Filippo Giannazzo

List of Publications by Year
in descending order

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330 papers	7,076 citations	61857 43 h-index	106150 65 g-index

337 all docs	337 docs citations	337 times ranked	6933 citing authors

#	Article	IF	Citations
1	Emerging trends in wide band gap semiconductors (SiC and GaN) technology for power devices. Microelectronic Engineering, 2018, 187-188, 66-77.	1.1	329
2	Ion irradiation and defect formation in single layer graphene. Carbon, 2009, 47, 3201-3207.	5.4	205
3	Atomistic origins of CH3NH3PbI3 degradation to PbI2 in vacuum. Applied Physics Letters, 2015, 106, .	1.5	158
4	Barrier inhomogeneity and electrical properties of Ptâˆ•GaN Schottky contacts. Journal of Applied Physics, 2007, 102, .	1.1	156
5	Recent advances on dielectrics technology for SiC and GaN power devices. Applied Surface Science, 2014, 301, 9-18.	3.1	130
6	Challenges for energy efficient wide band gap semiconductor power devices. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2063-2071.	0.8	107
7	Anchoring Molecular Magnets on the Si(100) Surface. Angewandte Chemie - International Edition, 2004, 43, 4081-4084.	7.2	101
8	Electrical properties of the graphene/<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>4</mml:mn><mml:mi>H</mml:mi><mml:mtext>-SiC</mml:mtext></mml:mrow></mml:math>(interface probed by scanning current spectroscopy. Physical Review B, 2009, 80, .	1.1	101
9	Screening Length and Quantum Capacitance in Graphene by Scanning Probe Microscopy. Nano Letters, 2009, 9, 23-29.	4.5	101
10	Mapping the Density of Scattering Centers Limiting the Electron Mean Free Path in Graphene. Nano Letters, 2011, 11, 4612-4618.	4.5	97
11	Surface and interface issues in wide band gap semiconductor electronics. Applied Surface Science, 2010, 256, 5727-5735.	3.1	96
12	Electronic transport at monolayer-bilayer junctions in epitaxial graphene on SiC. Physical Review B, 2012, 86, .	1.1	85
13	Characterization of SiO2/4H-SiC Interfaces in 4H-SiC MOSFETs: A Review. Energies, 2019, 12, 2310.	1.6	84
14	Ambipolar MoS₂ Transistors by Nanoscale Tailoring of Schottky Barrier Using Oxygen Plasma Functionalization. ACS Applied Materials & Interfaces, 2017, 9, 23164-23174.	4.0	81
15	Similar Structural Dynamics for the Degradation of CH₃NH₃PbI₃ in Air and in Vacuum. ChemPhysChem, 2015, 16, 3064-3071.	1.0	80
16	XPS and AFM Characterization of the Enzyme Glucose Oxidase Immobilized on SiO₂ Surfaces. Langmuir, 2008, 24, 1965-1972.	1.6	77
17	Delaminated Graphene at Silicon Carbide Facets: Atomic Scale Imaging and Spectroscopy. ACS Nano, 2013, 7, 3045-3052.	7.3	73
18	Vertical Transistors Based on 2D Materials: Status and Prospects. Crystals, 2018, 8, 70.	1.0	71

