

# Antonella Poggi

## List of Publications by Year in descending order

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82  
papers

759  
citations

566801

15  
h-index

642321

23  
g-index

85  
all docs

85  
docs citations

85  
times ranked

609  
citing authors

#	ARTICLE	IF	CITATIONS
1	Radiation hardness after very high neutron irradiation of minimum ionizing particle detectors based on 4H-SiC p/sup +/n junctions. IEEE Transactions on Nuclear Science, 2006, 53, 1557-1563.	1.2	59
2	Permeated porous silicon for hydrocarbon sensor fabrication. Sensors and Actuators A: Physical, 1999, 74, 95-99.	2.0	48
3	Nitrogen Implantation to Improve Electron Channel Mobility in 4H-SiC MOSFET. IEEE Transactions on Electron Devices, 2008, 55, 961-967.	1.6	41
4	Growth and Characterization of 3C-SiC Films for Micro Electro Mechanical Systems (MEMS) Applications. Crystal Growth and Design, 2009, 9, 4852-4859.	1.4	36
5	Composition and structure of tin/vanadium oxide surfaces for chemical sensing applications. Sensors and Actuators B: Chemical, 2000, 71, 123-126.	4.0	34
6	Effects of heating ramp rates on the characteristics of Al implanted 4H-SiC junctions. Applied Physics Letters, 2006, 88, 162106.	1.5	27
7	Analysis of electron traps at the 4H-SiC/SiO <sub>2</sub> interface; influence by nitrogen implantation prior to wet oxidation. Journal of Applied Physics, 2010, 108, 024503.	1.1	27
8	TEM characterisation of porous silicon. Micron, 2000, 31, 223-230.	1.1	26
9	Improved electrical characterization of Al-Ti ohmic contacts on p-type ion implanted 6H-SiC. Semiconductor Science and Technology, 2003, 18, 554-559.	1.0	25
10	Thick oxidised porous silicon layer as a thermo-insulating membrane for high-temperature operating thin- and thick-film gas sensors. Sensors and Actuators B: Chemical, 1998, 49, 22-29.	4.0	24
11	Permeated Porous Silicon Suspended Membrane as Sub-ppm Benzene Sensor for Air Quality Monitoring. Journal of Porous Materials, 2000, 7, 197-200.	1.3	23
12	MOS capacitors obtained by wet oxidation of n-type 4H-SiC pre-implanted with nitrogen. Microelectronic Engineering, 2007, 84, 2804-2809.	1.1	21
13	Investigation on the Use of Nitrogen Implantation to Improve the Performance of N-Channel Enhancement 4H-SiC MOSFETs. IEEE Transactions on Electron Devices, 2008, 55, 2021-2028.	1.6	20
14	Porous silicon layer permeated with Sn-V mixed oxides for hydrocarbon sensor fabrication. Thin Solid Films, 1997, 297, 43-47.	0.8	17
15	Effect of nitrogen implantation at the SiO <sub>2</sub> /SiC interface on the electron mobility and free carrier density in 4H-SiC metal oxide semiconductor field effect transistor channel. Journal of Applied Physics, 2010, 107, .	1.1	17
16	Measurements and simulations of charge collection efficiency of p+/n junction SiC detectors. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 546, 218-221.	0.7	16
17	Contact Resistivity and Barrier Height of Al/Ti Ohmic Contacts on p-Type Ion Implanted 4H- and 6H-SiC. Materials Science Forum, 2004, 457-460, 881-884.	0.3	15
18	Low temperature oxidation of SiC preamorphized by ion implantation. Journal of Applied Physics, 2004, 95, 6119-6123.	1.1	15

