

Mourad Idir

List of Publications by Year in descending order

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Version: 2024-02-01

63
papers

1,403
citations

361413

20
h-index

345221

36
g-index

63
all docs

63
docs citations

63
times ranked

781
citing authors

#	ARTICLE	IF	CITATIONS
1	Multi-tool optimization for computer controlled optical surfacing. Optics Express, 2022, 30, 16957.	3.4	7
2	Study of interface reaction in a B ₄ C/Cr mirror at elevated temperature using soft X-ray reflectivity. Journal of Synchrotron Radiation, 2022, 29, 978-984.	2.4	3
3	EUV and Hard X-ray Hartmann Wavefront Sensing for Optical Metrology, Alignment and Phase Imaging. Sensors, 2021, 21, 874.	3.8	9
4	RISE: robust iterative surface extension for sub-nanometer X-ray mirror fabrication. Optics Express, 2021, 29, 15114.	3.4	19
5	Universal dwell time optimization for deterministic optics fabrication. Optics Express, 2021, 29, 38737.	3.4	18
6	Stitching interferometry for synchrotron mirror metrology at National Synchrotron Light Source II (NSLS-II). Optics and Lasers in Engineering, 2020, 124, 105795.	3.8	26
7	RIFTA: A Robust Iterative Fourier Transform-based dwell time Algorithm for ultra-precision ion beam figuring of synchrotron mirrors. Scientific Reports, 2020, 10, 8135.	3.3	20
8	Future trends in synchrotron science at NSLS-II. Journal of Physics Condensed Matter, 2020, 32, 374008.	1.8	7
9	Development of a position-velocity-time-modulated two-dimensional ion beam figuring system for synchrotron x-ray mirror fabrication. Applied Optics, 2020, 59, 3306.	1.8	13
10	Adaptive shape control of wavefront-preserving X-ray mirrors with active cooling and heating. Optics Express, 2020, 28, 19242.	3.4	24
11	Multi-pitch self-calibration measurement using a nano-accuracy surface profiler for X-ray mirror metrology. Optics Express, 2020, 28, 23060.	3.4	10
12	Study on an effective one-dimensional ion-beam figuring method. Optics Express, 2019, 27, 15368.	3.4	37
13	Two-dimensional stitching interferometry for self-calibration of high-order additive systematic errors. Optics Express, 2019, 27, 26940.	3.4	24
14	One-dimensional ion-beam figuring solution from Brookhaven National Laboratory. , 2019, , .		0
15	Collaborative development of diffraction-limited beamline optical systems at US DOE light sources. , 2019, , .		0
16	Study on the performances of dwell time algorithms in ion beam figuring. , 2019, , .		1
17	Review of phase measuring deflectometry. Optics and Lasers in Engineering, 2018, 107, 247-257.	3.8	152
18	Two-dimensional stitching interferometry based on tilt measurement. Optics Express, 2018, 26, 23278.	3.4	13

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19	One-dimensional angular-measurement-based stitching interferometry. Optics Express, 2018, 26, 9882.	3.4	19
20	Advances in X-ray optics: From metrology characterization to wavefront sensing-based optimization of active optics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 907, 105-115.	1.6	21
21	Design and demonstration of tunable soft x-ray lateral shearing and Hartmann wavefront sensors. , 2018, , .		3
22	Repeatability analysis of one-dimensional angular-measurement-based stitching interferometry. Optics Express, 2018, 26, 20192.	3.4	4
23	Developments of EUV/x-ray wavefront sensors and adaptive optics at Imagine Optic. , 2018, , .		1
24	Three-dimensional shape measurement with modal phase measuring deflectometry. , 2017, , .		5
25	Spline based least squares integration for two-dimensional shape or wavefront reconstruction. Optics and Lasers in Engineering, 2017, 91, 221-226.	3.8	39
26	Model mismatch analysis and compensation for modal phase measuring deflectometry. Optics Express, 2017, 25, 881.	3.4	15
27	One-dimensional stitching interferometry assisted by a triple-beam interferometer. Optics Express, 2017, 25, 9393.	3.4	20
28	Zonal wavefront reconstruction in quadrilateral geometry for phase measuring deflectometry. Applied Optics, 2017, 56, 5139.	2.1	43
29	Alignment of KB mirrors with at-wavelength metrology tool simulated using SRW. , 2017, , .		1
30	DABAM: an open-source database of X-ray mirrors metrology. Journal of Synchrotron Radiation, 2016, 23, 665-678.	2.4	16
31	Modal phase measuring deflectometry. Optics Express, 2016, 24, 24649.	3.4	71
32	One-dimensional ion-beam figuring for grazing-incidence reflective optics. Journal of Synchrotron Radiation, 2016, 23, 182-186.	2.4	16
33	New scheme to control x-ray deformable mirrors. , 2016, , .		0
34	New figuring model based on surface slope profile for grazing-incidence reflective optics. Journal of Synchrotron Radiation, 2016, 23, 1087-1090.	2.4	14
35	Control x-ray deformable mirrors with few measurements. Proceedings of SPIE, 2016, , .	0.8	0
36	Innovative nano-accuracy surface profiler for sub-50 nrad rms mirror test. Proceedings of SPIE, 2016, , .	0.8	24

