Francesco La Via

List of Publications by Year in descending order

389 papers	4,562 citations	186265 28 h-index	206112 48 g-index
393 all docs	393 docs citations	393 times ranked	2344 citing authors

#	Article	IF	Citations
1	Richardsonâ€™s constant in inhomogeneous silicon carbide Schottky contacts. Journal of Applied Physics, 2003, 93, 9137-9144.	2.5	217
2	The NUMEN project: NUclear Matrix Elements for Neutrinoless double beta decay. European Physical Journal A, 2018, 54, 1.	2.5	146
3	Structural and electrical characterisation of titanium and nickel silicide contacts on silicon carbide. Microelectronic Engineering, 2002, 60, 269-282.	2.4	122
4	From thin film to bulk 3C-SiC growth: Understanding the mechanism of defects reduction. Materials Science in Semiconductor Processing, 2018, 78, 57-68.	4.0	99
5	Mechanisms of growth and defect properties of epitaxial SiC. Applied Physics Reviews, 2014, 1, 031301.	11.3	89
6	4H SiC Epitaxial Growth with Chlorine Addition. Chemical Vapor Deposition, 2006, 12, 509-515.	1.3	82
7	Highly reproducible ideal SiC Schottky rectifiers: effects of surface preparation and thermal annealing on the Ni/6H-SiC barrier height. Applied Physics A: Materials Science and Processing, 2003, 77, 827-833.	2.3	77
8	OHMIC CONTACTS TO SIC. International Journal of High Speed Electronics and Systems, 2005, 15, 781-820.	0.7	76
9	Schottkyâ€“ohmic transition in nickel silicide/SiC-4H system: is it really a solved problem?. Microelectronic Engineering, 2003, 70, 519-523.	2.4	72
10	Structural and electrical properties of Niâˆ•Ti Schottky contacts on silicon carbide upon thermal annealing. Journal of Applied Physics, 2004, 96, 4313-4318.	2.5	66
11	Thin crystalline 3C-SiC layer growth through carbonization of differently oriented Si substrates. Journal of Applied Physics, 2007, 102, 023518.	2.5	66
12	4H-SiC epitaxial layer growth by trichlorosilane (TCS). Journal of Crystal Growth, 2008, 311, 107-113.	1.5	65
13	High performance SiC detectors for MeV ion beams generated by intense pulsed laser plasmas. Journal of Materials Research, 2013, 28, 87-93.	2.6	64
14	Improvement of high temperature stability of nickel contacts on n-type 6Hâ€“SiC. Applied Surface Science, 2001, 184, 295-298.	6.1	61
15	High-quality 6inch (111) 3C-SiC films grown on off-axis (111) Si substrates. Thin Solid Films, 2010, 518, S165-S169.	1.8	61
16	Heteroepitaxy of 3C-SiC on different on-axis oriented silicon substrates. Journal of Applied Physics, 2009, 105, .	2.5	58
17	Effects of annealing temperature on the degree of inhomogeneity of nickel-silicide/SiC Schottky barrier. Journal of Applied Physics, 2005, 98, 023713.	2.5	54
18	SiCILIAâ€”Silicon Carbide Detectors for Intense Luminosity Investigations and Applications. Sensors, 2018, 18, 2289.	3.8	51

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19	Advanced Residual Stress Analysis and FEM Simulation on Heteroepitaxial 3Câ€“SiC for MEMS Application. Journal of Microelectromechanical Systems, 2011, 20, 745-752.	2.5	49
20	New Achievements on CVD Based Methods for SiC Epitaxial Growth. Materials Science Forum, 2005, 483-485, 67-72.	0.3	48
21	Structural defects in (100) 3C-SiC heteroepitaxy: Influence of the buffer layer morphology on generation and propagation of stacking faults and microtwins. Diamond and Related Materials, 2009, 18, 1440-1449.	3.9	46
22	A kinetic Monte Carlo method on super-lattices for the study of the defect formation in the growth of close packed structures. Journal of Computational Physics, 2007, 227, 1075-1093.	3.8	45
