

Masaki Michihata

List of Publications by Year in descending order

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Version: 2024-02-01

54
papers

267
citations

1163117

8
h-index

996975

15
g-index

54
all docs

54
docs citations

54
times ranked

202
citing authors

#	ARTICLE	IF	CITATIONS
1	Measurement of axial and transverse trapping stiffness of optical tweezers in air using a radially polarized beam. <i>Applied Optics</i> , 2009, 48, 6143.	2.1	65
2	Measurement of probe-stylus sphere diameter for micro-CMM based on spectral fingerprint of whispering gallery modes. <i>CIRP Annals - Manufacturing Technology</i> , 2014, 63, 469-472.	3.6	23
3	Probing technique using circular motion of a microsphere controlled by optical pressure for a nanocoordinate measuring machine. <i>Applied Optics</i> , 2009, 48, 198.	2.1	14
4	Surface-Sensing Principle of Microprobe System for Micro-Scale Coordinate Metrology: A Review. <i>Metrology</i> , 2022, 2, 46-72.	1.5	14
5	Microdisplacement sensor using an optically trapped microprobe based on the interference scale. <i>Review of Scientific Instruments</i> , 2010, 81, 015107.	1.3	13
6	Fundamental Study on Novel On-Machine Measurement Method of a Cutting Tool Edge Profile with a Fluorescent Confocal Microscopy. <i>International Journal of Automation Technology</i> , 2016, 10, 106-113.	1.0	12
7	New Technique for Single-Beam Gradient-Force Laser Trapping in Air. <i>International Journal of Optomechatronics</i> , 2013, 7, 46-59.	6.6	10
8	Surface Imaging Technique by an Optically Trapped Microsphere in Air Condition. <i>Nanomanufacturing and Metrology</i> , 2018, 1, 32-38.	3.0	10
9	Surface analysis of the chemical polishing process using a fullerene slurry by Raman spectroscopy under surface plasmon excitation. <i>CIRP Annals - Manufacturing Technology</i> , 2013, 62, 571-574.	3.6	8
10	Fabrication of nano/micro dual-periodic structures by multi-beam evanescent wave interference lithography using spatial beats. <i>Optics Express</i> , 2019, 27, 31522.	3.4	8
11	Scanning Type Microprobe for Displacement Measurement Based on Standing Wave Detection Using an Optically Trapped Particle. <i>International Journal of Automation Technology</i> , 2011, 5, 395-402.	1.0	8
12	Fundamental validation for surface texture imaging using a microsphere as a laser-trapping-based microprobe. <i>Advanced Optical Technologies</i> , 2014, 3, 417-423.	1.7	7
13	Dimensional measurement of microform with high aspect ratio using an optically controlled particle with standing wave scale sensing. <i>CIRP Annals - Manufacturing Technology</i> , 2012, 61, 479-482.	3.6	6
14	Evanescent Light Exposing System under Nitrogen Purge for Nano-Stereolithography. <i>Procedia CIRP</i> , 2016, 42, 77-80.	1.9	6
15	Radial mode number identification on whispering gallery mode resonances for diameter measurement of microsphere. <i>Measurement Science and Technology</i> , 2019, 30, 065201.	2.6	6
16	Numerical analysis on high resolution optical measurement method with long working distance objective for in-line inspection of micro-structured surface. <i>Precision Engineering</i> , 2021, 67, 232-247.	3.4	6
17	Improvement of Laser Trapping Based Microprobe in Laser Shaded Condition. <i>Journal of Advanced Mechanical Design, Systems and Manufacturing</i> , 2012, 6, 764-770.	0.7	5
18	Smart optical measurement probe for autonomously detecting nano-defects on bare semiconductor wafer surface: Verification of proposed concept. <i>Precision Engineering</i> , 2020, 61, 93-102.	3.4	5

