Mingyu Liu

List of Publications by Year
in descending order

29 papers	401 citations	840776 11 h-index	752698 20 g-index
29 all docs	29 docs citations	29 times ranked	233 citing authors

#	Article	IF	Citations
1	A novel multi-jet polishing process and tool for high-efficiency polishing. International Journal of Machine Tools and Manufacture, 2017, 115, 60-73.	13.4	93
2	Numerical modeling and experimentation of three dimensional material removal characteristics in fluid jet polishing. International Journal of Mechanical Sciences, 2017, 133, 568-577.	6.7	36
3	On-machine surface defect detection using light scattering and deep learning. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2020, 37, B53.	1.5	32
4	Integrated polar microstructure and template-matching method for optical position measurement. Optics Express, 2018, 26, 4330.	3.4	23
5	Theoretical and experimental investigation of surface generation in swing precess bonnet polishing of complex three-dimensional structured surfaces. Precision Engineering, 2017, 50, 361-371.	3.4	21
6	Optimization of Tool Path for Uniform Scallop-Height in Ultra-precision Grinding of Free-form Surfaces. Nanomanufacturing and Metrology, 2019, 2, 215-224.	3.0	21
7	Estimation of measurement uncertainty caused by surface gradient for a white light interferometer. Applied Optics, 2015, 54, 8670.	2.1	20
8	Fluid jet-array parallel machining of optical microstructure array surfaces. Optics Express, 2017, 25, 22710.	3.4	20
9	Nanoscale measurement with pattern recognition of an ultra-precision diamond machined polar microstructure. Precision Engineering, 2019, 56, 156-163.	3.4	19
10	A Gaussian process and image registration based stitching method for high dynamic range measurement of precision surfaces. Precision Engineering, 2017, 50, 99-106.	3.4	18
11	Model-based self-optimization method for form correction in the computer controlled bonnet polishing of optical freeform surfaces. Optics Express, 2018, 26, 2065.	3.4	17
12	Modeling and Simulation of a Machining Process Chain for the Precision Manufacture of Polar Microstructure. Micromachines, 2017, 8, 345.	2.9	12
13	A Gaussian Process Data Modelling and Maximum Likelihood Data Fusion Method for Multi-Sensor CMM Measurement of Freeform Surfaces. Applied Sciences (Switzerland), 2016, 6, 409.	2.5	10
14	A weighted least square based data fusion method for precision measurement of freeform surfaces. Precision Engineering, 2017, 48, 144-151.	3.4	10
15	Hierarchical-information-based characterization of multiscale structured surfaces. CIRP Annals - Manufacturing Technology, 2018, 67, 539-542.	3.6	10
16	Fiducial-aided on-machine positioning method for precision manufacturing of optical freeform surfaces. Optics Express, 2018, 26, 18928.	3.4	9
17	Fiducial-Aided Robust Positioning of Optical Freeform Surfaces. Micromachines, 2018, 9, 52.	2.9	5
18	A self-calibration rotational stitching method for precision measurement of revolving surfaces. Precision Engineering, 2018, 54, 60-69.	3.4	4

#	Article	IF	Citations
19	Measurement of laser powder bed fusion surfaces with light scattering and unsupervised machine learning. Measurement Science and Technology, 2022, 33, 074006.	2.6	4
20	An autonomous multisensorin situmetrology system for enabling high dynamic range measurement of 3D surfaces on precision machine tools. Measurement Science and Technology, 2016, 27, 115015.	2.6	3
21	Diamond machining of freeform-patterned surfaces on precision rollers. International Journal of Advanced Manufacturing Technology, 2019, 103, 4423-4431.	3.0	3
22	Intelligent quality monitoring for additive manufactured surfaces by machine learning and light scattering. , 2021, , .		3
23	Cascaded machine learning model for reconstruction of surface topography from light scattering. , 2020, , .		3
24	Fluid jet-array parallel machining of optical microstructure array surfaces: publisherâ€™s note. Optics Express, 2017, 25, 23387.	3.4	2
25	High-accuracy surface measurement through modelling of the surface transfer function in interference microscopy. , 2019, , .		2
26	A fiducial-aided data fusion method for the measurement of multiscale complex surfaces. International Journal of Advanced Manufacturing Technology, 2019, 103, 1381-1389.	3.0	1
27	A Study of Tool Path Generation for Machining of Precision Roller with Wavy Patterned Microstructures by Slow Tool Servo. Key Engineering Materials, 0, 679, 191-197.	0.4	0
28	A Framework of Data Fusion Algorithm for Precision Measurement of Multiscale Surfaces. Key Engineering Materials, 0, 679, 155-161.	0.4	0
29	A study of a priori knowledge-assisted multi-scopic metrology for freeform surface measurement. Procedia CIRP, 2018, 75, 337-342.	1.9	0