

Antti Lassila

List of Publications by Year in descending order

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72
all docs

72
docs citations

72
times ranked

442
citing authors

#	ARTICLE	IF	CITATIONS
1	Comparison of the performance of the next generation of optical interferometers. Metrologia, 2012, 49, 455-467.	1.2	75
2	Design and characterization of MIKES metrological atomic force microscope. Precision Engineering, 2010, 34, 735-744.	3.4	56
3	Calibration of a commercial AFM: traceability for a coordinate system. Measurement Science and Technology, 2007, 18, 395-403.	2.6	44
4	An optical method for direct determination of the radiometric aperture area at high accuracy. Measurement Science and Technology, 1997, 8, 973-977.	2.6	34
5	Frequency stabilization of a diode-pumped nd:yag laser at 532 nm to iodine by using third-harmonic technique. IEEE Transactions on Instrumentation and Measurement, 2003, 52, 284-287.	4.7	32
6	Application of Monte Carlo simulation for estimation of uncertainty of four-point roundness measurements of rolls. Precision Engineering, 2017, 48, 181-190.	3.4	32
7	Design and performance of an advanced metrology building for MIKES. Measurement: Journal of the International Measurement Confederation, 2011, 44, 399-425.	5.0	30
8	A new optical method for high-accuracy determination of aperture area. Metrologia, 1998, 35, 369-372.	1.2	29
9	Radiometric realization of the candela with a trap detector. Metrologia, 1995, 32, 689-692.	1.2	25
10	Interferometer for calibration of graduated line scales with a moving CCD camera as a line detector. Applied Optics, 1994, 33, 3600.	2.1	22
11	Interferometric 2D small angle generator for autocollimator calibration. Metrologia, 2017, 54, 253-261.	1.2	19
12	Metrological characterization methods for confocal chromatic line sensors and optical topography sensors. Measurement Science and Technology, 2018, 29, 054008.	2.6	19
13	High accuracy laser diffractometer: angle-scale traceability by the error separation method with a grating. Measurement Science and Technology, 2009, 20, 084020.	2.6	18
14	High-precision diode-laser-based temperature measurement for air refractive index compensation. Applied Optics, 2011, 50, 5990.	2.1	18
15	High-accuracy automatic machine vision based calibration of micrometers. Measurement Science and Technology, 2007, 18, 1655-1660.	2.6	17
16	Traceability of Laser Frequency Calibrations at MIKES. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 500-504.	4.7	16
17	A method for linearization of a laser interferometer down to the picometre level with a capacitive sensor. Measurement Science and Technology, 2011, 22, 094027.	2.6	16
18	International comparison of eight semiconductor lasers stabilized on $^{127}I_2$ at $\lambda = 633$ nm. Metrologia, 2000, 37, 329-339.	1.2	15

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19	MIKES [™] primary phase stepping gauge block interferometer. Measurement Science and Technology, 2015, 26, 084009.	2.6	12
20	DNA origami structures as calibration standards for nanometrology. Measurement Science and Technology, 2017, 28, 034001.	2.6	11
21	In-Line Measurement of the Surface Texture of Rolls Using Long Slender Piezoresistive Microprobes. Sensors, 2021, 21, 5955.	3.8	11
22	Final report on EUROMET.L-S15.a (EUROMET Project 925): Intercomparison on step height standards and 1D gratings. Metrologia, 2010, 47, 04006-04006.	1.2	10
23	Interferometric 30 m bench for calibrations of 1D scales and optical distance measuring instruments. Measurement Science and Technology, 2012, 23, 094017.	2.6	10
24	High accuracy step gauge interferometer. Measurement Science and Technology, 2018, 29, 054003.	2.6	10
25	MIKES fibre-coupled differential dynamic line scale interferometer. Measurement Science and Technology, 2012, 23, 094011.	2.6	9
26	Intercomparison of cryogenic radiometers using silicon trap detectors. Measurement Science and Technology, 1997, 8, 123-127.	2.6	8
27	Method for characterization of filter radiometers. Applied Optics, 1999, 38, 1709.	2.1	7
28	Quasidynamic calibration of stroboscopic scanning white light interferometer with a transfer standard. Optical Engineering, 2013, 52, 124104.	1.0	7
29	Intercomparison of flatness measurements of an optical flat at apertures of up to 150 μ m in diameter. Metrologia, 2017, 54, 85-93.	1.2	7
30	Atomic force microscope adhesion measurements and atomistic molecular dynamics simulations at different humidities. Measurement Science and Technology, 2017, 28, 034004.	2.6	6
31	Scatterometer for characterization of diffractive optical elements. Measurement Science and Technology, 2014, 25, 044019.	2.6	5
32	Wave front and phase correction for double-ended gauge block interferometry. Metrologia, 2015, 52, 708-716.	1.2	5
33	Interferometric step gauge for CMM verification. Measurement Science and Technology, 2018, 29, 074012.	2.6	5
34	Linking the optical and the mechanical measurements of dimension by a Newton [™] s rings method. Metrologia, 2019, 56, 025008.	1.2	5
35	A comparison of traceable spatial angle autocollimator calibrations performed by PTB and VTT MIKES. Metrologia, 2022, 59, 024002.	1.2	5
36	Acoustic method for the determination of the effective temperature and refractive index of air. , 2003, 5190, 316.		4

