Yuuki Ishida

List of Publications by Year
in descending order

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102	1,531	361413	395702
papers	citations	20 h-index	33 g-index

102	102	102	1092
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quartz crystal microbalance for real-time monitoring chlorosilane gas transport in slim vertical cold wall chemical vapor deposition reactor. Materials Science in Semiconductor Processing, 2020, 106, 104759.	4.0	2
2	Silicon Epitaxial Reactor for Minimal Fab. , 2018, , .		0
3	Real time evaluation of silicon epitaxial growth process by exhaust gas measurement using quartz crystal microbalance. Materials Science in Semiconductor Processing, 2018, 88, 192-197.	4.0	6
4	Advantages of a slim vertical gas channel at high SiHCl3 concentrations for atmospheric pressure silicon epitaxial growth. Materials Science in Semiconductor Processing, 2018, 87, 13-18.	4.0	10
5	Proposal of the mechanism for inclination growth on a mesa top during the 4H-SiC trench filling epitaxy. Japanese Journal of Applied Physics, 2017, 56, 070307.	1.5	0
6	Transport phenomena in a slim vertical atmospheric pressure chemical vapor deposition reactor utilizing natural convection. Materials Science in Semiconductor Processing, 2017, 71, 348-351.	4.0	6
7	Reflector Influence on Rapid Heating of Minimal Manufacturing Chemical Vapor Deposition Reactor. ECS Journal of Solid State Science and Technology, 2016, 5, P280-P284.	1.8	7
8	Investigation of the giant step bunching induced by the etching of 4H-SiC in Arâ€“H₂ mix gases. Japanese Journal of Applied Physics, 2016, 55, 095501.	1.5	6
9	Repetition of In Situ Cleaning Using Chlorine Trifluoride Gas for Silicon Carbide Epitaxial Reactor. ECS Journal of Solid State Science and Technology, 2016, 5, P12-P15.	1.8	14
10	Hopping conduction range of heavily Al-doped 4H-SiC thick epilayers grown by CVD. Applied Physics Express, 2015, 8, 121302.	2.4	12
11	Investigation of giant step bunching in 4H-SiC homoepitaxial growth: Proposal of cluster effect model. Japanese Journal of Applied Physics, 2015, 54, 061301.	1.5	11
12	In Situ Cleaning Process of Silicon Carbide Epitaxial Reactor. ECS Journal of Solid State Science and Technology, 2015, 4, P137-P140.	1.8	16
13	Epitaxial growth and characterization of thick multi-layer 4H-SiC for very high-voltage insulated gate bipolar transistors. Journal of Applied Physics, 2015, 118, .	2.5	13
14	Experiment on alleviating the bending of CVD-grown heavily Al-doped 4H-SiC epiwafer by codoping of N. Japanese Journal of Applied Physics, 2015, 54, 04DP08.	1.5	9
15	Cleaning Process for Using Chlorine Trifluoride Gas Silicon Carbide Chemical Vapor Deposition Reactor. Materials Science Forum, 2015, 821-823, 125-128.	0.3	3
16	Practical Thermal Condition of Silicon CVD Reactor for Minimal Manufacturing. , 2015, , .		1
17	Cleaning Process Applicable to Silicon Carbide Chemical Vapor Deposition Reactor. ECS Journal of Solid State Science and Technology, 2014, 3, N3006-N3009.	1.8	14
18	Proposal of quasi thermal equilibrium model for etching phenomenon by gases: Example of the etching of 4H-SiC by H₂. Japanese Journal of Applied Physics, 2014, 53, 046501.	1.5	7

#	Article	IF	Citations
19	Simulation Studies on Giant Step Bunching in 4H-SiC Epitaxial Growth: Cluster Effect. Materials Science Forum, 2014, 778-780, 183-186.	0.3	5
