

# Kai Cheng

## List of Publications by Year in descending order

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212  
papers

3,901  
citations

159525

30  
h-index

189801

50  
g-index

227  
all docs

227  
docs citations

227  
times ranked

2747  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultra-deep tyrosine phosphoproteomics enabled by a phosphotyrosine superbinder. <i>Nature Chemical Biology</i> , 2016, 12, 959-966.	3.9	141
2	Design of ultraprecision machine tools with applications to manufacture of miniature and micro components. <i>Journal of Materials Processing Technology</i> , 2005, 167, 515-528.	3.1	137
3	Design of a five-axis ultra-precision micro-milling machine—UltraMill. Part 1: holistic design approach, design considerations and specifications. <i>International Journal of Advanced Manufacturing Technology</i> , 2010, 47, 867-877.	1.5	107
4	Adaptive sparse polynomial chaos expansions for global sensitivity analysis based on support vector regression. <i>Computers and Structures</i> , 2018, 194, 86-96.	2.4	105
5	Aerostatic bearings design and analysis with the application to precision engineering: State-of-the-art and future perspectives. <i>Tribology International</i> , 2019, 135, 1-17.	3.0	103
6	CFD based investigation on influence of orifice chamber shapes for the design of aerostatic thrust bearings at ultra-high speed spindles. <i>Tribology International</i> , 2015, 92, 211-221.	3.0	94
7	A holistic integrated dynamic design and modelling approach applied to the development of ultraprecision micro-milling machines. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 335-343.	6.2	92
8	An innovative investigation on chip formation mechanisms in micro-milling using natural diamond and tungsten carbide tools. <i>Journal of Manufacturing Processes</i> , 2018, 31, 382-394.	2.8	92
9	Mixed kernel function support vector regression for global sensitivity analysis. <i>Mechanical Systems and Signal Processing</i> , 2017, 96, 201-214.	4.4	88
10	Analysis of 3D microtopography in machined KDP crystal surfaces based on fractal and wavelet methods. <i>International Journal of Machine Tools and Manufacture</i> , 2008, 48, 905-913.	6.2	80
11	Global sensitivity analysis using support vector regression. <i>Applied Mathematical Modelling</i> , 2017, 49, 587-598.	2.2	78
12	Structural reliability analysis based on ensemble learning of surrogate models. <i>Structural Safety</i> , 2020, 83, 101905.	2.8	75
13	Experimental study on machinability improvement of hardened tool steel using two dimensional vibration-assisted micro-end-milling. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 1115-1118.	6.2	71
14	Temporal and spatial multi-parameter dynamic reliability and global reliability sensitivity analysis based on the extreme value moments. <i>Structural and Multidisciplinary Optimization</i> , 2017, 56, 117-129.	1.7	66
15	The basic issues in design and fabrication of diamond-cutting tools for ultra-precision and nanometric machining. <i>International Journal of Machine Tools and Manufacture</i> , 2010, 50, 411-419.	6.2	62
16	A Bayesian Monte Carlo-based method for efficient computation of global sensitivity indices. <i>Mechanical Systems and Signal Processing</i> , 2019, 117, 498-516.	4.4	54
17	Smart Cutting Tools and Smart Machining: Development Approaches, and Their Implementation and Application Perspectives. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2017, 30, 1162-1176.	1.9	52
18	AK-DS: An adaptive Kriging-based directional sampling method for reliability analysis. <i>Mechanical Systems and Signal Processing</i> , 2021, 156, 107610.	4.4	52

