# Yuuki Ishida

## List of Publications by Citations



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| 100 papers | 1,365 citations | 20 h-index | 32 g-index |
| 102 ext. papers | 1,432 ext. citations | 1.3 avg, IF | 3.66 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 100 | Localized exciton dynamics in strained cubic In0.1Ga0.9N/GaN multiple quantum wells. *Applied Physics Letters*, **2001**, 79, 4319-4321 | 3.4 | 72 |
| 99 | Raman studies on phonon modes in cubic AlGaN alloy. *Applied Physics Letters*, **1999**, 74, 191-193 | 3.4 | 67 |
| 98 | 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 | | 66 |
| 97 | 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 | 1.6 | 65 |
| 96 | Arsenic surfactant effects and arsenic mediated molecular beam epitaxial growth for cubic GaN. *Applied Physics Letters*, **1998**, 72, 3056-3058 | 3.4 | 57 |
| 95 | Detection of defects in SiC crystalline films by Raman scattering. *Physica B: Condensed Matter*, **2001**, 308-310, 684-686 | 2.8 | 51 |
| 94 | Influence of InN mole fraction on the recombination processes of localized excitons in strained cubic InxGa1−xN/GaN multiple quantum wells. *Journal of Applied Physics*, **2003**, 93, 2051-2054 | 2.5 | 47 |
| 93 | Optical Constants of Cubic GaN, AlN, and AlGaN Alloys. *Japanese Journal of Applied Physics*, **2000**, 39, L497-L499 | 1.4 | 44 |
| 92 | Recombination dynamics of localized excitons in cubic InxGa1−xN/GaN multiple quantum wells grown by radio frequency molecular beam epitaxy on 3C-SiC substrate. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2003**, 21, 1856 | | 41 |
| 91 | Atomically Flat 3C-SiC Epilayers by Low Pressure Chemical Vapor Deposition. *Japanese Journal of Applied Physics*, **1997**, 36, 6633-6637 | 1.4 | 34 |
| 90 | The Electrical Characteristics of Metal-Oxide-Semiconductor Field Effect Transistors Fabricated on Cubic Silicon Carbide. *Japanese Journal of Applied Physics*, **2003**, 42, L625-L627 | 1.4 | 34 |
| 89 | N-channel MOSFETs fabricated on homoepitaxy-grown 3C-SiC films. *IEEE Electron Device Letters*, **2003**, 24, 466-468 | 4.4 | 32 |
| 88 | Effect of Reduced Pressure on 3C-SiC Heteroepitaxial Growth on Si by CVD. *Chemical Vapor Deposition*, **2006**, 12, 495-501 | | 31 |
| 87 | The growth of low resistivity, heavily Al-doped 4H-SiC thick epilayers by hot-wall chemical vapor deposition. *Journal of Crystal Growth*, **2013**, 380, 85-92 | 1.6 | 30 |
| 86 | Origin of Giant Step Bunching on 4H-SiC (0001) Surfaces. *Materials Science Forum*, **2008**, 600-603, 473-476 | 0.4 | 28 |
| 85 | Growth and characterization of cubic AlGaN and AlN epilayers by RF-plasma assisted MBE. *Journal of Crystal Growth*, **1999**, 201-202, 341-345 | 1.6 | 24 |
| 84 | 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 | 1.4 | 22 |

