Nicole Herbots

List of Publications by Year
in descending order

32 papers	309 citations	1039880 9 h-index	887953 17 g-index
32 all docs	32 docs citations	32 times ranked	228 citing authors

#	Article	IF	Citations
1	Infrared spectroscopic analysis of an ordered Si/SiO2 interface. Applied Physics Letters, 2004, 84, 493-495.	1.5	59
2	New SiGe dielectrics grown at room temperature by lowâ€energy ion beam oxidation and nitridation. Applied Physics Letters, 1991, 59, 2031-2033.	1.5	38
3	Shallow-junction diode formation by implantation of arsenic and boron through titanium-silicide films and rapid thermal annealing. IEEE Transactions on Electron Devices, 1990, 37, 183-190.	1.6	29
4	The formation of ordered, ultrathin SiO2/Si(100) interfaces grown on (1Ã—1) Si(100). Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 87, 303-316.	1.7	27
5	Stability of C49 and C54 phases of TiSi2under ion bombardment. Journal of Applied Physics, 1991, 70, 2660-2666.	1.1	22
6	Comparative study on dry oxidation of heteroepitaxial Si1âˆ’xGexand Si1âˆ’xâˆ’yGexCyon Si(100)+. Journal of Applied Physics, 1996, 80, 1857-1866.	1.1	22
7	The onset of secondary phase precipitation during synthesis of heteroepitaxial Si1âˆ’xâˆ’yGexCy on Si(100). Applied Physics Letters, 1996, 68, 782-784.	1.5	15
8	Comparative Study of Surface Energies of Native Oxides of Si(100) and Si(111) via Three Liquid Contact Angle Analysis. MRS Advances, 2018, 3, 3379-3390.	0.5	15
9	Heteroepitaxial properties of Si1âˆ’xâˆ’yGexCy on Si(100) grown by combined ion- and molecular-beam deposition. Journal of Applied Physics, 1997, 81, 3081-3091.	1.1	14
10	Arsenic Dopant Influence upon the Sintering Behavior of the Aluminumâ€Polysilicon Interface. Journal of the Electrochemical Society, 1984, 131, 645-652.	1.3	9
11	Microstructure and stoichiometry dependence of ion beam nitrides as a function of energy and temperature: A comparative study between Si and SiGe. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1992, 10, 1631-1636.	0.9	8
12	Atomic displacement free interfaces and atomic registry in SiO2âˆ•(1Ã—1) Si(100). Journal of Applied Physics, 2006, 100, 104109.	1.1	8
13	IBMM of OH adsorbates and interphases on Si-based materials. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 330-333.	0.6	7
14	Surface energy engineering for LiTaO3 and Î±-quartz SiO2 for low temperature (<220â€‰Â°C) wafer bonding. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	0.9	5
15	Structure and properties of silicon nitride and nitride prepared by direct low energy ion beam nitridation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1992, 12, 53-59.	1.7	4
16	RBS study of the effect of arsenic and phosphorus interfacial segregation upon the sintering of contacts between implanted polycrystalline silicon and aluminum: Silicon(1%). Nuclear Instruments & Methods in Physics Research B, 1985, 7-8, 278-286.	0.6	3
17	Integrated Processinyg of Silicided Shallow Junctions using Rapid Thermal Annealing Prior to Dopant Activation. Materials Research Society Symposia Proceedings, 1989, 146, 191.	0.1	3
18	Super-Hydrophilic, Bio-compatible Anti-Fog Coating for Lenses in Closed Body Cavity Surgery: VitreOxâ„¢ â€” Scientific Model, In Vitro Experiments and In Vivo Animal Trials. MRS Advances, 2016, 1, 2141-2146.	0.5	3

#	Article	IF	Citations
19	Measuring Surface Energies of GaAs (100) and Si (100) by Three Liquid Contact Angle Analysis (3LCAA) for Heterogeneous Nano-BondingTM. MRS Advances, 2018, 3, 3403-3411.	0.5	3
20	Microstructure and ion beam characterization of heteroepitaxial Si1â^'xâ^'yGexCy. Nuclear Instruments & Methods in Physics Research B, 1996, 118, 633-639.	0.6	2
21	A New 3D Multistring Code to Identify Compound Oxide Nanophase With Ion Channeling. Materials Research Society Symposia Proceedings, 2007, 996, 1.	0.1	2
22	Electrolyte Detection by Ion Beam Analysis, in Continuous Glucose Sensors and in Microliters of Blood using a Homogeneous Thin Solid Film of Blood, HemaDropâ„¢. MRS Advances, 2016, 1, 2133-2139.	0.5	2
23	GaAs to Si Direct Wafer Bonding at Tâ€‰â‰â€‰220ÂÂ°C in Ambient Air Via Nano-Bondingâ„¢ and Surface Energy Engineering (SEE). Silicon, 2022, 14, 11903-11926.	1.8	2
24	The role of interfacial segregation and microstructure in interdiffusion between aluminum and silicon. Journal of Electronic Materials, 1989, 18, 689-693.	1.0	1
25	A Model for Interdiffusion at Metal Semiconductor Interfaces: Conditions for Spiking. Materials Research Society Symposia Proceedings, 1989, 148, 83.	0.1	1
26	Epitaxy and Chemical Reactions During Thin Film Formation from Low Energy Ions New Kinetic Pathways, New Phases and New Properties. Materials Research Society Symposia Proceedings, 1991, 235, 749.	0.1	1
27	Epitaxy and Chemical Reactions During Thin Film Formation from Low Energy Ions New Kinetic Pathways, New Phases and New Properties. Materials Research Society Symposia Proceedings, 1991, 236, 287.	0.1	1
28	Damage-to-dose ratio after low energy silicon ion implantation into crystalline silicon. Journal of Materials Research, 1993, 8, 2305-2309.	1.2	1
29	Determining Canine Blood and Human Blood Composition by Congealing Microliter Drops into Homogeneous Thin Solid Films (HTSFs) via HemaDropâ„¢. MRS Advances, 2017, 2, 2451-2456.	0.5	1
30	Understanding gaas Native Oxides By Correlating Three Liquid Contact Angle Analysis (3LCAA) and High Resolution Ion Beam Analysis (HR-IBA) to X-Ray Photoelectron Spectroscopy (XPS) as Function of Surface Processing. MRS Advances, 2019, 4, 2249-2263.	0.5	1
31	Surface Characterization of Arsenic Implanted Silicon (100): A New Insight into the Inhibition of Aluminum/Silicon Interdiffusion. Materials Research Society Symposia Proceedings, 1984, 37, 613.	0.1	0
32	Optimizing Homogeneous Thin Solid Films (HTSFs) from Î¼L-Blood Droplets via Hyper-Hydrophilic Coatings (HemaDropâ„¢) for Accurate Compositional Analysis via IBA, XRF, and XPS. MRS Advances, 2019, 4, 2489-2513.	0.5	0