O Remus Tutunea-Fatan

List of Publications by Year
in descending order

55	474	840119 11	713013 21
papers	citations	h-index	g-index

55	55	55	331
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermographic analysis of a long fiberâ€“reinforced thermoplastic compression molding process. International Journal of Advanced Manufacturing Technology, 2022, 119, 6119-6133.	1.5	3
2	Quantitative Characterization of Warpage for Composite Components. Computer-Aided Design and Applications, 2022, 19, 1093-1108.	0.4	0
3	Repeatability and Accuracy of Laser Scanning-Based Reverse Engineering for Warped Composite Components. Computer-Aided Design and Applications, 2021, 18, 1018-1034.	0.4	2
4	Applicability of Convolutional Neural Network to Classification of Laser Polishing Process Conditions. , 2021, , .		1
5	Parallelized collision detection with applications in virtual bone machining. Computer Methods and Programs in Biomedicine, 2020, 188, 105263.	2.6	6
6	Axial strategies for ultraprecise single point cutting of V-grooves. Precision Engineering, 2020, 66, 10-20.	1.8	3
7	Thermophysical Simulation and Experimental Verification of Remelting Lines During Laser Polishing of H13 Tool Steel. Lasers in Manufacturing and Materials Processing, 2020, 7, 317-337.	1.2	4
8	Edge-lit sine-shape wedged light guides: Design, optical simulation, laser-remelting-based precision fabrication, and optical performance evaluation. Precision Engineering, 2020, 66, 333-346.	1.8	9
9	Reduction of cutting forces by elliptical vibration in multi-pass ultraprecise single point axial cutting of V-grooves. Procedia Manufacturing, 2020, 48, 570-578.	1.9	1
10	Vibration Analysis in Robot-Driven Glenoid Reaming Procedure. , 2020, , .		3
11	Parallel Haptic Rendering for Orthopedic Surgery Simulators. IEEE Robotics and Automation Letters, 2020, 5, 6388-6395.	3.3	6
12	Preliminary machine learning analysis and high-speed thermographic visualization of the laser polishing process. Procedia CIRP, 2020, 94, 947-950.	1.0	4
13	Preliminary analysis of the laser polishing process by high-speed thermographic visualization. , 2020, , .		1
14	CAD/CAM Framework for Generation of Surface Microstructures through Elliptical Vibration Assisted Single Point Cutting. Computer-Aided Design and Applications, 2020, 18, 669-681.	0.4	0
15	Analysis of the process parameters affecting the bone burring process: An inâ€vitro porcine study. International Journal of Medical Robotics and Computer Assisted Surgery, 2019, 15, e2028.	1.2	4
16	Effect of initial surface topography during laser polishing process: Statistical analysis. Procedia Manufacturing, 2019, 34, 269-274.	1.9	9
17	Axial strategy for ultraprecise single point cutting of V-grooves Case 1: constant chip thickness. Procedia Manufacturing, 2019, 34, 440-445.	1.9	4
18	One-Side Cutting Strategy for Ultraprecise Single Point Cutting of V-grooves Case 1: Constant Chip Thickness. IFAC-PapersOnLine, 2019, 52, 306-310.	0.5	0