23	Defect Influence on Heteroepitaxial 3C-SiC Youngâ€™s Modulus. Electrochemical and Solid-State Letters, 2011, 14, H161.	2.2	39
24	Electrical characterization of ultra-shallow junctions formed by diffusion from a CoSi/sub 2/ layer. IEEE Transactions on Electron Devices, 1997, 44, 526-534.	3.0	37
25	Genesis and evolution of extended defects: The role of evolving interface instabilities in cubic SiC. Applied Physics Reviews, 2020, 7, 021402.	11.3	35
26	New Approaches and Understandings in the Growth of Cubic Silicon Carbide. Materials, 2021, 14, 5348.	2.9	34
27	Structural and electronic transitions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">G</mml:mi><mml:msub><mml:mi mathvariant="normal">e</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">	3.2	33
28	3C-SiC Film Growth on Si Substrates. ECS Transactions, 2011, 35, 99-116.	0.5	32
29	Electron backscattering from stacking faults in SiC by means ofab initioquantum transport calculations. Physical Review B, 2012, 85, .	3.2	31
30	Diffusion and outdiffusion of aluminium implanted into silicon. Semiconductor Science and Technology, 1993, 8, 488-494.	2.0	30
31	Defect formation and evolution in the step-flow growth of silicon carbide: A Monte Carlo study. Journal of Crystal Growth, 2008, 310, 971-975.	1.5	29
32	Electrical properties of high energy ion irradiated 4H-SiC Schottky diodes. Journal of Applied Physics, 2008, 104, .	2.5	27
33	Effect of the miscut direction in (111) 3C-SiC film growth on off-axis (111)Si. Applied Physics Letters, 2009, 94, 101907.	3.3	27
34	Silicon carbide detectors study for NUMEN project. EPJ Web of Conferences, 2016, 117, 10006.	0.3	27
35	The NUMEN Heavy Ion Multidetector for a Complementary Approach to the Neutrinoless Double Beta Decay. Universe, 2020, 6, 129.	2.5	26
36	Extended defects in 3C-SiC: Stacking faults, threading partial dislocations, and inverted domain boundaries. Acta Materialia, 2021, 213, 116915.	7.9	26

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37	Ion irradiation of inhomogeneous Schottky barriers on silicon carbide. Journal of Applied Physics, 2005, 97, 123502.	2.5	25
38	Fabrication of a Monolithic Implantable Neural Interface from Cubic Silicon Carbide. Micromachines, 2019, 10, 430.	2.9	25
39	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.	5.1	25
40	Thermal stability of thin CoSi[sub 2] layers on polysilicon implanted with As, BF[sub 2], and Si. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 1129.	1.6	24
41	Structural characterisation of titanium silicon carbide reaction. Microelectronic Engineering, 2001, 55, 375-381.	2.4	24
42	Silicon carbide pinch rectifiers using a dual-metal Ti-Ni/sub 2/Si Schottky barrier. IEEE Transactions on Electron Devices, 2003, 50, 1741-1747.	3.0	24
43	SiC-4H Epitaxial Layer Growth Using Trichlorosilane (TCS) as Silicon Precursor. Materials Science Forum, 2006, 527-529, 179-182.	0.3	24
44	Preferential oxidation of stacking faults in epitaxial off-axis (111) 3C-SiC films. Applied Physics Letters, 2009, 95, 111905.	3.3	24
45	Protrusions reduction in 3C-SiC thin film on Si. Journal of Crystal Growth, 2018, 498, 248-257.	1.5	24
46	Biocompatibility between Silicon or Silicon Carbide surface and Neural Stem Cells. Scientific Reports, 2019, 9, 11540.	3.3	24
47	Tailoring the Tiâˆ•4Hâ€“SiC Schottky barrier by ion irradiation. Applied Physics Letters, 2004, 85, 6152-6154.	3.3	23
48	Photocatalytical activity of amorphous hydrogenated TiO2 obtained by pulsed laser ablation in liquid. Materials Science in Semiconductor Processing, 2016, 42, 28-31.	4.0	23