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19	Sparse polynomial chaos expansion based on D-MORPH regression. Applied Mathematics and Computation, 2018, 323, 17-30.	1.4	50
20	Design of a five-axis ultra-precision micro-milling machineâ€”UltraMill. Part 2: integrated dynamic modelling, design optimisation and analysis. International Journal of Advanced Manufacturing Technology, 2010, 47, 879-890.	1.5	49
21	e-Manufacturing: Characteristics, applications and potentials. Progress in Natural Science: Materials International, 2008, 18, 1323-1328.	1.8	45
22	Multi-scale simulation of the nano-metric cutting process. International Journal of Advanced Manufacturing Technology, 2010, 47, 891-901.	1.5	41
23	A proteomic analysis of engineered tendon formation under dynamic mechanical loading in vitro. Biomaterials, 2011, 32, 4085-4095.	5.7	40
24	Investigation of influence of tool rake angle in single point diamond turning of silicon. International Journal of Advanced Manufacturing Technology, 2018, 94, 2343-2355.	1.5	38
25	Dynamic surface generation modeling of two-dimensional vibration-assisted micro-end-milling. International Journal of Advanced Manufacturing Technology, 2011, 53, 1075-1079.	1.5	37
26	An innovative approach to cutting force modelling in diamond turning and its correlation analysis with tool wear. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 405-415.	1.5	36
27	Modeling and Simulation of Material Removal Rates and Profile Accuracy Control in Abrasive Flow Machining of the Integrally Bladed Rotor Blade and Experimental Perspectives. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2017, 139, .	1.3	34
28	Multiscale simulation on nanometric cutting of single crystal copper. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2006, 220, 1217-1222.	1.5	33
29	Multiphysics-based design and analysis of the high-speed aerostatic spindle with application to micro-milling. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2016, 230, 852-871.	1.0	33
30	Reliability index function approximation based on adaptive double-loop Kriging for reliability-based design optimization. Reliability Engineering and System Safety, 2021, 216, 108020.	5.1	33
31	Comparison of Laminar and Turbulent Thermal Plasma Jet Characteristicsâ€”A Modeling Study. Plasma Chemistry and Plasma Processing, 2006, 26, 211-235.	1.1	32
32	Simulation study of the influence of cutting speed and toolâ€”particle interaction location on surface formation mechanism in micromachining SiCp/Al composites. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2018, 232, 2044-2056.	1.1	32
33	Extending the product portfolio with â€”devolved manufacturingâ€™: methodology and case studies. International Journal of Production Research, 2006, 44, 3325-3343.	4.9	31
34	Prediction of the entrainment of ambient air into a turbulent argon plasma jet using a turbulence-enhanced combined-diffusion-coefficient method. International Journal of Heat and Mass Transfer, 2004, 47, 5139-5148.	2.5	30
35	Design of an instrumented smart cutting tool and its implementation and application perspectives. Smart Materials and Structures, 2014, 23, 035019.	1.8	30
36	Configuration Design of the Add-on Cyber-physical System with CNC Machine Tools and its Application Perspectives. Procedia CIRP, 2016, 56, 360-365.	1.0	30

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37	Multi-level multi-fidelity sparse polynomial chaos expansion based on Gaussian process regression. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 349, 360-377.	3.4	30
38	Cell Nucleus Targeting for Living Cell Extraction of Nucleic Acid Associated Proteins with Intracellular Nanoprobes of Magnetic Carbon Nanotubes. <i>Analytical Chemistry</i> , 2013, 85, 7038-7043.	3.2	29
39	An Innovative Method to Measure the Cutting Temperature in Process by Using an Internally Cooled Smart Cutting Tool. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2013, 135, .	1.3	29
40	Computational design and analysis of aerostatic journal bearings with application to ultra-high speed spindles. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2017, 231, 1205-1220.	1.1	29
41	Three-dimensional modelling of the characteristics of long laminar plasma jets with lateral injection of carrier gas and particulate matter. <i>Journal Physics D: Applied Physics</i> , 2003, 36, 1583-1594.	1.3	27
42	Adaptive smart machining based on using constant cutting force and a smart cutting tool. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 249-253.	1.5	27
43	Sustainability-oriented product modular design using kernel-based fuzzy c-means clustering and genetic algorithm. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2012, 226, 1635-1647.	1.5	26
44	Design and analysis of a piezoelectric film embedded smart cutting tool. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 254-260.	1.5	26
45	Development of the Energy-smart Production Management system (e-ProMan): A Big Data driven approach, analysis and optimisation. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2016, 230, 972-978.	1.5	26
46	Comparative studies on the effect of pilot drillings with application to high-speed drilling of carbon fibre reinforced plastic (CFRP) composites. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 89, 3243-3255.	1.5	26
47	Effect of self-developed graphene lubricant on tribological behaviour of silicon carbide/silicon nitride interface. <i>Ceramics International</i> , 2019, 45, 10211-10222.	2.3	26
48	Cross-entropy-based directional importance sampling with von Mises-Fisher mixture model for reliability analysis. <i>Reliability Engineering and System Safety</i> , 2022, 220, 108306.	5.1	26
49	An investigation on quantitative analysis of energy consumption and carbon footprint in the grinding process. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2014, 228, 950-956.	1.5	25
50	An Investigation of Surface Defect Formation in Micro Milling the 45% SiCp/Al Composite. <i>Procedia CIRP</i> , 2016, 45, 211-214.	1.0	25
51	An experimental investigation on surface generation in ultraprecision machining of particle reinforced metal matrix composites. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 105, 4499-4507.	1.5	25
52	Integrated modelling and analysis of micro-cutting mechanics with the precision surface generation in abrasive flow machining. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 105, 4571-4583.	1.5	25
53	Investigation on multi-body dynamics based approach to the toolpath generation for ultraprecision machining of freeform surfaces. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2020, 234, 571-583.	1.5	25
54	An investigation on the design and performance assessment of double-PID and LQR controllers for the inverted pendulum. , 2012, , .		24