20	Characterization of the Defect Evolution in Thick Heavily Al-Doped 4H-SiC Epilayers. Materials Science Forum, 2014, 778-780, 151-154.	0.3	3
21	Simulation Studies on Giant Step Bunching Accompanying Trapezoid-Shape Defects in 4H-SiC Epitaxial Layer. Materials Science Forum, 2014, 778-780, 222-225.	0.3	5
22	Suppressing Al memory effect on CVD growth of 4H-SiC epilayers by adding hydrogen chloride gas. Japanese Journal of Applied Physics, 2014, 53, 04EP07.	1.5	2
23	The growth of low resistivity, heavily Al-doped 4Hâ€“SiC thick epilayers by hot-wall chemical vapor deposition. Journal of Crystal Growth, 2013, 380, 85-92.	1.5	34
24	Suppression of Al Memory-Effect on Growing 4H-SiC Epilayers by Hot-Wall Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 04CP04.	1.5	1
25	Two-Dimensional Roughness Growth at Surface and Interface of SiO₂ Films during Thermal Oxidation of 4H-SiC(0001). Materials Science Forum, 2012, 717-720, 785-788.	0.3	5
26	Recent Developments in the High-Rate Growth of SiC Epitaxial Layers by the Chemical Vapor Deposition Method. Journal of the Vacuum Society of Japan, 2011, 54, 346-352.	0.3	3
27	RFâ€MBE growth of InN on 4Hâ€SiC (0001) with offâ€angles. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 2016-2018.	0.8	2
28	Experimental Verification of the Cluster Effect on Giant Step Bunching on 4H-SiC (0001) Surfaces. Materials Science Forum, 2010, 645-648, 543-546.	0.3	8
29	Shape Transformation of 4H-SiC Microtrenches by Hydrogen Annealing. Japanese Journal of Applied Physics, 2009, 48, 041105.	1.5	13
30	Origin of Giant Step Bunching on 4H-SiC (0001) Surfaces. Materials Science Forum, 2008, 600-603, 473-476.	0.3	29
31	Influence of Growth Conditions and Substrate Properties on Formation of Interfacial Dislocations and Dislocation Half-loop Arrays in 4H-SiC(0001) and (000-1) Epitaxy. Materials Research Society Symposia Proceedings, 2008, 1069, 1.	0.1	12
32	Reduction of defects propagating into 3C-SiC homoepilayers by reactive ion etching of 3C-SiC heteroepilayer substrates. Journal of Crystal Growth, 2007, 308, 50-57.	1.5	10
33	Dependence of stacking fault and twin densities on deposition conditions during 3C-SiC heteroepitaxial growth on on-axis Si(001) substrates. Journal of Crystal Growth, 2006, 291, 140-147.	1.5	20
34	Reductions of twin and protrusion in 3C-SiC heteroepitaxial growth on Si(100). Journal of Crystal Growth, 2006, 291, 148-153.	1.5	18
35	Effect of Reduced Pressure on 3C-SiC Heteroepitaxial Growth on Si by CVD. Chemical Vapor Deposition, 2006, 12, 495-501.	1.3	33
36	Proposal of the Thermal Equilibrium Model for SiC Hydrogen Etching Phenomena. Materials Science Forum, 2006, 527-529, 211-214.	0.3	6

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37	Effect of Ar post-oxidation annealing on oxideâ€“4H-SiC interfaces studied by capacitance to voltage measurements and photoemission spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2005, 23, 298-303.	2.1	21
38	In situObservation of Clusters in Gas Phase during 4H-SiC Epitaxial Growth by Chemical Vapor Deposition Method. Japanese Journal of Applied Physics, 2004, 43, 5140-5144.	1.5	24
39	4H-SiC Carbon-Face Epitaxial Layers Grown by Low-Pressure Hot-Wall Chemical Vapor Deposition. Materials Science Forum, 2004, 457-460, 209-212.	0.3	2