49	Effect of the linewidth reduction on the characteristic time spread in C49â€“C54 phase transition. Applied Physics Letters, 1998, 73, 3863-3865.	3.3	22
50	Extended study of the step-bunching mechanism during the homoepitaxial growth of SiC. Thin Solid Films, 2010, 518, S159-S161.	1.8	22
51	First Principles Investigation on the Modifications of the 4H-SiC Band Structure Due to the (4,4) and (3,5) Stacking Faults. Applied Physics Express, 2011, 4, 025802.	2.4	22
52	Carbonization and transition layer effects on 3C-SiC film residual stress. Journal of Crystal Growth, 2017, 473, 11-19.	1.5	22
53	Thermal stability of cobalt silicide stripes on Si (001). Journal of Applied Physics, 1999, 86, 3089-3095.	2.5	21
54	Temperature dependence of the c-axis mobility in 6H-SiC Schottky diodes. Applied Physics Letters, 2003, 83, 4181-4183.	3.3	21

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55	Growth Rate Effect on 3C-SiC Film Residual Stress on (100) Si Substrates. Materials Science Forum, 0, 645-648, 143-146.	0.3	21
56	Structural and electronic characterization of (2,33) bar-shaped stacking fault in 4H-SiC epitaxial layers. Applied Physics Letters, 2011, 98, .	3.3	21
57	The NUMEN Technical Design Report. International Journal of Modern Physics A, 2021, 36, .	1.5	21
58	Structural properties of fluorinated SiO2 thin films. Microelectronic Engineering, 2000, 50, 67-74.	2.4	20
59	Heteroepitaxial growth of (111) 3C-SiC on (110) Si substrate by second order twins. Applied Physics Letters, 2008, 92, 224102.	3.3	20
60	Low Stress Heteroepitaxial 3C-SiC Films Characterized by Microstructure Fabrication and Finite Elements Analysis. Journal of the Electrochemical Society, 2010, 157, H438.	2.9	20
61	Sublimation growth of bulk 3C-SiC using 3C-SiC-on-Si (1 0 0) seeding layers. Journal of Crystal Growth, 2017, 478, 159-162.	1.5	19
62	Nucleation and growth of C54 grains into C49 TiSi2 thin films monitored by micro-Raman imaging. Journal of Applied Physics, 2000, 88, 7013-7019.	2.5	18
63	Investigations of transient phase formation in Ti/Si thin film reaction. Journal of Applied Physics, 2004, 96, 361-368.	2.5	18
64	Raman Characterization of Doped 3C-SiC/Si for Different Silicon Substrates and C/Si Ratios. Materials Science Forum, 0, 645-648, 255-258.	0.3	18
65	Theoretical and experimental study of the role of cell-cell dipole interaction in dielectrophoretic devices: application to polynomial electrodes. BioMedical Engineering OnLine, 2014, 13, 71.	2.7	18
66	New thick silicon carbide detectors: Response to 14 MeV neutrons and comparison with single-crystal diamonds. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 946, 162637.	1.6	18
67	Status and Prospects of Cubic Silicon Carbide Power Electronics Device Technology. Materials, 2021, 14, 5831.	2.9	18
68	Structural properties of SiO2 films prepared by plasma-enhanced chemical vapor deposition. Materials Science in Semiconductor Processing, 2001, 4, 43-46.	4.0	17
69	Drift mobility in 4H-SiC Schottky diodes. Applied Physics Letters, 2005, 87, 142105.	3.3	17
70	High growth rate process in a SiC horizontal CVD reactor using HCl. Microelectronic Engineering, 2006, 83, 48-50.	2.4	17
71	Optical and electrical properties of 4H-SiC epitaxial layer grown with HCl addition. Journal of Applied Physics, 2007, 102, 043523.	2.5	17
72	Stacking faults evolution during epitaxial growths: Role of surface the kinetics. Surface Science, 2010, 604, 939-942.	1.9	17

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73	Two-dimensional junction profiling by selective chemical etching: Applications to electron device characterization. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 414.	1.6	16
