

Yasuhisa Sano

List of Publications by Year in descending order

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170
papers

3,957
citations

147801

31
h-index

138484

58
g-index

173
all docs

173
docs citations

173
times ranked

2001
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 1 | Breaking the 10 μ m barrier in hard-X-ray focusing. <i>Nature Physics</i> , 2010, 6, 122-125. | 16.7 | 484 |
| 2 | Focusing of X-ray free-electron laser pulses with reflective optics. <i>Nature Photonics</i> , 2013, 7, 43-47. | 31.4 | 234 |
| 3 | Efficient focusing of hard x rays to 25nm by a total reflection mirror. <i>Applied Physics Letters</i> , 2007, 90, 051903. | 3.3 | 203 |
| 4 | Microstitching interferometry for x-ray reflective optics. <i>Review of Scientific Instruments</i> , 2003, 74, 2894-2898. | 1.3 | 149 |
| 5 | Generation of 1020 μ W cm^{-2} hard X-ray laser pulses with two-stage reflective focusing system. <i>Nature Communications</i> , 2014, 5, 3539. | 12.8 | 124 |
| 6 | Relative angle determinable stitching interferometry for hard x-ray reflective optics. <i>Review of Scientific Instruments</i> , 2005, 76, 045102. | 1.3 | 119 |
| 7 | Single-nanometer focusing of hard x-rays by Kirkpatrick-Baez mirrors. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 394206. | 1.8 | 117 |
| 8 | Novel abrasive-free planarization of 4H-SiC (0001) using catalyst. <i>Journal of Electronic Materials</i> , 2006, 35, L11-L14. | 2.2 | 114 |
| 9 | Development of plasma chemical vaporization machining. <i>Review of Scientific Instruments</i> , 2000, 71, 4627. | 1.3 | 108 |
| 10 | Fabrication of elliptical mirror at nanometer-level accuracy for hard x-ray focusing by numerically controlled plasma chemical vaporization machining. <i>Review of Scientific Instruments</i> , 2003, 74, 4549-4553. | 1.3 | 99 |
| 11 | Hard X-ray Diffraction-Limited Nanofocusing with Kirkpatrick-Baez Mirrors. <i>Japanese Journal of Applied Physics</i> , 2005, 44, L539-L542. | 1.5 | 95 |
| 12 | Atomic-scale flattening of SiC surfaces by electroless chemical etching in HF solution with Pt catalyst. <i>Applied Physics Letters</i> , 2007, 90, 202106. | 3.3 | 79 |
| 13 | Element Array by Scanning X-ray Fluorescence Microscopy after Cis-Diamminedichloro-Platinum(II) Treatment. <i>Cancer Research</i> , 2005, 65, 4998-5002. | 0.9 | 64 |
| 14 | Fabrication of elliptically figured mirror for focusing hard x rays to size less than 50nm. <i>Review of Scientific Instruments</i> , 2005, 76, 063708. | 1.3 | 63 |
| 15 | At-wavelength figure metrology of hard x-ray focusing mirrors. <i>Review of Scientific Instruments</i> , 2006, 77, 063712. | 1.3 | 63 |
| 16 | Nearly diffraction-limited line focusing of a hard-X-ray beam with an elliptically figured mirror. <i>Journal of Synchrotron Radiation</i> , 2002, 9, 313-316. | 2.4 | 62 |
| 17 | The study of fabrication of the x-ray mirror by numerically controlled plasma chemical vaporization machining: Development of the machine for the x-ray mirror fabrication. <i>Review of Scientific Instruments</i> , 2000, 71, 4620. | 1.3 | 60 |
| 18 | Two-dimensional Submicron Focusing of Hard X-rays by Two Elliptical Mirrors Fabricated by Plasma Chemical Vaporization Machining and Elastic Emission Machining. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 7129-7134. | 1.5 | 57 |