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55	An integrated manufacturing network management framework by using mobile agent. International Journal of Advanced Manufacturing Technology, 2007, 32, 822-833.	1.5	22
56	An experimental investigation on micro-milling of polymethyl methacrylate components with nanometric surface roughness. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 790-796.	1.5	22
57	Internally cooled tools and cutting temperature in contamination-free machining. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2014, 228, 135-145.	1.1	22
58	Appreciation of 2014 reviewers. International Journal of Advanced Manufacturing Technology, 2015, 80, 1-2.	1.5	22
59	Cutting force-based analysis and correlative observations on the tool wear in diamond turning of single-crystal silicon. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 1867-1873.	1.5	22
60	Investigation on tooling geometrical effects of micro tools and the associated micro milling performance. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2012, 226, 1442-1453.	1.5	21
61	An integrated systematic investigation of the process variables on surface generation in abrasive flow machining of titanium alloy 6Al4V. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 1419-1431.	1.5	21
62	Design of an innovative smart turning tool with application to real-time cutting force measurement. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 563-568.	1.5	21
63	Investigation on Innovative Dynamic Cutting Force Modelling in Micro-milling and Its Experimental Validation. Nanomanufacturing and Metrology, 2018, 1, 82-95.	1.5	21
64	An efficient and robust adaptive sampling method for polynomial chaos expansion in sparse Bayesian learning framework. Computer Methods in Applied Mechanics and Engineering, 2019, 352, 654-674.	3.4	21
65	MetaLab 2.0 Enables Accurate Post-Translational Modifications Profiling in Metaproteomics. Journal of the American Society for Mass Spectrometry, 2020, 31, 1473-1482.	1.2	21
66	An experimental investigation on ultra-precision instrumented smart aerostatic bearing spindle applied to high speed micro-drilling. Journal of Manufacturing Processes, 2018, 31, 324-335.	2.8	21
67	Time-variant reliability analysis based on high dimensional model representation. Reliability Engineering and System Safety, 2019, 188, 310-319.	5.1	20
68	Multivariate output global sensitivity analysis using multi-output support vector regression. Structural and Multidisciplinary Optimization, 2019, 59, 2177-2187.	1.7	20
69	Monitoring and Predicting the Surface Generation and Surface Roughness in Ultraprecision Machining: A Critical Review. Machines, 2021, 9, 369.	1.2	20
70	Future Digital Design and Manufacturing: Embracing Industry 4.0 and Beyond. Chinese Journal of Mechanical Engineering (English Edition), 2017, 30, 1047-1049.	1.9	18
71	Investigation on an Innovative Method for High-Speed Low-Damage Micro-Cutting of CFRP Composites with Diamond Dicing Blades. Materials, 2018, 11, 1974.	1.3	18
72	Improved dynamic cutting force modelling in micro milling of metal matrix composites Part I: Theoretical model and simulations. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 1733-1745.	1.1	18