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19	Preliminary Characterization of Light Guide Tooling Fabricated by Surface Structuring by Laser Remelting. , 2019, , .		0
20	Analysis of surface quality during fabrication of automotive retroreflectors. Measurement: Journal of the International Measurement Confederation, 2019, 134, 649-657.	2.5	13
21	Instrumented linear cutting device for the analysis of fiber severing process. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 875-888.	1.5	0
22	Ultraprecise micromachining of retroreflective structures. , 2019, , .		0
23	Experimental analysis of the process parameters affecting bone burring operations. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2018, 232, 33-44.	1.0	8
24	Enhanced bidirectional ultraprecise single point inverted cutting of right triangular prismatic retroreflectors. Precision Engineering, 2018, 52, 158-169.	1.8	13
25	The Effect of Backing Profile on Cutting Blade Wear during High-Volume Production of Carbon Fiber-Reinforced Composites. SAE International Journal of Materials and Manufacturing, 2018, 11, 491-498.	0.3	0
26	Interdependence Between Tool Misalignment and Cutting Forces in Ultraprecise Single Point Inverted Cutting. Procedia CIRP, 2018, 77, 332-335.	1.0	1
27	Recent Developments in Modeling of Laser Polishing of Metallic Materials. Lasers in Manufacturing and Materials Processing, 2018, 5, 395-429.	1.2	15
28	Fast and cross-vendor OpenCL-based implementation for voxelization of triangular mesh models. Computer-Aided Design and Applications, 2018, 15, 852-862.	0.4	4
29	Fast Generation of Cartesian Meshes from Micro-Computed Tomography Data. Computer-Aided Design and Applications, 2018, 16, 161-171.	0.4	9
30	Thermo-Physical Modelling of Track Width During Laser Polishing of H13 Tool Steel. Procedia Manufacturing, 2017, 10, 708-719.	1.9	22
31	Experimental Analysis of Laser and Scanner Control Parameters During Laser Polishing of H13 Steel. Procedia Manufacturing, 2017, 10, 720-729.	1.9	14
32	Fabrication of right triangular prism retroreflectors through 3Â½Â½-axis ultraprecise single point inverted cutting. Computer-Aided Design and Applications, 2017, 14, 693-703.	0.4	2
33	Analysis of laser polished line formation part 2: Simulation. , 2017, , .		0
34	Optical detection of defects in high quality surface composites. , 2017, , .		1
35	Analysis of laser polished line formation part 1: Experimental analysis. , 2017, , .		0
36	Effect of build orientation on surface quality of selective laser melted Ti-6A1-4V. , 2017, , .		0

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37	Optical performance of right triangular prism. , 2016, , .		0
38	Fabrication of Right Triangular Prism Retroreflectors Through Ultraprecise Single Point Inverted Cutting. , 2016, , .		3
39	5D Cubic B-Spline Interpolated Compensation of Geometry-Based Errors in Five-Axis Surface Machining. Computer-Aided Design and Applications, 2016, 13, 369-378.	0.4	1
40	Minimization of Bone Removal through Optimal Humeral Implant Alignment in Total Elbow Arthroplasty. Computer-Aided Design and Applications, 2014, 11, 478-492.	0.4	0
41	Automatic and accurate reconstruction of distal humerus contours through B-Spline fitting based on control polygon deformation. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 1241-1257.	1.0	0
42	Experimental analysis of applicability of a picosecond laser for micro-polishing of micromilled Inconel 718 superalloy. International Journal of Advanced Manufacturing Technology, 2014, 70, 1963-1978.	1.5	40
43	Performance of laser polishing in finishing of metallic surfaces. International Journal of Advanced Manufacturing Technology, 2014, 73, 35-52.	1.5	149
44	Reduction of geometry-based errors in five-axis machining through enhanced 5D interpolation. International Journal of Advanced Manufacturing Technology, 2013, 64, 305-317.	1.5	3
45	Framework for evaluation of the relative contribution of the process on porosityâ€“cutting force dependence in micromilling of titanium foams. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2013, 227, 1635-1650.	1.5	10
46	Determination of Elbow Flexion-Extension Axis Based on Planar and Closed B-Splines. Computer-Aided Design and Applications, 2013, 10, 551-565.	0.4	0
47	Prediction of Interference Free Positions of the Humeral Implant in Preparation of Joint Replacement Procedures. , 2013, , .		0
48	An image-based methodology to establish correlations between porosity and cutting force in micromilling of porous titanium foams. International Journal of Advanced Manufacturing Technology, 2012, 60, 841-851.	1.5	20
49	Comparing the kinematic efficiency of five-axis machine tool configurations through nonlinearity errors. CAD Computer Aided Design, 2011, 43, 1163-1172.	1.4	21
50	An improved tool path discretization method for five-axis sculptured surface machining. International Journal of Advanced Manufacturing Technology, 2007, 33, 994-1000.	1.5	19
51	Determination of Geometry-Based Errors for Interpolated Tool Paths in Five-Axis Surface Machining. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2005, 127, 60-67.	1.3	31
52	Novel Retroreflective Micro-Optical Structure for Automotive Lighting Applications. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 9, 497-506.	0.4	13
53	Quantitative Characterization of Warpage for Composite Components. , 0, , .		1
54	Laser Light-Based Technique for Detection and Assessment of Localized Defects in Reflective Automotive Surfaces. , 0, , .		1

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55	Single-flank machining strategy for ultraprecise single-point cutting of V-grooves. International Journal of Advanced Manufacturing Technology, 0, , .	1.5	0