Yasuhisa Sano

List of Publications by Year in descending order

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170 papers 3,957 citations

147566 31 h-index 58 g-index

173 all docs

173 docs citations

173 times ranked 2001 citing authors

#	Article	IF	CITATIONS
1	Breaking the 10 nm barrier in hard-X-ray focusing. Nature Physics, 2010, 6, 122-125.	6.5	484
2	Focusing of X-ray free-electron laser pulses with reflective optics. Nature Photonics, 2013, 7, 43-47.	15.6	234
3	Efficient focusing of hard x rays to 25nm by a total reflection mirror. Applied Physics Letters, 2007, 90, 051903.	1.5	203
4	Microstitching interferometry for x-ray reflective optics. Review of Scientific Instruments, 2003, 74, 2894-2898.	0.6	149
5	Generation of 1020 W cmâ^²2 hard X-ray laser pulses with two-stage reflective focusing system. Nature Communications, 2014, 5, 3539.	5.8	124
6	Relative angle determinable stitching interferometry for hard x-ray reflective optics. Review of Scientific Instruments, 2005, 76, 045102.	0.6	119
7	Single-nanometer focusing of hard x-rays by Kirkpatrick–Baez mirrors. Journal of Physics Condensed Matter, 2011, 23, 394206.	0.7	117
8	Novel abrasive-free planarization of 4H-SiC (0001) using catalyst. Journal of Electronic Materials, 2006, 35, L11-L14.	1.0	114
9	Development of plasma chemical vaporization machining. Review of Scientific Instruments, 2000, 71, 4627.	0.6	108
10	Fabrication of elliptical mirror at nanometer-level accuracy for hard x-ray focusing by numerically controlled plasma chemical vaporization machining. Review of Scientific Instruments, 2003, 74, 4549-4553.	0.6	99
11	Hard X-ray Diffraction-Limited Nanofocusing with Kirkpatrick-Baez Mirrors. Japanese Journal of Applied Physics, 2005, 44, L539-L542.	0.8	95
12	Atomic-scale flattening of SiC surfaces by electroless chemical etching in HF solution with Pt catalyst. Applied Physics Letters, 2007, 90, 202106.	1.5	79
13	Element Array by Scanning X-ray Fluorescence Microscopy after Cis-Diamminedichloro-Platinum(II) Treatment. Cancer Research, 2005, 65, 4998-5002.	0.4	64
14	Fabrication of elliptically figured mirror for focusing hard x rays to size less than 50nm. Review of Scientific Instruments, 2005, 76, 063708.	0.6	63
15	At-wavelength figure metrology of hard x-ray focusing mirrors. Review of Scientific Instruments, 2006, 77, 063712.	0.6	63
16	Nearly diffraction-limited line focusing of a hard-X-ray beam with an elliptically figured mirror. Journal of Synchrotron Radiation, 2002, 9, 313-316.	1.0	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. Review of Scientific Instruments, 2000, 71, 4620.	0.6	60
18	Two-dimensional Submicron Focusing of Hard X-rays by Two Elliptical Mirrors Fabricated by Plasma Chemical Vaporization Machining and Elastic Emission Machining. Japanese Journal of Applied Physics, 2003, 42, 7129-7134.	0.8	57

