

S Ashok

List of Publications by Year in descending order

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63
papers

957
citations

567281

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434195

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65
all docs

65
docs citations

65
times ranked

549
citing authors

#	ARTICLE	IF	CITATIONS
1	On the design of GaN vertical MESFETs on commercial LED sapphire wafers. Solid-State Electronics, 2016, 126, 23-31.	1.4	7
2	Modeling the spectral responsivity of ultraviolet GaN Schottky barrier photodetectors under reverse bias. Journal of Applied Physics, 2015, 117, 134503.	2.5	5
3	Nano- and micro-scale morphological defects in oxidized a-SiC:H thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 619-623.	0.8	0
4	Influence of oxidation temperature on photoluminescence and electrical properties of amorphous thin film SiC:H:O+Tb. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2749-2751.	0.8	1
5	Minority carrier injection limited current in Re/4H α SiC Schottky diodes. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1509-1513.	1.8	3
6	Low temperature charge carrier hopping transport mechanism in vanadium oxide thin films grown using pulsed dc sputtering. Applied Physics Letters, 2009, 94, .	3.3	49
7	Correlation of temperature response and structure of annealed VOx thin films for IR detector applications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 956-961.	2.1	25
8	Unipolar accumulation-type transistor configuration implemented using Si nanowires. Applied Physics Letters, 2007, 91, .	3.3	19
9	Anomalous Evolution of Bubbles in Krypton-Implanted SiO ₂ . Materials Research Society Symposia Proceedings, 2007, 994, 1.	0.1	4
10	Low-k Dielectric Obtained by Noble Gas Implantation in Silicon Oxide. Materials Research Society Symposia Proceedings, 2006, 914, 1.	0.1	1
11	Xe implantation in SiO ₂ /sub 2/: low-k applications. , 2006, , .		1
12	Thermal Growth of He-cavities in Si Studied by Cascade Implantation. Materials Research Society Symposia Proceedings, 2005, 864, 971.	0.1	1
13	Blistering and Splitting in Hydrogen-implanted Silicon. Materials Research Society Symposia Proceedings, 2005, 864, 981.	0.1	1
14	Mechanism of Dopant Activation Enhancement in Shallow Junctions by Hydrogen. Materials Research Society Symposia Proceedings, 2005, 864, 9281.	0.1	0
15	Enhancement of Boron Activation in Shallow Junctions by Hydrogen. Materials Research Society Symposia Proceedings, 2004, 810, 351.	0.1	0
16	Impact of Hydrogen Plasma Treatment on Gettering by He Implantation-Induced Cavities in Silicon. Materials Research Society Symposia Proceedings, 2004, 813, 421.	0.1	1
17	Influence of Atomic Hydrogen on Nickel Silicide Formation. Materials Research Society Symposia Proceedings, 2004, 810, 231.	0.1	1
18	Reverse current transport mechanism in shallow junctions containing silicide spikes. Journal of Applied Physics, 2002, 92, 7532-7535.	2.5	10

#	ARTICLE	IF	CITATIONS
19	Study of Er-related Defects in a-Si:H(Er) Films Used in Light Emitting Heterostructures. Materials Research Society Symposia Proceedings, 2002, 719, .	0.1	0
20	Carrier transport in amorphous SiC/crystalline silicon heterojunctions. Journal of Applied Physics, 2001, 89, 4422-4428.	2.5	26
21	Radio frequency plasma annealing of positive charge generated by Fowlerâ€œNordheim electron injection in buried oxides in silicon. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 1254.	1.6	15
22	Near-surface defects in hydrogen-plasma-treated boron-doped silicon studied by positron beam spectroscopy. Applied Physics A: Materials Science and Processing, 1999, 68, 643-645.	2.3	11
23	Ion Implantation-Induced Defects and the Influence of Titanium Silicidation. Materials Research Society Symposia Proceedings, 1998, 510, 275.	0.1	0
24	On the Influence of Illumination During Ion Damage Defect Anneal of Silicon. Materials Research Society Symposia Proceedings, 1995, 396, 709.	0.1	0
25	Schottky barrier study of ion implantation damage in GaAs. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1994, 12, 2280.	1.6	5
26	Investigation of roomâ€œtemperature ion beam hydrogenation for the removal of traps in silicon ion beam damaged metalâ€œoxideâ€œsilicon structures. Journal of Applied Physics, 1993, 73, 2187-2195.	2.5	13
27	Electrical transport across oxygenâ€œdopedâ€œsilicon buried layers by substoichiometric oxygen ion implantation in silicon. Applied Physics Letters, 1993, 63, 3188-3190.	3.3	0
28	Effects of Processâ€œInduced Damage on Metal Oxide Semiconductor Structures with 115 Å.. Thin Gate Oxides. Journal of the Electrochemical Society, 1992, 139, 2026-2032.	2.9	6
29	Atomic hydrogen interactions with disordered regions in silicon. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 1118-1123.	2.1	3
30	Plasma Hydrogenation Studies on Low-Temperature Mbe-Grown GaAs. Materials Research Society Symposia Proceedings, 1992, 262, 437.	0.1	0
31	Oxygen-Doped-Silicon/Silicon Heterointerfaces by Ion Implantation. Materials Research Society Symposia Proceedings, 1992, 268, 369.	0.1	0
32	Trapping of atomic hydrogen in silicon by disordered regions. Journal of Applied Physics, 1991, 70, 4779-4783.	2.5	12
33	Atomic Hydrogen Passivation of High Energy Hydrogen Implants. Materials Research Society Symposia Proceedings, 1991, 223, 241.	0.1	0
34	High Performance Thin Film Transistors for Scanner Applications. Materials Research Society Symposia Proceedings, 1990, 182, 369.	0.1	1
35	Silicon Surface Barrier Modification by Lowâ€œEnergy Nitrogen Ion Implantation. Journal of the Electrochemical Society, 1987, 134, 1494-1499.	2.9	2
36	Deep level transient spectroscopy of interfacial traps at ionâ€œimplanted ultrahighpâ€œSi Schottky barriers. Applied Physics Letters, 1986, 49, 1784-1786.	3.3	9