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19	SiO2/4H-SiC interface doping during post-deposition-annealing of the oxide in N2O or POCl3. Applied Physics Letters, 2013, 103, .	1.5	70
20	Nanoscale inhomogeneity of the Schottky barrier and resistivity in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>multilayers. Physical Review B, 2015, 92, .	1.1	69
21	Nanoscale carrier transport in Tiâˆ•Alâˆ•Niâˆ•Au Ohmic contacts on AlGaN epilayers grown on Si(111). Applied Physics Letters, 2006, 89, 022103.	1.5	68
22	Nanostructuring in Ge by self-ion implantation. Journal of Applied Physics, 2010, 107, .	1.1	66
23	Current transport in graphene/AlGaN/GaN vertical heterostructures probed at nanoscale. Nanoscale, 2014, 6, 8671-8680.	2.8	66
24	Temperature behavior of inhomogeneous Ptâˆ•GaN Schottky contacts. Applied Physics Letters, 2007, 90, 092119.	1.5	63
25	Structural and transport properties in alloyed Ti/Al Ohmic contacts formed on p-type Al-implanted 4H-SiC annealed at high temperature. Journal Physics D: Applied Physics, 2011, 44, 255302.	1.3	63
26	Nanoscale transport properties at silicon carbide interfaces. Journal Physics D: Applied Physics, 2010, 43, 223001.	1.3	62
27	Assessing the performance of two-dimensional dopant profiling techniques. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 385.	1.6	61
28	Self-organization of gold nanoclusters on hexagonal SiC and SiO2 surfaces. Journal of Applied Physics, 2007, 101, 064306.	1.1	60
29	Role of graphene/substrate interface on the local transport properties of the two-dimensional electron gas. Applied Physics Letters, 2010, 97, 132101.	1.5	59
30	Limiting mechanism of inversion channel mobility in Al-implanted lateral 4H-SiC metal-oxide semiconductor field-effect transistors. Applied Physics Letters, 2011, 99, .	1.5	58
31	Critical issues for interfaces to p-type SiC and GaN in power devices. Applied Surface Science, 2012, 258, 8324-8333.	3.1	57
32	Nanoscale phenomena ruling deposition and intercalation of AlN at the graphene/SiC interface. Nanoscale, 2020, 12, 19470-19476.	2.8	54
33	Size-dependent Schottky Barrier Height in self-assembled gold nanoparticles. Applied Physics Letters, 2006, 89, 243113.	1.5	53
34	Correlating macroscopic and nanoscale electrical modifications of SiO2/4H-SiC interfaces upon post-oxidation-annealing in N2O and POCl3. Applied Physics Letters, 2012, 101, .	1.5	52
35	Nanoscale structural characterization of epitaxial graphene grown on off-axis 4H-SiC (0001). Nanoscale Research Letters, 2011, 6, 269.	3.1	50
36	Material proposal for 2D indium oxide. Applied Surface Science, 2021, 548, 149275.	3.1	50

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37	Toward an ideal Schottky barrier on 3C-SiC. Applied Physics Letters, 2009, 95, .	1.5	49
38	Microscopic mechanisms of graphene electrolytic delamination from metal substrates. Applied Physics Letters, 2014, 104, 233105.	1.5	49
39	Strain, Doping, and Electronic Transport of Large Area Monolayer MoS₂ Exfoliated on Gold and Transferred to an Insulating Substrate. ACS Applied Materials & Interfaces, 2021, 13, 31248-31259.	4.0	49
40	Acceptor, compensation, and mobility profiles in multiple Al implanted 4Hâ€SiC. Applied Physics Letters, 2007, 91, 202104.	1.5	48
41	Transport localization in heterogeneous Schottky barriers of quantum-defined metal films. Europhysics Letters, 2006, 74, 686-692.	0.7	46
42	Layer uniformity in glucose oxidase immobilization on SiO2 surfaces. Applied Surface Science, 2007, 253, 9116-9123.	3.1	46
43	Nitrogen Soaking Promotes Lattice Recovery inÂPolycrystalline Hybrid Perovskites. Advanced Energy Materials, 2019, 9, 1803450.	10.2	46
44	MOCVD of AlN on epitaxial graphene at extreme temperatures. CrystEngComm, 2021, 23, 385-390.	1.3	46
45	Thermal stability of the current transport mechanisms in Ni-based Ohmic contacts on n- and p-implanted 4H-SiC. Semiconductor Science and Technology, 2014, 29, 075018.	1.0	45
46	Indium Nitride at the 2D Limit. Advanced Materials, 2021, 33, e2006660.	11.1	45
47	Interface Electrical Properties of Al₂O₃ Thin Films on Graphene Obtained by Atomic Layer Deposition with an in Situ Seedlike Layer. ACS Applied Materials & Interfaces, 2017, 9, 7761-7771.	4.0	44
48	Influence of high-temperature GaN annealed surface on the electrical properties of Ni/GaN Schottky contacts. Journal of Applied Physics, 2008, 104, .	1.1	43
49	Direct growth of quasi-free-standing epitaxial graphene on nonpolar SiC surfaces. Physical Review B, 2013, 88, .	1.1	43
50	Quantitative carrier profiling in ion-implanted 6Hâ€“SiC. Applied Physics Letters, 2001, 79, 1211-1213.	1.5	42
51	Nanoscale current transport through Schottky contacts on wide bandgap semiconductors. Journal of Vacuum Science & Technology B, 2009, 27, 789-794.	1.3	42
52	Study of interface states and oxide quality to avoid contrast reversal in scanning capacitance microscopy. Applied Physics Letters, 2002, 81, 1824-1826.	1.5	41
53	Graphene p-Type Doping and Stability by Thermal Treatments in Molecular Oxygen Controlled Atmosphere. Journal of Physical Chemistry C, 2015, 119, 22718-22723.	1.5	41
54	Normal and abnormal grain growth in nanostructured gold film. Journal of Applied Physics, 2009, 105, .	1.1	40