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19	A Comparative Study of High-Temperature Aluminum Post-Implantation Annealing in 6H- and 4H-SiC, Non-Uniform Temperature Effects. Materials Science Forum, 2002, 389-393, 827-830.	0.3	13
20	Contact resistivity of Al/Ti ohmic contacts on p-type ion implanted 4H- and 6H-SiC.. Materials Research Society Symposia Proceedings, 2002, 742, 621.	0.1	13
21	Oxidation kinetics of ion-amorphized (0001) 6H-SiC: Competition between oxidation and recrystallization processes. Applied Physics Letters, 2005, 86, 121907.	1.5	12
22	Rapid screening and identification of illicit drugs by IR absorption spectroscopy and gas chromatography. Proceedings of SPIE, 2013, , .	0.8	12
23	microstructural development in pure and V-doped SnO <sub>2</sub> nanopowders. Journal of the European Ceramic Society, 1999, 19, 2073-2077.	2.8	11
24	Structural Characterization of Alloyed Al/Ti and Ti Contacts on SiC. Materials Science Forum, 2004, 457-460, 837-840.	0.3	10
25	Lattice disorder and recombination centres in heat-treated FZ silicon. Physica Status Solidi A, 1985, 92, 177-185.	1.7	9
26	Measurements of Charge Collection Efficiency of p-n Junction SiC Detectors. Materials Science Forum, 2005, 483-485, 1021-1024.	0.3	9
27	Effects of Very High Neutron Fluence Irradiation on p-n Junction 4H-SiC Diodes. Materials Science Forum, 2007, 556-557, 917-920.	0.3	9
28	Annealing effects on leakage current and epilayer doping concentration of p+n junction 4H-SiC diodes after very high neutron irradiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 583, 173-176.	0.7	9
29	Rapid Thermal Annealing of p-type Silicon: Correlation Between Deep Level Transient Spectroscopy and Lifetime Measurements. Journal of the Electrochemical Society, 1994, 141, 754-758.	1.3	8
30	Deep level transient spectroscopy study of the damage induced in n-type silicon by a gate oxide etching in a CHF <sub>3</sub> /Ar plasma. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1997, 15, 623.	1.6	8
31	Low-Temperature Thermal Oxidation of Ion-Amorphized 6H-SiC. Materials Science Forum, 2002, 389-393, 1109-1112.	0.3	8
32	Schottky contact barrier height enhancement on p-type silicon by wet chemical etching. Applied Physics A: Solids and Surfaces, 1989, 48, 391-395.	1.4	7
33	Al/Ti Ohmic Contacts to p-Type Ion-Implanted 6H-SiC: Mono- and Two- Dimensional Analysis of TLM Data. Materials Science Forum, 2003, 433-436, 673-676.	0.3	7
34	Current Analysis of Ion Implanted p-n Junctions: Post-Implantation Annealing in Ar Ambient. Materials Science Forum, 2006, 527-529, 815-818.	0.3	7
35	Some electrical characteristics of Fe and its annealing behaviour in FZ silicon. Physica Status Solidi A, 1990, 118, 491-496.	1.7	6
36	Effect of Rapid Thermal Annealing on Electrical and Structural Properties of Silicon. Journal of the Electrochemical Society, 1991, 138, 1841-1845.	1.3	6