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | A Bragg beam splitter for hard x-ray free-electron lasers. <i>Optics Express</i> , 2013, 21, 2823. | 3.4 | 55 |
| 20 | Creation of perfect surfaces. <i>Journal of Crystal Growth</i> , 2005, 275, 39-50. | 1.5 | 52 |
| 21 | Wavelength-tunable split-and-delay optical system for hard X-ray free-electron lasers. <i>Optics Express</i> , 2016, 24, 9187. | 3.4 | 52 |
| 22 | Computer numerically controlled plasma chemical vaporization machining with a pipe electrode for optical fabrication. <i>Applied Optics</i> , 1998, 37, 5198. | 2.1 | 50 |
| 23 | First-principles simulations of removal process in EEM (Elastic Emission Machining). <i>Computational Materials Science</i> , 1999, 14, 232-235. | 3.0 | 48 |
| 24 | Wave-optical evaluation of interference fringes and wavefront phase in a hard-x-ray beam totally reflected by mirror optics. <i>Applied Optics</i> , 2005, 44, 6927. | 2.1 | 46 |
| 25 | Catalyst-referred etching of 4H β -SiC substrate utilizing hydroxyl radicals generated from hydrogen peroxide molecules. <i>Surface and Interface Analysis</i> , 2008, 40, 998-1001. | 1.8 | 44 |
| 26 | Nearly diffraction-limited X-ray focusing with variable-numerical-aperture focusing optical system based on four deformable mirrors. <i>Scientific Reports</i> , 2016, 6, 24801. | 3.3 | 41 |
| 27 | Thinning of silicon-on-insulator wafers by numerically controlled plasma chemical vaporization machining. <i>Review of Scientific Instruments</i> , 2004, 75, 942-946. | 1.3 | 40 |
| 28 | Direct determination of the wave field of an x-ray nanobeam. <i>Physical Review A</i> , 2008, 77, . | 2.5 | 38 |
| 29 | Atomically Smooth Gallium Nitride Surfaces Prepared by Chemical Etching with Platinum Catalyst in Water. <i>Journal of the Electrochemical Society</i> , 2012, 159, H417-H420. | 2.9 | 36 |
| 30 | The Polishing Effect of SiC Substrates in Femtosecond Laser Irradiation Assisted Chemical Mechanical Polishing (CMP). <i>ECS Journal of Solid State Science and Technology</i> , 2017, 6, P105-P112. | 1.8 | 35 |
| 31 | A Study on a Surface Preparation Method for Single-Crystal SiC Using an Fe Catalyst. <i>Journal of Electronic Materials</i> , 2009, 38, 159-163. | 2.2 | 33 |
| 32 | Fabrication of optics by use of plasma chemical vaporization machining with a pipe electrode. <i>Applied Optics</i> , 2002, 41, 3971. | 2.1 | 32 |
| 33 | Wavefront Control System for Phase Compensation in Hard X-ray Optics. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 072503. | 1.5 | 32 |
| 34 | Structural and chemical characteristics of atomically smooth GaN surfaces prepared by abrasive-free polishing with Pt catalyst. <i>Journal of Crystal Growth</i> , 2012, 349, 83-88. | 1.5 | 32 |
| 35 | Characterization of temporal coherence of hard X-ray free-electron laser pulses with single-shot interferograms. <i>IUCr</i> , 2017, 4, 728-733. | 2.2 | 32 |
| 36 | Dependence of Process Characteristics on Atomic-Step Density in Catalyst-Referred Etching of 4H β -SiC(0001) Surface. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2928-2930. | 0.9 | 30 |

