

# Sandy To

## List of Publications by Year in descending order

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339  
papers

7,164  
citations

61984

43  
h-index

106344

65  
g-index

345  
all docs

345  
docs citations

345  
times ranked

2897  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review of surface roughness generation in ultra-precision machining. <i>International Journal of Machine Tools and Manufacture</i> , 2015, 91, 76-95.	13.4	254
2	Advances in ultra-precision machining of micro-structured functional surfaces and their typical applications. <i>International Journal of Machine Tools and Manufacture</i> , 2019, 142, 16-41.	13.4	181
3	Effects of dynamic electropulsing on microstructure and elongation of a Zn-Al alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 501, 125-132.	5.6	148
4	A review of machine-tool vibration and its influence upon surface generation in ultra-precision machining. <i>International Journal of Machine Tools and Manufacture</i> , 2015, 91, 34-42.	13.4	148
5	Inhibiting the Leidenfrost effect above 1,000°C for sustained thermal cooling. <i>Nature</i> , 2022, 601, 568-572.	27.8	120
6	A review of fly cutting applied to surface generation in ultra-precision machining. <i>International Journal of Machine Tools and Manufacture</i> , 2016, 103, 13-27.	13.4	118
7	Modelling and simulation of structure surface generation using computer controlled ultra-precision polishing. <i>Precision Engineering</i> , 2011, 35, 574-590.	3.4	110
8	A theoretical and experimental investigation of the tool-tip vibration and its influence upon surface generation in single-point diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 241-252.	13.4	105
9	Molecular dynamics modelling of brittle-ductile cutting mode transition: Case study on silicon carbide. <i>International Journal of Machine Tools and Manufacture</i> , 2015, 88, 214-222.	13.4	102
10	Ultraprecision diamond turning of aluminium single crystals. <i>Journal of Materials Processing Technology</i> , 1997, 63, 157-162.	6.3	87
11	Diamond tool wear in ultra-precision machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 88, 613-641.	3.0	87
12	Development and Repetitive-Compensated PID Control of a Nanopositioning Stage With Large-Stroke and Decoupling Property. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 3995-4005.	7.9	81
13	A study of materials swelling and recovery in single-point diamond turning of ductile materials. <i>Journal of Materials Processing Technology</i> , 2006, 180, 210-215.	6.3	80
14	Dynamic characteristics of an aerostatic bearing spindle and its influence on surface topography in ultra-precision diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2012, 62, 1-12.	13.4	80
15	Theoretical and experimental investigation on the novel end-fly-cutting-servo diamond machining of hierarchical micro-nanostructures. <i>International Journal of Machine Tools and Manufacture</i> , 2015, 94, 15-25.	13.4	77
16	The mechanism of ductile deformation in ductile regime machining of 6H SiC. <i>Computational Materials Science</i> , 2015, 98, 178-188.	3.0	77
17	Investigation on the influence of tool-tip vibration on surface roughness and its representative measurement in ultra-precision diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 69, 20-29.	13.4	76
18	Large-scale fabrication of micro-lens array by novel end-fly-cutting-servo diamond machining. <i>Optics Express</i> , 2015, 23, 20593.	3.4	75