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19	A Bragg beam splitter for hard x-ray free-electron lasers. Optics Express, 2013, 21, 2823.	1.7	55
20	Creation of perfect surfaces. Journal of Crystal Growth, 2005, 275, 39-50.	0.7	52
21	Wavelength-tunable split-and-delay optical system for hard X-ray free-electron lasers. Optics Express, 2016, 24, 9187.	1.7	52
22	Computer numerically controlled plasma chemical vaporization machining with a pipe electrode for optical fabrication. Applied Optics, 1998, 37, 5198.	2.1	50
23	First-principles simulations of removal process in EEM (Elastic Emission Machining). Computational Materials Science, 1999, 14, 232-235.	1.4	48
24	Wave-optical evaluation of interference fringes and wavefront phase in a hard-x-ray beam totally reflected by mirror optics. Applied Optics, 2005, 44, 6927.	2.1	46
25	Catalystâ€referred etching of 4HSiC substrate utilizing hydroxyl radicals generated from hydrogen peroxide molecules. Surface and Interface Analysis, 2008, 40, 998-1001.	0.8	44
26	Nearly diffraction-limited X-ray focusing with variable-numerical-aperture focusing optical system based on four deformable mirrors. Scientific Reports, 2016, 6, 24801.	1.6	41
27	Thinning of silicon-on-insulator wafers by numerically controlled plasma chemical vaporization machining. Review of Scientific Instruments, 2004, 75, 942-946.	0.6	40
28	Direct determination of the wave field of an x-ray nanobeam. Physical Review A, 2008, 77, .	1.0	38
29	Atomically Smooth Gallium Nitride Surfaces Prepared by Chemical Etching with Platinum Catalyst in Water. Journal of the Electrochemical Society, 2012, 159, H417-H420.	1.3	36
30	The Polishing Effect of SiC Substrates in Femtosecond Laser Irradiation Assisted Chemical Mechanical Polishing (CMP). ECS Journal of Solid State Science and Technology, 2017, 6, P105-P112.	0.9	35
31	A Study on a Surface Preparation Method for Single-Crystal SiC Using an Fe Catalyst. Journal of Electronic Materials, 2009, 38, 159-163.	1.0	33
32	Fabrication of optics by use of plasma chemical vaporization machining with a pipe electrode. Applied Optics, 2002, 41, 3971.	2.1	32
33	Wavefront Control System for Phase Compensation in Hard X-ray Optics. Japanese Journal of Applied Physics, 2009, 48, 072503.	0.8	32
34	Structural and chemical characteristics of atomically smooth GaN surfaces prepared by abrasive-free polishing with Pt catalyst. Journal of Crystal Growth, 2012, 349, 83-88.	0.7	32
35	Characterization of temporal coherence of hard X-ray free-electron laser pulses with single-shot interferograms. IUCrJ, 2017, 4, 728-733.	1.0	32
36	Dependence of Process Characteristics on Atomic-Step Density in Catalyst-Referred Etching of 4H–SiC(0001) Surface. Journal of Nanoscience and Nanotechnology, 2011, 11, 2928-2930.	0.9	30