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Image quality improvement in a hard X-ray projection microscope using total reflection mirror optics. <i>Journal of Synchrotron Radiation</i> , 2004, 11, 343-346. | 2.4 | 28 |
| 38 | Hard-X-ray imaging optics based on four aspherical mirrors with 50 nm resolution. <i>Optics Express</i> , 2012, 20, 10310. | 3.4 | 27 |
| 39 | Polishing Characteristics of Silicon Carbide by Plasma Chemical Vaporization Machining. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 8277-8280. | 1.5 | 26 |
| 40 | Formation of wide and atomically flat graphene layers on ultraprecision-figured 4H-SiC(0001) surfaces. <i>Surface Science</i> , 2011, 605, 597-605. | 1.9 | 26 |
| 41 | Performance of a hard X-ray split-and-delay optical system with a wavefront division. <i>Journal of Synchrotron Radiation</i> , 2018, 25, 20-25. | 2.4 | 25 |
| 42 | Planarization of SiC and GaN Wafers Using Polishing Technique Utilizing Catalyst Surface Reaction. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, N3028-N3035. | 1.8 | 24 |
| 43 | Termination dependence of surface stacking at $\langle 111 \rangle$ surface of 4H-SiC. Density functional theory calculations. <i>Physical Review B</i> , 2009, 79, 045411. | 3.2 | 23 |
| 44 | X-ray optics for advanced ultrafast pump-probe X-ray experiments at SACLA. <i>Journal of Synchrotron Radiation</i> , 2019, 26, 333-338. | 2.4 | 22 |
| 45 | Stitching-angle measurable microscopic-interferometer: Surface-figure metrology tool for hard X-ray nanofocusing mirrors with large curvature. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2010, 616, 203-206. | 1.6 | 21 |
| 46 | Hard X-ray nanofocusing using adaptive focusing optics based on piezoelectric deformable mirrors. <i>Review of Scientific Instruments</i> , 2015, 86, 043102. | 1.3 | 21 |
| 47 | Ultraprecision Machining Utilizing Numerically Controlled Scanning of Localized Atmospheric Pressure Plasma. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 8270-8276. | 1.5 | 20 |
| 48 | Fabrication of ultrathin and highly uniform silicon on insulator by numerically controlled plasma chemical vaporization machining. <i>Review of Scientific Instruments</i> , 2007, 78, 086102. | 1.3 | 20 |
| 49 | Wavefield characterization of nearly diffraction-limited focused hard x-ray beam with size less than 10 nm. <i>Review of Scientific Instruments</i> , 2010, 81, 123704. | 1.3 | 19 |
| 50 | Temperature Dependence of Plasma Chemical Vaporization Machining of Silicon and Silicon Carbide. <i>Materials Science Forum</i> , 0, 600-603, 847-850. | 0.3 | 17 |
| 51 | Improvement of the thickness distribution of a quartz crystal wafer by numerically controlled plasma chemical vaporization machining. <i>Review of Scientific Instruments</i> , 2005, 76, 096103. | 1.3 | 16 |
| 52 | Reduction of Surface Roughness of 4H-SiC by Catalyst-Referred Etching. <i>Materials Science Forum</i> , 2010, 645-648, 775-778. | 0.3 | 16 |
| 53 | Removal characteristics of plasma chemical vaporization machining with a pipe electrode for optical fabrication. <i>Applied Optics</i> , 2010, 49, 4434. | 2.1 | 16 |
| 54 | Damage-Free Planarization of 4H-SiC (0001) by Catalyst-Referred Etching. <i>Materials Science Forum</i> , 2007, 556-557, 749-751. | 0.3 | 15 |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Investigation of the Surface Removal Process of Silicon Carbide in Elastic Emission Machining. <i>Journal of Electronic Materials</i> , 2007, 36, 92-97. | 2.2 | 15 |
| 56 | Defect-Free Planarization of 4H-SiC(0001) Substrate Using Reference Plate. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 104-107. | 1.5 | 15 |
| 57 | Catalyzed chemical polishing of SiO ₂ glasses in pure water. <i>Review of Scientific Instruments</i> , 2019, 90, 045115. | 1.3 | 15 |
| 58 | Adsorption of hydrogen fluoride on SiC surfaces: A density functional theory study. <i>Current Applied Physics</i> , 2012, 12, S42-S46. | 2.4 | 14 |
| 59 | Damage threshold of platinum/carbon multilayers under hard X-ray free-electron laser irradiation. <i>Optics Express</i> , 2015, 23, 29032. | 3.4 | 14 |
| 60 | Development of speckle-free channel-cut crystal optics using plasma chemical vaporization machining for coherent x-ray applications. <i>Review of Scientific Instruments</i> , 2016, 87, 063118. | 1.3 | 14 |
| 61 | Simulation of concave-convex imaging mirror system for development of a compact and achromatic full-field x-ray microscope. <i>Applied Optics</i> , 2017, 56, 967. | 2.1 | 14 |
| 62 | Stitching interferometric metrology for steeply curved x-ray mirrors. <i>Surface and Interface Analysis</i> , 2008, 40, 1023-1027. | 1.8 | 13 |
