

# Joanna L Batstone

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

68  
papers

1,532  
citations

20  
h-index

38  
g-index

69  
ext. papers

1,570  
ext. citations

3.5  
avg, IF

3.88  
L-index

#	Paper	IF	Citations
68	Kinetic Studies of Nanoscale Crystallization in Electronic Materials. <i>Materials Research Society Symposia Proceedings</i> , <b>1995</b> , 405, 73		
67	Structural and electronic properties of defects in semiconductors. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1995</b> , 53, 4-5		
66	Microscopic Processes in Crystallisation. <i>Solid State Phenomena</i> , <b>1994</b> , 37-38, 257-268	0.4	15
65	Silicide formation and silicide-mediated crystallization of nickel-implanted amorphous silicon thin films. <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 8279-8289	2.5	316
64	In situ crystallization of amorphous silicon in the transmission electron microscope. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1993</b> , 67, 51-72		55
63	Stability of visible luminescence from porous silicon. <i>Applied Physics Letters</i> , <b>1993</b> , 62, 2667-2669	3.4	33
62	High Resolution In Situ TEM Studies of Silicide-Mediated Crystallization of Amorphous Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1993</b> , 321, 579		1
61	In situ transmission electron microscopy studies of silicide-mediated crystallization of amorphous silicon. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 225-227	3.4	109
60	Stacking fault asymmetry in epitaxial films of mcvd znse/gaas(001). <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1992</b> , 66, 609-620		11
59	Degradation of visible cathodoluminescence from porous silicon. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1992</b> , 50, 1372-1373		
58	In situ crystallization of amorphous silicon. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1992</b> , 50, 1346-1347		
57	Dynamic studies of silicide-mediated crystallization of amorphous silicon. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1992</b> , 50, 1352-1353		
56	The Effect of Rapid Thermal Annealing on Heteroepitaxial Structures. <i>Materials Research Society Symposia Proceedings</i> , <b>1991</b> , 91, 365		4
55	Twin intersections in silicon on sapphire. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , <b>1991</b> , 63, 1037-1050		11
54	Motion of Crystal/Crystal and Crystal/Amorphous Interfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>1990</b> , 183, 79		
53	Growth and characterization of ultrathin cobalt silicide films on Si(211) and (311). <i>Journal of Materials Research</i> , <b>1990</b> , 5, 1032-1041	2.5	6
52	Interface motion during recrystallization of amorphous NiSi <sub>2</sub> . <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1990</b> , 48, 524-525		1

51	A crystallographic analysis of the CoSi/Si(111) interface using Transmission Electron Microscopy. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1990</b> , 48, 574-575		
50	Dependence of the structural and electrical properties of ultrathin cobalt silicide films on formation conditions. <i>Journal of Materials Research</i> , <b>1989</b> , 4, 144-155	2.5	16
49	Si / CoSi <sub>2</sub> / Si Structures: Pseudomorphism, Interface Structures, Epitaxial Orientations, and the Control of Pinholes. <i>Journal of the Electrochemical Society</i> , <b>1989</b> , 136, 815-819	3.9	21
48	Epitaxial recrystallization and diffusion phenomena in amorphous silicon produced by MeV ion beams. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1989</b> , 37-38, 955-959	1.2	12
47	Radiation-enhanced diffusion of implanted impurities in amorphous Si. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , <b>1989</b> , 39, 343-346	1.2	7
46	In-situ transmission electron microscopy of NiSi <sub>2</sub> formation by molecular beam epitaxy. <i>Surface Science</i> , <b>1989</b> , 208, 317-350	1.8	45
45	Bonding Configurations at Epitaxial CaF <sub>2</sub> /Si Interfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>1989</b> , 139, 351		1
44	Reconstruction of (100) Silicon/Disilicide Interfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>1989</b> , 139, 97		2
43	Epitaxial films of CoSi <sub>2</sub> on Si (311) and Si (211). <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1989</b> , 47, 456-457		
42	Reconstruction of the NiSi <sub>2</sub> /Si(100) interface. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1989</b> , 47, 460-461		1
41	Origin of A- or B-type NiSi <sub>2</sub> determined by in situ transmission electron microscopy and diffraction during growth. <i>Physical Review Letters</i> , <b>1988</b> , 60, 1158-1161	7.4	50
40	Twin formation and Au segregation during ion-beam-induced epitaxy of amorphous Si. <i>Applied Physics Letters</i> , <b>1988</b> , 52, 1043-1045	3.4	22
39	Control of pinholes in epitaxial CoSi <sub>2</sub> layers on Si(111). <i>Applied Physics Letters</i> , <b>1988</b> , 52, 648-650	3.4	64
38	Trapping of Au in Si during pulsed laser irradiation: A comparison with ion beam induced segregation. <i>Applied Physics Letters</i> , <b>1988</b> , 53, 2486-2488	3.4	16
37	Coreless defects and the continuity of epitaxial NiSi <sub>2</sub> /Si(100) thin films. <i>Applied Physics Letters</i> , <b>1988</b> , 52, 828-830	3.4	27
36	Evidence for the influence of interfacial atomic structure on electrical properties at the epitaxial CaF <sub>2</sub> /Si(111) interface. <i>Physical Review Letters</i> , <b>1988</b> , 60, 1394-1397	7.4	79
35	Control of epitaxial orientation of Si on CoSi <sub>2</sub> (111). <i>Applied Physics Letters</i> , <b>1988</b> , 52, 1611-1613	3.4	44
34	Batstone and Phillips reply. <i>Physical Review Letters</i> , <b>1988</b> , 61, 2275	7.4	11