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37	X-ray optics R&D at NSLSII: focus on optical metrology development. , 2016, , .		0
38	Controlling X-ray deformable mirrors during inspection. Journal of Synchrotron Radiation, 2016, 23, 1348-1356.	2.4	6
39	A one-dimensional ion beam figuring system for x-ray mirror fabrication. Review of Scientific Instruments, 2015, 86, 105120.	1.3	17
40	Approaching sub-50 nanoradian measurements by reducing the saw-tooth deviation of the autocollimator in the Nano-Optic-Measuring Machine. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2015, 785, 206-212.	1.6	27
41	High-accuracy aspheric x-ray mirror metrology using Software Configurable Optical Test System/deflectometry. Optical Engineering, 2015, 54, 084103.	1.0	50
42	Shape reconstruction from gradient data in an arbitrarily-shaped aperture by iterative discrete cosine transforms in Southwell configuration. Optics and Lasers in Engineering, 2015, 67, 176-181.	3.8	24
43	Comparison of two-dimensional integration methods for shape reconstruction from gradient data. Optics and Lasers in Engineering, 2015, 64, 1-11.	3.8	83
44	A 2 D high accuracy slope measuring system based on a Stitching Shack Hartmann Optical Head. Optics Express, 2014, 22, 2770.	3.4	46
45	Nano-accuracy measurements and the surface profiler by use of Monolithic Hollow Penta-Prism for precision mirror testing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 759, 36-43.	1.6	13
46	Current status of the NSLS-II optical metrology laboratory. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 710, 17-23.	1.6	14
47	Ex- and In-situ Metrology Based on the Shack-Hartmann Technique for Sub-nanometric Metrology. Synchrotron Radiation News, 2013, 26, 23-29.	0.8	4
48	X-ray mirror metrology using SCOTS/deflectometry. Proceedings of SPIE, 2013, , .	0.8	9
49	X-ray active optics for synchrotron and Free Electron Laser applications Why and How?. , 2013, , .		0
50	Non-null full field X-ray mirror metrology using SCOTS: a reflection deflectometry approach. Optics Express, 2012, 20, 12393.	3.4	114
51	NbC/Si multilayer mirror for next generation EUV light sources. Optics Express, 2012, 20, 15114.	3.4	21
52	Energy resolution of the CdTe-XPAD detector: calibration and potential for Laue diffraction measurements on protein crystals. Journal of Synchrotron Radiation, 2012, 19, 323-331.	2.4	17
53	Quadriwave lateral shearing interferometry in an achromatic and continuously self-imaging regime for future x-ray phase imaging. Optics Letters, 2011, 36, 1398.	3.3	39
54	Metrology and Tests beamline at SOLEIL Design and first results. AIP Conference Proceedings, 2010, , .	0.4	12

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55	X-ray active mirror coupled with a Hartmann wavefront sensor. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 616, 162-171.	1.6	58
56	Hartmann wavefront sensor and adaptive x-ray optics developments for synchrotron applications. Proceedings of SPIE, 2010, , .	0.8	9
57	A Shackâ€™Hartmann measuring head for the two-dimensional characterization of X-ray mirrors. Journal of Synchrotron Radiation, 2008, 15, 134-139.	2.4	8
58	Hartmann and Shackâ€™Hartmann Wavefront Sensors for Sub-nanometric Metrology. , 2008, , 219-232.		3
59	Wavefront Closed-Loop Correction for X-Ray Microfocusing Active Optics. AIP Conference Proceedings, 2007, , .	0.4	6
60	Automatic alignment of a Kirkpatrick-Baez active optic by use of a soft-x-ray Hartmann wavefront sensor. Optics Letters, 2006, 31, 199.	3.3	35
61	Hartmann wave-front measurement at 134 nm with $\hat{\lambda}$ _EUV/120 accuracy. Optics Letters, 2003, 28, 1534.	3.3	93
62	Hard X-Ray Hartmann Wavefront Sensor for Beamline Optimization. Synchrotron Radiation News, 0, , 1-5.	0.8	0
63	Element differentiation with a Hartmann- based X-ray phase imaging system. Nondestructive Testing and Evaluation, 0, , 1-14.	2.1	0