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19	A theoretical and experimental investigation into five-DOF dynamic characteristics of an aerostatic bearing spindle in ultra-precision diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 71, 1-10.	13.4	74
20	Cutting forces in fast-/slow tool servo diamond turning of micro-structured surfaces. <i>International Journal of Machine Tools and Manufacture</i> , 2019, 136, 62-75.	13.4	74
21	Theoretical and experimental analysis of nano-surface generation in ultra-precision raster milling. <i>International Journal of Machine Tools and Manufacture</i> , 2008, 48, 1090-1102.	13.4	73
22	Effect of reinforcement in ultra-precision machining of Al6061/SiC metal matrix composites. <i>Scripta Materialia</i> , 2002, 47, 77-82.	5.2	71
23	Effect of crystallographic orientation in diamond turning of copper single crystals. <i>Scripta Materialia</i> , 2000, 42, 937-945.	5.2	69
24	A theoretical and experimental investigation of surface generation in diamond turning of an Al6061/SiCp metal matrix composite. <i>International Journal of Mechanical Sciences</i> , 2001, 43, 2047-2068.	6.7	67
25	A kinematics and experimental analysis of form error compensation in ultra-precision machining. <i>International Journal of Machine Tools and Manufacture</i> , 2008, 48, 1408-1419.	13.4	67
26	Improvement on load performance of externally pressurized gas journal bearings by opening pressure-equalizing grooves. <i>Tribology International</i> , 2014, 73, 156-166.	5.9	64
27	Optimum Design of a Piezo-Actuated Triaxial Compliant Mechanism for Nanocutting. <i>IEEE Transactions on Industrial Electronics</i> , 2018, 65, 6362-6371.	7.9	64
28	Influence of material swelling on surface roughness in diamond turning of single crystals. <i>Materials Science and Technology</i> , 2001, 17, 102-108.	1.6	63
29	A multi-perspective knowledge-based system for customer service management. <i>Expert Systems With Applications</i> , 2003, 24, 457-470.	7.6	63
30	Optical design of a freeform TIR lens for LED streetlight. <i>Optik</i> , 2010, 121, 1761-1765.	2.9	58
31	The effects of spindle vibration on surface generation in ultra-precision raster milling. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 71, 52-56.	13.4	56
32	Design, Analysis, and Realization of a Novel Piezoelectrically Actuated Rotary Spatial Vibration System for Micro-/Nanomachining. <i>IEEE/ASME Transactions on Mechatronics</i> , 2017, 22, 1227-1237.	5.8	54
33	An investigation into surface generation in ultra-precision raster milling. <i>Journal of Materials Processing Technology</i> , 2009, 209, 4178-4185.	6.3	50
34	Adaptive tool servo diamond turning for enhancing machining efficiency and surface quality of freeform optics. <i>Optics Express</i> , 2015, 23, 20234.	3.4	50
35	Tool life enhancement in dry diamond turning of titanium alloys using an eddy current damping and a magnetic field for sustainable manufacturing. <i>Journal of Cleaner Production</i> , 2017, 168, 929-939.	9.3	50
36	Effects of non-amorphizing hydrogen ion implantation on anisotropy in micro cutting of silicon. <i>Journal of Materials Processing Technology</i> , 2015, 225, 439-450.	6.3	49

