

Yongzhao Yao Yao

List of Publications by Year in descending order

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83
papers

785
citations

706676

14
h-index

685536

24
g-index

83
all docs

83
docs citations

83
times ranked

710
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | A synchrotron X-ray topography study of crystallographic defects in ScAlMgO ₄ single crystals. Journal of Alloys and Compounds, 2022, 896, 163025. | 2.8 | 5 |
| 2 | Three-dimensional curving of crystal planes in wide bandgap semiconductor wafers visualized using a laboratory X-ray diffractometer. Journal of Crystal Growth, 2022, 583, 126558. | 0.7 | 2 |
| 3 | Mechanism of molten KOH+NaOH etching of GaN revealed by the slopes of etch pits formed at threading dislocations. Journal of Alloys and Compounds, 2022, 902, 163830. | 2.8 | 5 |
| 4 | Etch pit formation on $\hat{\Gamma}^2$ -Ga ₂ O ₃ by molten KOH+NaOH and hot H ₃ PO ₄ and their correlation with dislocations. Journal of Alloys and Compounds, 2022, 910, 164788. | 2.8 | 5 |
| 5 | Observation of dislocations in thick $\hat{\Gamma}^2$ -Ga ₂ O ₃ single-crystal substrates using Borrmann effect synchrotron x-ray topography. APL Materials, 2022, 10, . | 2.2 | 8 |
| 6 | Observation of threading dislocations with a c+m type Burgers vector in HVPE GaN substrates using multi-photon excitation photoluminescence and TEM. Journal of Crystal Growth, 2022, , 126748. | 0.7 | 0 |
| 7 | Size of dislocation patterns induced by Vickers indentation in hydride vapor-phase epitaxy GaN. Journal of Applied Physics, 2022, 131, . | 1.1 | 7 |
| 8 | Large-area total-thickness imaging and Burgers vector analysis of dislocations in $\hat{\Gamma}^2$ -Ga ₂ O ₃ using bright-field x-ray topography based on anomalous transmission. Applied Physics Letters, 2022, 121, . | 1.5 | 5 |
| 9 | Preparation of crystalline SiC coating from Si and C powder mixture using laser sublimation technique. Journal of the Ceramic Society of Japan, 2021, 129, 310-314. | 0.5 | 0 |
| 10 | Generation of dislocations from scratches on GaN formed during wafer fabrication and dislocation reactions during homoepitaxial growth. Japanese Journal of Applied Physics, 2021, 60, 115501. | 0.8 | 5 |
| 11 | X-ray topography of crystallographic defects in wide-bandgap semiconductors using a high-resolution digital camera. Japanese Journal of Applied Physics, 2021, 60, 010908. | 0.8 | 4 |
| 12 | Deep ultraviolet emission from multiple quantum wells on flat N-polar AlN templates fabricated using periodical pulsed H ₂ etching. Japanese Journal of Applied Physics, 2021, 60, 125502. | 0.8 | 4 |
| 13 | Visualization of the curving of crystal planes in $\hat{\Gamma}^2$ -Ga ₂ O ₃ by X-ray topography. Journal of Crystal Growth, 2021, 576, 126376. | 0.7 | 4 |
| 14 | Anisotropic radius of curvature of crystal planes in wide-bandgap semiconductor wafers measured by X-ray diffraction. Japanese Journal of Applied Physics, 2021, 60, 128004. | 0.8 | 2 |
| 15 | Revelation of Dislocations in $\hat{\Gamma}^2$ -Ga ₂ O ₃ Substrates Grown by Edge-Defined Film-Growth. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900630. | 0.8 | 23 |
| 16 | Three-Dimensional Observation of Internal Defects in a $\hat{\Gamma}^2$ -Ga ₂ O ₃ (001) Wafer Using the FIB-SEM Serial Sectioning Method. Journal of Electronic Materials, 2020, 49, 5190-5195. | 1.0 | 9 |
| 17 | Dislocation classification of a large-area $\hat{\Gamma}^2$ -Ga ₂ O ₃ single crystal via contrast analysis of affine-transformed X-ray topographs. Journal of Crystal Growth, 2020, 548, 125825. | 0.7 | 6 |
| 18 | Correlation between structural properties and nonradiative recombination behaviors of threading dislocations in freestanding GaN substrates grown by hydride vapor phase epitaxy. CrystEngComm, 2020, 22, 8299-8312. | 1.3 | 13 |

