

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	Investigation on industrial dataspace for advanced machining workshops: enabling machining operations control with domain knowledge and application case studies. <i>Journal of Intelligent Manufacturing</i> , 2022, 33, 103-119.	4.4	13
2	Exploring the deformation potential of composite materials processed by incremental sheet forming: a review. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 118, 2099-2137.	1.5	9
3	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
4	Non-Linear Dynamic Analysis on Hybrid Air Bearing-Rotor System under Ultra-High Speed Condition. <i>Materials</i> , 2022, 15, 675.	1.3	2
5	The Stability of Spiral-Grooved Air Journal Bearings in Ultrahigh Speeds. <i>Materials</i> , 2022, 15, 1759.	1.3	1
6	Design of a Hydrostatic Spindle and Its Simulation Analysis with the Application to a High Precision Internal Grinding Machine. <i>Machines</i> , 2022, 10, 127.	1.2	7
7	The Modelling and Analysis of Micro-Milling Forces for Fabricating Thin-Walled Micro-Parts Considering Machining Dynamics. <i>Machines</i> , 2022, 10, 217.	1.2	5
8	Advanced Autonomous Machines and Design Developments. <i>Machines</i> , 2022, 10, 491.	1.2	0
9	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
10	Development of the innovative differential tool wear modeling for high-feed milling and its experimental verification. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2021, 235, 85-97.	1.5	7
11	An investigation of influence of cutting parameters on three-dimensional surface topography in micromilling SiCp/Al composites. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2021, 235, 829-838.	1.5	12
12	Investigation on quantitative analysis of carbon footprint in discrete manufacturing by using the innovative energy dataspace approach. <i>Manufacturing Letters</i> , 2021, 27, 58-62.	1.1	1
13	Exploring the Microbiome-Wide Lysine Acetylation, Succinylation, and Propionylation in Human Gut Microbiota. <i>Analytical Chemistry</i> , 2021, 93, 6594-6598.	3.2	6
14	Multiscale Modelling and Analysis for Design and Development of a High-Precision Aerostatic Bearing Slideway and Its Digital Twin. <i>Machines</i> , 2021, 9, 85.	1.2	12
15	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
16	Dislocation evolution in nanoscratching the CVD diamond film: Discrete dislocation dynamics simulation and experiments. <i>MRS Communications</i> , 2021, 11, 619.	0.8	5
17	Reliability index function approximation based on adaptive double-loop Kriging for reliability-based design optimization. <i>Reliability Engineering and System Safety</i> , 2021, 216, 108020.	5.1	33
18	Investigation of a dynamics-oriented engineering approach to ultraprecision machining of freeform surfaces and its implementation perspectives. <i>Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering</i> , 2021, 4, 043002.	1.7	3

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19	Development of an Intelligent Quality Management System for Micro Laser Welding: An Innovative Framework and Its Implementation Perspectives. <i>Machines</i> , 2021, 9, 252.	1.2	6
20	Investigation into precision engineering design and development of the next-generation brake discs using Al/SiC metal matrix composites. <i>Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering</i> , 2021, 4, 043003.	1.7	0
21	Monitoring and Predicting the Surface Generation and Surface Roughness in Ultraprecision Machining: A Critical Review. <i>Machines</i> , 2021, 9, 369.	1.2	20
22	Bayesian optimum accelerated life test plans based on quantile regression. <i>Communications in Statistics Part B: Simulation and Computation</i> , 2020, 49, 2402-2418.	0.6	2
23	Investigation of strengthening effect on the machining rigidity in longitudinal torsional ultrasonic milling of thin-plate structures. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2020, 234, 665-670.	1.5	9
24	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
25	Development of electrical enhanced photocatalysis polishing slurry for silicon carbide wafer. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2020, 234, 401-413.	1.0	9
26	Improved dynamic cutting force modelling in micro milling of metal matrix composites Part I: Theoretical model and simulations. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, 234, 1733-1745.	1.1	18
27	Structural reliability analysis based on ensemble learning of surrogate models. <i>Structural Safety</i> , 2020, 83, 101905.	2.8	75
28	Improved dynamic cutting force modelling in micro milling of metal matrix composites part II: Experimental validation and prediction. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2020, 234, 1500-1515.	1.1	8
29	Investigation on an innovative approach for clamping contact lens mould inserts in ultraprecision machining using an adaptive precision chuck and its application perspectives. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 111, 839-850.	1.5	10
30	Multiscale Modelling and Analysis on the Heavy-duty Hydrostatic Journal Bearing for a Precision Press Machine. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 825, 012010.	0.3	1
31	The static performance of the high-speed aerostatic spindles with modified discharge coefficients. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2020, , 095440542091206.	1.5	1
32	MetaLab 2.0 Enables Accurate Post-Translational Modifications Profiling in Metaproteomics. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 1473-1482.	1.2	21
33	An analytical model for force prediction in micromilling silicon carbide particle-reinforced aluminum matrix composites. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2020, 234, 1273-1282.	1.5	6
34	A vine copula-based method for analyzing the moment-independent importance measure of the multivariate output. <i>Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability</i> , 2019, 233, 338-354.	0.6	1
35	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
36	Investigation on surface morphology and tribological property generated by vibration assisted strengthening on aviation spherical plain bearings. <i>Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science</i> , 2019, 233, 4091-4101.	1.1	4