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37	Final report on inter-RMO Key Comparison EUROMET.L-K5.2004: Calibration of a step gauge. Metrologia, 2012, 49, 04008-04008.	1.2	4
38	Final report on APMP regional key comparison APMP.L-K6: Calibration of ball plate and hole plate. Metrologia, 2014, 51, 04003-04003.	1.2	4
39	Intercomparison of lateral scales of scanning electron microscopes and atomic force microscopes in research institutes in Northern Europe. Measurement Science and Technology, 2014, 25, 044013.	2.6	4
40	Measurement of gauge blocks by interferometry. Metrologia, 2016, 53, 04003-04003.	1.2	4
41	<title>Interferometric length measurements</title>. Proceedings of SPIE, 1993, , .	0.8	3
42	Interferometers for calibration of length standards. Optical Engineering, 1995, 34, 2619.	1.0	3
43	Final report on supplementary comparison EURAMET.L-S20: Comparison of laser distance measuring instruments. Metrologia, 2014, 51, 04002-04002.	1.2	3
44	Traceable methods for vertical scale characterization of dynamic stroboscopic scanning white-light interferometer measurements. Applied Optics, 2015, 54, 10397.	2.1	3
45	Angle comparison using an autocollimator. Metrologia, 2018, 55, 04001.	1.2	3
46	High-accuracy autocollimator calibration by interferometric 2D angle generator. , 2019, , .		3
47	Design of a calibration machine for optical two-dimensional length standards. , 2002, , .		2
48	Final report on the thermal expansion coefficient of gauge blocks (APMP.L-S1). Metrologia, 2008, 45, 04001-04001.	1.2	2
49	Sub-kHz traceable characterization of stroboscopic scanning white light interferometer. , 2014, , .		2
50	Fabrication of a thin silicon detector with excellent thickness uniformity. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 810, 27-31.	1.6	2
51	Multi-sensor optical profilometer for measurement of large freeforms at nm-level uncertainty. Surface Topography: Metrology and Properties, 2020, 8, 045030.	1.6	2
52	Step height standards based on self-assembly for 3D metrology of biological samples. Measurement Science and Technology, 2020, 31, 094008.	2.6	2
53	Calibration of 1-D CMM artefacts: step gauges (EURAMET.L-K5.2016). Metrologia, 2020, 57, 04002.	1.2	2
54	Comparison of length standards between the CMA and the VNIIM. Metrologia, 1996, 33, 29-33.	1.2	1

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55	<title>Interferometric refractometer with a variable-length vacuum cylinder</title>. , 1998, , .		1
56	International comparison of He-Ne lasers stabilized with 12712Å at $\lambda = 633\text{ nm}$: Comparison of the fifth- and third-harmonic locking techniques. Metrologia, 2000, 37, 701-707.	1.2	1
57	Measurement strategies and uncertainty estimations for pitch and step height calibrations by metrological AFM. Proceedings of SPIE, 2011, , .	0.8	1
58	Equipment for the calibration of squareness standards. Measurement Science and Technology, 2012, 23, 094009.	2.6	1
59	Static and (quasi)dynamic calibration of stroboscopic scanning white light interferometer. , 2013, , .		1
60	Final report on RMO key comparison EURAMET.L-K6: CMM 2-D artifact: ball plate. Metrologia, 2013, 50, 04001-04001.	1.2	1
61	Interference cancellation for hollow-core fiber reference cells. , 2014, , .		1
62	Interference Cancellation for Hollow-Core Fiber Reference Cells. IEEE Transactions on Instrumentation and Measurement, 2015, , 1-1.	4.7	1
63	Recent developments in traceable dimensional measurements. Measurement Science and Technology, 2018, 29, 090101.	2.6	1
64	Final report on EURAMET.L-S21: 'Supplementary comparison of parallel thread gauges'. Metrologia, 2015, 52, 04003-04003.	1.2	1
65	Comparison of national standards of Russia and Finland for the unit of length. Measurement Techniques, 1997, 40, 289-293.	0.6	0
66	Dynamical Nonlinearities in Piezoelectric Materials. Materials Research Society Symposia Proceedings, 2007, 1034, 78.	0.1	0
67	Scatterometric characterization of diffractive optical elements. Proceedings of SPIE, 2014, , .	0.8	0
68	Toward SI Traceability of a Monte Carlo Radiative Transfer Model in the Visible Range. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1360-1373.	6.3	0
69	Traceable Quasi-dynamic Stroboscopic Scanning White Light Interferometry. , 2014, , 491-496.		0
70	The CCL-K11 ongoing key comparison. Final report for the year 2012. Metrologia, 2015, 52, 04005-04005.	1.2	0
71	Online measurement of optical fibre geometry during manufacturing. , 2018, , .		0
72	Calibration of diameter standards (EURAMET.L-K4.2015). Metrologia, 2021, 58, 04004.	1.2	0