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73	A fitness differential adaptive parameter controlled evolutionary algorithm with application to the design structure matrix. <i>International Journal of Production Research</i> , 2008, 46, 5043-5057.	4.9	17
74	What do we know about long laminar plasma jets?. <i>Pure and Applied Chemistry</i> , 2006, 78, 1253-1264.	0.9	16
75	An integrated modeling method for assessment of quality systems applied to aerospace manufacturing supply chains. <i>Journal of Intelligent Manufacturing</i> , 2012, 23, 1365-1378.	4.4	16
76	Guided wave mode dispersion of transient acoustic emission on copper pipes – its visualisation and application to source location. <i>Mechanical Systems and Signal Processing</i> , 2016, 70-71, 881-890.	4.4	16
77	Analysis on discharge coefficients in FEM modeling of hybrid air journal bearings and experimental validation. <i>Tribology International</i> , 2018, 119, 549-558.	3.0	16
78	Realization of ductile regime machining in micro-milling SiCp/Al composites and selection of cutting parameters. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 4336-4347.	1.1	16
79	An expanded sparse Bayesian learning method for polynomial chaos expansion. <i>Mechanical Systems and Signal Processing</i> , 2019, 128, 153-171.	4.4	16
80	Innovative design and analysis of a longitudinal-torsional transducer with the shared node plane applied for ultrasonic assisted milling. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 4128-4139.	1.1	16
81	Development of multiscale multiphysics-based modelling and simulations with the application to precision machining of aerofoil structures. <i>Engineering Computations</i> , 2021, 38, 1330-1349.	0.7	16
82	An industrially feasible approach to process optimisation of abrasive flow machining and its implementation perspectives. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 1748-1752.	1.5	15
83	Micro milling performance assessment of diamond-like carbon coatings on a micro-end mill. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2013, 227, 1038-1046.	1.0	15
84	Design of a smart turning tool with application to in-process cutting force measurement in ultraprecision and micro cutting. <i>Manufacturing Letters</i> , 2014, 2, 112-117.	1.1	15
85	An investigation on the cutting performance of nano-crystalline diamond coatings on a micro-end mill. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2012, 226, 1421-1424.	1.5	14
86	An investigation of the influence of phases – removal ways on surface quality in micro milling SiCp/Al composites. <i>Procedia CIRP</i> , 2018, 71, 59-64.	1.0	14
87	Development of the improved Preston equation for abrasive flow machining of aerofoil structures and components. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2019, 233, 1397-1404.	1.0	14
88	Effects of natural convection on the characteristics of long laminar argon plasma jets issuing upwards or downwards into ambient air – a numerical study. <i>Journal Physics D: Applied Physics</i> , 2004, 37, 2385-2391.	1.3	13
89	An investigation on machinability assessment of difficult-to-cut materials based on radar charts. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 1916-1920.	1.5	13
90	Investigation on an integrated approach to design and micro fly-cutting of micro-structured riblet surfaces. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2017, 231, 3291-3300.	1.1	13

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91	Investigation on the fabrication of dicing blades with different sintering methods for machining hard-brittle material wafers. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 1781-1793.	1.5	13
92	Investigation on industrial dataspace for advanced machining workshops: enabling machining operations control with domain knowledge and application case studies. Journal of Intelligent Manufacturing, 2022, 33, 103-119.	4.4	13
93	Characterization of the surface functionality on precision machined engineering surfaces. International Journal of Advanced Manufacturing Technology, 2008, 38, 402-409.	1.5	12
94	An innovative method for surface defects prevention in micro milling and its implementation perspectives. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2013, 227, 1347-1355.	1.0	12
95	An efficient method for estimating global reliability sensitivity indices. Probabilistic Engineering Mechanics, 2019, 56, 35-49.	1.3	12
96	An investigation of influence of cutting parameters on three-dimensional surface topography in micromilling SiCp/Al composites. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 829-838.	1.5	12
97	Multiscale Modelling and Analysis for Design and Development of a High-Precision Aerostatic Bearing Slideway and Its Digital Twin. Machines, 2021, 9, 85.	1.2	12
98	Modeling study on the characteristics of laminar and turbulent argon plasma jets impinging normally upon a flat plate in ambient air. International Journal of Heat and Mass Transfer, 2007, 50, 734-745.	2.5	11
99	Special issue on sustainable manufacturing and the key enabling technologies. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2012, 226, 1603-1603.	1.5	11
100	An analytical investigation on the workpiece roundness generation and its perfection strategies in centreless grinding. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2015, 229, 409-420.	1.5	11
101	An Integrated approach to energy efficiency in automotive manufacturing systems: quantitative analysis and optimisation. Production and Manufacturing Research, 2017, 5, 90-98.	0.9	11
102	Longitudinal-torsional ultrasonic vibration-assisted side milling process. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 3356-3363.	1.1	11
103	Micro-/Nano-Machining through Mechanical Cutting. , 2010, , 24-38.		10
104	Design and analysis of a novel large-aperture grating device and its experimental validation. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2013, 227, 1349-1359.	1.5	10
105	Efficiency in contamination-free machining using microfluidic structures. CIRP Journal of Manufacturing Science and Technology, 2014, 7, 97-105.	2.3	10
106	Special issue on future digital design and manufacturing: Embracing industry 4.0 and beyond. Chinese Journal of Mechanical Engineering (English Edition), 2016, 29, 1045-1045.	1.9	10
107	An experimental investigation on the dissimilar joining of AA6061 and 1Cr18Ni9Ti by refill friction stir spot welding and its mechanical properties. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2016, 230, 779-785.	1.5	10
108	Investigation on influences of herringbone grooves for the aerostatic journal bearings applied to ultra-high-speed spindles. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 5795-5812.	1.1	10