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37	Evidence for Polycrystalline Si Surface Layer Formation by Argon Implantation and its Passivation by Atomic Hydrogen. Materials Research Society Symposia Proceedings, 1986, 76, 203.	0.1	0
38	Evidence for the formation of polycrystalline silicon by argon implantation and its passivation by atomic hydrogen. Applied Physics Letters, 1986, 49, 728-730.	3.3	13
39	A study of target heating in low-energy ion-beam processing. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 2385-2388.	2.1	13
40	Summary Abstract: Synergistic effects in ion bombardment modification of silicon Schottky contacts. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1986, 4, 845-846.	2.1	2
41	Argon-ion implantation damage studies in silicon Schottky barriers using anodic oxidation/etching. Journal of Applied Physics, 1986, 60, 2886-2892.	2.5	18
42	Low-energy hydrogen ion implantation in Schottky barrier control. Applied Physics Letters, 1985, 47, 426-428.	3.3	16
43	Silicon Schottky-barrier modification by ion-implantation damage. IEEE Electron Device Letters, 1984, 5, 48-49.	3.9	23
44	Electrical, structural, and bonding changes induced in silicon by H, Ar, and Kr ion-beam etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1983, 1, 334-336.	2.1	44
45	Passivation of dry-etching damage using low-energy hydrogen implants. IEEE Electron Device Letters, 1983, 4, 432-435.	3.9	35
46	Interface investigation using transparent conductor-oxide-silicon structures. Journal of Applied Physics, 1982, 53, 7039-7043.	2.5	5
47	On resolving the anomaly of indium-tin oxide silicon junctions. IEEE Electron Device Letters, 1981, 2, 184-186.	3.9	33
48	Chemical and Ion Beam Etch Studies of Polycrystalline Silicon. Materials Research Society Symposia Proceedings, 1981, 5, 199.	0.1	0
49	A study of Pd/Si MIS Schottky barrier diode hydrogen detector. IEEE Transactions on Electron Devices, 1981, 28, 1003-1009.	3.0	162
50	Effect of ion-beam sputter damage on Schottky barrier formation in silicon. Applied Physics Letters, 1981, 39, 423-425.	3.3	127
51	Spray-deposited ITO-Silicon SIS heterojunction solar cells. IEEE Transactions on Electron Devices, 1980, 27, 725-730.	3.0	105
52	Evidence of tunnel-assisted transport in nondegenerate MOS and semiconductor-oxide-semiconductor diodes at room temperature. Journal of Applied Physics, 1980, 51, 3417-3421.	2.5	35
53	Evidence of space-charge-limited current in amorphous silicon Schottky diodes. IEEE Electron Device Letters, 1980, 1, 200-202.	3.9	61
54	An additional source of photovoltage in photoconductive materials. Applied Physics Letters, 1979, 35, 535-537.	3.3	17

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55	A model for the I-V characteristics of electrochemical photovoltaic devices. , 1979, , .		1
56	Hydrogen in silicon: defect interactions and applications. , 0, , .		2
57	Electrically active defects in surface preamorphized and subsequently RTP-annealed Si and the effect of titanium silicidation. , 0, , .		0
58	Process-induced damage-a study of hydrogen and deuterium passivation. , 0, , .		3
59	Formation and characterization of multi-layered nanocavities in silicon with cascade helium implantation/anneal. , 0, , .		0
60	Effect of silicon substrate hydrogenation treatment on nickel silicide formation. , 0, , .		0
61	Helium implant depth dependence on thermal growth of nanocavities in silicon. , 0, , .		0
62	Plasma and ion beam process-induced damage in semiconductors: review and retrospective. , 0, , .		1
63	Hydrogenation-enhanced low temperature activation of boron in silicon. , 0, , .		0