

# Toshiyuki Isshiki

## List of Publications by Year in descending order

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docs citations

73  
times ranked

550  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Crystal structure analysis of stacking faults through scanning transmission electron microscopy of $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ (001) layer grown via halide vapor phase epitaxy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 032701. | 2.1  | 4         |
| 2  | Broadband Optical Amplification of Waveguide Cut-off Mode in Polymer Waveguide Doped with Graphene Quantum Dots. Advanced Optical Materials, 2022, 10, .   | 7.3  | 4         |
| 3  | Formation of various-axis-oriented wurtzite nuclei and enlargement of the <i>a</i> -axis-oriented region in AlFeN films deposited on Si(100) substrates. Materials Advances, 2021, 2, 4075-4080.   | 5.4  | 0         |
| 4  | Three-Dimensional Observation of Internal Defects in a $\text{In}^{2-}\text{Ga}^{2-}\text{O}^{3-}$ (001) Wafer Using the FIB-SEM Serial Sectioning Method. Journal of Electronic Materials, 2020, 49, 5190-5195.   | 2.2  | 9         |
| 5  | Microstructure of Stacking Fault Complex/Carrot Defects at Interface Between 4H-SiC Epitaxial Layers and Substrates. Journal of Electronic Materials, 2020, 49, 5213-5218.   | 2.2  | 1         |
| 6  | Electronic structure of AlFeN films exhibiting crystallographic orientation change from <i>c</i> - to <i>a</i> -axis with Fe concentrations and annealing effect. Scientific Reports, 2020, 10, 1819.  | 3.3  | 3         |
| 7  | Observation of Dislocation Conversion in 4H-SiC Epitaxial Wafer by Mirror Projection Electron Microscopy. Materials Science Forum, 2019, 963, 251-254.   | 0.3  | 1         |
| 8  | Au-nanoparticle-embedded cross-linked gelatin films synthesized on aqueous solution in contact with dielectric barrier discharge. Japanese Journal of Applied Physics, 2018, 57, 0102BE.   | 1.5  | 4         |
| 9  | Surface Plasmon Resonances in Sn: In <sub>2</sub> O <sub>3</sub> Thin Films with Diffraction Grating. Proceedings (mdpi), 2018, 2, .   | 0.2  | 0         |
| 10 | Crystal Defect Analysis of Latent Scratch Induced during CMP Process on 4H-SiC Wafer Using Electron Microscopy. Materials Science Forum, 2018, 924, 531-534.   | 0.3  | 0         |
| 11 | STEM and HRTEM studies of accumulated deposits on human tooth surface. Microscopy Research and Technique, 2017, 80, 511-524.   | 2.2  | 1         |
| 12 | Three Dimensional Dislocation Analysis of Threading Mixed Dislocation Using Multi Directional Scanning Transmission Electron Microscopy. Materials Science Forum, 2017, 897, 173-176.  | 0.3  | 1         |
| 13 | Band structure and photoconductivity of blue-green light absorbing AlTiN films. Journal of Materials Chemistry A, 2017, 5, 20824-20832.  | 10.3 | 10        |
| 14 | Characterization of the surface morphology and grain growth near the surface of a block copolymer thin film with cylindrical microdomains oriented perpendicular to the surface. Polymer Journal, 2017, 49, 655-663.   | 2.7  | 4         |
| 15 | Surface morphology and dislocation characteristics near the surface of 4H-SiC wafer using multi-directional scanning transmission electron microscopy. Journal of Electron Microscopy, 2017, 66, 337-347.  | 0.9  | 2         |
| 16 | Cross Section and Plan View STEM Analysis on Identical Conversion Point of Basal Plane Dislocation to Threading Edge Dislocation of 4H-SiC. Materials Science Forum, 2016, 858, 397-400.   | 0.3  | 0         |
| 17 | Crystallographic properties of 3d transition metal (Ti, V, and Cr) doped AlN films. , 2016, , .  |      | 0         |
| 18 | Fine structure of tooth enamel in the yellowing human teeth: SEM and HRTEM studies. Microscopy Research and Technique, 2016, 79, 14-22.  | 2.2  | 12        |