40	Relationship between the Current Direction in the Inversion Layer and the Electrical Characteristics of Metal-Oxide-Semiconductor Field Effect Transistors on 3C-SiC. Materials Science Forum, 2004, 457-460, 1405-1408.	0.3	2
41	Photoemission Spectroscopic Studies on Oxide/SiC Interfaces Formed by Dry and Pyrogenic Oxidation. Materials Science Forum, 2004, 457-460, 1341-1344.	0.3	2
42	Influence of C/Si Ratio on the 4H-SiC (0001) Epitaxial Growth and a Keynote for High-Rate Growth. Materials Science Forum, 2004, 457-460, 213-216.	0.3	14
43	Uniformity of 4Hâ€“SiC epitaxial layers grown on 3-in diameter substrates. Journal of Crystal Growth, 2003, 258, 113-122.	1.5	6
44	Light emission versus energy gap in group-III nitrides: hydrostatic pressure studies. Physica Status Solidi (B): Basic Research, 2003, 235, 225-231.	1.5	11
45	Anomalous pressure dependence of light emission in cubic InGaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 2682-2685.	0.8	0
46	Influence of InN mole fraction on the recombination processes of localized excitons in strained cubic InxGa1â^'xN/GaN multiple quantum wells. Journal of Applied Physics, 2003, 93, 2051-2054.	2.5	49
47	N-channel MOSFETs fabricated on homoepitaxy-grown 3C-SiC films. IEEE Electron Device Letters, 2003, 24, 466-468.	3.9	39
48	Investigation of antiphase domain annihilation mechanism in 3Câ€“SiC on Si substrates. Journal of Applied Physics, 2003, 94, 4676-4689.	2.5	16
49	Recombination dynamics of localized excitons in cubic In[sub x]Ga[sub 1â^'x]N/GaN multiple quantum wells grown by radio frequency molecular beam epitaxy on 3Câ€“SiC substrate. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1856.	1.6	47
50	The Electrical Characteristics of Metal-Oxide-Semiconductor Field Effect Transistors Fabricated on Cubic Silicon Carbide. Japanese Journal of Applied Physics, 2003, 42, L625-L627.	1.5	35
51	Different pressure coefficients of the light emission in cubic and hexagonal InGaN/GaN quantum wells. Applied Physics Letters, 2002, 81, 232-234.	3.3	15
52	Epitaxial Growth of (11-20) 4H-SiC Using Substrate Grown in the [11-20] Direction. Materials Science Forum, 2002, 389-393, 195-198.	0.3	5
53	Measurements of the Depth Profile of the Refractive Indices in Oxide Films on SiC by Spectroscopic Ellipsometry. Japanese Journal of Applied Physics, 2002, 41, 800-804.	1.5	24
54	Replication of Defects from 4H-SiC Wafer to Epitaxial Layer. Materials Science Forum, 2002, 389-393, 447-450.	0.3	5

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55	Influence of the Crystalline Quality of Epitaxial Layers on Inversion Channel Mobility in 4H-SiC MOSFETs. Materials Science Forum, 2002, 389-393, 1053-1056.	0.3	1
56	3C-SiC(100) Homoepitaxial Growth by Chemical Vapor Deposition and Schottky Barrier Junction Characteristics. Materials Science Forum, 2002, 389-393, 275-278.	0.3	5
57	The Investigation of 4H-SiC/SiO₂ Interfaces by Optical and Electrical Measurements. Materials Science Forum, 2002, 389-393, 1013-1016.	0.3	3
58	Investigation of the Relationship between Defects and Electrical Properties of 3C-SiC Epilayers. Materials Science Forum, 2002, 389-393, 459-462.	0.3	3
59	High-Rate Epitaxial Growth of 4H-SiC Using a Vertical-Type, Quasi-Hot-Wall CVD Reactor. Materials Science Forum, 2002, 389-393, 179-182.	0.3	14
