evolution of extended defects: The role of evolving interface instabilities in cubic SiC. <i>Applied Physics Reviews</i> , 2020 , 7, 021402	17.3	22
239	Ion beam induced defects in graphene: Raman spectroscopy and DFT calculations. <i>Journal of Molecular Structure</i> , 2011 , 993, 506-509	3.4	22
238	Electrical behavior of AlGa _N /Ga _N heterostructures upon high-temperature selective oxidation. <i>Journal of Applied Physics</i> , 2009 , 106, 023703	2.5	22
237	Drift mobility in quantum nanostructures by scanning probe microscopy. <i>Applied Physics Letters</i> , 2006 , 88, 043117	3.4	22
236	Carrier concentration profiles in 6H-SiC by scanning capacitance microscopy. <i>Materials Science in Semiconductor Processing</i> , 2001 , 4, 195-199	4.3	22
235	Multi-scale investigation of interface properties, stacking order and decoupling of few layer graphene on C-face 4H-SiC. <i>Carbon</i> , 2017 , 116, 722-732	10.4	21
234	Effect of air on oxygen p-doped graphene on SiO ₂ . <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016 , 213, 2341-2344	1.6	21
233	Conduction Mechanisms at Interface of AlN/SiN Dielectric Stacks with AlGa _N /Ga _N 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
232	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
231	Self-organization and nanostructural control in thin film heterojunctions. <i>Nanoscale</i> , 2014 , 6, 3566-75	7.7	20
230	Monolayer graphene doping and strain dynamics induced by thermal treatments in controlled atmosphere. <i>Carbon</i> , 2018 , 127, 270-279	10.4	20
229	Nanoscale electrical and structural modification induced by rapid thermal oxidation of AlGa _N /Ga _N heterostructures. <i>Nanotechnology</i> , 2014 , 25, 025201	3.4	19
228	Nanostructured TiO ₂ Grown by Low-Temperature Reactive Sputtering for Planar Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2019 , 2, 6218-6229	6.1	18

227	Study of the Anchoring Process of Tethered Unsymmetrical Zn-Phthalocyanines on TiO ₂ Nanostructured Thin Films. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 11176-11185	3.8	18
226	Optical, morphological and spectro- scopic characterization of graphene on SiO ₂ . <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, NA-NA		18
225	Material proposal for 2D indium oxide. <i>Applied Surface Science</i> , 2021 , 548, 149275	6.7	18
224	Barrier inhomogeneity in vertical Schottky diodes on free standing gallium nitride. <i>Materials Science in Semiconductor Processing</i> , 2019 , 94, 164-170	4.3	17
223	Conductive Atomic Force Microscopy of Semiconducting Transition Metal Dichalcogenides and Heterostructures. <i>Nanomaterials</i> , 2020 , 10,	5.4	17
222	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
221	Interface disorder probed at the atomic scale for graphene grown on the C face of SiC. <i>Physical Review B</i> , 2015 , 91,	3.3	17
220	Simulation of scanning capacitance microscopy measurements on micro-sectioned and bevelled n+ β samples. <i>Materials Science in Semiconductor Processing</i> , 2001 , 4, 85-88	4.3	17
219	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
218	Morphological and electrical properties of Nickel based Ohmic contacts formed by laser annealing process on n-type 4H-SiC. <i>Materials Science in Semiconductor Processing</i> , 2019 , 97, 62-66	4.3	16
217	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
216	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
215	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
214	Advances in the fabrication of graphene transistors on flexible substrates. <i>Beilstein Journal of Nanotechnology</i> , 2017 , 8, 467-474	3	16
213	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
212	Improved Ni/3C-SiC contacts by effective contact area and conductivity increases at the nanoscale. <i>Applied Physics Letters</i> , 2009 , 94, 112104	3.4	16
211	Role of surface nanovoids on interstitial trapping in He implanted crystalline Si. <i>Applied Physics Letters</i> , 2006 , 88, 191910	3.4	16
