

# Thierry Chassagne

## List of Publications by Year in descending order

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99  
papers

1,398  
citations

361296

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414303

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101  
all docs

101  
docs citations

101  
times ranked

1233  
citing authors

#	ARTICLE	IF	CITATIONS
1	Epitaxial graphene on cubic SiC(111)/Si(111) substrate. Applied Physics Letters, 2010, 96, 191910.	1.5	97
2	Quantum Hall resistance standards from graphene grown by chemical vapour deposition on silicon carbide. Nature Communications, 2015, 6, 6806.	5.8	76
3	Direct growth of few-layer graphene on 6H-SiC and 3C-SiC/Si via propane chemical vapor deposition. Applied Physics Letters, 2010, 97, .	1.5	70
4	Evidence of electrical activity of extended defects in 3C-SiC grown on Si. Applied Physics Letters, 2010, 96, .	1.5	65
5	Comparative study of the role of the nucleation stage on the final crystalline quality of (111) and (100) silicon carbide films deposited on silicon substrates.. Journal of Applied Physics, 2009, 105, 083505.	1.1	61
6	Strain and wafer curvature of 3C-SiC films on silicon: influence of the growth conditions. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 981-986.	0.8	54
7	A comprehensive study of SiC growth processes in a VPE reactor. Thin Solid Films, 2002, 402, 83-89.	0.8	46
8	Nitrogen doping of 3C-SiC thin films grown by CVD in a resistively heated horizontal hot-wall reactor. Journal of Crystal Growth, 2008, 310, 3174-3182.	0.7	41
9	AlGaN/GaN high electron mobility transistors grown on 3C-SiC/Si(111). Journal of Crystal Growth, 2008, 310, 4417-4423.	0.7	41
10	Stress relaxation during the growth of 3C-SiC/Si thin films. Applied Physics Letters, 2006, 89, 131906.	1.5	40
11	Structural properties of undoped and doped cubic GaN grown on SiC(001). Journal of Applied Physics, 2002, 91, 4983-4987.	1.1	38
12	Strain Tailoring in 3C-SiC Heteroepitaxial Layers Grown on Si(100). Chemical Vapor Deposition, 2006, 12, 483-488.	1.4	37
13	Effects of pressure, temperature, and hydrogen during graphene growth on SiC(0001) using propane-hydrogen chemical vapor deposition. Journal of Applied Physics, 2013, 113, .	1.1	36
14	Investigation of 2 Inch SiC Layers Grown in a Resistively-Heated LP-CVD Reactor with Horizontal "Hot-Walls". Materials Science Forum, 2004, 457-460, 273-276.	0.3	30
15	Fabrication of monocrystalline 3C-SiC resonators for MHz frequency sensors applications. Sensors and Actuators B: Chemical, 2008, 133, 276-280.	4.0	28
16	Elaboration of (111) oriented 3C-SiC/Si layers for template application in nitride epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 9-14.	1.7	28
17	Growth mode and electric properties of graphene and graphitic phase grown by argon-propane assisted CVD on 3C-SiC/Si and 6H-SiC. Journal of Crystal Growth, 2012, 349, 27-35.	0.7	27
18	Study of surface defects on 3C-SiC films grown on Si(111) by CVD. Journal of Crystal Growth, 2003, 253, 95-101.	0.7	25