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37	Boron ion implantation through Mo and Mo silicide layers for shallow junction formation. Journal of Applied Physics, 1991, 69, 3962-3967.	1.1	6
38	Copper impurities and their annealing behaviour in FZ silicon. Physica Status Solidi A, 1994, 143, 373-377.	1.7	6
39	Interfacial Properties of SiO <sub>2</sub> Grown on 4H-SiC: Comparison between N <sub>2</sub> O and Wet O <sub>2</sub> Oxidation Ambient. Materials Science Forum, 2006, 527-529, 979-982.	0.3	6
40	The electrical activity of stacking faults in Czochralski silicon. Applied Physics A: Solids and Surfaces, 1989, 48, 431-436.	1.4	5
41	Electrical Properties of Rapid Thermal Annealing Induced Defects in Silicon. Journal of the Electrochemical Society, 1995, 142, 2081-2085.	1.3	5
42	SiC Donor Doping by 300°C P Implantation: Characterization of the Doped Layer Properties in Dependence of the Post-Implantation Annealing Temperature. Materials Science Forum, 2004, 457-460, 945-950.	0.3	5
43	Extraction of the Schottky Barrier Height for Ti/Al Contacts on 4H-SiC from I-V and C-V Measurements. Materials Science Forum, 2004, 457-460, 993-996.	0.3	4
44	Ion Implanted p+/n 4H-SiC Junctions: effect of the Heating Rate during Post Implantation Annealing. Materials Research Society Symposia Proceedings, 2006, 911, 1.	0.1	4
45	Characterization of MOS Capacitors Fabricated on n-type 4H-SiC Implanted with Nitrogen at High Dose. Materials Science Forum, 2007, 556-557, 639-642.	0.3	4
46	Residual Stress Measurement and Simulation of 3C-SiC Single and Poly Crystal Cantilevers. Materials Science Forum, 0, 645-648, 865-868.	0.3	4
47	Non-Nitridated Oxides: Abnormal Behaviour of N-4H-SiC/SiO <sub>2</sub> Capacitors at Low Temperature Caused by near Interface States. Materials Science Forum, 2011, 679-680, 346-349.	0.3	4
48	Electrical Properties of Silver Impurities and their Annealing Behaviour in p-Type Fz Silicon. Journal De Physique III, 1996, 6, 1691-1696.	0.3	4
49	Denuded zone stability in a SPAD diode as a function of out-diffusion parameters. IEEE Transactions on Electron Devices, 1987, 34, 1496-1500.	1.6	3
50	Study of the electrical active defects induced by reactive ion etching in n-type silicon. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 2139.	1.6	3
51	Ni-Silicide Contacts to 6H-SiC: Contact Resistivity and Barrier Height on Ion Implanted n-Type and Barrier Height on p-Type Epilayer. Materials Science Forum, 2005, 483-485, 737-740.	0.3	3
52	Fabrication of MOS Capacitors by Wet Oxidation of p-Type 4H-SiC Preamorphized by Nitrogen Ion Implantation. Materials Science Forum, 2007, 556-557, 651-654.	0.3	3
53	Nitridation of the SiO <sub>2</sub> /SiC Interface by N <sup>+</sup> Implantation: Hall versus Field Effect Mobility in n-Channel Planar 4H-SiC MOSFETs. Materials Science Forum, 0, 645-648, 491-494.	0.3	3
54	Processing-Induced Electrically Active Defects in Black Silicon Nanowire Devices. ACS Applied Materials & Interfaces, 2016, 8, 10443-10450.	4.0	3