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55	Atomic Force Microscopy Study of the Kinetic Roughening in Nanostructured Gold Films on SiO2. Nanoscale Research Letters, 2009, 4, 262-8.	3.1	40
56	Smart High-Î¹ Nanodielectrics Using Solid Supported Polyoxometalate-Rich Nanostructures. ACS Nano, 2011, 5, 9992-9999.	7.3	38
57	Graphene integration with nitride semiconductors for high power and high frequency electronics. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600460.	0.8	38
58	Experimental aspects and modeling for quantitative measurements in scanning capacitance microscopy. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 2391.	1.6	37
59	Kinetic mechanism of the thermal-induced self-organization of Au/Si nanodroplets on Si(100): Size and roughness evolution. Journal of Applied Physics, 2008, 104, .	1.1	35
60	Dielectric thickness dependence of capacitive behavior in graphene deposited on silicon dioxide. Journal of Vacuum Science & Technology B, 2009, 27, 868-873.	1.3	35
61	Poole-Frenkel emission in epitaxial nickel oxide on AlGaN/GaN heterostructures. Applied Physics Letters, 2012, 101, .	1.5	35
62	Comparative study of gate oxide in 4H-SiC lateral MOSFETs subjected to post-deposition-annealing in N2O and POCl3. Applied Physics A: Materials Science and Processing, 2014, 115, 333-339.	1.1	35
63	Impact of contact resistance on the electrical properties of MoS₂ transistors at practical operating temperatures. Beilstein Journal of Nanotechnology, 2017, 8, 254-263.	1.5	35
64	A Review on Metal Nanoparticles Nucleation and Growth on/in Graphene. Crystals, 2017, 7, 219.	1.0	35
65	High-Performance Graphene/AlGaN/GaN Schottky Junctions for Hot Electron Transistors. ACS Applied Electronic Materials, 2019, 1, 2342-2354.	2.0	35
66	Genesis and evolution of extended defects: The role of evolving interface instabilities in cubic SiC. Applied Physics Reviews, 2020, 7, 021402.	5.5	35
67	Self-organization of Au nanoclusters on the SiO2 surface induced by 200keV-Ar+ irradiation. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 810-814.	0.6	34
68	Nanoscale structural and electrical evolution of Ta- and Ti-based contacts on AlGaN/GaN heterostructures. Journal of Applied Physics, 2013, 114, .	1.1	34
69	Conductive Atomic Force Microscopy of Semiconducting Transition Metal Dichalcogenides and Heterostructures. Nanomaterials, 2020, 10, 803.	1.9	34
70	New Approaches and Understandings in the Growth of Cubic Silicon Carbide. Materials, 2021, 14, 5348.	1.3	34
71	Microstructure of Au nanoclusters formed in and on SiO2. Superlattices and Microstructures, 2008, 44, 588-598.	1.4	33
72	Irradiation damage in graphene on SiO2 probed by local mobility measurements. Applied Physics Letters, 2009, 95, 263109.	1.5	33