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|----|--|-----|-----------|
| 19 | Structural Analysis of ZnO Thin Films Grown in Room Temperature on PET Film. Materials Science Forum, 2014, 778-780, 1201-1205.  | 0.3 | 0         |
| 20 | Intriguing transmission electron microscopy images observed for perpendicularly oriented cylindrical microdomains of block copolymers. Nanoscale, 2014, 6, 10817-10823.                                      | 5.6 | 8         |
| 21 | Reducing structural change in aluminum coated polyethylene naphthalate foils during MeV proton irradiation. Vacuum, 2013, 89, 153-156.   | 3.5 | 2         |
| 22 | Dislocation Conversion in 4H-SiC Crystals Grown by Metastable Solvent Epitaxy. ECS Journal of Solid State Science and Technology, 2013, 2, N3092-N3097.  | 1.8 | 5         |
| 23 | Frank Partial Dislocation in 4H-SiC Epitaxial Layer by MSE Method. Materials Science Forum, 2012, 725, 31-34.  | 0.3 | 6         |
| 24 | Structural and electronic properties of Co-doped ZnO nanocrystals synthesized by co-precipitation method. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 213-216.                  | 0.8 | 5         |
| 25 | Effective catalyst on SiO <sub>2</sub> in ethanol CVD for growth of single-walled carbon nanotubes. Diamond and Related Materials, 2008, 17, 1467-1470.  | 3.9 | 5         |
| 26 | Multi-Wavelength Raman and HRTEM Study of Ni/Si Interface after NiSi Formation at Low Temperatures using Various Heating Methods. ECS Transactions, 2008, 13, 405-412.                                       | 0.5 | 1         |
| 27 | Simultaneous Observation of Single-Walled Carbon Nanotubes and Catalyst Particles on SiO <sub>2</sub> Substrate by Transmission Electron Microscopy. Japanese Journal of Applied Physics, 2008, 47, 730-734. | 1.5 | 5         |
| 28 | Studies on the growth of pure double-walled carbon nanotube and its phonon spectra. Journal of Applied Physics, 2008, 103, 114305.   | 2.5 | 7         |
| 29 | Preparation of Mesoporous Silica with Well-Defined Hexagonal Array of Pores by Using Octyltrimethylammonium Chloride. Bulletin of the Chemical Society of Japan, 2008, 81, 407-409.                          | 3.2 | 7         |
| 30 | Deep-UV Raman Scattering Analysis of Re-Crystallization in Ultra-Shallow Junction Implanted Si under Various Annealing Conditions. , 2007, , .   |     | 0         |
| 31 | Synthesis and Raman study of double-walled carbon nanotubes. Diamond and Related Materials, 2007, 16, 1188-1191.   | 3.9 | 8         |
| 32 | Synthesis of Phosphate Glass Coating Film by Pulsed Laser Deposition. Zairyo/Journal of the Society of Materials Science, Japan, 2007, 56, 777-780.  | 0.2 | 1         |
| 33 | Catalytic mechanism of a Fe-Co bimetallic system for efficient growth of single-walled carbon nanotubes on SiO <sub>2</sub> substrates. Journal of Applied Physics, 2006, 100, 094303.                       | 2.5 | 20        |
| 34 | High-Resolution Transmission Electron Microscopy of Interfaces between thin Nickel Layers on Si(001) After Nickel Silicide Formation under Various Annealing Conditions. , 2006, , .                         |     | 3         |
| 35 | Non-Contact, Non-Destructive Characterization of Crystal Quality in Ultra-Shallow ion Implanted Silicon Wafers Before and after Annealing. , 2006, , .   |     | 1         |
| 36 | Transmission electron microscopic observation of a metastable phase on the thermal decomposition process of Ca-deficient hydroxyapatite. Journal of Materials Science, 2006, 41, 525-530.                    | 3.7 | 5         |