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55	Lifetime and crystal order in annealed CZ silicon. <i>Physica Status Solidi A</i> , 1988, 108, 503-508.	1.7	2
56	RTA-induced defects: a comparison between lamp and electron beam techniques. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1989, 4, 231-235.	1.7	2
57	Intrinsic gettering of Cr impurities in p-type Cz silicon. <i>Physica Status Solidi A</i> , 1990, 121, 181-185.	1.7	2
58	Arsenic ion implantation through Mo and Mo silicide layers for shallow junction formation. <i>Solid-State Electronics</i> , 1992, 35, 941-947.	0.8	2
59	Surface damage in processed silicon. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 1996, 42, 249-253.	1.7	2
60	The Role of the Ion Implanted Emitter State on 6H-SiC Power Diodes Behavior. A Statistical Study. <i>Materials Science Forum</i> , 2004, 457-460, 1025-1028.	0.3	2
61	Ar Annealing at 1600°C and 1650°C of Al <sup>+</sup> Implanted p <sup>+</sup> /n 4H-SiC Diodes: Analysis of the J-V Characteristics Versus Annealing Temperature. <i>Materials Science Forum</i> , 2005, 483-485, 625-628.	0.3	2
62	Correlation between Current Transport and Defects in n <sup>+</sup> /p 6H-SiC Diodes. <i>Materials Science Forum</i> , 2006, 527-529, 811-814.	0.3	2
63	Analysis of the Electrical Activation of P <sup>+</sup> Implanted Layers as a Function of the Heating Rate of the Annealing Process. <i>Materials Science Forum</i> , 2007, 556-557, 571-574.	0.3	2
64	Î <sup>2</sup> -SiC NWs Grown on Patterned and MEMS Silicon Substrates. <i>Materials Science Forum</i> , 0, 679-680, 508-511.	0.3	2
65	Shallow junction formation using MoSi <sub>2</sub> as diffusion source. <i>Microelectronic Engineering</i> , 1992, 19, 673-676.	1.1	1
66	Characterization of a Thermal Oxidation Process on SiC Preamorphized by Ar Ion Implantation. <i>Materials Science Forum</i> , 2004, 457-460, 1357-1360.	0.3	1
67	n <sup>+</sup> /p Diodes Realized in SiC by Phosphorus Ion Implantation: Electrical Characterization as a Function of Temperature. <i>Materials Science Forum</i> , 2005, 483-485, 649-652.	0.3	1
68	Minimum Ionizing Particle Detector Based on p <sup>+</sup> /n Junction SiC Diode. <i>Materials Science Forum</i> , 2006, 527-529, 1469-1472.	0.3	1
69	Improvement of Electron Channel Mobility in 4H SiC MOSFET by Using Nitrogen Implantation. <i>Materials Science Forum</i> , 0, 600-603, 699-702.	0.3	1
70	Room Temperature Annealing Effects on Leakage Current of Ion Implanted p <sup>+</sup> /n 4H-SiC Diodes. <i>Materials Science Forum</i> , 0, 600-603, 1027-1030.	0.3	1
71	The Influence of Excess Nitrogen, on the Electrical Properties of the 4H-SiC/SiO <sub>2</sub> Interface. <i>Materials Science Forum</i> , 0, 679-680, 326-329.	0.3	1
72	The Effects of High Temperature Anneal on the Electrical Activity of Iron in B-Doped Cz Silicon. <i>Physica Status Solidi A</i> , 1989, 114, 247-252.	1.7	0

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73	B-Ion Implantation into Mo-Film for Shallow Junction Formation: DLTS Analyses on the p <sup>+</sup> Fabricated Diodes. Solid State Phenomena, 1991, 19-20, 505-510.	0.3	0
74	Competition between Oxidation and Recrystallization in Ion Amorphized (0001) 6H-SiC. Materials Science Forum, 2005, 483-485, 665-668.	0.3	0
75	Ion Implanted p <sup>+</sup> Diodes: Post-Implantation Annealing in a Silane Ambient in a Cold-Wall Low-Pressure CVD Reactor. Materials Science Forum, 2006, 527-529, 819-822.	0.3	0
76	Analysis of the Electron Traps at the 4H-SiC/SiO <sub>2</sub> Interface of a Gate Oxide Obtained by Wet Oxidation of a Nitrogen Pre-Implanted Layer. Materials Science Forum, 2009, 615-617, 533-536.	0.3	0
77	Strain Evaluation in SiC MEMS Test Structures. ECS Transactions, 2009, 25, 1031-1037.	0.3	0
78	Characterization of Phosphorus Implanted n <sup>+</sup> /p Junctions Integrated as Source/Drain Regions in a 4H-SiC n-MOSFET. Materials Science Forum, 0, 615-617, 687-690.	0.3	0
79	Effects of N Implantation before Gate Oxidation on the Performance of 4H-SiC MOSFET. Materials Science Forum, 0, 615-617, 761-764.	0.3	0
80	C-V and DLTS Analyses of Trap-Induced Graded Junctions: The Case of Al <sup>+</sup> Implanted JTE p <sup>+</sup> 4H-SiC Diodes. Materials Science Forum, 2009, 615-617, 469-472.	0.3	0
81	Passivation by N Implantation of the SiO <sub>2</sub> /SiC Acceptor Interface States: Impact on the Oxide Hole Traps and the Gate Oxide Reliability. Materials Research Society Symposia Proceedings, 2010, 1246, 1.	0.1	0
82	Epitaxial Growth, Mechanical, Electrical Properties of SiC/Si and SiC/Poli-Si. Materials Science Forum, 0, 717-720, 897-900.	0.3	0