60	Investigation of Residual Impurities in 4H-SiC Epitaxial Layers Grown by Hot-Wall Chemical Vapor Deposition. Materials Science Forum, 2002, 389-393, 215-218.	0.3	8
61	Simulation of High-Temperature SiC Epitaxial Growth Using Vertical, Quasi-Hot-Wall CVD Reactor. Materials Science Forum, 2002, 389-393, 227-230.	0.3	6
62	Sensitive Detection of Defects in Î± and Î² SiC by Raman Scattering. Materials Science Forum, 2002, 389-393, 629-632.	0.3	6
63	Characterization of the Interfaces between SiC and Oxide Films by Spectroscopic Ellipsometry. Materials Science Forum, 2002, 389-393, 1029-1032.	0.3	5
64	Influence of stacking faults on the performance of 4Hâ€“SiC Schottky barrier diodes fabricated on (112Ì„0) face. Applied Physics Letters, 2002, 81, 2974-2976.	3.3	27
65	Comparative Study of Heteroepitaxially and Homoepitaxially Grown 3C-SiC Films. Materials Science Forum, 2002, 389-393, 323-326.	0.3	6
66	Pressure Coefficients of the Light Emission in Cubic InGaN Epilayers and Cubic InGaN/GaN Quantum Wells. Physica Status Solidi (B): Basic Research, 2002, 234, 759-763.	1.5	4
67	Similarities in the Optical Properties of Hexagonal and Cubic InGaN Quantum Wells. Materials Research Society Symposia Proceedings, 2001, 693, 722.	0.1	0
68	Piezoelectric Field and its Influence on the Pressure Behavior of the Light Emission from InGaN/GaN and GaN/AlGaN Quantum Wells. Materials Research Society Symposia Proceedings, 2001, 693, 728.	0.1	0
69	Detection of defects in SiC crystalline films by Raman scattering. Physica B: Condensed Matter, 2001, 308-310, 684-686.	2.7	57
70	Electrical Characterization at Cubic AlN/GaN Heterointerface Grown by Radio-Frequency Plasma-Assisted Molecular Beam Epitaxy. Physica Status Solidi (B): Basic Research, 2001, 228, 599-602.	1.5	3
71	Optical Properties of Cubic InGaN/GaN Multiple Quantum Wells on 3C-SiC Substrates by Radio-Frequency Plasma-Assisted Molecular Beam Epitaxy. Physica Status Solidi A, 2001, 188, 705-709.	1.7	9
72	Growth and characterization of cubic InGaN epilayers on 3C-SiC by RF MBE. Journal of Crystal Growth, 2001, 227-228, 471-475.	1.5	21

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73	Control of Surface Morphologies for Epitaxial Growth on Low Off-Angle 4H-SiC (0001) Substrates. Materials Science Forum, 2001, 353-356, 135-138.	0.3	4
74	Optical and structural studies in InGaN quantum well structure laser diodes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 2177.	1.6	72
75	Localized exciton dynamics in strained cubic In0.1Ga0.9N/GaN multiple quantum wells. Applied Physics Letters, 2001, 79, 4319-4321.	3.3	81
76	Band gap bowing and exciton localization in strained cubic InxGa1â^'xN films grown on 3C-SiCâ€‰(001) by rf molecular-beam epitaxy. Applied Physics Letters, 2001, 79, 3600-3602.	3.3	20
77	Optical Constants of Cubic GaN, AlN, and AlGaN Alloys. Japanese Journal of Applied Physics, 2000, 39, L497-L499.	1.5	50
78	Characterization of Oxide Films on SiC by Spectroscopic Ellipsometry. Japanese Journal of Applied Physics, 2000, 39, L1054-L1056.	1.5	19
79	Effects of Steam Annealing on Electrical Characteristics of 3C-SiC Metal-Oxide-Semiconductor Structures. Materials Science Forum, 2000, 338-342, 1129-1132.	0.3	0