| 63 | Fabrication of small complex-shaped optics by plasma chemical vaporization machining with a microelectrode. <i>Applied Optics</i> , 2006, 45, 5897. | 2.1 | 12 |
| 64 | Shape correction of optical surfaces using plasma chemical vaporization machining with a hemispherical tip electrode. <i>Applied Optics</i> , 2012, 51, 401. | 1.8 | 12 |
| 65 | Experimental and simulation study of undesirable short-period deformation in piezoelectric deformable x-ray mirrors. <i>Review of Scientific Instruments</i> , 2012, 83, 053701. | 1.3 | 12 |
| 66 | Compact reflective imaging optics in hard X-ray region based on concave and convex mirrors. <i>Optics Express</i> , 2019, 27, 3429. | 3.4 | 12 |
| 67 | X-ray nanofocusing using a piezoelectric deformable mirror and at-wavelength metrology methods. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2013, 710, 93-97. | 1.6 | 11 |
| 68 | Development of ion beam figuring system with electrostatic deflection for ultraprecise X-ray reflective optics. <i>Review of Scientific Instruments</i> , 2015, 86, 093103. | 1.3 | 11 |
| 69 | Plasma Chemical Vaporization Machining (CVM) for Fabrication of Optics. <i>Japanese Journal of Applied Physics</i> , 1998, 37, L894-L896. | 1.5 | 10 |
| 70 | Ultraprecision finishing technique by numerically controlled sacrificial oxidation. <i>Journal of Crystal Growth</i> , 2008, 310, 2173-2177. | 1.5 | 10 |
| 71 | Improvement of Removal Rate in Abrasive-Free Planarization of 4H-SiC Substrates Using Catalytic Platinum and Hydrofluoric Acid. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 046501. | 1.5 | 10 |
| 72 | Development of split-delay x-ray optics using Si(220) crystals at SACLA. <i>Proceedings of SPIE</i> , 2014, , . | 0.8 | 10 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Platinum-catalyzed hydrolysis etching of SiC in water: A density functional theory study. Japanese Journal of Applied Physics, 2018, 57, 055703. | 1.5 | 10 |
| 74 | Improvement of Removal Rate in Abrasive-Free Planarization of 4H-SiC Substrates Using Catalytic Platinum and Hydrofluoric Acid. Japanese Journal of Applied Physics, 2012, 51, 046501. | 1.5 | 10 |
| 75 | Fabrication technology of hard x-ray aspherical mirror optics and application to nanospectroscopy. , 2004, , . | | 9 |
| 76 | Thinning of SiC Wafer by Plasma Chemical Vaporization Machining. Materials Science Forum, 0, 645-648, 857-860. | 0.3 | 9 |
| 77 | Enhancement of photoluminescence efficiency from GaN(0001) by surface treatments. Japanese Journal of Applied Physics, 2014, 53, 021001. | 1.5 | 9 |
| 78 | Nearly diffraction-limited hard X-ray line focusing with hybrid adaptive X-ray mirror based on mechanical and piezo-driven deformation. Optics Express, 2018, 26, 17477. | 3.4 | 9 |
| 79 | A micro channel-cut crystal X-ray monochromator for a self-seeded hard X-ray free-electron laser. Journal of Synchrotron Radiation, 2019, 26, 1496-1502. | 2.4 | 9 |
| 80 | Photoelectrochemical Oxidation Assisted Catalyst-Referred Etching for SiC (0001) Surface. International Journal of Automation Technology, 2021, 15, 74-79. | 1.0 | 9 |
| 81 | Novel Abrasive-free Planarization of Si and SiC using Catalyst. , 2007, , 267-270. | | 8 |
| 82 | Catalyst-referred etching of silicon. Science and Technology of Advanced Materials, 2007, 8, 162-165. | 6.1 | 8 |
| 83 | Etching characteristics of GaN by plasma chemical vaporization machining. Surface and Interface Analysis, 2008, 40, 1566-1570. | 1.8 | 8 |
| 84 | Extended knife-edge method for characterizing sub-10-nm X-ray beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 616, 246-250. | 1.6 | 8 |
| 85 | Influence of the UV Light Intensity on the Photoelectrochemical Planarization Technique for Gallium Nitride. Materials Science Forum, 0, 645-648, 795-798. | 0.3 | 8 |
| 86 | Fabrication of Ultrathin Bragg Beam Splitter by Plasma Chemical Vaporization Machining. Key Engineering Materials, 0, 523-524, 40-45. | 0.4 | 8 |
| 87 | Improved reflectivity of platinum/carbon multilayers for X-ray mirrors by carbon doping into platinum layer. Current Applied Physics, 2012, 12, S20-S23. | 2.4 | 8 |
| 88 | Characteristics and Mechanism of Catalyst-Referred Etching Method: Application to 4H-SiC. International Journal of Automation Technology, 2018, 12, 154-159. | 1.0 | 8 |
| 89 | Hard x-ray intensity autocorrelation using direct two-photon absorption. Physical Review Research, 2022, 4, . | 3.6 | 8 |
| 90 | Thinning of 2-Inch SiC Wafer by Plasma Chemical Vaporization Machining Using Cylindrical Rotary Electrode. Materials Science Forum, 0, 679-680, 481-484. | 0.3 | 7 |