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109	Investigation on an innovative approach for clamping contact lens mould inserts in ultraprecision machining using an adaptive precision chuck and its application perspectives. International Journal of Advanced Manufacturing Technology, 2020, 111, 839-850.	1.5	10
110	Wear and breakage behaviors of PCD small-diameter end-mill: a case study on machining 2A12 aluminum alloy. International Journal of Advanced Manufacturing Technology, 2015, 77, 839-846.	1.5	9
111	Improving Production Changeovers and the Optimization: A Simulation Based Virtual Process Approach and Its Application Perspectives. Procedia Manufacturing, 2017, 11, 2042-2050.	1.9	9
112	Investigation on the material removal and surface roughness in ultraprecision machining of Al/B4C/50p metal matrix composites. International Journal of Advanced Manufacturing Technology, 2019, 105, 2815-2831.	1.5	9
113	Sparse polynomial chaos expansions for global sensitivity analysis with partial least squares and distance correlation. Structural and Multidisciplinary Optimization, 2019, 59, 229-247.	1.7	9
114	An approach to investigate moiré patterns of a reflective linear encoder with application to accuracy improvement of a machine tool. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 927-936.	1.5	9
115	Investigation of strengthening effect on the machining rigidity in longitudinal torsional ultrasonic milling of thin-plate structures. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2020, 234, 665-670.	1.5	9
116	Development of electrical enhanced photocatalysis polishing slurry for silicon carbide wafer. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020, 234, 401-413.	1.0	9
117	Exploring the deformation potential of composite materials processed by incremental sheet forming: a review. International Journal of Advanced Manufacturing Technology, 2022, 118, 2099-2137.	1.5	9
118	Internet-enabled modelling of extended manufacturing enterprises using process-based techniques. International Journal of Advanced Manufacturing Technology, 2004, 23, 148-153.	1.5	8
119	Subdivision surface modeling for spiral bevel gear manufacturing. International Journal of Advanced Manufacturing Technology, 2011, 53, 63-70.	1.5	8
120	An investigation on the micro cutting performance of diamond-like carbon coatings using finite element method. International Journal of Advanced Manufacturing Technology, 2014, 73, 1321-1340.	1.5	8
121	Improved dynamic cutting force modelling in micro milling of metal matrix composites part II: Experimental validation and prediction. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2020, 234, 1500-1515.	1.1	8
122	Three-dimensional modeling of heat transfer and fluid flow in laminar-plasma material re-melting processing. International Journal of Heat and Mass Transfer, 2006, 49, 2254-2264.	2.5	7
123	Two Dimensional Vibration-Assisted Micro-Milling: Kinematics Simulation, Chip Thickness Computation and Analysis. Advanced Materials Research, 2010, 97-101, 2779-2784.	0.3	7
124	FEM-Based Design and Analysis of a Smart Cutting Tool with Internal Cooling for Cutting Temperature Measurement and Control. Applied Mechanics and Materials, 0, 217-219, 1874-1879.	0.2	7
125	Dynamics Design and Analysis of Direct-Drive Aerostatic Slideways in a Multi-Physics Simulation Environment. International Journal of Mechanical Engineering Education, 2013, 41, 315-328.	0.6	7
126	Micro-/Nano-machining through Mechanical Cutting. , 2015, , 35-59.		7