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37	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
38	Gradient-enhanced high dimensional model representation via Bayesian inference. Knowledge-Based Systems, 2019, 184, 104903.	4.0	3
39	Realization of ductile regime machining in micro-milling SiCp/Al composites and selection of cutting parameters. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4336-4347.	1.1	16
40	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
41	On-Machine Measurement of the Straightness and Tilt Errors of a Linear Slideway Using a New Four-Sensor Method. Chinese Journal of Mechanical Engineering (English Edition), 2019, 32, .	1.9	3
42	An experimental investigation on surface generation in ultraprecision machining of particle reinforced metal matrix composites. International Journal of Advanced Manufacturing Technology, 2019, 105, 4499-4507.	1.5	25
43	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
44	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
45	Vibration assisted machining. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4079-4080.	1.1	5
46	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
47	An efficient method for estimating global reliability sensitivity indices. Probabilistic Engineering Mechanics, 2019, 56, 35-49.	1.3	12
48	Time-variant reliability analysis based on high dimensional model representation. Reliability Engineering and System Safety, 2019, 188, 310-319.	5.1	20
49	Integrated modelling and analysis of micro-cutting mechanics with the precision surface generation in abrasive flow machining. International Journal of Advanced Manufacturing Technology, 2019, 105, 4571-4583.	1.5	25
50	An expanded sparse Bayesian learning method for polynomial chaos expansion. Mechanical Systems and Signal Processing, 2019, 128, 153-171.	4.4	16
51	Aerostatic bearings design and analysis with the application to precision engineering: State-of-the-art and future perspectives. Tribology International, 2019, 135, 1-17.	3.0	103
52	Development of the improved Preston equation for abrasive flow machining of aerofoil structures and components. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2019, 233, 1397-1404.	1.0	14
53	Multi-level multi-fidelity sparse polynomial chaos expansion based on Gaussian process regression. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 360-377.	3.4	30
54	Effect of self-developed graphene lubricant on tribological behaviour of silicon carbide/silicon nitride interface. Ceramics International, 2019, 45, 10211-10222.	2.3	26

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55	Non-traditional and hybrid processes for micro and nano manufacturing. International Journal of Advanced Manufacturing Technology, 2019, 105, 4481-4482.	1.5	4
56	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
57	Innovative design and analysis of a longitudinal-torsional transducer with the shared node plane applied for ultrasonic assisted milling. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 4128-4139.	1.1	16
58	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
59	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
60	Multivariate output global sensitivity analysis using multi-output support vector regression. Structural and Multidisciplinary Optimization, 2019, 59, 2177-2187.	1.7	20
61	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
62	Investigation on an industrial-feasible approach for measurement and assessment of large-sized micro-structured surfaces based on grayscale matching. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2019, 233, 1310-1316.	1.5	2
63	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
64	Characterizing the fluid dynamics of the inverted frustoconical shaking bioreactor. Biotechnology Progress, 2018, 34, 478-485.	1.3	7
65	Investigation on Innovative Dynamic Cutting Force Modelling in Micro-milling and Its Experimental Validation. Nanomanufacturing and Metrology, 2018, 1, 82-95.	1.5	21
66	Simulation study of the influence of cutting speed and tool-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
67	Adaptive sparse polynomial chaos expansions for global sensitivity analysis based on support vector regression. Computers and Structures, 2018, 194, 86-96.	2.4	105
68	Sparse polynomial chaos expansion based on D-MORPH regression. Applied Mathematics and Computation, 2018, 323, 17-30.	1.4	50
69	An innovative investigation on chip formation mechanisms in micro-milling using natural diamond and tungsten carbide tools. Journal of Manufacturing Processes, 2018, 31, 382-394.	2.8	92
70	Analysis on discharge coefficients in FEM modeling of hybrid air journal bearings and experimental validation. Tribology International, 2018, 119, 549-558.	3.0	16
71	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
72	An investigation of the influence of phases™ removal ways on surface quality in micro milling SiCp/Al composites. Procedia CIRP, 2018, 71, 59-64.	1.0	14