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37	Image quality improvement in a hard X-ray projection microscope using total reflection mirror optics. Journal of Synchrotron Radiation, 2004, 11, 343-346.	1.0	28
38	Hard-X-ray imaging optics based on four aspherical mirrors with 50 nm resolution. Optics Express, 2012, 20, 10310.	1.7	27
39	Polishing Characteristics of Silicon Carbide by Plasma Chemical Vaporization Machining. Japanese Journal of Applied Physics, 2006, 45, 8277-8280.	0.8	26
40	Formation of wide and atomically flat graphene layers on ultraprecision-figured 4H-SiC(0001) surfaces. Surface Science, 2011, 605, 597-605.	0.8	26
41	Performance of a hard X-ray split-and-delay optical system with a wavefront division. Journal of Synchrotron Radiation, 2018, 25, 20-25.	1.0	25
42	Planarization of SiC and GaN Wafers Using Polishing Technique Utilizing Catalyst Surface Reaction. ECS Journal of Solid State Science and Technology, 2013, 2, N3028-N3035.	0.9	24
43	Termination dependence of surface stacking at <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>H</mml:mi><mml:mtext>-SiC</mml:mtext><mm 2009.="" 79<="" b.="" calculations.="" density="" functional="" physical="" review="" th="" theory=""><th>l:mrow><</th><th>mml:mo>(<</th></mm></mml:mrow></mml:math>	l:mrow><	mml:mo>(<
44	X-ray optics for advanced ultrafast pump–probe X-ray experiments at SACLA. Journal of Synchrotron Radiation, 2019, 26, 333-338.	1.0	22
45	Stitching-angle measurable microscopic-interferometer: Surface-figure metrology tool for hard X-ray nanofocusing mirrors with large curvature. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 616, 203-206.	0.7	21
46	Hard X-ray nanofocusing using adaptive focusing optics based on piezoelectric deformable mirrors. Review of Scientific Instruments, 2015, 86, 043102.	0.6	21
47	Ultraprecision Machining Utilizing Numerically Controlled Scanning of Localized Atmospheric Pressure Plasma. Japanese Journal of Applied Physics, 2006, 45, 8270-8276.	0.8	20
48	Fabrication of ultrathin and highly uniform silicon on insulator by numerically controlled plasma chemical vaporization machining. Review of Scientific Instruments, 2007, 78, 086102.	0.6	20
49	Wavefield characterization of nearly diffraction-limited focused hard x-ray beam with size less than 10 nm. Review of Scientific Instruments, 2010, 81, 123704.	0.6	19
50	Temperature Dependence of Plasma Chemical Vaporization Machining of Silicon and Silicon Carbide. Materials Science Forum, 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. Review of Scientific Instruments, 2005, 76, 096103.	0.6	16
52	Reduction of Surface Roughness of 4H-SiC by Catalyst-Referred Etching. Materials Science Forum, 2010, 645-648, 775-778.	0.3	16
53	Removal characteristics of plasma chemical vaporization machining with a pipe electrode for optical fabrication. Applied Optics, 2010, 49, 4434.	2.1	16
54	Damage-Free Planarization of 4H-SiC (0001) by Catalyst-Referred Etching. Materials Science Forum, 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. Journal of Electronic Materials, 2007, 36, 92-97.	1.0	15
56	Defect-Free Planarization of 4H–SiC(0001) Substrate Using Reference Plate. Japanese Journal of Applied Physics, 2008, 47, 104-107.	0.8	15
57	Catalyzed chemical polishing of SiO2 glasses in pure water. Review of Scientific Instruments, 2019, 90, 045115.	0.6	15
58	Adsorption of hydrogen fluoride on SiC surfaces: A density functional theory study. Current Applied Physics, 2012, 12, S42-S46.	1.1	14
59	Damage threshold of platinum/carbon multilayers under hard X-ray free-electron laser irradiation. Optics Express, 2015, 23, 29032.	1.7	14
60	Development of speckle-free channel-cut crystal optics using plasma chemical vaporization machining for coherent x-ray applications. Review of Scientific Instruments, 2016, 87, 063118.	0.6	14
61	Simulation of concave–convex imaging mirror system for development of a compact and achromatic full-field x-ray microscope. Applied Optics, 2017, 56, 967.	2.1	14
62	Stitching interferometric metrology for steeply curved xâ€ray mirrors. Surface and Interface Analysis, 2008, 40, 1023-1027.	0.8	13
63	Fabrication of small complex-shaped optics by plasma chemical vaporization machining with a microelectrode. Applied Optics, 2006, 45, 5897.	2.1	12
64	Shape correction of optical surfaces using plasma chemical vaporization machining with a hemispherical tip electrode. Applied Optics, 2012, 51, 401.	0.9	12
65	Experimental and simulation study of undesirable short-period deformation in piezoelectric deformable x-ray mirrors. Review of Scientific Instruments, 2012, 83, 053701.	0.6	12
66	Compact reflective imaging optics in hard X-ray region based on concave and convex mirrors. Optics Express, 2019, 27, 3429.	1.7	12
67	X-ray nanofocusing using a piezoelectric deformable mirror and at-wavelength metrology methods. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 710, 93-97.	0.7	11
68	Development of ion beam figuring system with electrostatic deflection for ultraprecise X-ray reflective optics. Review of Scientific Instruments, 2015, 86, 093103.	0.6	11
69	Plasma Chemical Vaporization Machining (CVM) for Fabrication of Optics. Japanese Journal of Applied Physics, 1998, 37, L894-L896.	0.8	10
70	Ultraprecision finishing technique by numerically controlled sacrificial oxidation. Journal of Crystal Growth, 2008, 310, 2173-2177.	0.7	10
71	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.	0.8	10
72	Development of split-delay x-ray optics using Si(220) crystals at SACLA. Proceedings of SPIE, 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.	0.8	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.	0.8	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.	0.8	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.	1.7	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.	1.0	9