210	Temperature dependent forward current-voltage characteristics of Ni/Au Schottky contacts on AlGaIn/GaN heterostructures described by a two diodes model. <i>Journal of Applied Physics</i> , 2017 , 121, 045701	2.5	15

209	Seed-Layer-Free Atomic Layer Deposition of Highly Uniform Al ₂ O ₃ Thin Films onto Monolayer Epitaxial Graphene on Silicon Carbide. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900097	4.6	15
208	Quantitative determination of depth carrier profiles in ion-implanted Gallium Nitride. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 257, 336-339	1.2	15
207	Nanoscale voltage tunable tunnel rectifier by gold nanostructures embedded in SiO ₂ . <i>Applied Physics Letters</i> , 2006 , 89, 263108	3.4	15
206	High growth rate process in a SiC horizontal CVD reactor using HCl. <i>Microelectronic Engineering</i> , 2006 , 83, 48-50	2.5	15
205	Carrier distribution in quantum nanostructures by scanning capacitance microscopy. <i>Journal of Applied Physics</i> , 2005 , 97, 014302	2.5	15
204	Two-dimensional profiling and size effects on the transient enhanced diffusion of ultralow-energy B implants in Si. <i>Applied Physics Letters</i> , 2001 , 78, 598-600	3.4	15
203	Direct Probing of Grain Boundary Resistance in Chemical Vapor Deposition-Grown Monolayer MoS ₂ by Conductive Atomic Force Microscopy. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 1900393 ²⁻⁵	3.5	15
202	Near-surface processing on AlGaN/GaN heterostructures: a nanoscale electrical and structural characterization. <i>Nanoscale Research Letters</i> , 2011 , 6, 132	5	14
201	Thermodynamic Properties of Supported and Embedded Metallic Nanocrystals: Gold on/in SiO ₂ . <i>Nanoscale Research Letters</i> , 2008 , 3, 454-60	5	14
200	Fluorine counter doping effect in B-doped Si. <i>Applied Physics Letters</i> , 2007 , 91, 132101	3.4	14
199	Fabrication and Characterization of Graphene Heterostructures with Nitride Semiconductors for High Frequency Vertical Transistors. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018 , 215, 1700653	1.6	14
198	Radial junctions formed by conformal chemical doping for innovative hole-based solar cells. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2013 , 178, 686-690	3.1	13
197	Two-dimensional electron gas insulation by local surface thin thermal oxidation in AlGaN/GaN heterostructures. <i>Applied Physics Letters</i> , 2008 , 92, 252101	3.4	13
196	Substrate and atmosphere influence on oxygen p-doped graphene. <i>Carbon</i> , 2016 , 107, 696-704	10.4	13
195	Recent Advances in Seeded and Seed-Layer-Free Atomic Layer Deposition of High-K Dielectrics on Graphene for Electronics. <i>Journal of Carbon Research</i> , 2019 , 5, 53	3.3	12
194	Ti/Al-based contacts to p-type SiC and GaN for power device applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2017 , 214, 1600357	1.6	12
193	Two-dimensional effects on ultralow energy B implants in Si. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002 , 20, 414		12
192	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

191	A comprehensive study on the physicochemical and electrical properties of Si doped with the molecular doping method. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015 , 212, 1685-1694	1.6	11
190	Electrical Characteristics of Schottky Contacts on Ge-Doped 4H-SiC. <i>Materials Science Forum</i> , 2014 , 778-780, 706-709	0.4	11
189	Microstructure and current transport in Ti/Al/Ni/Au ohmic contacts to n-type AlGaN epilayers grown on Si(111). <i>Superlattices and Microstructures</i> , 2006 , 40, 373-379	2.8	11
188	SCTS:: scanning capacitance transient spectroscopy. <i>Materials Science in Semiconductor Processing</i> , 2001 , 4, 89-91	4.3	11
187	Aluminum oxide nucleation in the early stages of atomic layer deposition on epitaxial graphene. <i>Carbon</i> , 2020 , 169, 172-181	10.4	11
186	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
185	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
184	In-situ monitoring by Raman spectroscopy of the thermal doping of graphene and MoS in O-controlled atmosphere. <i>Beilstein Journal of Nanotechnology</i> , 2017 , 8, 418-424	3	10