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37	Design and Control of a Piezoelectrically Actuated Fast Tool Servo for Diamond Turning of Microstructured Surfaces. <i>IEEE Transactions on Industrial Electronics</i> , 2020, 67, 6688-6697.	7.9	49
38	Materials induced vibration in ultra-precision machining. <i>Journal of Materials Processing Technology</i> , 1999, 89-90, 318-325.	6.3	48
39	Unsteady flow structures around a high-drag Ahmed body. <i>Journal of Fluid Mechanics</i> , 2015, 777, 291-326.	3.4	47
40	Serrated chip formation and their adiabatic analysis by using the constitutive model of titanium alloy in high speed cutting. <i>Journal of Alloys and Compounds</i> , 2015, 629, 368-373.	5.5	47
41	A Microplasticity Analysis of Micro-Cutting Force Variation in Ultra-Precision Diamond Turning. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2002, 124, 170-177.	2.2	45
42	A theoretical and experimental study of surface generation under spindle vibration in ultra-precision raster milling. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 75, 36-45.	13.4	45
43	Rotary spatial vibration-assisted diamond cutting of brittle materials. <i>Precision Engineering</i> , 2016, 44, 211-219.	3.4	45
44	Electropulsing-induced phase transformations in a Zn-Al-based alloy. <i>Journal of Materials Research</i> , 2009, 24, 2661-2669.	2.6	44
45	Enhancement of the machinability of silicon by hydrogen ion implantation for ultra-precision micro-cutting. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 74, 50-55.	13.4	44
46	SLC-GAN: An automated myocardial infarction detection model based on generative adversarial networks and convolutional neural networks with single-lead electrocardiogram synthesis. <i>Information Sciences</i> , 2022, 589, 738-750.	6.9	43
47	An investigation into material-induced surface roughness in ultra-precision milling. <i>International Journal of Advanced Manufacturing Technology</i> , 2013, 68, 607-616.	3.0	42
48	A theoretical and experimental study of spindle imbalance induced forced vibration and its effect on surface generation in diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2018, 133, 61-71.	13.4	42
49	Optimal design and experimental validation of sound absorbing multilayer microperforated panel with constraint conditions. <i>Applied Acoustics</i> , 2019, 146, 334-344.	3.3	41
50	Deterioration of form accuracy induced by servo dynamics errors and real-time compensation for slow tool servo diamond turning of complex-shaped optics. <i>International Journal of Machine Tools and Manufacture</i> , 2020, 154, 103556.	13.4	41
51	Modelling and simulation of freeform surface generation in ultra-precision raster milling. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2006, 220, 1787-1801.	2.4	40
52	Finite element modelling of shear angle and cutting force variation induced by material anisotropy in ultra-precision diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 75, 82-86.	13.4	40
53	Reduction of material swelling and recovery of titanium alloys in diamond cutting by magnetic field assistance. <i>Journal of Alloys and Compounds</i> , 2017, 722, 525-531.	5.5	40
54	Effect of material anisotropy on shear angle prediction in metal cutting—a mesoplasticity approach. <i>International Journal of Mechanical Sciences</i> , 2003, 45, 1739-1749.	6.7	39

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55	An integrated form characterization method for measuring ultra-precision freeform surfaces. <i>International Journal of Machine Tools and Manufacture</i> , 2007, 47, 81-91.	13.4	39
56	Active drag reduction of a high-drag Ahmed body based on steady blowing. <i>Journal of Fluid Mechanics</i> , 2018, 856, 351-396.	3.4	39
57	Anisotropy of surface roughness in diamond turning of brittle single crystals. <i>Materials and Manufacturing Processes</i> , 2002, 17, 251-267.	4.7	38
58	Analysis of surface generation in the ultraprecision polishing of freeform surfaces. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2010, 224, 59-73.	2.4	38
59	A theoretical and experimental investigation into multimode tool vibration with surface generation in ultra-precision diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2013, 72, 32-36.	13.4	38
60	Theoretical and experimental investigation into non-uniformity of surface generation in micro-milling. <i>International Journal of Mechanical Sciences</i> , 2018, 140, 313-324.	6.7	38
61	Cutting Characteristics of Zr-Based Bulk Metallic Glass. <i>Journal of Materials Science and Technology</i> , 2015, 31, 153-158.	10.7	37
62	Birefringence techniques for the characterization of residual stresses in injection-moulded micro-lens arrays. <i>Polymer Testing</i> , 2009, 28, 709-714.	4.8	36
63	Fast-tool-servo micro-grooving freeform surfaces with embedded metrology. <i>CIRP Annals - Manufacturing Technology</i> , 2020, 69, 505-508.	3.6	36
64	Dynamic modelling of shear band formation and tool-tip vibration in ultra-precision diamond turning. <i>International Journal of Machine Tools and Manufacture</i> , 2011, 51, 512-519.	13.4	35
65	A novel ductile machining model of single-crystal silicon for freeform surfaces with large azimuthal height variation by ultra-precision fly cutting. <i>International Journal of Machine Tools and Manufacture</i> , 2018, 135, 1-11.	13.4	35
66	A study of the cutting-induced heating effect on the machined surface in ultra-precision raster milling of 6061 Al alloy. <i>International Journal of Advanced Manufacturing Technology</i> , 2010, 51, 69-78.	3.0	34
67	Novel tool wear monitoring method in ultra-precision raster milling using cutting chips. <i>Precision Engineering</i> , 2014, 38, 555-560.	3.4	34
68	The relation between chip morphology and tool wear in ultra-precision raster milling. <i>International Journal of Machine Tools and Manufacture</i> , 2014, 80-81, 11-17.	13.4	33
69	Effects of eco-friendly cooling strategy on machining performance in micro-scale diamond turning of TiAl <sub>4</sub> V. <i>Journal of Cleaner Production</i> , 2020, 243, 118526.	9.3	32
70	A study of regularly spaced shear bands and morphology of serrated chip formation in microcutting process. <i>Scripta Materialia</i> , 2010, 63, 227-230.	5.2	31
71	Elastic strain induced shear bands in the microcutting process. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 9-18.	13.4	31
72	Numerical and experimental analysis of heat transfer in turbulent flow channels with two-dimensional ribs. <i>Applied Thermal Engineering</i> , 2015, 75, 623-634.	6.0	31