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|----|---|-----|-----------|
| 19 | Study of dislocations in AlN single-crystal using bright-field synchrotron x-ray topography under a multiple-beam diffraction condition. Applied Physics Letters, 2020, 117, 092102. | 1.5 | 4 |
| 20 | Decreased Mortality with Beta-Blocker Therapy in HFpEF Patients Associated with Atrial Fibrillation. Cardiology Research and Practice, 2020, 2020, 1-7. | 0.5 | 6 |
| 21 | Identification of Burgers vectors of dislocations in monoclinic $\hat{\Gamma}^2$ -Ga ₂ O ₃ via synchrotron x-ray topography. Journal of Applied Physics, 2020, 127, . | 1.1 | 24 |
| 22 | Observation of dislocations in $\hat{\Gamma}^2$ -Ga ₂ O ₃ single-crystal substrates by synchrotron X-ray topography, chemical etching, and transmission electron microscopy. Japanese Journal of Applied Physics, 2020, 59, 045502. | 0.8 | 18 |
| 23 | Mg diffusion and activation along threading dislocations in GaN. Applied Physics Letters, 2020, 116, . | 1.5 | 12 |
| 24 | Revelation of Dislocations in $\hat{\Gamma}^2$ -Ga ₂ O ₃ Substrates Grown by Edge-Defined Film-Fed Growth. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 2070016. | 0.8 | 2 |
| 25 | Growth and Characterization of Nitrogen-Polar AlGaN/AlN Heterostructure for High-Electron-Mobility Transistor. Physica Status Solidi (B): Basic Research, 2020, 257, 1900589. | 0.7 | 13 |
| 26 | Growth of N-Polar Aluminum Nitride on Vicinal Sapphire Substrates and Aluminum Nitride Bulk Substrates. Physica Status Solidi (B): Basic Research, 2020, 257, 1900588. | 0.7 | 17 |
| 27 | Crystallinity Evaluation and Dislocation Observation for an Aluminum Nitride Single-Crystal Substrate on a Wafer Scale. Journal of Electronic Materials, 2020, 49, 5144-5153. | 1.0 | 7 |
| 28 | Screw dislocations on $\{1\bar{1}2\}$ pyramidal planes induced by Vickers indentation in HVPE GaN. Japanese Journal of Applied Physics, 2020, 59, 091005. | 0.8 | 11 |
| 29 | Slip planes in monoclinic $\hat{\Gamma}^2$ -Ga ₂ O ₃ revealed from its {010} face via synchrotron X-ray diffraction and X-ray topography. Japanese Journal of Applied Physics, 2020, 59, 125501. | 0.8 | 18 |
| 30 | Identification of fine structures at the surface of epi-ready GaN wafer observed by confocal differential interference contrast microscopy. Japanese Journal of Applied Physics, 2020, 59, 100907. | 0.8 | 1 |
| 31 | Observation of dislocations and their arrays in physical vapor transport-grown AlN single-crystal substrate by synchrotron X-ray topography. Japanese Journal of Applied Physics, 2019, 58, SCCB29. | 0.8 | 10 |
| 32 | X-ray diffraction and Raman characterization of $\hat{\Gamma}^2$ -Ga ₂ O ₃ single crystal grown by edge-defined film-fed growth method. Journal of Applied Physics, 2019, 126, . | 1.1 | 29 |
| 33 | Observation of Threading Dislocations in Ammonothermal Gallium Nitride Single Crystal Using Synchrotron X-ray Topography. Journal of Electronic Materials, 2018, 47, 5007-5012. | 1.0 | 28 |
| 34 | Correlation between dislocations and leakage current of p-n diodes on a free-standing GaN substrate. Applied Physics Letters, 2018, 112, . | 1.5 | 142 |
| 35 | Expansion of Basal Plane Dislocation in 4H-SiC Epitaxial Layer on A-Plane by Electron Beam Irradiation. Materials Science Forum, 2018, 924, 151-154. | 0.3 | 1 |
| 36 | Expansion of a single Shockley stacking fault in a 4H-SiC (112 $\bar{1}$ 0) epitaxial layer caused by electron beam irradiation. Journal of Applied Physics, 2018, 123, . | 1.1 | 27 |