74	Formation of the TiSi2 C40 as an intermediate phase during the reaction of the Si/Ta/Ti system. Applied Physics Letters, 2001, 78, 1864-1866.	3.3	16
75	Schottky-Ohmic Transition in Nickel Silicide/SiC System: Is it Really a Solved Problem?. Materials Science Forum, 2003, 433-436, 721-724.	0.3	16
76	Theoretical Monte Carlo Study of the Formation and Evolution of Defects in the Homoepitaxial Growth of SiC. Materials Science Forum, 2008, 600-603, 135-138.	0.3	16
77	Very High Growth Rate Epitaxy Processes with Chlorine Addition. Materials Science Forum, 2007, 556-557, 157-160.	0.3	15
78	Thick Epitaxial Layers Growth by Chlorine Addition. Materials Science Forum, 0, 615-617, 55-60.	0.3	15
79	Monte Carlo study of the step flow to island nucleation transition for close packed structures. Surface Science, 2009, 603, 2226-2229.	1.9	15
80	SiC Films and Coatings. , 2012, , 17-61.		15
81	Interface state density evaluation of high quality hetero-epitaxial 3Câ€“SiC(001) for high-power MOSFET applications. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 198, 14-19.	3.5	15
82	Temperature Investigation on 3C-SiC Homo-Epitaxy on Four-Inch Wafers. Materials, 2019, 12, 3293.	2.9	15
83	Precipitation of arsenic diffused into silicon from a TiSi2source. Journal of Applied Physics, 1991, 69, 726-731.	2.5	14
84	Roughness of thermal oxide layers grown on ion implanted silicon wafers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1998, 16, 619.	1.6	14
85	High-resolution investigation of atomic interdiffusion during Co/Ni/Si phase transition. Journal of Applied Physics, 2003, 94, 231-237.	2.5	14
86	Microtwin reduction in 3Câ€“SiC heteroepitaxy. Applied Physics Letters, 2010, 97, .	3.3	14
87	Stress fields analysis in 3Câ€“SiC free-standing microstructures by micro-Raman spectroscopy. Thin Solid Films, 2012, 522, 20-22.	1.8	14
88	Patterned substrate with inverted silicon pyramids for 3Câ€“SiC epitaxial growth: A comparison with conventional (001) Si substrate. Journal of Materials Research, 2013, 28, 94-103.	2.6	14
89	(Invited) Three-Dimensional Epitaxial Si_{1-X}Ge_x, Ge and SiC Crystals on Deeply Patterned Si Substrates. ECS Transactions, 2014, 64, 631-648.	0.5	14
90	Nuclear fragment identification with <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" id="d1e1454" altimg="si68.gif"><mml:mi>Î”</mml:mi></mml:math>E-E telescopes exploiting silicon carbide detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 925, 60-69.	1.6	14

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91	Generation and Termination of Stacking Faults by Inverted Domain Boundaries in 3C-SiC. Crystal Growth and Design, 2020, 20, 3104-3111.	3.0	14
92	Electrical resistivity and Hall coefficient of C49, C40, and C54 TiSi2 thin-film phases. Journal of Applied Physics, 2002, 92, 3147-3151.	2.5	13
93	â€œDirectâ€•measurement of the growth rate during the C49 to C54 transformation in TiSi2: Activation energy. Journal of Applied Physics, 2002, 92, 627-628.	2.5	13
94	Epitaxial Layers Grown with HCl Addition: A Comparison with the Standard Process. Materials Science Forum, 2006, 527-529, 163-166.	0.3	13
95	High Quality Single Crystal 3C-SiC(111) Films Grown on Si(111). Materials Science Forum, 0, 615-617, 145-148.	0.3	13
96	Ion Implantation Defects in 4H-SiC DIMOSFET. Materials Science Forum, 0, 858, 418-421.	0.3	13
97	Photo-electrochemical water splitting in silicon based photocathodes enhanced by plasmonic/catalytic nanostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2017, 225, 128-133.	3.5	13