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73	Relationships of tool wear characteristics to cutting mechanics, chip formation, and surface quality in ultra-precision fly cutting. <i>International Journal of Advanced Manufacturing Technology</i> , 2016, 83, 133-144.	3.0	31
74	Diamond wheel wear mechanism and its impact on the surface generation in parallel diamond grinding of RB-SiC/Si. <i>Diamond and Related Materials</i> , 2017, 74, 16-23.	3.9	31
75	Feasibility study of the novel quasi-elliptical tool servo for vibration suppression in the turning of micro-lens arrays. <i>International Journal of Machine Tools and Manufacture</i> , 2017, 122, 98-105.	13.4	31
76	Virtual spindle based tool servo diamond turning of discontinuously structured microoptics arrays. <i>CIRP Annals - Manufacturing Technology</i> , 2016, 65, 475-478.	3.6	30
77	Sustainable manufacturing of ultra-precision machining of titanium alloys using a magnetic field and its sustainability assessment. <i>Sustainable Materials and Technologies</i> , 2018, 16, 38-46.	3.3	30
78	Novel end-fly-cutting-servo system for deterministic generation of hierarchical micro-“nanostructures. <i>CIRP Annals - Manufacturing Technology</i> , 2015, 64, 133-136.	3.6	29
79	Surface damage mechanism of monocrystalline silicon during single point diamond grinding. <i>Wear</i> , 2018, 396-397, 48-55.	3.1	29
80	Orientation changes of aluminium single crystals in ultra-precision diamond turning. <i>Journal of Materials Processing Technology</i> , 2003, 140, 346-351.	6.3	28
81	One-step generation of hybrid micro-optics with high-frequency diffractive structures on infrared materials by ultra-precision side milling. <i>Optics Express</i> , 2018, 26, 28161.	3.4	28
82	Effect of Static Electropulsing on Microstructure and Elongation of a Zn-Al Alloy (ZA22). <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 1933-1940.	2.2	27
83	Evaluation for tool flank wear and its influences on surface roughness in ultra-precision raster fly cutting. <i>International Journal of Mechanical Sciences</i> , 2016, 118, 125-134.	6.7	27
84	External force estimation of a piezo-actuated compliant mechanism based on a fractional order hysteresis model. <i>Mechanical Systems and Signal Processing</i> , 2018, 110, 296-306.	8.0	27
85	A Study of Mechanics in Brittle-“Ductile Cutting Mode Transition. <i>Micromachines</i> , 2018, 9, 49.	2.9	27
86	Static Electropulsing-Induced Microstructural Changes and Their Effect on the Ultra-Precision Machining of Cold-Rolled AZ91 Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 1341-1346.	2.2	26
87	Computer simulation of single-point diamond turning using finite element method. <i>Journal of Materials Processing Technology</i> , 2005, 167, 549-554.	6.3	25
88	Effect of cutting parameters on heat generation in ultra-precision milling of aluminum alloy 6061. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 80, 1265-1275.	3.0	25
89	Low Frequency Sound Absorption by Optimal Combination Structure of Porous Metal and Microperforated Panel. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1507.	2.5	25
90	A theoretical and experimental investigation of cutting forces and spring back behaviour of Ti6Al4V alloy in ultraprecision machining of microgrooves. <i>International Journal of Mechanical Sciences</i> , 2020, 169, 105315.	6.7	25