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|----|---|-----|-----------|
| 37 | Highly Aligned Growth of Carbon Nanotubes by RF-Plasma-Assisted DC Plasma Chemical Vapor Deposition at High Pressure. Japanese Journal of Applied Physics, 2006, 45, 8308-8310.   | 1.5 | 3         |
| 38 | Transmission Electron Microscopic Study on Thermal Decomposition Process of Calcium-Deficient Hydroxyapatite. Key Engineering Materials, 2006, 317-318, 785-788.  | 0.4 | 0         |
| 39 | Application of UV-Raman Spectroscopy for Characterization of the Physical Crystal Structure Following Flash Anneal of an Ultrashallow Implanted Layer. Journal of the Electrochemical Society, 2006, 153, G697.                                 | 2.9 | 16        |
| 40 | Influence of Substrate Roughness on the Formation of Defects in 3C-SiC Grown on Si(110) Substrate by Hetero-Epitaxial CVD Method. Materials Science Forum, 2005, 483-485, 185-188.  | 0.3 | 5         |
| 41 | Suppression Mechanism of Double Positioning Growth in 3C-SiC(111) Crystal by Using an Off-Axis Si(110) Substrate. Materials Science Forum, 2005, 483-485, 181-184.  | 0.3 | 13        |
| 42 | Suppression of the Twin Formation in CVD Growth of (111) 3C-SiC on (110) Si Substrate. Materials Science Forum, 2005, 483-485, 193-196.   | 0.3 | 11        |
| 43 | Heteroepitaxial growth of (111) 3C-SiC on well-lattice-matched (110) Si substrates by chemical vapor deposition. Applied Physics Letters, 2004, 84, 3082-3084.  | 3.3 | 72        |
| 44 | A metastable phase in thermal decomposition of Ca-deficient hydroxyapatite. Journal of Materials Science: Materials in Medicine, 2003, 14, 617-622.   | 3.6 | 37        |
| 45 | Transmission electron microscopic studies on an initial stage in the conversion process from $\beta$ -tricalcium phosphate to hydroxyapatite. Journal of Materials Research, 2003, 18, 2633-2638.   | 2.6 | 14        |
| 46 | Consolidation Mechanism of Calcium Silicate on Exposure to Carbon Dioxide. Zairyo/Journal of the Society of Materials Science, Japan, 2003, 52, 571-575.  | 0.2 | 5         |
| 47 | Ferromagnetism and structural distortions induced in atomized Fe-Al (35-42 at.% Al) powder particles by cold milling. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1999, 79, 2013-2023. | 0.6 | 13        |
| 48 | Structure and growth mechanism of tetrapod-like ZnO particles. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1997, 76, 889-904.  | 0.6 | 55        |
| 49 | A preparation method of sections of fine particles and cross-sectional transmission electron microscopy of Ni powder. Journal of Electron Microscopy, 1997, 46, 293-301.  | 0.9 | 10        |
| 50 | Multi-slice calculation for InP crystals using different slices. Ultramicroscopy, 1994, 54, 301-309.  | 1.9 | 4         |
| 51 | High-resolution transmission electron microscopy of hexagonal and rhombohedral molybdenum disulfide crystals. Microscopy Research and Technique, 1993, 25, 325-334.   | 2.2 | 9         |
| 52 | Habit, structure and surface formation of Te particles deposited in a high-resolution transmission electron microscope. Journal of Crystal Growth, 1992, 125, 7-16.   | 1.5 | 4         |
| 53 | Chemical element of the outermost layer of AgBr single crystal. Applied Surface Science, 1992, 55, 287-291.   | 6.1 | 0         |
| 54 | Contrast of adsorbed or removed atoms in surface profile images by high- and ultra-high-resolution electron microscopy. Ultramicroscopy, 1992, 41, 201-209.   | 1.9 | 5         |