80	Observation of Cubic GaN/AlN Heterointerface Formation by RHEED in Plasma-Assisted Molecular Beam Epitaxy. Materials Science Forum, 2000, 338-342, 1545-1548.	0.3	1
81	The APD Annihilation Mechanism of 3C-SiC Hetero-Epilayer on Si(001) Substrate. Materials Science Forum, 2000, 338-342, 253-256.	0.3	5
82	Schottky Barrier Characteristics of 3C-SiC Epilayers Grown by Low Pressure Chemical Vapor Deposition. Materials Science Forum, 2000, 338-342, 1235-1238.	0.3	4
83	Pre-Growth Treatment of 4H-SiC Substrates by Hydrogen Etching at Low Pressure. Materials Science Forum, 2000, 338-342, 1037-1040.	0.3	9
84	Coimplantation Effects of (C and Si)/Ga in 6H-SiC. Materials Science Forum, 2000, 338-342, 917-920.	0.3	2
85	Competitive Growth between Deposition and Etching in 4H-SiC CVD Epitaxy Using Quasi-Hot Wall Reactor. Materials Science Forum, 2000, 338-342, 169-172.	0.3	11
86	Elongated shaped Si Island Formation on 3C-SiC by Chemical Vapor Deposition and Its Application to Antiphase Domain Observation. Japanese Journal of Applied Physics, 1999, 38, 3470-3474.	1.5	15
87	Growth and characterization of cubic AlGaN and AlN epilayers by RF-plasma assisted MBE. Journal of Crystal Growth, 1999, 201-202, 341-345.	1.5	26
88	Optical Characterization of Cubic AlGaN Epilayers by Cathodoluminescence and Spectroscopic Ellipsometry. Physica Status Solidi (B): Basic Research, 1999, 216, 211-214.	1.5	10
89	Raman studies on phonon modes in cubic AlGaN alloy. Applied Physics Letters, 1999, 74, 191-193.	3.3	71
90	Growth of cubic III-nitrides by gas source MBE using atomic nitrogen plasma: GaN, AlGaN and AlN. Journal of Crystal Growth, 1998, 189-190, 390-394.	1.5	69

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91	Raman scattering characterization of group III-nitride epitaxial layers including cubic phase. Journal of Crystal Growth, 1998, 189-190, 435-438.	1.5	17
92	Arsenic surfactant effects and arsenic mediated molecular beam epitaxial growth for cubic GaN. Applied Physics Letters, 1998, 72, 3056-3058.	3.3	61
93	CVD Growth Mechanism of 3C-SiC on Si Substrates. Materials Science Forum, 1998, 264-268, 183-186.	0.3	4
94	The Characterization of SiC Hot-Implanted with Ga ⁺. Materials Science Forum, 1998, 264-268, 713-716.	0.3	3
95	Surface Reconstruction and As Surfactant Effects on MBE-Grown GaN Epilayers. Materials Science Forum, 1998, 264-268, 1167-1172.	0.3	7
96	Investigation of Positron Moderator Materials for Electron-Linac-Based Slow Positron Beamlines. Japanese Journal of Applied Physics, 1998, 37, 4636-4643.	1.5	28
97	Surface Morphology of 3C-SiC Heteroepitaxial Layers Grown by LPCVD on Si Substrates. Materials Science Forum, 1998, 264-268, 207-210.	0.3	6
98	Atomically Flat 3C-SiC Epilayers by Low Pressure Chemical Vapor Deposition. Japanese Journal of Applied Physics, 1997, 36, 6633-6637.	1.5	38
99	Positron Lifetime Study on Semiconductor Thin Films. Materials Science Forum, 1997, 255-257, 714-717.	0.3	5
100	Development of a Practical High-Rate CVD System. Materials Science Forum, 0, 600-603, 119-122.	0.3	19
101	Low Resistivity, Thick Heavily Al-Doped 4H-SiC Epilayers Grown by Hot-Wall Chemical Vapor Deposition. Materials Science Forum, 0, 740-742, 181-184.	0.3	22
102	Epitaxial Growth of Thick Multi-Layer 4H-SiC for the Fabrication of Very High-Voltage C-Face n-Channel IGBT. Materials Science Forum, 0, 778-780, 135-138.	0.3	11