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91	Effects of current density on electropulsing-induced phase transformations in a Zn-Al based alloy. Applied Physics A: Materials Science and Processing, 2009, 96, 939-944.	2.3	24
92	Investigation on the maximum strain rate sensitivity ( $m$ ) superplastic deformation of Mg-Li based alloy. Materials and Design, 2016, 112, 151-159.	7.0	24
93	Study on Influence of Ultrasonic Vibration on the Ultra-Precision Turning of Ti6Al4V Alloy Based on Simulation and Experiment. IEEE Access, 2019, 7, 33640-33651.	4.2	24
94	Ageing characteristics of cast Zn-Al based alloy (ZnAl7Cu3). Journal of Materials Science, 2003, 38, 1945-1952.	3.7	23
95	Numerical simulation of residual stress and birefringence in the precision injection molding of plastic microlens arrays. International Communications in Heat and Mass Transfer, 2009, 36, 213-219.	5.6	23
96	Analysis of surface generation in ultra-precision machining with a fast tool servo. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2010, 224, 1351-1367.	2.4	23
97	Effect of Workpiece Material on Surface Roughness in Ultraprecision Raster Milling. Materials and Manufacturing Processes, 2012, 27, 1022-1028.	4.7	23
98	Redundantly piezo-actuated $X\bar{Y}\bar{Z}$ compliant mechanism for nano-positioning featuring simple kinematics, bi-directional motion and enlarged workspace. Smart Materials and Structures, 2016, 25, 125002.	3.5	23
99	Microstructural effects of Ti6Al4V alloys modified by electropulsing treatment on ultraprecision diamond turning. Journal of Manufacturing Processes, 2019, 39, 58-68.	5.9	23
100	Characterization of surface generation of optical microstructures using a pattern and feature parametric analysis method. Precision Engineering, 2010, 34, 755-766.	3.4	22
101	A novel spindle inclination error identification and compensation method in ultra-precision raster milling. International Journal of Machine Tools and Manufacture, 2014, 78, 8-17.	13.4	22
102	Amorphization and C segregation based surface generation of Reaction-Bonded SiC/Si composites under micro-grinding. International Journal of Machine Tools and Manufacture, 2015, 95, 78-81.	13.4	22
103	An investigation on surface finishing in ultra-precision raster milling of aluminum alloy 6061. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 1289-1301.	2.4	22
104	Effects of electropulsing treatment on material properties and ultra-precision machining of titanium alloy. International Journal of Advanced Manufacturing Technology, 2016, 82, 2029-2036.	3.0	22
105	An investigation of resolved shear stress on activation of slip systems during ultraprecision rotary cutting of local anisotropic Ti-6Al-4V alloy: Models and experiments. International Journal of Machine Tools and Manufacture, 2018, 134, 69-78.	13.4	22
106	Efficient fabrication of gradient nanostructure layer on surface of commercial pure copper by coupling electric pulse and ultrasonics treatment. Journal of Alloys and Compounds, 2018, 764, 51-61.	5.5	22
107	A novel robust Gaussian filtering method for the characterization of surface generation in ultra-precision machining. Precision Engineering, 2006, 30, 421-430.	3.4	21
108	Measuring ultra-precision freeform surfaces using a robust form characterization method. Measurement Science and Technology, 2006, 17, 488-494.	2.6	21