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|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------|
| 91 | Local atomic configuration of graphene, buffer layer, and precursor layer on SiC(0001) by photoelectron diffraction. <i>Surface Science</i> , 2015, 632, 98-102. | 1.9 | 7 |
| 92 | Simulation and Experimental Study of Wavefront Measurement Accuracy of the Pencil-Beam Method. <i>Synchrotron Radiation News</i> , 2016, 29, 32-36. | 0.8 | 7 |
| 93 | TEM Observation of 8 Deg Off-Axis 4H-SiC (0001) Surfaces Planarized by Catalyst-Referred Etching. <i>Materials Science Forum</i> , 2011, 679-680, 489-492. | 0.3 | 6 |
| 94 | Mechanism of atomic-scale passivation and flattening of semiconductor surfaces by wet-chemical preparations. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 394202. | 1.8 | 6 |
| 95 | High-Resolution TEM Observation of 4H-SiC (0001) Surface Planarized by Catalyst-Referred Etching. <i>Materials Science Forum</i> , 2012, 717-720, 873-876. | 0.3 | 6 |
| 96 | An abrasive-free chemical polishing method assisted by nickel catalyst generated by <i>in situ</i> electrochemical plating. <i>Review of Scientific Instruments</i> , 2020, 91, 045108. | 1.3 | 6 |
| 97 | High-resolution micro channel-cut crystal monochromator processed by plasma chemical vaporization machining for a reflection self-seeded X-ray free-electron laser. <i>Optics Express</i> , 2020, 28, 25706. | 3.4 | 6 |
| 98 | Surface gradient integrated profiler for X-ray and EUV optics. <i>Science and Technology of Advanced Materials</i> , 2007, 8, 177-180. | 6.1 | 5 |
| 99 | Cutting of SiC Wafer by Atmospheric-Pressure Plasma Etching with Wire Electrode. <i>Materials Science Forum</i> , 0, 717-720, 865-868. | 0.3 | 5 |
| 100 | 4H-SiC Planarization Using Catalyst-Referred Etching with Pure Water. <i>Materials Science Forum</i> , 0, 778-780, 722-725. | 0.3 | 5 |
| 101 | Basic Study on Etching Selectivity of Plasma Chemical Vaporization Machining by Introducing Crystallographic Damage into Work Surface. <i>Key Engineering Materials</i> , 0, 625, 550-553. | 0.4 | 5 |
| 102 | Aggregation of carbon atoms at SiO ₂ /SiC(0 0 0 1) interface by plasma oxidation toward formation of pit-free graphene. <i>Carbon</i> , 2014, 80, 440-445. | 10.3 | 5 |
| 103 | Catalyst-Assisted Electroless Flattening of Ge Surfaces in Dissolved O ₂ -Containing Water. <i>ChemElectroChem</i> , 2015, 2, 1656-1659. | 3.4 | 5 |
| 104 | High-Speed Etching of Silicon Carbide Wafer Using High-Pressure SF ₆ Plasma. <i>ECS Journal of Solid State Science and Technology</i> , 2021, 10, 014005. | 1.8 | 5 |
| 105 | Wave-optical and ray-tracing analysis to establish a compact two-dimensional focusing unit using K-B mirror arrangement. , 2004, , . | | 4 |
| 106 | Development of a figure correction method having spatial resolution close to 0.1 mm. , 2004, 5193, 105. | | 4 |
| 107 | Hard x-ray nano-focusing at 40nm level using K-B mirror optics for nanoscopy/spectroscopy. , 2005, , . | | 4 |
| 108 | Beveling of Silicon Carbide Wafer by Plasma Chemical Vaporization Machining. <i>Materials Science Forum</i> , 2008, 600-603, 843-846. | 0.3 | 4 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | Beveling of Silicon Carbide Wafer by Plasma Etching Using Atmospheric-Pressure Plasma. Japanese Journal of Applied Physics, 2010, 49, 08JJ03. | 1.5 | 4 |
| 110 | Atomically controlled chemical polishing of GaN using platinum and hydrofluoric acid. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 433-435. | 0.8 | 4 |
| 111 | Thinning of a Two-Inch Silicon Carbide Wafer by Plasma Chemical Vaporization Machining Using a Slit Electrode. Materials Science Forum, 0, 778-780, 750-753. | 0.3 | 4 |
| 112 | Numerically controlled atmospheric-pressure plasma sacrificial oxidation using electrode arrays for improving silicon-on-insulator layer uniformity. Japanese Journal of Applied Physics, 2015, 54, 01AE03. | 1.5 | 4 |
| 113 | Cause of Etch Pits during the High Speed Plasma Etching of Silicon Carbide and an Approach to Reduce their Size. Materials Science Forum, 0, 1004, 161-166. | 0.3 | 4 |
| 114 | Surface Finishing Method Using Plasma Chemical Vaporization Machining for Narrow Channel Walls of X-Ray Crystal Monochromators. International Journal of Automation Technology, 2019, 13, 246-253. | 1.0 | 4 |
| 115 | Microstitching interferometry for nanofocusing mirror optics. , 2004, , . | | 3 |
| 116 | Improvement of thickness uniformity of quartz crystal wafer by numerically controlled plasma CVM. , 2005, 5869, 103. | | 3 |