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|----|--|-----|-----------|
| 37 | Characterization of threading dislocations in GaN (0001) substrates by photoluminescence imaging, cathodoluminescence mapping and etch pits. <i>Journal of Crystal Growth</i> , 2017, 468, 484-488. | 0.7 | 22 |
| 38 | Dislocations in SiC Revealed by NaOH Vapor Etching and a Comparison with X-Ray Topography Taken with Various $\langle i \rangle g \langle /i \rangle$ -Vectors. <i>Materials Science Forum</i> , 2016, 858, 389-392. | 0.3 | 1 |
| 39 | Revelation of dislocations in HVPE GaN single crystal by KOH etching with Na ₂ O ₂ additive and cathodoluminescence mapping. <i>Superlattices and Microstructures</i> , 2016, 99, 83-87. | 1.4 | 33 |
| 40 | Fast removal of surface damage layer from single crystal diamond by using chemical etching in molten KCl + KOH solution. <i>Diamond and Related Materials</i> , 2016, 63, 86-90. | 1.8 | 7 |
| 41 | Therapeutic delivery of cyclin-A2 via recombinant adeno-associated virus serotype 9 restarts the myocardial cell cycle: An in vitro study. <i>Molecular Medicine Reports</i> , 2015, 11, 3652-3658. | 1.1 | 2 |
| 42 | Removal of Mechanical-Polishing-Induced Surface Damages on 4H-SiC by Chemical Etching and its Effect on Subsequent Epitaxial Growth. <i>Materials Science Forum</i> , 2015, 821-823, 541-544. | 0.3 | 3 |
| 43 | Characterization of Damage Induced by Electric Discharge Machining and Wiresawing with Loose Abrasive at Subsurface of SiC Crystal. <i>Materials Science Forum</i> , 2014, 778-780, 362-365. | 0.3 | 0 |
| 44 | Comparison of slicing-induced damage in hexagonal SiC by wire sawing with loose abrasive, wire sawing with fixed abrasive, and electric discharge machining. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 071301. | 0.8 | 19 |
| 45 | Removal of Mechanical-Polishing-Induced Surface Damages on 4H-SiC Wafers by Using Chemical Etching with Molten KCl+KOH. <i>Materials Science Forum</i> , 2014, 778-780, 746-749. | 0.3 | 2 |
| 46 | Cross-sectional observation of stacking faults in 4H-SiC by KOH etching on nonpolar $\{1\bar{1}00\}$ face, cathodoluminescence imaging, and transmission electron microscopy. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 081301. | 0.8 | 4 |
| 47 | Correlation between etch pits formed by molten KOH+Na ₂ O ₂ etching and dislocation types in heavily doped n ⁺ -4H-SiC studied by X-ray topography. <i>Journal of Crystal Growth</i> , 2013, 364, 7-10. | 0.7 | 13 |
| 48 | GW24-e2387â€¦Cyclin-A2 promotes cardiac self-repair via the recruitment of cardiac stem cells after myocardium infarction. <i>Heart</i> , 2013, 99, A10.1-A10. | 1.2 | 0 |
| 49 | GW24-e2389â€¦Delivery of AAV9 cyclin-A2 via hyaluronic acid hydrogel induces cardiac regeneration as well as improves cardiac function in vivo post myocardial infarction. <i>Heart</i> , 2013, 99, A25.3-A26. | 1.2 | 0 |
| 50 | Different Dissociation Behavior of [11-20] and Non-[11-20] Basal Plane Dislocations in 4H-SiC under Electron Beam Irradiation. <i>Materials Science Forum</i> , 2012, 725, 45-48. | 0.3 | 0 |
| 51 | Variation of Etch Pit Size by Screw Dislocation Tilt in 4H-SiC Wafer. <i>Materials Science Forum</i> , 2012, 717-720, 367-370. | 0.3 | 4 |
| 52 | Influence of substrate nitridation on GaN and InN growth by plasma-assisted molecular-beam epitaxy. <i>Journal of the Ceramic Society of Japan</i> , 2012, 120, 513-519. | 0.5 | 3 |
| 53 | Dislocation Revelation from (0001) Carbon-face of 4H-SiC by Using Vaporized KOH at High Temperature. <i>Applied Physics Express</i> , 2012, 5, 075601. | 1.1 | 12 |
| 54 | Transmission Electron Microscopy Analysis of a Threading Dislocation with $\langle c+a \rangle$ Burgers Vector in 4H-SiC. <i>Applied Physics Express</i> , 2012, 5, 081301. | 1.1 | 36 |