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73	High-resolution scanning capacitance microscopy of silicon devices by surface beveling. Applied Physics Letters, 2000, 76, 2565-2567.	1.5	32
74	Influence of the surface morphology on the channel mobility of lateral implanted 4H-SiC(0001) metal-oxide-semiconductor field-effect transistors. Journal of Applied Physics, 2012, 112, .	1.1	31
75	Selective Doping in Silicon Carbide Power Devices. Materials, 2021, 14, 3923.	1.3	31
76	Scanning capacitance microscopy on ultranarrow doping profiles in Si. Applied Physics Letters, 2003, 83, 2659-2661.	1.5	30
77	Barrier inhomogeneity in vertical Schottky diodes on free standing gallium nitride. Materials Science in Semiconductor Processing, 2019, 94, 164-170.	1.9	30
78	Defect formation and evolution in the step-flow growth of silicon carbide: A Monte Carlo study. Journal of Crystal Growth, 2008, 310, 971-975.	0.7	29
79	Role of the Potential Barrier in the Electrical Performance of the Graphene/SiC Interface. Crystals, 2017, 7, 162.	1.0	29
80	Monolayer graphene doping and strain dynamics induced by thermal treatments in controlled atmosphere. Carbon, 2018, 127, 270-279.	5.4	29
81	Micro- and nanoscale electrical characterization of large-area graphene transferred to functional substrates. Beilstein Journal of Nanotechnology, 2013, 4, 234-242.	1.5	28
82	Electrical behavior of AlGaN/GaN heterostuctures upon high-temperature selective oxidation. Journal of Applied Physics, 2009, 106, .	1.1	27
83	Optical, morphological and spectroâ€•scopic characterization of graphene on SiO₂. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1251-1255.	0.8	27
84	Ti/Al ohmic contacts on AlGaN/GaN heterostructures with different defect density. Applied Surface Science, 2014, 314, 546-551.	3.1	27
85	Temperature-dependent Fowler-Nordheim electron barrier height in SiO2/4H-SiC MOS capacitors. Materials Science in Semiconductor Processing, 2018, 78, 38-42.	1.9	27
86	Nanostructured TiO₂ Grown by Low-Temperature Reactive Sputtering for Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 6218-6229.	2.5	27
87	From Schottky to Ohmic graphene contacts to AlGaN/GaN heterostructures: Role of the AlGaN layer microstructure. Applied Physics Letters, 2014, 105, .	1.5	26
88	Effect of air on oxygen pâ€doped graphene on SiO₂. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 2341-2344.	0.8	26
89	Conduction Mechanisms at Interface of AlN/SiN Dielectric Stacks with AlGaN/GaN Heterostructures for Normally-off High Electron Mobility Transistors: Correlating Device Behavior with Nanoscale Interfaces Properties. ACS Applied Materials & Interfaces, 2017, 9, 35383-35390.	4.0	26
90	Effect of high temperature annealing (Tâ€>â€1650â€Â°C) on the morphological and electrical properties of p-type implanted 4H-SiC layers. Materials Science in Semiconductor Processing, 2019, 93, 274-279.	1.9	26