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19	Transmission electron microscopy investigation of microtwins and double positioning domains in (111) 3C-SiC in relation with the carbonization conditions. Applied Physics Letters, 2009, 95, .	1.5	25
20	How to Grow Unstrained 3C-SiC Heteroepitaxial Layers on Si (100) Substrates. Materials Science Forum, 2001, 353-356, 155-158.	0.3	22
21	Experimental observation and analytical model of the stress gradient inversion in 3C-SiC layers on silicon. Journal of Applied Physics, 2012, 111, .	1.1	21
22	Electrical transport properties of p-type 4H-SiC. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600679.	0.8	20
23	Interfacial strain in 3C-SiC/Si(100) pseudo-substrates for cubic nitride epitaxy. Physica Status Solidi A, 2003, 195, 18-25.	1.7	18
24	Control of 3C-SiC/Si wafer bending by the "checker-board" carbonization method. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 524-530.	0.8	18
25	Graphene growth on AlN templates on silicon using propane-hydrogen chemical vapor deposition. Applied Physics Letters, 2014, 104, .	1.5	17
26	Ti-Ni ohmic contacts on 3C-SiC doped by nitrogen or phosphorus implantation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 171, 120-126.	1.7	16
27	p and n type doping of cubic GaN on SiC (001). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 82, 59-61.	1.7	15
28	A new approach for AFM cantilever elaboration with 3C-SiC. Materials Letters, 2012, 77, 54-56.	1.3	15
29	Original 3C-SiC micro-structure on a 3C-SiC pseudo-substrate. Microelectronic Engineering, 2013, 105, 65-67.	1.1	15
30	Electrothermally driven high-frequency piezoresistive SiC cantilevers for dynamic atomic force microscopy. Journal of Applied Physics, 2014, 116, .	1.1	15
31	p-Type Doping of 4H- and 3C-SiC Epitaxial Layers with Aluminum. Materials Science Forum, 0, 858, 137-142.	0.3	15
32	Micromachining of thin 3C-SiC films for mechanical properties investigation. Materials Research Society Symposia Proceedings, 2010, 1246, 1.	0.1	14
33	Structural and electrical characterizations of n-type implanted layers and ohmic contacts on 3C-SiC. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 2020-2025.	0.6	14
34	Correlation between epitaxial growth conditions of 3C-SiC thin films on Si and mechanical behavior of 3C-SiC self-suspended membranes. Sensors and Actuators A: Physical, 2002, 99, 31-34.	2.0	13
35	Recent Advances in Surface Preparation of Silicon Carbide and other Wide Band Gap Materials. Materials Science Forum, 0, 645-648, 753-758.	0.3	13
36	Graphene growth using propane-hydrogen CVD on 6H-SiC(0001): temperature dependent interface and strain. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 175-178.	0.8	13

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37	Influence of 3C-SiC/Si (111) template properties on the strain relaxation in thick GaN films. Journal of Crystal Growth, 2014, 398, 23-32.	0.7	13
38	Structural Quality, Polishing and Thermal Stability of 3C-SiC/Si Templates. Materials Science Forum, 0, 924, 306-309.	0.3	12
39	Improved SiCOI Structures Elaborated by Heteroepitaxy of 3C-SiC on SOI. Materials Science Forum, 2002, 389-393, 343-346.	0.3	10
40	High Quality Ohmic Contacts on n-type 3C-SiC Obtained by High and Low Process Temperature. , 2010, , .		10
41	X-Ray Diffraction and Raman Spectroscopy Study of Strain in Graphene Films Grown on 6H-SiC(0001) Using Propane-Hydrogen-Argon CVD. Materials Science Forum, 0, 740-742, 117-120.	0.3	10
42	High temperature annealing and CVD growth of few-layer graphene on bulk AlN and AlN templates. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600436.	0.8	10
43	Screening the built-in electric field in 4H silicon carbide stacking faults. Applied Physics Letters, 2007, 90, 111902.	1.5	9
44	Realization of AlGaIn/GaN HEMTs on 3C-SiC/Si(111) substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1983-1985.	0.8	9
45	Low Specific Contact Resistance to 3C-SiC Grown on (100) Si Substrates. Materials Science Forum, 2007, 556-557, 721-724.	0.3	8
46	Role of Substrate Misorientation in Relaxation of 3C-SiC Layers on Silicon. Materials Science Forum, 0, 615-617, 169-172.	0.3	8
47	Combined structural and optical studies of stacking faults in 4H-SiC layers grown by chemical vapour deposition. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1924-1930.	0.8	8
48	Elaboration of Monocrystalline Si Thin Film on 3C-SiC(100)/Si Epilayers by Low Pressure Chemical Vapor Deposition. Materials Science Forum, 0, 711, 61-65.	0.3	7
49	Characterization of 3C-SiC/SOI Deposited with HMDS. Materials Science Forum, 2000, 338-342, 599-602.	0.3	6
50	Trends in Dopant Incorporation for 3C-SiC Films on Silicon. Materials Science Forum, 0, 556-557, 207-210.	0.3	6
51	Structural and Morphological Characterization of 3C-SiC Films Grown on (111), (211) and (100) Silicon Substrates. Materials Science Forum, 2008, 600-603, 231-234.	0.3	6
52	Detailed study of the influence of surface misorientation on the density of Anti-Phase Boundaries in 3C-SiC layers grown on (001) silicon. , 2010, , .		6
53	Electrical Characterization of Nitrogen Implanted 3C-SiC by SSRM and C&ATLM Measurements. Materials Science Forum, 0, 679-680, 193-196.	0.3	6
54	Effect of germanium doping on electrical properties of n-type 4H-SiC homoepitaxial layers grown by chemical vapor deposition. Journal of Applied Physics, 2016, 120, .	1.1	6