| 117 | Abrasive-Free Planarization of 3-Inch 4H-SiC Substrate Using Catalyst-Referred Etching. Materials Science Forum, 2011, 679-680, 493-495. | 0.3 | 3 |
| 118 | Plasma Chemical Vaporization Machining of Silicon Carbide Wafer Using Flat-Bar Electrode with Multiple Gas Nozzles. Advanced Materials Research, 0, 497, 160-164. | 0.3 | 3 |
| 119 | Back-Side Thinning of Silicon Carbide Wafer by Plasma Etching Using Atmospheric-Pressure Plasma. Key Engineering Materials, 0, 516, 108-112. | 0.4 | 3 |
| 120 | Damage characteristics of platinum/carbon multilayers under x-ray free-electron laser irradiation. Proceedings of SPIE, 2013, , . | 0.8 | 3 |
| 121 | Improvement of I-V Characteristics of Schottky Barrier Diode by 4H-SiC Surface Planarization. Materials Science Forum, 0, 821-823, 567-570. | 0.3 | 3 |
| 122 | Optimal deformation procedure for hybrid adaptive x-ray mirror based on mechanical and piezo-driven bending system. Review of Scientific Instruments, 2021, 92, 123706. | 1.3 | 3 |
| 123 | Fabrication technology of ultraprecise mirror optics to realize hard x-ray nanobeam. , 2004, , . | | 2 |
| 124 | Fabrication of damascene Cu wirings using solid acidic catalyst. Science and Technology of Advanced Materials, 2007, 8, 166-169. | 6.1 | 2 |
| 125 | Novel Scheme of Figure-Error Correction for X-ray Nanofocusing Mirror. Japanese Journal of Applied Physics, 2009, 48, 096507. | 1.5 | 2 |
| 126 | Rapid Planarization Method by Ultraviolet Light Irradiation for Gallium Nitride Using Platinum Catalyst. Key Engineering Materials, 2012, 523-524, 46-49. | 0.4 | 2 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | Study of Terminated Species on 4H-SiC (0001) Surfaces Planarized by Catalyst-Referred Etching. Materials Science Forum, 0, 740-742, 510-513. | 0.3 | 2 |
| 128 | Dicing of SiC Wafer by Atmospheric-Pressure Plasma Etching Process with Slit Mask for Plasma Confinement. Materials Science Forum, 2014, 778-780, 759-762. | 0.3 | 2 |
| 129 | Development of basic-type CMP/P-CVM fusion processing system (Type A) and its fundamental characteristics. , 2014, , . | | 2 |
| 130 | Improvements in graphene growth on 4H-SiC(0001) using plasma induced surface oxidation. Journal of Applied Physics, 2019, 126, 065301. | 2.5 | 2 |
| 131 | High-Efficiency Planarization of SiC Wafers by Water-CARE (Catalyst-Referred Etching) Employing Photoelectrochemical Oxidation. Materials Science Forum, 2019, 963, 525-529. | 0.3 | 2 |
| 132 | X-ray adaptive zoom condenser utilizing an intermediate virtual focus. Optics Express, 2021, 29, 15604. | 3.4 | 2 |
| 133 | Plasma-Based Nanomanufacturing Under Atmospheric Pressure. , 2013, , 1-17. | | 2 |
| 134 | High-Spatial-Resolution Machining Utilizing Atmospheric Pressure Plasma: Machining Characteristics of Silicon. Japanese Journal of Applied Physics, 2006, 45, 8281-8285. | 1.5 | 1 |
| 135 | Hard X-ray Focusing less than 50nm for Nanoscopy/spectroscopy. AIP Conference Proceedings, 2007, , . | 0.4 | 1 |
| 136 | Development of nanometer level accurate computer-controlled figuring with high spatial resolution and its application to hard X-ray focusing mirror. Journal of the Japan Society for Precision Engineering, 2010, 76, 338-342. | 0.1 | 1 |
| 137 | Evaluation of Schottky Barrier Diodes Fabricated Directly on Processed 4H-SiC(0001) Surfaces. Journal of Nanoscience and Nanotechnology, 2011, 11, 2809-2813. | 0.9 | 1 |
| 138 | Basic Experiment on Atmospheric-Pressure Plasma Etching with Slit Aperture for High-Efficiency Dicing of SiC Wafer. Materials Science Forum, 0, 740-742, 813-816. | 0.3 | 1 |
| 139 | Investigation of the Barrier Heights for Dissociative Adsorption of HF on SiC Surfaces in the Catalyst-Referred Etching Process. Materials Science Forum, 0, 778-780, 726-729. | 0.3 | 1 |
| 140 | Planarization of 6-Inch 4H-SiC Wafer Using Catalyst-Referred Etching. Materials Science Forum, 0, 821-823, 537-540. | 0.3 | 1 |
| 141 | (Invited) High-Speed Plasma Etching of SiC Wafer Toward Backside Thinning. ECS Transactions, 2021, 104, 85-92. | 0.5 | 1 |
| 142 | Adaptive x-ray zoom condenser system based on concave and convex mirrors. , 2020, , . | | 1 |
| 143 | Fabrication of Ultraprecisely Figured Elliptical Mirror for Nano-Focusing of Hard X-ray and Evaluation of Focusing Properties. Journal of the Japan Society for Precision Engineering Contributed Papers, 2005, 71, 1137-1140. | 0.0 | 1 |
| 144 | Ultraprecision Machining. Ultra-precision Machining by Plasma CVM.. Hyomen Kagaku, 2001, 22, 160-166. | 0.0 | 0 |