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109	Effects of Dynamic Electropulsing on Phase Transformation of a Zn-Al Based Alloy. <i>Materials Transactions</i> , 2009, 50, 1105-1112.	1.2	21
110	Study of the workspace of a class of universal joints. <i>Mechanism and Machine Theory</i> , 2014, 73, 244-258.	4.5	21
111	Surface damage mechanism of WC/Co and RB-SiC/Si composites under high spindle speed grinding (HSSG). <i>Materials and Design</i> , 2016, 92, 378-386.	7.0	21
112	Design and control of a new 3-PUU fast tool servo for complex microstructure machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 94, 3503-3517.	3.0	21
113	Development of thin sound absorber by parameter optimization of multilayer compressed porous metal with rear cavity. <i>Applied Acoustics</i> , 2020, 159, 107071.	3.3	21
114	Flexible fabrication of micro-optics arrays with high-aspect-ratio by an offset-tool-servo diamond machining system. <i>Optics Express</i> , 2019, 27, 9631.	3.4	21
115	Material removal and micro-roughness in fluid-assisted smoothing of reaction-bonded silicon carbide surfaces. <i>Journal of Materials Processing Technology</i> , 2009, 209, 4563-4567.	6.3	20
116	Effect of Machining Parameters and Tool Wear on Surface Uniformity in Micro-Milling. <i>Micromachines</i> , 2018, 9, 268.	2.9	20
117	Deformation behaviour of aluminium single crystals in ultraprecision diamond turning. <i>Journal of Materials Processing Technology</i> , 2001, 113, 296-300.	6.3	19
118	Modeling and characterization of generation of 3D micro-structured surfaces with self-cleaning and optical functions. <i>Optik</i> , 2013, 124, 2848-2853.	2.9	19
119	A novel diamond micro-/nano-machining process for the generation of hierarchical micro-/nano-structures. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 035009.	2.6	19
120	Triaxial Fast Tool Servo Using Hybrid Electromagneticâ€”Piezoelectric Actuation for Diamond Turning. <i>IEEE Transactions on Industrial Electronics</i> , 2022, 69, 1728-1738.	7.9	19
121	Explosive Pancake Bouncing on Hot Superhydrophilic Surfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 24321-24328.	8.0	19
122	Thematic analysis of sustainable ultra-precision machining by using text mining and unsupervised learning method. <i>Journal of Manufacturing Systems</i> , 2022, 62, 218-233.	13.9	19
123	Theoretical and experimental investigations of magnetic field assisted ultra-precision machining of titanium alloys. <i>Journal of Materials Processing Technology</i> , 2022, 300, 117429.	6.3	19
124	Wear characteristics of diamond tool in ultraprecision raster milling. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 44, 638-647.	3.0	18
125	Micro-structural changes of Znâ€”Al alloy influencing micro-topographical surface in micro-cutting. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 72, 9-15.	3.0	18
126	Active control of residual tool marks for freeform optics functionalization by novel biaxial servo assisted fly cutting. <i>Applied Optics</i> , 2015, 54, 7656.	2.1	18