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|----|---|-----|-----------|
| 55 | Structures of grain boundaries in long-chain te crystals observed by high-resolution transmission electron microscopy. <i>Microscopy Research and Technique</i> , 1992, 23, 207-218.                          | 2.2 | 1         |
| 56 | High-resolution transmission electron microscopy of growth and structures of Ag-Te and Cu-Se crystals produced by solid-solid reactions. <i>Journal of Crystal Growth</i> , 1991, 112, 55-70.                 | 1.5 | 8         |
| 57 | Surface profile images of Te crystals by high-resolution transmission electron microscopy. <i>Ultramicroscopy</i> , 1989, 30, 329-336.  | 1.9 | 4         |
| 58 | Growth and transformation of Cu-Te crystals produced by a solid-solid reaction. <i>Journal of Crystal Growth</i> , 1987, 83, 421-430.   | 1.5 | 6         |
| 59 | High-resolution transmission electron microscopic observations of grain boundaries and surfaces on Cu <sub>1-x</sub> Te crystals grown by a solid-solid reaction. <i>Ultramicroscopy</i> , 1987, 23, 355-363. | 1.9 | 8         |
| 60 | TEM Observation of Defect Structure of Low-Energy Ion Implanted SiC. <i>Materials Science Forum</i> , 0, 778-780, 350-353.  | 0.3 | 1         |
| 61 | Non Destructive Inspection of Dislocations in SiC Wafer by Mirror Projection Electron Microscopy. <i>Materials Science Forum</i> , 0, 778-780, 402-406.   | 0.3 | 6         |
| 62 | Dislocation Analysis of 4H-SiC Using KOH Low Temperature Etching. <i>Materials Science Forum</i> , 0, 778-780, 358-361.   | 0.3 | 4         |
| 63 | Study on Formation of Dislocation Contrast in 4H-SiC Wafer in Mirror Projection Electron Microscopy Image. <i>Materials Science Forum</i> , 0, 821-823, 307-310.  | 0.3 | 5         |
| 64 | Relations between Surface Morphology and Dislocations of SiC Crystal. <i>Materials Science Forum</i> , 0, 821-823, 311-314.   | 0.3 | 4         |
| 65 | Basal Plane Dislocation Analysis of 4H-SiC Using Multi Directional STEM Observation. <i>Materials Science Forum</i> , 0, 821-823, 303-306.  | 0.3 | 4         |
| 66 | Observation of Pair Structures of Threading Dislocation and Surface Defect in 4H-SiC Wafer by Mirror Projection Electron Microscopy. <i>Materials Science Forum</i> , 0, 858, 371-375.                        | 0.3 | 3         |
| 67 | Observation of Basal Plane Dislocation in 4H-SiC Wafer by Mirror Projection Electron Microscopy and Low-Energy SEM. <i>Materials Science Forum</i> , 0, 897, 197-200.   | 0.3 | 4         |
| 68 | Chemical Trend in Band Structure of 3d-Transition-Metal-Doped AlN Films. <i>Materials Science Forum</i> , 0, 924, 322-325.  | 0.3 | 2         |
| 69 | Observation of a Latent Scratch on Chemo-Mechanical Polished 4H-SiC Wafer by Mirror Projection Electron Microscopy. <i>Materials Science Forum</i> , 0, 924, 543-546.   | 0.3 | 9         |
| 70 | Review and Detail Classification of Stacking Faults in 4H-SiC Epitaxial Layer by Mirror Projection Electron Microscopy. <i>Materials Science Forum</i> , 0, 1004, 314-320.                                    | 0.3 | 1         |
| 71 | Structural Characterization of Prismatic Stacking Faults of Two Types of Carrot Defects in 4H-SiC Epi Wafers. <i>Materials Science Forum</i> , 0, 1004, 421-426.  | 0.3 | 0         |
| 72 | AFM Observation of Etch-Pit Shapes on $\hat{1}^2$ -Ga <sub>2</sub> O <sub>3</sub> (001) Surface Formed by Molten Alkali Etching. <i>Materials Science Forum</i> , 0, 1004, 512-518.                           | 0.3 | 5         |

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|----|--|-----|-----------|
| 73 | Defects Characterization of GaN Substrate with Hot Implant Process. Materials Science Forum, 0, 1004, 497-504. | 0.3 | 2         |