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55	Checker-Board Carbonization for Control and Reduction of the Mean Curvature of 3C-SiC Layers Grown on Si(100) Substrates. Materials Science Forum, 2004, 457-460, 265-268.	0.3	5
56	Cathodoluminescence investigation of stacking faults extension in 4H-SiC. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2222-2228.	0.8	5
57	Observation of Asymmetric Wafer Bending for 3C-SiC Thin Films Grown on Misoriented Silicon Substrates. Materials Research Society Symposia Proceedings, 2008, 1069, 1.	0.1	5
58	Strain in 3C-SiC Heteroepitaxial Layers Grown on (100) and (111) Oriented Silicon Substrates. Materials Science Forum, 2008, 600-603, 207-210.	0.3	5
59	Ti Thickness Influence for Ti/Ni Ohmic Contacts on N-Type 3C-SiC. Materials Science Forum, 2012, 711, 179-183.	0.3	5
60	Silicon Growth on 3C-SiC(001)/Si(001): Pressure Influence and Thermal Effect. Materials Science Forum, 0, 821-823, 978-981.	0.3	5
61	Electrical Transport Properties of Highly Aluminum Doped p-Type 4H-SiC. Materials Science Forum, 0, 858, 249-252.	0.3	5
62	Electrical properties of SiO <sub>2</sub> /SiC interfaces on 2°-off axis 4H-SiC epilayers. Applied Surface Science, 2016, 364, 892-895.	3.1	5
63	Optical Investigation of the Built-In Strain in 3C-SiC Epilayers. Materials Science Forum, 2004, 457-460, 657-660.	0.3	4
64	Highly sensitive determination of N <sup>+</sup> doping level in 3C-SiC and GaN epilayers by Fourier transform infrared spectroscopy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 165, 42-46.	1.7	4
65	Epitaxial Graphene Elaborated on 3C-SiC(111)/Si Epilayers. Materials Science Forum, 2010, 645-648, 585-588.	0.3	4
66	Dose Influence on Physical and Electrical Properties of Nitrogen Implantation in 3C-SiC on Si. Materials Science Forum, 0, 711, 154-158.	0.3	4
67	Graphene/SiC Interface Control Using Propane-Hydrogen CVD on 6H-SiC(0001) and 3C-SiC(111)/Si(111). Materials Science Forum, 2012, 711, 253-257.	0.3	4
68	Realization of minimum number of rotational domains in heteroepitaxied Si(110) on 3C-SiC(001). Applied Physics Letters, 2016, 108, 011608.	1.5	4
69	CVD Growth of Graphene on SiC (0001): Influence of Substrate Offcut. Materials Science Forum, 0, 897, 731-734.	0.3	4
70	Behaviour of the 3C-SiC(100) c(2 × 2) (C-terminated) and 3 × 2 (Si-rich) surface reconstructions upon initial H <sub>2</sub> /CH <sub>4</sub> microwave plasma exposures. Physica Status Solidi A, 2005, 202, 2234-2239.	1.7	3
71	Analytical Model of Stress Relaxation in 3C SiC Layers on Silicon. Materials Science Forum, 2011, 679-680, 79-82.	0.3	3
72	Structural and Electrical Properties of Graphene Films Grown by Propane/Hydrogen CVD on 6H-SiC(0001). Materials Science Forum, 0, 717-720, 625-628.	0.3	3