#	ARTICLE	IF	CITATIONS
19	Wide-Range Axial Position Measurement for Jumping Behavior of Optically Trapped Microsphere Near Surface Using Chromatic Confocal Sensor. International Journal of Optomechatronics, 2015, 9, 131-140.	6.6	4
20	In-Process Diameter Measurement Technique for Micro-Optical Fiber with Standing Wave Illumination. Nanomanufacturing and Metrology, 2021, 4, 28-36.	3.0	4
21	Grating periods measurement of multi-pitched grating using Littrow configuration external cavity diode laser. Applied Physics Express, 2021, 14, 076501.	2.4	4
22	Proposal of In-process Measurement for Micro-stereolithography Using Surface Plasmon Resonance. Physics Procedia, 2016, 83, 964-970.	1.2	3
23	Scanning dimensional measurement using laser-trapped microsphere with optical standing-wave scale. Optical Engineering, 2017, 56, 1.	1.0	3
24	Advanced generation of functional dual-periodic microstructured surface based on optical in-process measurement. CIRP Annals - Manufacturing Technology, 2020, 69, 477-480.	3.6	3
25	New technique of single-beam gradient-force laser trapping in air condition. , 2012, , .		2
26	Precise Diameter Measurement of a Microsphere Based on Polarization Analysis of Whispering Gallery Mode Resonance. Applied Mechanics and Materials, 0, 870, 108-113.	0.2	2
27	One-shot stereolithography for biomimetic micro hemisphere covered with relief structure. Precision Engineering, 2018, 54, 353-360.	3.4	2
28	In-Process Measurement of Thickness of Cured Resin in Evanescent-Wave-Based Nano-stereolithography Using Critical Angle Reflection. Nanomanufacturing and Metrology, 2018, 1, 112-124.	3.0	2
29	Quantitative depth evaluation of microgrooves on polymer material beyond the diffraction limit. Precision Engineering, 2019, 59, 56-65.	3.4	2
30	Micro-scale Additive Manufacturing Using the Optical Potential Generated by a Bessel Beam. Nanomanufacturing and Metrology, 2020, 3, 292-298.	3.0	2
31	Study on Nanoparticle Sizing Using Fluorescent Polarization Method with DNA Fluorescent Probe. International Journal of Automation Technology, 2015, 9, 534-540.	1.0	2
32	Measurement properties of electric field intensity distribution of whispering gallery mode with near-field optical probe. Measurement Science and Technology, 2022, 33, 095501.	2.6	2
33	Coordinate measurement of micro groove on MEMS device by optically controlled microprobe. , 2010, , .		1
34	Evaluation of optical heterogeneity using phase-shift digital holography. International Journal of Nanomanufacturing, 2012, 8, 508.	0.3	1
35	Foreword to the Special Issue on Micro- and Nano-Metrology in Japan (I). Nanomanufacturing and Metrology, 2021, 4, 1-2.	3.0	1
36	A Simulation Study of Plasmonic Substrate for In-Process Measurement of Refractive Index in Nano-Stereolithography. International Journal of Automation Technology, 2017, 11, 772-780.	1.0	1

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37	Mode selective probing method of micro trench structure using optically trapped probe. , 2012, , .		0
38	Fundamental study for measuring microflow with Michelson interferometer enhanced by external random signal. Journal of Advanced Mechanical Design, Systems and Manufacturing, 2014, 8, JAMDSM0049-JAMDSM0049.	0.7	0
39	Total Angle Resolved Scattering Characterization for Ultra-fine Finished Surface Areal-Topography. , 2014, , .		0
40	Improvement of quantitative depth evaluation for diffraction-limited microgroove using LED light source. Journal of Physics: Conference Series, 2018, 1065, 142010.	0.4	0
41	Foreword to the Special Issue on Micro- and Nano-Metrology in Japan (II). Nanomanufacturing and Metrology, 2021, 4, 67-68.	3.0	0
42	Flexible Evanescent Wave Interference Lithography System for Sub-half-Wavelength Complex Relief Structures Fabrication. Nanomanufacturing and Metrology, 2021, 4, 256.	3.0	0
43	In-process diameter measurement technique for nano/micro-optical fiber with standing wave illumination -evaluation of measurement performance. Measurement: Sensors, 2021, 18, 100185.	1.7	0
44	Absolute distance measurement in water by optical comb for in-process measurement of water-guided laser processing. Measurement: Sensors, 2021, 18, 100221.	1.7	0
45	3231 Optically controlled surface sensing probe enhanced by radially polarized beam. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2011, 2011.6, _3231-1_-_3231-4_.	0.0	0
46	1503 Analysis of chemical reaction in Cu-CMP with reactive nanoparticles based on Raman spectra enhanced by surface plasmon. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2015, 2015.8, _1503-1_-_1503-5_.	0.0	0
47	In-process Measurement of Gradient Boundary of Resin in Evanescent-wave-based Nano-stereolithography using Reflection Interference Near Critical Angle. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 441-446.	0.3	0
48	Development of measuring system of whispering gallery mode resonances for evaluating a diameter of microsphere. Transactions of the JSME (in Japanese), 2019, 85, 19-00226-19-00226.	0.2	0
49	Fundamental study on micro-scaled additive manufacturing using optical potential induced by optical radiation pressure by Bessel beam. Transactions of the JSME (in Japanese), 2019, 85, 19-00244-19-00244.	0.2	0
50	Measurement of diameter of sub-micrometer fiber based on analysis of scattered light intensity distribution under standing wave illumination. CIRP Annals - Manufacturing Technology, 2022, , .	3.6	0
51	Manufacturing of glass probe for measuring the surface light intensity distribution of spherical WGM resonance. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2021, 2021.10, 086-017.	0.0	0
52	Probe Diameter Correction Gauge for Micro-CMM Using Fabry-Perot Interferometer. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2021, 2021.10, 149-050.	0.0	0
53	High precision cavity length measurement of external cavity diode laser. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2021, 2021.10, 101-045.	0.0	0
54	Realization of arbitrary phase control of dual-periodic structures using interference lithography. Proceedings of International Conference on Leading Edge Manufacturing in 21st Century LEM21, 2021, 2021.10, 054-026.	0.0	0