98	Growth of Large-Area, Stress-Free, and Bulk-Like 3C-SiC (100) Using 3C-SiC-on-Si in Vapor Phase Growth. Materials, 2019, 12, 2179.	2.9	13
99	Laser Annealing of P and Al Implanted 4H-SiC Epitaxial Layers. Materials, 2019, 12, 3362.	2.9	13
100	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.	4.0	13
101	Arsenic redistribution at theSiO2/Siinterface during oxidation of implanted silicon. Physical Review B, 1998, 58, 10990-10999.	3.2	12
102	On the â€œStep Bunchingâ€•Phenomena Observed on Etched and Homoepitaxially Grown 4H Silicon Carbide. Materials Science Forum, 0, 679-680, 358-361.	0.3	12
103	Reduction of the Surface Density of Single Shockley Faults by TCS Growth Process. Materials Science Forum, 0, 679-680, 67-70.	0.3	12
104	Microâ€Raman analysis and finiteâ€element modeling of 3â€‰Câ€SiC microstructures. Journal of Raman Spectroscopy, 2013, 44, 299-306.	2.5	12
105	Defect Reduction in Epitaxial 3C-SiC on Si(001) and Si(111) by Deep Substrate Patterning. Materials Science Forum, 0, 821-823, 193-196.	0.3	12
106	3C-SiÐ¡ Hetero-Epitaxially Grown on Silicon Compliance Substrates and New 3C-SiÐ¡ Substrates for Sustainable Wide-Band-Gap Power Devices (CHALLENGE). Materials Science Forum, 2018, 924, 913-918.	0.3	12
107	3C-SiC Growth on Inverted Silicon Pyramids Patterned Substrate. Materials, 2019, 12, 3407.	2.9	12
108	Ni/4H-SiC interaction and silicide formation under excimer laser annealing for ohmic contact. Materialia, 2020, 9, 100528.	2.7	12

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109	Characterization of 4H- and 6H-Like Stacking Faults in Cross Section of 3C-SiC Epitaxial Layer by Room-Temperature Î¼-Photoluminescence and Î¼-Raman Analysis. Materials, 2020, 13, 1837.	2.9	12
110	Epitaxial CoSi2 formation on Si(001) from an amorphous Co75W25 sputtered layer. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1992, 10, 2284.	1.6	11
111	Reduction of the C49-C54 TiSi 2 phase transformation temperature by reactive Ti deposition. Europhysics Letters, 1997, 40, 581-586.	2.0	11
112	Role of the substrate in the C49â€“C54 transformation of TiSi[sub 2]. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 721.	1.6	11
113	Defect-induced tetragonalization of the orthorhombic TiSi2 C49 phase: X-ray diffraction and first principles calculations. Applied Physics Letters, 2001, 78, 739-741.	3.3	11
114	Thermal oxidation of Si (001) single crystal implanted with Ge ions. Journal of Applied Physics, 2002, 91, 6754.	2.5	11
115	Optical investigation of bulk electron mobility in 3Câ€“SiC films on Si substrates. Applied Physics Letters, 2010, 97, 142103.	3.3	11
116	A novel micro-Raman technique to detect and characterize 4H-SiC stacking faults. Journal of Applied Physics, 2014, 116, .	2.5	11
117	Stacking Fault Analysis of Epitaxial 3C-SiC on Si(001) Ridges. Materials Science Forum, 0, 858, 147-150.	0.3	11
118	3C-SiC Epitaxy on Deeply Patterned Si(111) Substrates. Materials Science Forum, 0, 858, 151-154.	0.3	11
119	Epitaxial Growth and Characterization of 4H-SiC for Neutron Detection Applications. Materials, 2021, 14, 976.	2.9	11
120	Measurement of Residual Stress and Youngâ€™s Modulus on Micromachined Monocrystalline 3C-SiC Layers Grown on <111> and <100> Silicon. Micromachines, 2021, 12, 1072.	2.9	11
121	Dopant profile measurements in ion implanted 6Hâ€“SiC by scanning capacitance microscopy. Applied Surface Science, 2001, 184, 183-189.	6.1	10
122	Oxidation of ion implanted silicon carbide. Materials Science in Semiconductor Processing, 2001, 4, 345-349.	4.0	10