183	Lateral homogeneity of the electronic properties in pristine and ion-irradiated graphene probed by scanning capacitance spectroscopy. <i>Nanoscale Research Letters</i> , 2011 , 6, 109	5	10
182	Direct observation of two-dimensional diffusion of the self-interstitials in crystalline Si. <i>Physical Review B</i> , 2002 , 66,	3.3	10
181	Current injection from metal to MoS ₂ probed at nanoscale by conductive atomic force microscopy. <i>Materials Science in Semiconductor Processing</i> , 2016 , 42, 174-178	4.3	9
180	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
179	High resolution study of structural and electronic properties of epitaxial graphene grown on off-axis 4H-SiC (0001). <i>Journal of Crystal Growth</i> , 2014 , 393, 150-155	1.6	9
178	Electronic properties of epitaxial graphene residing on SiC facets probed by conductive atomic force microscopy. <i>Applied Surface Science</i> , 2014 , 291, 53-57	6.7	9
177	Nanoscale electro-structural characterisation of ohmic contacts formed on p-type implanted 4H-SiC. <i>Nanoscale Research Letters</i> , 2011 , 6, 158	5	9
176	Kinetic mechanisms of the in situ electron beam-induced self-organization of gold nanoclusters in SiO ₂ . <i>Journal Physics D: Applied Physics</i> , 2009 , 42, 075304	3	9
175	Investigation of graphene-SiC interface by nanoscale electrical characterization. <i>Physica Status Solidi (B): Basic Research</i> , 2010 , 247, 912-915	1.3	9
174	He implantation in Si for B diffusion control. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2007 , 257, 181-185	1.2	9

173	Effect of surrounding environment on atomic structure and equilibrium shape of growing nanocrystals: gold in/on SiO ₂ . <i>Nanoscale Research Letters</i> , 2007 , 2, 240-7	5	9
172	Improved reproducibility in scanning capacitance microscopy for quantitative 2D carrier profiling on silicon. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2003 , 102, 152-155	3.1	9
171	Activation Study of Implanted N ⁺ in 6H-SiC by Scanning Capacitance Microscopy. <i>Materials Science Forum</i> , 2003 , 433-436, 375-378	0.4	9
170	Dopant profile measurements in ion implanted 6H-SiC by scanning capacitance microscopy. <i>Applied Surface Science</i> , 2001 , 184, 183-189	6.7	9
169	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
168	Influence of oxide substrates on monolayer graphene doping process by thermal treatments in oxygen. <i>Carbon</i> , 2019 , 149, 546-555	10.4	8
167	Ohmic Contacts on p-Type Al-Implanted 4H-SiC Layers after Different Post-Implantation Annealings. <i>Materials</i> , 2019 , 12,	3.5	8
166	Ge Mediated Surface Preparation for Twin Free 3C-SiC Nucleation and Growth on Low Off-Axis 4H-SiC Substrate. <i>ECS Journal of Solid State Science and Technology</i> , 2014 , 3, P285-P292	2	8
165	Transport Properties of Graphene with Nanoscale Lateral Resolution. <i>Nanoscience and Technology</i> , 2011 , 247-285	0.6	8
164	Structural defects and device electrical behaviour in AlGaN/GaN heterostructures grown on 8° off-axis 4H-SiC. <i>Applied Physics A: Materials Science and Processing</i> , 2010 , 100, 197-202	2.6	8
163	High spatial and energy resolution characterization of lateral inhomogeneous Schottky barriers by conductive atomic force microscopy. <i>Microelectronic Engineering</i> , 2007 , 84, 450-453	2.5	8
162	Electrical Activation and Carrier Compensation in Si and Mg Implanted GaN by Scanning Capacitance Microscopy. <i>Solid State Phenomena</i> , 2007 , 131-133, 491-496	0.4	8
161	CsPbBr ₃ , MAPbBr ₃ , and FAPbBr ₃ Bromide Perovskite Single Crystals: Interband Critical Points under Dry N ₂ and Optical Degradation under Humid Air. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 4938-4945	3.8	8
160	Ni Schottky barrier on heavily doped phosphorous implanted 4H-SiC. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 445107	3	8
159	Ohmic contacts on n-type and p-type cubic silicon carbide (3C-SiC) grown on silicon. <i>Materials Science in Semiconductor Processing</i> , 2019 , 93, 295-298	4.3	7
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