

Kazuto Yamauchi

List of Publications by Citations

Source: <https://exaly.com/author-pdf/10089275/kazuto-yamauchi-publications-by-citations.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

87
papers

3,077
citations

28
h-index

54
g-index

96
ext. papers

3,453
ext. citations

3.9
avg, IF

4.41
L-index

#	Paper	IF	Citations
87	Breaking the 10 nm barrier in hard-X-ray focusing. <i>Nature Physics</i> , 2010 , 6, 122-125	16.2	413
86	Figuring with subnanometer-level accuracy by numerically controlled elastic emission machining. <i>Review of Scientific Instruments</i> , 2002 , 73, 4028-4033	1.7	197
85	Focusing of X-ray free-electron laser pulses with reflective optics. <i>Nature Photonics</i> , 2013 , 7, 43-47	33.9	195
84	Efficient focusing of hard x rays to 25nm by a total reflection mirror. <i>Applied Physics Letters</i> , 2007 , 90, 051903	3.4	173
83	X-ray two-photon absorption competing against single and sequential multiphoton processes. <i>Nature Photonics</i> , 2014 , 8, 313-316	33.9	143
82	Microstitching interferometry for x-ray reflective optics. <i>Review of Scientific Instruments</i> , 2003 , 74, 2894-2898	11.7	117
81	Generation of 10(20) W cm ⁻² hard X-ray laser pulses with two-stage reflective focusing system. <i>Nature Communications</i> , 2014 , 5, 3539	17.4	105
80	Single-nanometer focusing of hard x-rays by Kirkpatrick-Baez mirrors. <i>Journal of Physics Condensed Matter</i> , 2011 , 23, 394206	1.8	102
79	Relative angle determinable stitching interferometry for hard x-ray reflective optics. <i>Review of Scientific Instruments</i> , 2005 , 76, 045102	1.7	93
78	Development of plasma chemical vaporization machining. <i>Review of Scientific Instruments</i> , 2000 , 71, 4627-4631	1.7	89
77	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	1.7	87
76	High-resolution multislice x-ray ptychography of extended thick objects. <i>Physical Review Letters</i> , 2014 , 112, 053903	7.4	75
75	Saturable absorption of intense hard X-rays in iron. <i>Nature Communications</i> , 2014 , 5, 5080	17.4	74
74	Bragg x-ray ptychography of a silicon crystal: Visualization of the dislocation strain field and the production of a vortex beam. <i>Physical Review B</i> , 2013 , 87,	3.3	74
73	Atomic-scale flattening of SiC surfaces by electroless chemical etching in HF solution with Pt catalyst. <i>Applied Physics Letters</i> , 2007 , 90, 202106	3.4	65
72	50-nm-resolution full-field X-ray microscope without chromatic aberration using total-reflection imaging mirrors. <i>Scientific Reports</i> , 2017 , 7, 46358	4.9	59
71	Fabrication of elliptically figured mirror for focusing hard x rays to size less than 50nm. <i>Review of Scientific Instruments</i> , 2005 , 76, 063708	1.7	59

70	Towards high-resolution ptychographic x-ray diffraction microscopy. <i>Physical Review B</i> , 2011 , 83,	3.3	58
69	High-resolution diffraction microscopy using the plane-wave field of a nearly diffraction limited focused x-ray beam. <i>Physical Review B</i> , 2009 , 80,	3.3	56
68	At-wavelength figure metrology of hard x-ray focusing mirrors. <i>Review of Scientific Instruments</i> , 2006 , 77, 063712	1.7	50
67	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, 6927-32	1.7	36
66	Direct determination of the wave field of an x-ray nanobeam. <i>Physical Review A</i> , 2008 , 77,	2.6	34
65	Catalyst-referred etching of 4H-SiC substrate utilizing hydroxyl radicals generated from hydrogen peroxide molecules. <i>Surface and Interface Analysis</i> , 2008 , 40, 998-1001	1.5	34
64	Optics for coherent X-ray applications. <i>Journal of Synchrotron Radiation</i> , 2014 , 21, 976-85	2.4	31
63	High-resolution projection image reconstruction of thick objects by hard x-ray diffraction microscopy. <i>Physical Review B</i> , 2010 , 82,	3.3	31
62	Evaluation of elastic emission machined surfaces by scanning tunneling microscopy. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1990 , 8, 621-624	2.9	30
61	Dynamic fracture of tantalum under extreme tensile stress. <i>Science Advances</i> , 2017 , 3, e1602705	14.3	30
60	Optimized Logarithmic Roller Crowning Design of Cylindrical Roller Bearings and Its Experimental Demonstration. <i>Tribology Transactions</i> , 2010 , 53, 909-916	1.8	29
59	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	4.9	28
58	Element-specific hard x-ray diffraction microscopy. <i>Physical Review B</i> , 2008 , 78,	3.3	27
57	3D visualization of XFEL beam focusing properties using LiF crystal X-ray detector. <i>Scientific Reports</i> , 2015 , 5, 17713	4.9	27
56	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	1.9	24
55	Multiscale element mapping of buried structures by ptychographic x-ray diffraction microscopy using anomalous scattering. <i>Applied Physics Letters</i> , 2011 , 99, 131905	3.4	23
54	Highly accurate differential deposition for X-ray reflective optics. <i>Surface and Interface Analysis</i> , 2008 , 40, 1019-1022	1.5	23
53	Termination dependence of surface stacking at 4H-SiC(0001)001: Density functional theory calculations. <i>Physical Review B</i> , 2009 , 79,	3.3	21