123	In situ investigations of the metal/silicon reaction in Ti/Si thin films capped with TiN: Volumetric analysis of the C49â€“C54 transformation. Applied Physics Letters, 2001, 79, 2184-2186.	3.3	10
124	Improvement of CoSi2 thermal stability by cavity formation. Applied Physics Letters, 2001, 79, 3419-3421.	3.3	10
125	TEM analysis of an additional metal-rich component at the C49â€“C54 transformation in Ti/Si thin films capped with TiN. Thin Solid Films, 2002, 408, 123-127.	1.8	10
126	Comparison between Different Schottky Diode Edge Termination Structures: Simulations and Experimental Results. Materials Science Forum, 2003, 433-436, 827-830.	0.3	10

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127	3C-SiC Hetero-Epitaxial Films for Sensors Fabrication. Advances in Science and Technology, 0, , .	0.2	10
128	3C-SiC Heteroepitaxial Growth on Inverted Silicon Pyramids (ISP). Materials Science Forum, 0, 645-648, 135-138.	0.3	10
129	Complete Determination of the Local Stress Field in Epitaxial Thin Films Using Single Microstructure. Materials Science Forum, 2011, 679-680, 213-216.	0.3	10
130	4H-SiC Epitaxial Layer Grown on 150 mm Automatic Horizontal Hot Wall Reactor PE106. Materials Science Forum, 0, 778-780, 121-124.	0.3	10
131	Formation, Morphology, and Optical Properties of Electroless Deposited Gold Nanoparticles on 3C-SiC. Journal of Physical Chemistry C, 2017, 121, 4304-4311.	3.1	10
132	Silicon Carbide and MRI: Towards Developing a MRI Safe Neural Interface. Micromachines, 2021, 12, 126.	2.9	10
133	Effect of Nitrogen and Aluminum Doping on 3C-SiC Heteroepitaxial Layers Grown on 4Â° Off-Axis Si (100). Materials, 2021, 14, 4400.	2.9	10
134	On the origin of the premature breakdown of thermal oxide on 3C-SiC probed by electrical scanning probe microscopy. Applied Surface Science, 2020, 526, 146656.	6.1	10
135	High temperature annealing effects on the electrical characteristics of C implanted Si. Journal of Applied Physics, 1996, 79, 3464-3469.	2.5	9
136	Precipitation of As in thermally oxidized ion-implanted Si crystals. Applied Physics Letters, 1998, 73, 2633-2635.	3.3	9
137	Effects of N-induced heterogeneous nucleation and growth of cavities at the CoSi2/polycrystallineâ€“silicon interface. Applied Physics Letters, 2002, 81, 55-57.	3.3	9
138	Dual metal SiC Schottky rectifiers with low power dissipation. Microelectronic Engineering, 2003, 70, 524-528.	2.4	9
139	Activation Study of Implanted N⁺ in 6H-SiC by Scanning Capacitance Microscopy. Materials Science Forum, 2003, 433-436, 375-378.	0.3	9
140	Study of the connection between stacking faults evolution and step kinetics in misoriented 4H-SiC epitaxial growths. Surface Science, 2011, 605, L67-L69.	1.9	9
141	Electrical properties of extended defects in 4H-SiC investigated by photoinduced current measurements. Applied Physics Express, 2017, 10, 036601.	2.4	9
142	Growth and Coalescence of 3C-SiC on Si(111) Micro-Pillars by a Phase-Field Approach. Materials, 2019, 12, 3223.	2.9	9
143	3C-SiC grown on Si by using a Si1-xGex buffer layer. Journal of Crystal Growth, 2019, 519, 1-6.	1.5	9
144	Growth of thick [1â€¯1â€¯1]-oriented 3C-SiC films on T-shaped Si micropillars. Materials and Design, 2021, 208, 109833.	7.0	9

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145	An energy dispersion spectroscopy technique to measure titanium silicide lateral diffusion. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 2609-2613.	2.1	8
146	Titanium silicide as a diffusion source for phosphorous: precipitation and activation. Applied Surface Science, 1991, 53, 190-195.	6.1	8