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73	Investigation of Aluminum Incorporation in 4H-SiC Epitaxial Layers. Materials Science Forum, 0, 806, 45-50.	0.3	3
74	3C-SiC: New Interest for MEMS Devices. Materials Science Forum, 0, 806, 3-9.	0.3	3
75	Structural trends in Si dots formation on SiC surfaces using CVD environment. Journal of Crystal Growth, 2014, 404, 157-163.	0.7	3
76	Influence of Aluminum Incorporation on Mechanical Properties of 3C-SiC Epilayers. Materials Science Forum, 0, 924, 318-321.	0.3	3
77	Nucleation Control in FLASIC Assisted Short Time Liquid Phase Epitaxy by Melt Modification. Materials Science Forum, 2005, 483-485, 213-216.	0.3	2
78	P Implantation Effect on Specific Contact Resistance in 3C-SiC Grown on Si. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	2
79	8H Stacking Faults in a 4H-SiC Matrix: Simple Unit Cell or Double 3C Quantum Well?. Materials Science Forum, 0, 615-617, 339-342.	0.3	2
80	Advances in Liquid Phase Conversion of (100) and (111) Oriented Si Wafers into Self-Standing 3C-SiC. Materials Science Forum, 0, 615-617, 49-52.	0.3	2
81	Thermally Induced Surface Reorganization of 3C-SiC(111) Epilayers Grown on Silicon Substrates. Materials Science Forum, 2010, 645-648, 155-158.	0.3	2
82	Control of Stress with Growth Conditions and Mechanical Parameters Determination of 3C-SiC Heteroepitaxial Thin Films. Materials Research Society Symposia Proceedings, 2000, 657, 5201.	0.1	1
83	3C-SiC Pseudosubstrates for the Growth of Cubic GaN. Materials Science Forum, 2000, 338-342, 1467-1470.	0.3	1
84	Growth and Characterization of AlGaIn/GaN HEMT Structures on 3C-SiC/Si(111) Templates. Materials Science Forum, 2008, 600-603, 1277-1280.	0.3	1
85	SiC on SOI Resonators: A Route for Electrically Driven MEMS in Harsh Environment. Materials Science Forum, 2010, 645-648, 845-848.	0.3	1
86	Detailed Experimental Study of Mean and Gradient Stresses in Thin 3C-SiC Films Performed Using Micromachined Cantilevers. Materials Science Forum, 2012, 711, 84-88.	0.3	1
87	CVD Growth of Graphene on 3C-SiC/Si Templates: Influence of Substrate Orientation and Wafer Homogeneity. Materials Science Forum, 0, 717-720, 621-624.	0.3	1
88	Influence of Site Competition Effects on Dopant Incorporation during Chemical Vapor Deposition of 4H-SiC Epitaxial Layers. Materials Science Forum, 2015, 821-823, 149-152.	0.3	1
89	Novel 3C-SiC Microstructure for MEMS Applications. Materials Science Forum, 2016, 858, 723-728.	0.3	1
90	Comparative Study of p-Type 4H-SiC Grown on n-Type and Semi Insulating 4H-SiC Substrates. Materials Science Forum, 2017, 897, 275-278.	0.3	1

#	ARTICLE	IF	CITATIONS
91	Fabrication of electrostatic resonators with monocrystalline 3C SiC grown on silicon. , 0, , .		0
92	Electric-Field Screening Effects in the Micro-Photoluminescence Spectra of As-Grown Stacking Faults in 4H-SiC. Materials Science Forum, 2007, 556-557, 351-354.	0.3	0
93	Photoluminescence, cathodo-luminescence and micro-Raman spectroscopy of as-grown stacking faults in 4H-SiC. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1513-1516.	0.8	0
94	Growth of AlGaIn/GaN HEMTs on 3C-SiC/Si(111) Substrates. Materials Research Society Symposia Proceedings, 2008, 1068, 1.	0.1	0
95	Evaluation of the Crystalline Quality of Strongly Curved 3C-SiC <sup>+</sup> Si Epiwafers Through X-Ray Diffraction Analyses. , 2010, , .		0
96	Probing at Nanoscale Underneath the Gate Oxides in 4H-SiC MOS-Based Devices Annealed in N <sub>2</sub> and POCl <sub>3</sub> . Materials Science Forum, 0, 806, 143-147.	0.3	0
97	Structural Investigation of Si Quantum Dots Grown by CVD on AlN/Si(111) and 3C-SiC/Si(100) Epilayers. Materials Science Forum, 2015, 821-823, 1003-1006.	0.3	0
98	Processing and Characterization of MOS Capacitors Fabricated on 2°-Off Axis 4H-SiC Epilayers. Materials Science Forum, 0, 858, 663-666.	0.3	0
99	Influence of Growth Temperature on Site Competition Effects during Chemical Vapor Deposition of 4H-SiC Layers. Materials Science Forum, 2017, 897, 79-82.	0.3	0