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|----|---|-----|-----------|
| 55 | Molten KOH Etching with Na ₂ O Additive for Dislocation Revelation in 4H-SiC Epilayers and Substrates. Japanese Journal of Applied Physics, 2011, 50, 075502. | 0.8 | 27 |
| 56 | A simultaneous observation of dislocations in 4H-SiC epilayer and n ⁺ -substrate by using electron beam induced current. Journal of Applied Physics, 2011, 109, . | 1.1 | 6 |
| 57 | Detection of Shallow Dislocations on 4H-SiC Substrate by Etching Method. Acta Physica Polonica A, 2011, 120, A-25-A-27. | 0.2 | 2 |
| 58 | Investigation on buffer layer for InN growth by molecular beam epitaxy. Journal of the Ceramic Society of Japan, 2010, 118, 152-156. | 0.5 | 1 |
| 59 | Nitrogen isotopic effect in Ga ₁₅ N epilayers grown by plasma-assisted molecular-beam epitaxy. Scripta Materialia, 2010, 62, 516-519. | 2.6 | 1 |
| 60 | Surface effects on the luminescence degradation of hydride vapor-phase epitaxy-grown GaN induced by electron-beam irradiation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 611-613. | 0.9 | 8 |
| 61 | Periodic supply of indium as surfactant for N-polar InN growth by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2009, 95, . | 1.5 | 6 |
| 62 | Growth of colorless transparent GaN single crystals on prismatic GaN seeds using a Ga melt and Na vapor. Materials Research Bulletin, 2009, 44, 594-599. | 2.7 | 22 |
| 63 | Growth and characterization of isotopic ^{nat} Ga ¹⁵ N by molecular-beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S707. | 0.8 | 1 |
| 64 | Impact of electron beam irradiation on the cathodoluminescence intensity for ZnO and GaN. Journal of Materials Science: Materials in Electronics, 2008, 19, 307-310. | 1.1 | 9 |
| 65 | InN Growth by Plasma-Assisted Molecular Beam Epitaxy with Indium Monolayer Insertion. Crystal Growth and Design, 2008, 8, 1073-1077. | 1.4 | 7 |
| 66 | Photoluminescence and x-ray diffraction measurements of InN epilayers grown with varying In ^x N ^{1-x} ratio by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2008, 92, 211910. | 1.5 | 5 |
| 67 | Luminescence of GaN single crystals prepared by heating a Ga melt in N ₂ atmosphere. Crystal Research and Technology, 2007, 42, 713-717. | 0.6 | 1 |
| 68 | The influence of indium monolayer insertion on the InN epilayer grown by plasma-assisted molecular beam epitaxy. Journal of Crystal Growth, 2007, 301-302, 521-524. | 0.7 | 2 |
| 69 | Effect of the oblique excitation and detection on the cathodoluminescence spectra. Materials Science in Semiconductor Processing, 2006, 9, 19-24. | 1.9 | 0 |
| 70 | Cathodoluminescence characterization of GaN quantum dots grown on 6H-SiC substrate by metal-organic chemical vapor deposition. Scripta Materialia, 2006, 55, 679-682. | 2.6 | 4 |
| 71 | Blue-Green Light Emission from a-SiC x:H-Based Fabry-Perot Microcavities. Chinese Physics Letters, 2006, 23, 482-485. | 1.3 | 1 |
| 72 | GaN nanodot fabrication by implant source growth. Microelectronics Journal, 2005, 36, 456-459. | 1.1 | 3 |

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|----|--|-----|-----------|
| 73 | Dislocation Revelation in Highly Doped N-Type 4H-SiC by Molten KOH Etching with NaOH Additive. Materials Science Forum, 0, 679-680, 290-293. | 0.3 | 9 |
| 74 | Dislocation Analysis in Highly Doped n-Type 4H-SiC by Using Electron Beam Induced Current and KOH+NaOH Etching. Materials Science Forum, 0, 679-680, 294-297. | 0.3 | 9 |
| 75 | Dislocation Formation in Epitaxial Film by Propagation of Shallow Dislocations on 4H-SiC Substrate. Materials Science Forum, 0, 717-720, 383-386. | 0.3 | 6 |
| 76 | Characterization of Dislocation Structures in Hexagonal SiC by Transmission Electron Microscopy. Materials Science Forum, 0, 725, 11-14. | 0.3 | 1 |
| 77 | Electron Beam Induced Current Observation of Dislocations in 4H-SiC Introduced by Mechanical Polishing. Materials Science Forum, 0, 725, 23-26. | 0.3 | 0 |
| 78 | Large-Area Mapping of Dislocations in 4H-SiC from Carbon-Face (000-1) by Using Vaporized KOH Etching near 1000 Å°C. Materials Science Forum, 0, 740-742, 829-832. | 0.3 | 2 |
| 79 | Characterization of Threading Edge Dislocation in 4H-SiC by X-Ray Topography and Transmission Electron Microscopy. Materials Science Forum, 0, 778-780, 366-369. | 0.3 | 1 |
| 80 | Dislocation Revelation for 4H-SiC by Using Vaporized NaOH: A Possible Way to Distinguish Edge, Screw and Mixed Threading Dislocations by Etch Pit Method. Materials Science Forum, 0, 778-780, 346-349. | 0.3 | 3 |
| 81 | Elementary Screw and Mixed-Type Dislocations in 4H-SiC Characterized by X-Ray Topography Taken with Six Equivalent \hat{g} -Vectors and a Comparison to Etch Pit Evaluation. Materials Science Forum, 0, 897, 185-188. | 0.3 | 3 |
| 82 | Dislocation Revelation and Categorization for Thick Free-Standing GaN Substrates Grown by HVPE. Materials Science Forum, 0, 897, 707-710. | 0.3 | 2 |
| 83 | AFM Observation of Etch-Pit Shapes on $\hat{2}$ -Ga ₂ O ₃ (001) Surface Formed by Molten Alkali Etching. Materials Science Forum, 0, 1004, 512-518. | 0.3 | 5 |