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| 83 | Influence of stacking faults on the performance of 4H□SiC Schottky barrier diodes fabricated on (112 0) face. *Applied Physics Letters*, **2002**, 81, 2974-2976 | 3.4 | 22 |
| 82 | Investigation of Positron Moderator Materials for Electron-Linac-Based Slow Positron Beamlines. *Japanese Journal of Applied Physics*, **1998**, 37, 4636-4643 | 1.4 | 22 |
| 81 | Growth and characterization of cubic InGaN epilayers on 3C-SiC by RF MBE. *Journal of Crystal Growth*, **2001**, 227-228, 471-475 | 1.6 | 20 |
| 80 | Development of a Practical High-Rate CVD System. *Materials Science Forum*, **2008**, 600-603, 119-122 | 0.4 | 19 |
| 79 | 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 | 1.6 | 19 |
| 78 | Effect of Ar post-oxidation annealing on oxide□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 | 2.9 | 19 |
| 77 | Low Resistivity, Thick Heavily Al-Doped 4H-SiC Epilayers Grown by Hot-Wall Chemical Vapor Deposition. *Materials Science Forum*, **2013**, 740-742, 181-184 | 0.4 | 18 |
| 76 | Reductions of twin and protrusion in 3C-SiC heteroepitaxial growth on Si(100). *Journal of Crystal Growth*, **2006**, 291, 148-153 | 1.6 | 18 |
| 75 | Band gap bowing and exciton localization in strained cubic InxGa1□N films grown on 3C-SiC (001) by rf molecular-beam epitaxy. *Applied Physics Letters*, **2001**, 79, 3600-3602 | 3.4 | 17 |
| 74 | Characterization of Oxide Films on SiC by Spectroscopic Ellipsometry. *Japanese Journal of Applied Physics*, **2000**, 39, L1054-L1056 | 1.4 | 17 |
| 73 | Investigation of antiphase domain annihilation mechanism in 3C□SiC on Si substrates. *Journal of Applied Physics*, **2003**, 94, 4676-4689 | 2.5 | 15 |
| 72 | 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 | 1.4 | 15 |
| 71 | In Situ Cleaning Process of Silicon Carbide Epitaxial Reactor. *ECS Journal of Solid State Science and Technology*, **2015**, 4, P137-P140 | 2 | 14 |
| 70 | Raman scattering characterization of group III-nitride epitaxial layers including cubic phase. *Journal of Crystal Growth*, **1998**, 189-190, 435-438 | 1.6 | 14 |
| 69 | Different pressure coefficients of the light emission in cubic and hexagonal InGaN/GaN quantum wells. *Applied Physics Letters*, **2002**, 81, 232-234 | 3.4 | 14 |
| 68 | High-Rate Epitaxial Growth of 4H-SiC Using a Vertical-Type, Quasi-Hot-Wall CVD Reactor. *Materials Science Forum*, **2002**, 389-393, 179-182 | 0.4 | 14 |
| 67 | 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 | 1.4 | 14 |
| 66 | Cleaning Process Applicable to Silicon Carbide Chemical Vapor Deposition Reactor. *ECS Journal of Solid State Science and Technology*, **2014**, 3, N3006-N3009 | 2 | 13 |

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| 65 | 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 | 2 | 12 |
| 64 | Shape Transformation of 4H-SiC Microtrenches by Hydrogen Annealing. *Japanese Journal of Applied Physics*, **2009**, 48, 041105 | 1.4 | 12 |
| 63 | 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 | 0.4 | 12 |
| 62 | Epitaxial growth and characterization of thick multi-layer 4H-SiC for very high-voltage insulated gate bipolar transistors. *Journal of Applied Physics*, **2015**, 118, 085702 | 2.5 | 11 |
| 61 | Light emission versus energy gap in group-III nitrides: hydrostatic pressure studies. *Physica Status Solidi (B): Basic Research*, **2003**, 235, 225-231 | 1.3 | 11 |
| 60 | Investigation of giant step bunching in 4H-SiC homoepitaxial growth: Proposal of cluster effect model. *Japanese Journal of Applied Physics*, **2015**, 54, 061301 | 1.4 | 9 |
| 59 | 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 | | 9 |
| 58 | 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 | 1.6 | 9 |
| 57 | 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 | | 9 |
| 56 | Pre-Growth Treatment of 4H-SiC Substrates by Hydrogen Etching at Low Pressure. *Materials Science Forum*, **2000**, 338-342, 1037-1040 | 0.4 | 9 |
| 55 | Competitive Growth between Deposition and Etching in 4H-SiC CVD Epitaxy Using Quasi-Hot Wall Reactor. *Materials Science Forum*, **2000**, 338-342, 169-172 | 0.4 | 9 |
| 54 | Optical Characterization of Cubic AlGaN Epilayers by Cathodoluminescence and Spectroscopic Ellipsometry. *Physica Status Solidi (B): Basic Research*, **1999**, 216, 211-214 | 1.3 | 9 |
| 53 | Hopping conduction range of heavily Al-doped 4H-SiC thick epilayers grown by CVD. *Applied Physics Express*, **2015**, 8, 121302 | 2.4 | 8 |
| 52 | Epitaxial Growth of Thick Multi-Layer 4H-SiC for the Fabrication of Very High-Voltage C-Face n-Channel IGBT. *Materials Science Forum*, **2014**, 778-780, 135-138 | 0.4 | 8 |
| 51 | Experimental Verification of the Cluster Effect on Giant Step Bunching on 4H-SiC (0001) Surfaces. *Materials Science Forum*, **2010**, 645-648, 543-546 | 0.4 | 8 |
| 50 | Surface Reconstruction and As Surfactant Effects on MBE-Grown GaN Epilayers. *Materials Science Forum*, **1998**, 264-268, 1167-1172 | 0.4 | 7 |
| 49 | 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 | 1.4 | 6 |
| 48 | Uniformity of 4H-SiC epitaxial layers grown on 3-in diameter substrates. *Journal of Crystal Growth*, **2003**, 258, 113-122 | 1.6 | 6 |