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127	Multiscale Multiphysics-Based Modeling and Analysis on the Tool Wear in Micro Drilling. Journal of Multiscale Modeling, 2016, 07, 1640002.	1.0	7
128	Characterizing the fluid dynamics of the inverted frustoconical shaking bioreactor. Biotechnology Progress, 2018, 34, 478-485.	1.3	7
129	Analysis of static and dynamic characteristics of spiral-grooved gas journal bearings in high speed. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 6774-6792.	1.1	7
130	A new surrogate modeling method combining polynomial chaos expansion and Gaussian kernel in a sparse Bayesian learning framework. International Journal for Numerical Methods in Engineering, 2019, 120, 498-516.	1.5	7
131	Development of the innovative differential tool wear modeling for high-feed milling and its experimental verification. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2021, 235, 85-97.	1.5	7
132	Design of a Hydrostatic Spindle and Its Simulation Analysis with the Application to a High Precision Internal Grinding Machine. Machines, 2022, 10, 127.	1.2	7
133	An analytical model for force prediction in micromilling silicon carbide particle-reinforced aluminum matrix composites. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2020, 234, 1273-1282.	1.5	6
134	Exploring the Microbiome-Wide Lysine Acetylation, Succinylation, and Propionylation in Human Gut Microbiota. Analytical Chemistry, 2021, 93, 6594-6598.	3.2	6
135	Development of an Intelligent Quality Management System for Micro Laser Welding: An Innovative Framework and Its Implementation Perspectives. Machines, 2021, 9, 252.	1.2	6
136	The application of dependency management in an integrated manufacturing network framework. International Journal of Advanced Manufacturing Technology, 2007, 33, 354-364.	1.5	5
137	Special issue on design of ultraprecision and micro machine tools and their key enabling technologies. International Journal of Machine Tools and Manufacture, 2010, 50, 309.	6.2	5
138	Development of the supply chain oriented quality assurance system for aerospace manufacturing SMEs and its implementation perspectives. Chinese Journal of Mechanical Engineering (English) Tj ETQq0 0 0 rgBT /Coverlock 10 Tf 50 29		
139	Investigation on the Industrial Design Approach for CNC Machine Tools and Its Implementation and Application Perspectives. Procedia Manufacturing, 2017, 11, 1454-1462.	1.9	5
140	Vibration assisted machining. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4079-4080.	1.1	5
141	The copula-based method for statistical analysis of step-stress accelerated life test with dependent competing failure modes. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2019, 233, 401-418.	0.6	5
142	Dislocation evolution in nanoscratching the CVD diamond film: Discrete dislocation dynamics simulation and experiments. MRS Communications, 2021, 11, 619.	0.8	5
143	The Modelling and Analysis of Micro-Milling Forces for Fabricating Thin-Walled Micro-Parts Considering Machining Dynamics. Machines, 2022, 10, 217.	1.2	5
144	Special issue on "Digital Manufacturing and Enterprise Technologies". International Journal of Advanced Manufacturing Technology, 2006, 30, 909-910.	1.5	4

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145	Customer-Centric Strategy for E-Manufacturing in Apparel Industry. Applied Mechanics and Materials, 2008, 10-12, 39-44.	0.2	4
146	3D FE-Based Modelling and Simulation of the Micro Milling Process. Key Engineering Materials, 2012, 516, 634-639.	0.4	4
147	Thermal Design and Analysis of an Internally Cooled Smart Cutting Tool and its Implementation Perspectives. Materials Science Forum, 0, 770, 120-125.	0.3	4
148	Development of a novel surface acoustic wave (SAW) based smart cutting tool in machining hybrid dissimilar material. Manufacturing Letters, 2014, 2, 21-25.	1.1	4
149	Managing Complexity in Manufacturing Changeovers: A Sustainable Manufacturing-Oriented Approach and the Application Case Study. , 2016, , .		4
150	An innovative investigation on the workpiece kinematics and its roundness generation in through-feed centreless grinding. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2017, 231, 1131-1143.	1.5	4
151	Separation and characterization of human microbiomes by metaproteomics. TrAC - Trends in Analytical Chemistry, 2018, 108, 221-230.	5.8	4
152	Investigation on surface morphology and tribological property generated by vibration assisted strengthening on aviation spherical plain bearings. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4091-4101.	1.1	4
153	Non-traditional and hybrid processes for micro and nano manufacturing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4481-4482.	1.5	4
154	Devolved Manufacturing. Concurrent Engineering Research and Applications, 2002, 10, 291-298.	2.0	4
155	Investigation of a novel green internal cooling in turning application. , 2011, , .		3
156	An Integrated Approach to the Design and Analysis of an Ultra-High Speed Air-Bearing Spindle. Materials Science Forum, 0, 723, 227-232.	0.3	3
157	Keynote presentation &#x2014; 2: Smart tooling, smart machines and smart manufacturing: Working towards the Industry 4.0 and beyond. , 2015, , .		3
158	Simulation based energy-resource efficient manufacturing integrated with in-process virtual management. Chinese Journal of Mechanical Engineering (English Edition), 2016, 29, 1083-1089.	1.9	3
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