147	Arsenic and boron diffusion in silicon from implanted cobalt silicide layers. Semiconductor Science and Technology, 1995, 10, 1362-1367.	2.0	8
148	Twoâ€Ðimensional Aluminum Diffusion in Silicon: Experimental Results and Simulations. Journal of the Electrochemical Society, 1995, 142, 1585-1590.	2.9	8
149	Determination of C54 nucleation site density in narrow stripes by sheet resistance measurements and Î¼-Raman spectroscopy. Microelectronic Engineering, 2000, 50, 139-145.	2.4	8
150	Structural investigations of the C49â€“C54 transformation in TiSi2 thin films. Microelectronic Engineering, 2001, 55, 115-122.	2.4	8
151	Reaction of the Si/Ta/Ti system: C40 TiSi2 phase formation andin situkinetics. Journal of Applied Physics, 2002, 91, 633-638.	2.5	8
152	Reduction of the power dissipation in silicon carbide Schottky rectifiers by a dual-metal planar structure. Applied Physics Letters, 2002, 81, 1125-1127.	3.3	8
153	Correlation between microstructure control, density and diffusion barrier properties of TiN(O) films. Microelectronic Engineering, 2002, 60, 81-87.	2.4	8
154	Thermal expansion and stress development in the first stages of silicidation in Ti/Si thin films. Journal of Applied Physics, 2003, 94, 7083-7090.	2.5	8
155	Environment influence on Ti diffusion and layer degradation of a SiC/Ni[sub 2]Si/TiW/Au contact structure. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 966.	1.6	8
156	SiC-4H Epitaxial Layer Growth by Trichlorosilane (TCS) as Silicon Precursor at Very High Growth Rate. Materials Science Forum, 0, 600-603, 123-126.	0.3	8
157	Study of the Evolution of Basal Plane Dislocations during Epitaxial Growth: Role of the Surface Kinetics. Materials Science Forum, 2010, 645-648, 539-542.	0.3	8
158	Systematic First Principles Calculations of the Effects of Stacking Fault Defects on the 4H-SiC Band Structure. Materials Science Forum, 0, 645-648, 283-286.	0.3	8
159	Study of the Effects of Growth Rate, Miscut Direction and Postgrowth Argon Annealing on the Surface Morphology of Homoepitaxially Grown 4H Silicon Carbide Films. Materials Science Forum, 0, 740-742, 229-234.	0.3	8
160	Evaluation of 3C-SiC/Si residual stress and curvatures along different wafer direction. Materials Letters, 2014, 118, 130-133.	2.6	8
161	Dependence of PtSi Schottky diode electrical behaviour on the platinum film thickness and on the annealing process. Thin Solid Films, 1988, 161, 13-20.	1.8	7
162	Rapid thermal processing reliability of titanium silicide implanted with arsenic, boron and phosphorus. Applied Surface Science, 1991, 53, 377-382.	6.1	7

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163	Diffusion and precipitation of As from a CoSi2 diffusion source. Applied Surface Science, 1993, 73, 175-181.	6.1	7
164	Stress-induced precipitation of dopants diffused into Si and TiSi2and CoSi2implanted layers. Semiconductor Science and Technology, 1993, 8, 1196-1203.	2.0	7
165	Structure and defect characterization of epitaxial CoSi2 on Si(001) formed using an amorphous Co75W25 sputtered layer. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1993, 11, 1807.	1.6	7
166	Kinetics of the C49â€“C54 phase transition in TiSi2: New indications from sheet resistance, infrared spectroscopy and molecular dynamics simulations. Microelectronic Engineering, 1997, 37-38, 441-448.	2.4	7
167	Reaction and thermal stability of cobalt disilicide on polysilicon resulting from a Si/Ti/Co multilayer system. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 1448.	1.6	7
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