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| 47 | Investigation of Residual Impurities in 4H-SiC Epitaxial Layers Grown by Hot-Wall Chemical Vapor Deposition. *Materials Science Forum*, **2002**, 389-393, 215-218 | 0.4 | 6 |
| 46 | Simulation of High-Temperature SiC Epitaxial Growth Using Vertical, Quasi-Hot-Wall CVD Reactor. *Materials Science Forum*, **2002**, 389-393, 227-230 | 0.4 | 6 |
| 45 | Sensitive Detection of Defects in  and  SiC by Raman Scattering. *Materials Science Forum*, **2002**, 389-393, 629-632 | 0.4 | 6 |
| 44 | Comparative Study of Heteroepitaxially and Homoepitaxially Grown 3C-SiC Films. *Materials Science Forum*, **2002**, 389-393, 323-326 | 0.4 | 6 |
| 43 | Surface Morphology of 3C-SiC Heteroepitaxial Layers Grown by LPCVD on Si Substrates. *Materials Science Forum*, **1998**, 264-268, 207-210 | 0.4 | 6 |
| 42 | Transport phenomena in a slim vertical atmospheric pressure chemical vapor deposition reactor utilizing natural convection. *Materials Science in Semiconductor Processing*, **2017**, 71, 348-351 | 4.3 | 5 |
| 41 | Simulation Studies on Giant Step Bunching in 4H-SiC Epitaxial Growth: Cluster Effect. *Materials Science Forum*, **2014**, 778-780, 183-186 | 0.4 | 5 |
| 40 | Simulation Studies on Giant Step Bunching Accompanying Trapezoid-Shape Defects in 4H-SiC Epitaxial Layer. *Materials Science Forum*, **2014**, 778-780, 222-225 | 0.4 | 5 |
| 39 | Positron Lifetime Study on Semiconductor Thin Films. *Materials Science Forum*, **1997**, 255-257, 714-717 | 0.4 | 5 |
| 38 | Proposal of the Thermal Equilibrium Model for SiC Hydrogen Etching Phenomena. *Materials Science Forum*, **2006**, 527-529, 211-214 | 0.4 | 5 |
| 37 | Epitaxial Growth of (11-20) 4H-SiC Using Substrate Grown in the [11-20] Direction. *Materials Science Forum*, **2002**, 389-393, 195-198 | 0.4 | 5 |
| 36 | The APD Annihilation Mechanism of 3C-SiC Hetero-Epilayer on Si(001) Substrate. *Materials Science Forum*, **2000**, 338-342, 253-256 | 0.4 | 5 |
| 35 | Reflector Influence on Rapid Heating of Minimal Manufacturing Chemical Vapor Deposition Reactor. *ECS Journal of Solid State Science and Technology*, **2016**, 5, P280-P284 | 2 | 5 |
| 34 | 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 | 4.3 | 5 |
| 33 | 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 | 1.4 | 4 |
| 32 | 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 | 4.3 | 4 |
| 31 | 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 | 0.4 | 4 |
| 30 | 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 | 1.3 | 4 |