52	Feasibility study of high-resolution coherent diffraction microscopy using synchrotron x rays focused by Kirkpatrick-Baez mirrors. <i>Journal of Applied Physics</i> , 2009 , 105, 083106	2.5	21
51	Characterization of temporal coherence of hard X-ray free-electron laser pulses with single-shot interferograms. <i>IUCrJ</i> , 2017 , 4, 728-733	4.7	21
50	Hard X-ray nanofocusing using adaptive focusing optics based on piezoelectric deformable mirrors. <i>Review of Scientific Instruments</i> , 2015 , 86, 043102	1.7	19
49	Measurement of the X-ray Spectrum of a Free Electron Laser with a Wide-Range High-Resolution Single-Shot Spectrometer. <i>Applied Sciences (Switzerland)</i> , 2017 , 7, 584	2.6	19
48	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	18
47	High-resolution and high-sensitivity phase-contrast imaging by focused hard x-ray ptychography with a spatial filter. <i>Applied Physics Letters</i> , 2013 , 102, 094102	3.4	17
46	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	1.7	17
45	Damage threshold of coating materials on x-ray mirror for x-ray free electron laser. <i>Review of Scientific Instruments</i> , 2016 , 87, 051801	1.7	17
44	Preparation of ultrasmooth and defect-free 4H-SiC(0001) surfaces by elastic emission machining. <i>Journal of Electronic Materials</i> , 2005 , 34, 439-443	1.9	16
43	Investigation of the Surface Removal Process of Silicon Carbide in Elastic Emission Machining. <i>Journal of Electronic Materials</i> , 2007 , 36, 92-97	1.9	14
42	Systematic-error-free wavefront measurement using an X-ray single-grating interferometer. <i>Review of Scientific Instruments</i> , 2018 , 89, 043106	1.7	13
41	Ellipsoidal mirror for two-dimensional 100-nm focusing in hard X-ray region. <i>Scientific Reports</i> , 2017 , 7, 16408	4.9	12
40	Stitching interferometric metrology for steeply curved x-ray mirrors. <i>Surface and Interface Analysis</i> , 2008 , 40, 1023-1027	1.5	12
39	A Precision Grazing-incidence Angle Error Measurement of a Hard X-ray Condenser Mirror Using Single-grating Interferometry. <i>Synchrotron Radiation News</i> , 2013 , 26, 13-16	0.6	10
38	Ultraprecision finishing technique by numerically controlled sacrificial oxidation. <i>Journal of Crystal Growth</i> , 2008 , 310, 2173-2177	1.6	10
37	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	1.7	10
36	Imaging of intracellular fatty acids by scanning X-ray fluorescence microscopy. <i>FASEB Journal</i> , 2016 , 30, 4149-4158	0.9	10
35	Development of an Experimental Platform for Combinative Use of an XFEL and a High-Power Nanosecond Laser. <i>Applied Sciences (Switzerland)</i> , 2020 , 10, 2224	2.6	9