80	Photoelectrochemical Oxidation Assisted Catalyst-Referred Etching for SiC (0001) Surface. International Journal of Automation Technology, 2021, 15, 74-79.	0.5	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.	2.8	8
83	Etching characteristics of GaN by plasma chemical vaporization machining. Surface and Interface Analysis, 2008, 40, 1566-1570.	0.8	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.	0.7	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.	1.1	8
88	Characteristics and Mechanism of Catalyst-Referred Etching Method: Application to 4H-SiC. International Journal of Automation Technology, 2018, 12, 154-159.	0.5	8
89	Hard x-ray intensity autocorrelation using direct two-photon absorption. Physical Review Research, 2022, 4, .	1.3	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. Surface Science, 2015, 632, 98-102.	0.8	7
92	Simulation and Experimental Study of Wavefront Measurement Accuracy of the Pencil-Beam Method. Synchrotron Radiation News, 2016, 29, 32-36.	0.2	7
93	TEM Observation of 8 Deg Off-Axis 4H-SiC (0001) Surfaces Planarized by Catalyst-Referred Etching. Materials Science Forum, 2011, 679-680, 489-492.	0.3	6
94	Mechanism of atomic-scale passivation and flattening of semiconductor surfaces by wet-chemical preparations. Journal of Physics Condensed Matter, 2011, 23, 394202.	0.7	6
95	High-Resolution TEM Observation of 4H-SiC (0001) Surface Planarized by Catalyst-Referred Etching. Materials Science Forum, 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. Review of Scientific Instruments, 2020, 91, 045108.	0.6	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. Optics Express, 2020, 28, 25706.	1.7	6
98	Surface gradient integrated profiler for X-ray and EUV optics. Science and Technology of Advanced Materials, 2007, 8, 177-180.	2.8	5
99	Cutting of SiC Wafer by Atmospheric-Pressure Plasma Etching with Wire Electrode. Materials Science Forum, 0, 717-720, 865-868.	0.3	5
100	4H-SiC Planarization Using Catalyst-Referred Etching with Pure Water. Materials Science Forum, 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. Key Engineering Materials, 0, 625, 550-553.	0.4	5
102	Aggregation of carbon atoms at SiO2/SiC(0 0 0 1) interface by plasma oxidation toward formation of pit-free graphene. Carbon, 2014, 80, 440-445.	5.4	5
103	Catalystâ€Assisted Electroless Flattening of Ge Surfaces in Dissolvedâ€O ₂ â€Containing Water. ChemElectroChem, 2015, 2, 1656-1659.	1.7	5
104	High-Speed Etching of Silicon Carbide Wafer Using High-Pressure SF ₆ Plasma. ECS Journal of Solid State Science and Technology, 2021, 10, 014005.	0.9	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. Materials Science Forum, 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.	0.8	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.	0.8	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.	0.5	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.	0.6	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.	2.8	2
125	Novel Scheme of Figure-Error Correction for X-ray Nanofocusing Mirror. Japanese Journal of Applied Physics, 2009, 48, 096507.	0.8	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.	1.1	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.	1.7	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.	0.8	1
135	Hard X-ray Focusing less than 50nm for Nanoscopy/spectroscopy. AIP Conference Proceedings, 2007, , .	0.3	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.	0.0	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.	0.3	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, , .	0.3	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)1 \tilde{A} -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.	0.3	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
156	Atomically controlled surfacing of single crystalline SiC and GaN by catalyst-referred etching. , 2014, , .		0
157	High-efficiency planarization method combining mechanical polishing and atmospheric-pressure plasma etching for hard-to-machine semiconductor substrates. Mechanical Engineering Journal, 2016, 3, 15-00527-15-00527.	0.2	0
158	Polishing Technique of Next-Generation Power Semiconductor SiC Substrate. Journal of the Japan Society for Precision Engineering, 2018, 84, 217-220.	0.0	0
159	Focusing Hard X-rays to Sub-50 nm Size by Elliptically Figured Mirror. , 2005, , .		0
160	Improvement of Thickness Uniformity of Quartz Wafer by Numerically Controlled Plasma CVM. Journal of the Japan Society for Precision Engineering Contributed Papers, 2005, 71, 655-659.	0.0	0
161	Stitching Interferometry for Surface Figure Measurement of X-ray Reflective Optics. , 2005, , .		0
162	Development of a Mirror Manipulator for Hard X-ray Microscopy with High Resolution. Journal of the Japan Society for Precision Engineering Contributed Papers, 2006, 72, 884-888.	0.0	0

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163	Plasma-Based Nanomanufacturing Under Atmospheric Pressure. , 2015, , 1529-1547.		O
164	Development of concave-convex imaging mirror system for a compact and achromatic full-field x-ray microscope., 2017,,.		0
165	Fabrication of Optics with a Thin Part by Plasma Chemical Vaporization Machining. , 2019, , .		0
166	Figuring of fused silica optical surface with thin parts by plasma chemical vaporization machining. , 2019, , .		0
167	Ultraprecision Finishing of Photomask Substrate by Utilizing Atmospheric Pressure Plasma. , 2007, , 227-231.		0
168	Fabrication of Ultraprecisely Figured Mirror for Nano Focusing Hard-x-ray., 2007,, 295-300.		0
169	(Invited) High-Speed Plasma Etching of SiC Wafer Toward Backside Thinning. ECS Meeting Abstracts, 2021, MA2021-02, 992-992.	0.0	0
170	High-throughput deterministic plasma etching using array-type plasma generator system. Review of Scientific Instruments, 2021, 92, 125107.	0.6	0