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91	Direct Probing of Grain Boundary Resistance in Chemical Vapor Depositionâ€Grown Monolayer MoS 2 by Conductive Atomic Force Microscopy. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900393.	1.2	26
92	CsPbBr₃, MAPbBr₃, and FAPbBr₃ Bromide Perovskite Single Crystals: Interband Critical Points under Dry N₂ and Optical Degradation under Humid Air. Journal of Physical Chemistry C, 2021, 125, 4938-4945.	1.5	26
93	Ion irradiation of inhomogeneous Schottky barriers on silicon carbide. Journal of Applied Physics, 2005, 97, 123502.	1.1	25
94	Ion beam induced defects in graphene: Raman spectroscopy and DFT calculations. Journal of Molecular Structure, 2011, 993, 506-509.	1.8	25
95	Morphological and electrical properties of Nickel based Ohmic contacts formed by laser annealing process on n-type 4H-SiC. Materials Science in Semiconductor Processing, 2019, 97, 62-66.	1.9	25
96	Impact of Stacking Faults and Domain Boundaries on the Electronic Transport in Cubic Silicon Carbide Probed by Conductive Atomic Force Microscopy. Advanced Electronic Materials, 2020, 6, 1901171.	2.6	25
97	Substrate impact on the thickness dependence of vibrational and optical properties of large area MoS2 produced by gold-assisted exfoliation. Applied Physics Letters, 2021, 119, .	1.5	25
98	Carrier concentration profiles in 6H-SiC by scanning capacitance microscopy. Materials Science in Semiconductor Processing, 2001, 4, 195-199.	1.9	24
99	Effect of temperatureâ€“bias annealing on the hysteresis and subthreshold behavior of multilayer MoS₂ transistors. Physica Status Solidi - Rapid Research Letters, 2016, 10, 797-801.	1.2	24
100	Seedâ€Layerâ€Free Atomic Layer Deposition of Highly Uniform Al₂O₃ Thin Films onto Monolayer Epitaxial Graphene on Silicon Carbide. Advanced Materials Interfaces, 2019, 6, 1900097.	1.9	24
101	Drift mobility in quantum nanostructures by scanning probe microscopy. Applied Physics Letters, 2006, 88, 043117.	1.5	23
102	Near-surface processing on AlGaN/GaN heterostructures: a nanoscale electrical and structural characterization. Nanoscale Research Letters, 2011, 6, 132.	3.1	23
103	Multi-scale investigation of interface properties, stacking order and decoupling of few layer graphene on C-face 4H-SiC. Carbon, 2017, 116, 722-732.	5.4	23
104	Probing the uniformity of hydrogen intercalation in quasi-free-standing epitaxial graphene on SiC by micro-Raman mapping and conductive atomic force microscopy. Nanotechnology, 2019, 30, 284003.	1.3	23
105	Study of the Anchoring Process of Tethered Unsymmetrical Zn-Phthalocyanines on TiO₂ Nanostructured Thin Films. Journal of Physical Chemistry C, 2013, 117, 11176-11185.	1.5	22
106	Electron trapping at SiO₂/4H-SiC interface probed by transient capacitance measurements and atomic resolution chemical analysis. Nanotechnology, 2018, 29, 395702.	1.3	22
107	Aluminum oxide nucleation in the early stages of atomic layer deposition on epitaxial graphene. Carbon, 2020, 169, 172-181.	5.4	22
108	Simulation of scanning capacitance microscopy measurements on micro-sectioned and bevelled n+â€“p samples. Materials Science in Semiconductor Processing, 2001, 4, 85-88.	1.9	21

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109	Nanoscale electrical and structural modification induced by rapid thermal oxidation of AlGaN/GaN heterostructures. Nanotechnology, 2014, 25, 025201.	1.3	21
110	Improved Ni/3C-SiC contacts by effective contact area and conductivity increases at the nanoscale. Applied Physics Letters, 2009, 94, 112104.	1.5	20
111	Self-organization and nanostructural control in thin film heterojunctions. Nanoscale, 2014, 6, 3566-3575.	2.8	20
112	Interface disorder probed at the atomic scale for graphene grown on the C face of SiC. Physical Review B, 2015, 91, .	1.1	20
113	Temperature dependent forward current-voltage characteristics of Ni/Au Schottky contacts on AlGaN/GaN heterostructures described by a two diodes model. Journal of Applied Physics, 2017, 121, .	1.1	20
114	Advances in the fabrication of graphene transistors on flexible substrates. Beilstein Journal of Nanotechnology, 2017, 8, 467-474.	1.5	20
115	Recent Advances in Seeded and Seed-Layer-Free Atomic Layer Deposition of High-K Dielectrics on Graphene for Electronics. Journal of Carbon Research, 2019, 5, 53.	1.4	20
116	Effects of interface states and near interface traps on the threshold voltage stability of GaN and SiC transistors employing SiO2 as gate dielectric. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, .	0.6	19
117	Identification of two trapping mechanisms responsible of the threshold voltage variation in SiO2/4H-SiC MOSFETs. Applied Physics Letters, 2020, 117, .	1.5	19
118	A look underneath the SiO₂/4H-SiC interface after N₂O thermal treatments. Beilstein Journal of Nanotechnology, 2013, 4, 249-254.	1.5	18
119	Understanding the role of threading dislocations on 4H-SiC MOSFET breakdown under high temperature reverse bias stress. Nanotechnology, 2020, 31, 125203.	1.3	18
120	Two-dimensional profiling and size effects on the transient enhanced diffusion of ultralow-energy B implants in Si. Applied Physics Letters, 2001, 78, 598-600.	1.5	17
121	Carrier distribution in quantum nanostructures by scanning capacitance microscopy. Journal of Applied Physics, 2005, 97, 014302.	1.1	17
122	High growth rate process in a SiC horizontal CVD reactor using HCl. Microelectronic Engineering, 2006, 83, 48-50.	1.1	17
123	Role of surface nanovoids on interstitial trapping in He implanted crystalline Si. Applied Physics Letters, 2006, 88, 191910.	1.5	17
124	Ti/Al-based contacts to p-type SiC and GaN for power device applications. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600357.	0.8	17
125	Quantitative determination of depth carrier profiles in ion-implanted Gallium Nitride. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 336-339.	0.6	16
126	Thermodynamic Properties of Supported and Embedded Metallic Nanocrystals: Gold on/in SiO2. Nanoscale Research Letters, 2008, 3, 454-60.	3.1	16