34	Stitching interferometry for ellipsoidal x-ray mirrors. <i>Review of Scientific Instruments</i> , 2016 , 87, 051905	1.7	9
33	Development of ion beam figuring system with electrostatic deflection for ultraprecise X-ray reflective optics. <i>Review of Scientific Instruments</i> , 2015 , 86, 093103	1.7	8
32	Generation of apodized X-ray illumination and its application to scanning and diffraction microscopy. <i>Journal of Synchrotron Radiation</i> , 2017 , 24, 142-149	2.4	7
31	Catalyst-referred etching of silicon. <i>Science and Technology of Advanced Materials</i> , 2007 , 8, 162-165	7.1	7
30	Catalyzed chemical polishing of SiO glasses in pure water. <i>Review of Scientific Instruments</i> , 2019 , 90, 045115	1.5	6
29	Simulation and Experimental Study of Wavefront Measurement Accuracy of the Pencil-Beam Method. <i>Synchrotron Radiation News</i> , 2016 , 29, 32-36	0.6	6
28	A micro channel-cut crystal X-ray monochromator for a self-seeded hard X-ray free-electron laser. <i>Journal of Synchrotron Radiation</i> , 2019 , 26, 1496-1502	2.4	6
27	Catalyst-Assisted Electroless Flattening of Ge Surfaces in Dissolved-O ₂ -Containing Water. <i>ChemElectroChem</i> , 2015 , 2, 1656-1659	4.3	5
26	Global High-Accuracy Intercomparison of Slope Measuring Instruments. <i>AIP Conference Proceedings</i> , 2007 ,	0	5
25	First-Principles Evaluations of Machinability Dependency on Powder Material in Elastic Emission Machining. <i>Materials Transactions</i> , 2001 , 42, 2290-2294	1.3	5
24	Generation of an X-ray nanobeam of a free-electron laser using reflective optics with speckle interferometry. <i>Journal of Synchrotron Radiation</i> , 2020 , 27, 883-889	2.4	5
23	Development of a glue-free bimorph mirror for use in vacuum chambers. <i>Review of Scientific Instruments</i> , 2019 , 90, 021702	1.7	5
22	Influence of gallium additives on surface roughness for photoelectrochemical planarization of GaN. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011 , 8, 2223-2225		3
21	Observation of electromigration in a Cu thin line by in situ coherent x-ray diffraction microscopy. <i>Journal of Applied Physics</i> , 2009 , 105, 124911	2.5	3
20	An abrasive-free chemical polishing method assisted by nickel catalyst generated by in situ electrochemical plating. <i>Review of Scientific Instruments</i> , 2020 , 91, 045108	1.7	2
19	Advancement of Hard X-ray Nano-focusing Ellipsoidal Mirror at SPring-8. <i>Synchrotron Radiation News</i> , 2016 , 29, 27-31	0.6	2
18	A design of large current ion gun employing liquid metal ion source. <i>Review of Scientific Instruments</i> , 1990 , 61, 1874-1879	1.7	2
17	X-Ray Single-Grating Interferometry for Wavefront Measurement and Correction of Hard X-Ray Nanofocusing Mirrors. <i>Sensors</i> , 2020 , 20,	3.8	2

16	High-Resolution Full-Field X-ray Microscope for 20-keV X-rays with Multilayer Imaging Mirrors. <i>Microscopy and Microanalysis</i> , 2018 , 24, 288-289	0.5	2
15	Reflective Imaging Optics Using Concave and Convex Mirrors for a Compact and Achromatic Full-field X-ray Microscope.. <i>Microscopy and Microanalysis</i> , 2018 , 24, 276-277	0.5	2
14	Fabrication of damascene Cu wirings using solid acidic catalyst. <i>Science and Technology of Advanced Materials</i> , 2007 , 8, 166-169	7.1	1
13	Coherent x-ray diffraction measurements of Cu thin lines. <i>Surface and Interface Analysis</i> , 2008 , 40, 1046-1049	10.49	1
12	Numerically Controlled EEM (Elastic Emission Machining) System for Ultraprecision Figuring and Smoothing of Aspherical Surfaces607-620		1
11	Focus characterization of an X-ray free-electron laser by intensity correlation measurement of X-ray fluorescence. <i>Journal of Synchrotron Radiation</i> , 2020 , 27, 1366-1371	2.4	1
10	Nanofocusing of X-Ray Free Electron Laser. <i>The Review of Laser Engineering</i> , 2012 , 40, 691	0	1
9	Hard X-ray nanoprobe scanner. <i>IUCrJ</i> , 2021 , 8, 713-718	4.7	1
8	High-Speed Etching of Silicon Carbide Wafer Using High-Pressure SF6 Plasma. <i>ECS Journal of Solid State Science and Technology</i> , 2021 , 10, 014005	2	1
7	Optimal deformation procedure for hybrid adaptive x-ray mirror based on mechanical and piezo-driven bending system.. <i>Review of Scientific Instruments</i> , 2021 , 92, 123706	1.7	1
6	High-efficiency planarization method combining mechanical polishing and atmospheric-pressure plasma etching for hard-to-machine semiconductor substrates. <i>Mechanical Engineering Journal</i> , 2016 , 3, 15-00527-15-00527	0.5	
5	Special issue on atomically controlled fabrication technology. <i>Nanoscale Research Letters</i> , 2014 , 9, 232	5	
4	Crystal Machining Using Atmospheric Pressure Plasma 2010 , 313-330		
3	Ultraprecision Machining Method for Ultraprecise Aspherical Mirror. <i>The Review of Laser Engineering</i> , 2007 , 35, 162-167	0	
2	Ultra high vacuum compatible metal ion beam surface modification system. <i>Review of Scientific Instruments</i> , 1990 , 61, 3412-3415	1.7	
1	High-throughput deterministic plasma etching using array-type plasma generator system.. <i>Review of Scientific Instruments</i> , 2021 , 92, 125107	1.7	