33	Nonequilibrium segregation and trapping phenomena during ion-induced crystallization of amorphous Si. <i>Physical Review Letters</i> , <b>1988</b> , 60, 1322-1325	7-4	48
32	Radiation-enhanced diffusion of Au in amorphous Si. <i>Applied Physics Letters</i> , <b>1988</b> , 52, 1213-1215	3-4	37
31	Segregation and Trapping of Gold During Ion-Induced Crystallization of Amorphous Si. <i>Materials Research Society Symposia Proceedings</i> , <b>1988</b> , 100, 399		1
30	Diffusion of Au in Amorphous Si During Ion-Beam Irradiation. <i>Materials Research Society Symposia Proceedings</i> , <b>1988</b> , 100, 87		1
29	New Directions in the Growth of Epitaxial Insulators and Metals on Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1988</b> , 116, 403		1
28	Growth of Thin Epitaxial CoSi <sub>2</sub> Layers on Si(100). <i>Materials Research Society Symposia Proceedings</i> , <b>1988</b> , 116, 439		24
27	The Effect of Rapid Thermal Annealing on the Dislocation Structure of Silicon on Sapphire. <i>Materials Research Society Symposia Proceedings</i> , <b>1988</b> , 138, 373		10
26	TEM and cathodoluminescence of precipitates in II-VI semiconductors. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1988</b> , 46, 488-489		
25	Subboundary-free zone-melt recrystallization of thin-film silicon. <i>Applied Physics Letters</i> , <b>1987</b> , 51, 1256-1258	3-4	41
24	Mechanisms of buried oxide formation by ion implantation. <i>Applied Physics Letters</i> , <b>1987</b> , 50, 19-21	3-4	77
23	Nucleation and Growth of Ultrathin Epitaxial Metal Silicides on Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 102, 253		
22	Ultrathin Single Crystal CoSi <sub>2</sub> Layers on Si(111) And Si(100). <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 102, 265		7
21	In-Situ Rapid Thermal Annealing of Heterostructures Grown by Molecular Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 102, 355		1
20	Hot Electron Transistors Using Si/CoSi <sub>2</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 102, 361		6
19	The Effect of Formation Conditions on the Structural and Electrical Properties of Ultrathin Cobalt Silicide Films. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 102, 389		1
18	Effect of Atomic Structure at the Epitaxial CaF <sub>2</sub> /Si(111) Interface on Electrical Properties. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 102, 45		3
17	In-Situ Rapid Thermal Annealing of Heterostructures Grown by Molecular Beam Epitaxy. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 107, 253		
16	Hot Electron Transistors Using Si/CoSi <sub>2</sub> . <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 107, 259		7

15	Techniques of Insulator/Semiconductor Heterostructure Specimen Preparation. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 115, 63		4
14	Electrical Transport in Ultrathin Films of CoSi <sub>2</sub> on Si(111). <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 91, 427		2
13	Characterization of Ultrathin CoSi <sub>2</sub> on Si(111) Layers.. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 91, 445		15
12	In-Situ Studies of the MBE Growth of CoSi <sub>2</sub> on Si (111) in a UHV Transmission Electron Microscope. <i>Materials Research Society Symposia Proceedings</i> , <b>1987</b> , 94, 151		
11	In situ study of the molecular beam epitaxy of CoSi <sub>2</sub> on (111) Si by transmission electron microscopy and diffraction. <i>Applied Physics Letters</i> , <b>1987</b> , 51, 45-47	3-4	79
10	Electrical and structural characterization of ultrathin epitaxial CoSi <sub>2</sub> on Si(111). <i>Applied Physics Letters</i> , <b>1987</b> , 51, 1895-1897	3-4	50
9	Rapid thermal processing to improve the epitaxy of (100) silicon on (11 02) sapphire. <i>Applied Physics Letters</i> , <b>1987</b> , 50, 466-468	3-4	14
8	High-resolution electron microscopy of interfaces and surfaces. <i>Ultramicroscopy</i> , <b>1987</b> , 22, 35-46	3.1	15
7	The Role of Implant Temperature in the Formation of Thin Buried Oxide Layers. <i>Materials Research Society Symposia Proceedings</i> , <b>1986</b> , 74, 585		4
6	Microstructural Characterization of High Dose Oxygen Implanted Silicon. <i>Materials Research Society Symposia Proceedings</i> , <b>1986</b> , 74, 597		3
5	Electron Transport Through Epitaxial Metal/Semiconductor Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , <b>1986</b> , 77, 271		4
4	Correlation of Electrical Properties with Structure Imaging of Semiconductor Interfaces. <i>Materials Research Society Symposia Proceedings</i> , <b>1986</b> , 82, 335		3
3	Dislocation Luminescence in ZnSe. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1986</b> , 44, 818-819		1
2	Atomic structure imaging of the Si/SiO <sub>2</sub> interface with high-resolution electron microscopy. <i>Proceedings Annual Meeting Electron Microscopy Society of America</i> , <b>1986</b> , 44, 390-391		2
1	Luminescence studies of individual dislocations in II-VI (ZnSe) and III-V (InP) semiconductors. <i>Journal of Physics C: Solid State Physics</i> , <b>1984</b> , 17, 6477-6492		91