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127	Engineering 2D heterojunctions with dielectrics. Nature Electronics, 2019, 2, 54-55.	13.1	16
128	Raman probing of hydrogen-intercalated graphene on Si-face 4H-SiC. Materials Science in Semiconductor Processing, 2019, 96, 145-152.	1.9	16
129	Interfacial electrical and chemical properties of deposited SiO2 layers in lateral implanted 4H-SiC MOSFETs subjected to different nitridations. Applied Surface Science, 2021, 557, 149752.	3.1	16
130	Ion Implantation Doping in Silicon Carbide and Gallium Nitride Electronic Devices. Micro, 2022, 2, 23-53.	0.9	16
131	Nanoscale voltage tunable tunnel rectifier by gold nanostructures embedded in SiO2. Applied Physics Letters, 2006, 89, 263108.	1.5	15
132	Fluorine counter doping effect in B-doped Si. Applied Physics Letters, 2007, 91, 132101.	1.5	15
133	Radial junctions formed by conformal chemical doping for innovative hole-based solar cells. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2013, 178, 686-690.	1.7	15
134	Substrate and atmosphere influence on oxygen p-doped graphene. Carbon, 2016, 107, 696-704.	5.4	15
135	Atomic Layer Deposition of High-k Insulators on Epitaxial Graphene: A Review. Applied Sciences (Switzerland), 2020, 10, 2440.	1.3	15
136	Gold nanoparticle assisted synthesis of MoS₂ monolayers by chemical vapor deposition. Nanoscale Advances, 2021, 3, 4826-4833.	2.2	15
137	Multiscale Investigation of the Structural, Electrical and Photoluminescence Properties of MoS2 Obtained by MoO3 Sulfurization. Nanomaterials, 2022, 12, 182.	1.9	15
138	SCTS:. Materials Science in Semiconductor Processing, 2001, 4, 89-91.	1.9	14
139	Two-dimensional electron gas insulation by local surface thin thermal oxidation in AlGaNâ•GaN heterostructures. Applied Physics Letters, 2008, 92, 252101.	1.5	14
140	Barrier Inhomogeneity of Ni Schottky Contacts to Bulk GaN. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700613.	0.8	14
141	Fabrication and Characterization of Graphene Heterostructures with Nitride Semiconductors for High Frequency Vertical Transistors. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700653.	0.8	14
142	Esaki Diode Behavior in Highly Uniform MoS₂/Silicon Carbide Heterojunctions. Advanced Materials Interfaces, 2022, 9, .	1.9	14
143	Two-dimensional effects on ultralow energy B implants in Si. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 414.	1.6	13
144	Impact of the Morphological and Electrical Properties of SiO₂/4H-SiC Interfaces on the Behavior of 4H-SiC MOSFETs. ECS Journal of Solid State Science and Technology, 2013, 2, N3006-N3011.	0.9	13