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| 29 | Control of Surface Morphologies for Epitaxial Growth on Low Off-Angle 4H-SiC (0001) Substrates. *Materials Science Forum*, **2001**, 353-356, 135-138 | 0.4 | 4 |
| 28 | Replication of Defects from 4H-SiC Wafer to Epitaxial Layer. *Materials Science Forum*, **2002**, 389-393, 447-450 | 0.4 | 4 |
| 27 | 3C-SiC(100) Homoepitaxial Growth by Chemical Vapor Deposition and Schottky Barrier Junction Characteristics. *Materials Science Forum*, **2002**, 389-393, 275-278 | 0.4 | 4 |
| 26 | Schottky Barrier Characteristics of 3C-SiC Epilayers Grown by Low Pressure Chemical Vapor Deposition. *Materials Science Forum*, **2000**, 338-342, 1235-1238 | 0.4 | 4 |
| 25 | CVD Growth Mechanism of 3C-SiC on Si Substrates. *Materials Science Forum*, **1998**, 264-268, 183-186 | 0.4 | 4 |
| 24 | Investigation of the giant step bunching induced by the etching of 4H-SiC in Ar□2mix gases. *Japanese Journal of Applied Physics*, **2016**, 55, 095501 | 1.4 | 4 |
| 23 | Cleaning Process for Using Chlorine Trifluoride Gas Silicon Carbide Chemical Vapor Deposition Reactor. *Materials Science Forum*, **2015**, 821-823, 125-128 | 0.4 | 3 |
| 22 | Characterization of the Defect Evolution in Thick Heavily Al-Doped 4H-SiC Epilayers. *Materials Science Forum*, **2014**, 778-780, 151-154 | 0.4 | 3 |
| 21 | 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 | 1.3 | 3 |
| 20 | The Investigation of 4H-SiC/SiO2 Interfaces by Optical and Electrical Measurements. *Materials Science Forum*, **2002**, 389-393, 1013-1016 | 0.4 | 3 |
| 19 | Characterization of the Interfaces between SiC and Oxide Films by Spectroscopic Ellipsometry. *Materials Science Forum*, **2002**, 389-393, 1029-1032 | 0.4 | 3 |
| 18 | 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 | | 3 |
| 17 | RF-MBE growth of InN on 4H-SiC (0001) with off-angles. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, 2016-2018 | | 2 |
| 16 | 4H-SiC Carbon-Face Epitaxial Layers Grown by Low-Pressure Hot-Wall Chemical Vapor Deposition. *Materials Science Forum*, **2004**, 457-460, 209-212 | 0.4 | 2 |
| 15 | 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 | 0.4 | 2 |
| 14 | Photoemission Spectroscopic Studies on Oxide/SiC Interfaces Formed by Dry and Pyrogenic Oxidation. *Materials Science Forum*, **2004**, 457-460, 1341-1344 | 0.4 | 2 |
| 13 | Investigation of the Relationship between Defects and Electrical Properties of 3C-SiC Epilayers. *Materials Science Forum*, **2002**, 389-393, 459-462 | 0.4 | 2 |
| 12 | Coimplantation Effects of (C and Si)/Ga in 6H-SiC. *Materials Science Forum*, **2000**, 338-342, 917-920 | 0.4 | 2 |

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| 11 | The Characterization of SiC Hot-Implanted with Ga +. *Materials Science Forum*, **1998**, 264-268, 713-716 | 0.4 | 2 |
| 10 | Suppressing Al memory effect on CVD growth of 4H-SiC epilayers by adding hydrogen chloride gas. *Japanese Journal of Applied Physics*, **2014**, 53, 04EP07 | 1.4 | 1 |
| 9 | Suppression of Al Memory-Effect on Growing 4H-SiC Epilayers by Hot-Wall Chemical Vapor Deposition. *Japanese Journal of Applied Physics*, **2013**, 52, 04CP04 | 1.4 | 1 |
| 8 | Influence of the Crystalline Quality of Epitaxial Layers on Inversion Channel Mobility in 4H-SiC MOSFETs. *Materials Science Forum*, **2002**, 389-393, 1053-1056 | 0.4 | 1 |
| 7 | Observation of Cubic GaN/AlN Heterointerface Formation by RHEED in Plasma-Assisted Molecular Beam Epitaxy. *Materials Science Forum*, **2000**, 338-342, 1545-1548 | 0.4 | 1 |
| 6 | 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 | 4.3 | 1 |
| 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 | 1.4 | |
| 4 | Anomalous pressure dependence of light emission in cubic InGaN. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2003**, 2682-2685 | | |
| 3 | Effects of Steam Annealing on Electrical Characteristics of 3C-SiC Metal-Oxide-Semiconductor Structures. *Materials Science Forum*, **2000**, 338-342, 1129-1132 | 0.4 | |
| 2 | Similarities in the Optical Properties of Hexagonal and Cubic InGaN Quantum Wells. *Materials Research Society Symposia Proceedings*, **2001**, 693, 722 | | |
| 1 | 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 | | |