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Ultraprecision Finishing Process for Improving Thickness Distribution of Quartz Crystal Wafer by Utilizing Atmospheric Pressure Plasma. , 2006, , . | | 0 |
| 146 | At-wavelength figure metrology of total reflection mirrors in hard x-ray region. , 2006, , . | | 0 |
| 147 | Fabrication of X-ray Mirror for Hard X-ray Diffraction Limited Nanofocusing. AIP Conference Proceedings, 2007, , . | 0.4 | 0 |
| 148 | Polishing Characteristics of 4H-SiC Si-Face and C-Face by Plasma Chemical Vaporization Machining. Materials Science Forum, 2007, 556-557, 757-760. | 0.3 | 0 |
| 149 | Development of Ultra Precision Finishing Method for Quartz Crystal Wafer Utilizing Atmospheric Pressure Plasma. , 2007, , 233-237. | | 0 |
| 150 | Atomic-scale Characterization of HF-treated 4H-SiC(0001)1Å–1 Surfaces by Scanning Tunneling Microscopy. Materials Research Society Symposia Proceedings, 2007, 996, 1. | 0.1 | 0 |
| 151 | Hard x-ray wavefront measurement and control for hard x-ray nanofocusing. , 2007, , . | | 0 |
| 152 | Stitching interferometric measurement system for hard x-ray nanofocusing mirrors. Journal of Physics: Conference Series, 2009, 186, 012080. | 0.4 | 0 |
| 153 | Numerically controlled sacrificial plasma oxidation using array-type electrode toward high-throughput deterministic machining. International Journal of Nanomanufacturing, 2011, 7, 289. | 0.3 | 0 |
| 154 | Surface Observation of 4H-SiC (0001) Planarized by Catalyst-Referred Etching. Key Engineering Materials, 2012, 516, 452-456. | 0.4 | 0 |
| 155 | Development of an Ultraprecise Piezoelectric Deformable Mirror for Adaptive X-Ray Optics. Key Engineering Materials, 0, 523-524, 50-53. | 0.4 | 0 |
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