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145	A comprehensive study on the physicochemical and electrical properties of Si doped with the molecular doping method. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1685-1694.	0.8	13
146	Nanoscale probing of the lateral homogeneity of donors concentration in nitridated SiO₂/4Hâ€“SiC interfaces. Nanotechnology, 2016, 27, 315701.	1.3	13
147	In-situ monitoring by Raman spectroscopy of the thermal doping of graphene and MoS₂ in O₂-controlled atmosphere. Beilstein Journal of Nanotechnology, 2017, 8, 418-424.	1.5	13
148	Ohmic contacts on n-type and p-type cubic silicon carbide (3C-SiC) grown on silicon. Materials Science in Semiconductor Processing, 2019, 93, 295-298.	1.9	13
149	Lateral homogeneity of the electronic properties in pristine and ion-irradiated graphene probed by scanning capacitance spectroscopy. Nanoscale Research Letters, 2011, 6, 109.	3.1	12
150	Electronic properties of epitaxial graphene residing on SiC facets probed by conductive atomic force microscopy. Applied Surface Science, 2014, 291, 53-57.	3.1	12
151	Current injection from metal to MoS2 probed at nanoscale by conductive atomic force microscopy. Materials Science in Semiconductor Processing, 2016, 42, 174-178.	1.9	12
152	Metal/Semiconductor Contacts to Silicon Carbide: Physics and Technology. Materials Science Forum, 0, 924, 339-344.	0.3	12
153	Metal/Semiconductor Barrier Properties of Non-Recessed Ti/Al/Ti and Ta/Al/Ta Ohmic Contacts on AlGaN/GaN Heterostructures. Energies, 2019, 12, 2655.	1.6	12
154	Influence of oxide substrates on monolayer graphene doping process by thermal treatments in oxygen. Carbon, 2019, 149, 546-555.	5.4	12
155	Ni Schottky barrier on heavily doped phosphorous implanted 4H-SiC. Journal Physics D: Applied Physics, 2021, 54, 445107.	1.3	12
156	Microstructure and current transport in Ti/Al/Ni/Au ohmic contacts to n-type AlGaN epilayers grown on Si(111). Superlattices and Microstructures, 2006, 40, 373-379.	1.4	11
157	Nanoscale probing of dielectric breakdown at SiO2/3C-SiC interfaces. Journal of Applied Physics, 2011, 109, .	1.1	11
158	Electrical Characteristics of Schottky Contacts on Ge-Doped 4H-SiC. Materials Science Forum, 0, 778-780, 706-709.	0.3	11
159	High resolution study of structural and electronic properties of epitaxial graphene grown on off-axis 4Hâ€“SiC (0001). Journal of Crystal Growth, 2014, 393, 150-155.	0.7	11
160	Structural and electrical properties of AlN thin films on GaN substrates grown by plasma enhanced-Atomic Layer Deposition. Materials Science in Semiconductor Processing, 2019, 97, 35-39.	1.9	11
161	Forward and reverse current transport mechanisms in tungsten carbide Schottky contacts on AlGaN/GaN heterostructures. Journal of Applied Physics, 2021, 129, .	1.1	11
162	Epitaxial Graphene on 4H-SiC (0001) as a Versatile Platform for Materials Growth: Mini-Review. Applied Sciences (Switzerland), 2021, 11, 5784.	1.3	11

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163	Substrate-Driven Atomic Layer Deposition of High-Îº Dielectrics on 2D Materials. Applied Sciences (Switzerland), 2021, 11, 11052.	1.3	11
164	Dopant profile measurements in ion implanted 6Hâ€“SiC by scanning capacitance microscopy. Applied Surface Science, 2001, 184, 183-189.	3.1	10
165	Direct observation of two-dimensional diffusion of the self-interstitials in crystalline Si. Physical Review B, 2002, 66, .	1.1	10
166	He implantation in Si for B diffusion control. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 181-185.	0.6	10
167	Effect of surrounding environment on atomic structure and equilibrium shape of growing nanocrystals: gold in/on SiO2. Nanoscale Research Letters, 2007, 2, 240-247.	3.1	10
168	Localization of He induced nanovoids in buried Si1â^'xGex thin films. Journal of Applied Physics, 2008, 103, 016104.	1.1	10
169	Investigation of grapheneâ€“SiC interface by nanoscale electrical characterization. Physica Status Solidi (B): Basic Research, 2010, 247, 912-915.	0.7	10
170	Nanoscale electro-structural characterisation of ohmic contacts formed on p-type implanted 4H-SiC. Nanoscale Research Letters, 2011, 6, 158.	3.1	10
171	Ge Mediated Surface Preparation for Twin Free 3C-SiC Nucleation and Growth on Low Off-Axis 4H-SiC Substrate. ECS Journal of Solid State Science and Technology, 2014, 3, P285-P292.	0.9	10
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