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127	Deformation band formation in metal cutting. <i>Scripta Materialia</i> , 1999, 40, 439-443.	5.2	17
128	Molecular Dynamics Simulation for Ultrafine Machining. <i>Materials and Manufacturing Processes</i> , 2006, 21, 393-397.	4.7	17
129	Measuring optical freeform surfaces using a coupled reference data method. <i>Measurement Science and Technology</i> , 2007, 18, 2252-2260.	2.6	17
130	A study of the fabrication of v-groove structure in ultra-precision milling. <i>International Journal of Computer Integrated Manufacturing</i> , 2014, 27, 986-996.	4.6	17
131	Study of cutting force in ultra-precision raster milling of V-groove. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 75, 967-978.	3.0	17
132	A theoretical and experimental investigation of design and slow tool servo machining of freeform progressive addition lenses (PALs) for optometric applications. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 72, 33-40.	3.0	17
133	Ductile and brittle transition behavior of titanium alloys in ultra-precision machining. <i>Scientific Reports</i> , 2018, 8, 3934.	3.3	17
134	Tuned diamond turning of micro-structured surfaces on brittle materials for the improvement of machining efficiency. <i>CIRP Annals - Manufacturing Technology</i> , 2019, 68, 559-562.	3.6	17
135	Social network analysis for optimal machining conditions in ultra-precision manufacturing. <i>Journal of Manufacturing Systems</i> , 2020, 56, 93-103.	13.9	17
136	Influence of initial texture on formability of aluminum sheet metal by crystal plasticity FE simulation. <i>Journal of Materials Processing Technology</i> , 2007, 192-193, 397-403.	6.3	16
137	Ultra-precision raster milling-induced phase decomposition and plastic deformation at the surface of a Zn-Al-based alloy. <i>Scripta Materialia</i> , 2010, 62, 101-104.	5.2	16
138	A study of the relevant effects on the maximum residual stress in the precision injection moulding of microlens arrays. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 035033.	2.6	16
139	Surface generation mechanism of WC/Co and RB-SiC/Si composites under high spindle speed grinding (HSSG). <i>International Journal of Refractory Metals and Hard Materials</i> , 2016, 56, 123-131.	3.8	16
140	An application of eddy current damping effect on single point diamond turning of titanium alloys. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 435002.	2.8	16
141	A systematic investigation on the diamond wear mechanism during the dry scratching of WC/Co. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 70, 184-190.	3.8	16
142	Feasibility investigation on ductile machining of single-crystal silicon for deep micro-structures by ultra-precision fly cutting. <i>Journal of Manufacturing Processes</i> , 2019, 45, 176-187.	5.9	16
143	An analytical force model for ultra-precision diamond sculpturing of micro-grooves with textured surfaces. <i>International Journal of Mechanical Sciences</i> , 2019, 160, 129-139.	6.7	16
144	An investigation in the ultra-precision fly cutting of freeform surfaces on brittle materials with high machining efficiency and low tool wear. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 101, 1583-1593.	3.0	16

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145	Tool interference at workpiece centre in single-point diamond turning. <i>International Journal of Mechanical Sciences</i> , 2019, 151, 1-12.	6.7	16
146	Identification of stakeholder related barriers in sustainable manufacturing using Social Network Analysis. <i>Sustainable Production and Consumption</i> , 2021, 27, 1903-1917.	11.0	16
147	A Study of Factors Affecting Surface Quality in Ultra-Precision Raster Milling. <i>Key Engineering Materials</i> , 2007, 339, 400-406.	0.4	15
148	Effects of Current Density on Elongation of an Electropulsing Treated Zn-Al Based Alloy. <i>Materials Transactions</i> , 2009, 50, 2772-2777.	1.2	15
149	Characterization of freeform optics in automotive lighting systems using an Optical Geometrical Feature Based Method. <i>Optik</i> , 2011, 122, 358-363.	2.9	15
150	Impact of material microstructure and diamond grit wear on surface finish in micro-grinding of RB-SiC/Si and WC/Co carbides. <i>International Journal of Refractory Metals and Hard Materials</i> , 2015, 51, 258-263.	3.8	15
151	Wetting characteristics of bare micro-patterned cyclic olefin copolymer surfaces fabricated by ultra-precision raster milling. <i>RSC Advances</i> , 2016, 6, 1562-1570.	3.6	15
152	Sustainable Ultra-Precision Machining of Titanium Alloy Using Intermittent Cutting. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2020, 7, 361-373.	4.9	15
153	CHARACTERISTICS OF MICROCLIPPING FORCE VARIATION IN ULTRAPRECISION DIAMOND TURNING. <i>Materials and Manufacturing Processes</i> , 2001, 16, 177-193.	4.7	14
154	Effects of binder addition on the surface generation mechanism of WC/Co during high spindle speed grinding (HSSG). <i>International Journal of Refractory Metals and Hard Materials</i> , 2016, 59, 32-39.	3.8	14
155	Current status, challenges and opportunities of sustainable ultra-precision manufacturing. <i>Journal of Intelligent Manufacturing</i> , 2022, 33, 2193-2205.	7.3	14
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