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73	Research on Morphology and Semantics of Industrial Design for CNC Machine Tools. <i>Procedia Manufacturing</i> , 2018, 17, 379-386.	1.9	1
74	Investigation on an Innovative Method for High-Speed Low-Damage Micro-Cutting of CFRP Composites with Diamond Dicing Blades. <i>Materials</i> , 2018, 11, 1974.	1.3	18
75	CFD-based design and analysis of air-bearing-supported paint spray spindle. <i>Nami Jishu Yu Jingmi Gongcheng/Nanotechnology and Precision Engineering</i> , 2018, 1, 226-235.	1.7	0
76	Investigation on an industrial-feasible approach for measurement and assessment of large-sized micro-structured surfaces based on grayscale matching. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2018, 232, 2242-2248.	1.5	3
77	Separation and characterization of human microbiomes by metaproteomics. <i>TrAC - Trends in Analytical Chemistry</i> , 2018, 108, 221-230.	5.8	4
78	An experimental investigation on ultra-precision instrumented smart aerostatic bearing spindle applied to high speed micro-drilling. <i>Journal of Manufacturing Processes</i> , 2018, 31, 324-335.	2.8	21
79	An innovative investigation on the workpiece kinematics and its roundness generation in through-feed centreless grinding. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2017, 231, 1131-1143.	1.5	4
80	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
81	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
82	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
83	Mixed kernel function support vector regression for global sensitivity analysis. <i>Mechanical Systems and Signal Processing</i> , 2017, 96, 201-214.	4.4	88
84	Global sensitivity analysis using support vector regression. <i>Applied Mathematical Modelling</i> , 2017, 49, 587-598.	2.2	78
85	Development of Smart Tooling Concepts Applied to Ultraprecision Machining. <i>Journal of Micro and Nano-Manufacturing</i> , 2017, 5, .	0.8	0
86	Modeling and Simulation of Material Removal Rates and Profile Accuracy Control in Abrasive Flow Machining of the Integrally Bladed Rotor Blade and Experimental Perspectives. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2017, 139, .	1.3	34
87	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
88	Future Digital Design and Manufacturing: Embracing Industry 4.0 and Beyond. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2017, 30, 1047-1049.	1.9	18
89	Special Issue on Future Digital Design and Manufacturing: Embracing Industry 4.0 and Beyond-Part II. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2017, 30, 1045-1046.	1.9	2
90	An Integrated approach to energy efficiency in automotive manufacturing systems: quantitative analysis and optimisation. <i>Production and Manufacturing Research</i> , 2017, 5, 90-98.	0.9	11

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91	Investigation on the Industrial Design Approach for CNC Machine Tools and Its Implementation and Application Perspectives. <i>Procedia Manufacturing</i> , 2017, 11, 1454-1462.	1.9	5
92	Improving Production Changeovers and the Optimization: A Simulation Based Virtual Process Approach and Its Application Perspectives. <i>Procedia Manufacturing</i> , 2017, 11, 2042-2050.	1.9	9
93	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
94	Cathode design for precision electrochemical machining of straight teeth face gear. , 2017, , .		0
95	Simulation based energy-resource efficient manufacturing integrated with in-process virtual management. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2016, 29, 1083-1089.	1.9	3
96	Manufacturing Supplier Selection in Cloud Manufacturing Context and its Implementation and Application Perspectives. , 2016, , .		0
97	Special issue on future digital design and manufacturing: Embracing industry 4.0 and beyond. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2016, 29, 1045-1045.	1.9	10
98	Investigation on Multi-Physics Simulation-Based Virtual Machining System for Vibratory Finishing of Integrally Bladed Rotors (IBRS). <i>Journal of Multiscale Modeling</i> , 2016, 07, 1640003.	1.0	2
99	Ultra-deep tyrosine phosphoproteomics enabled by a phosphotyrosine superbinder. <i>Nature Chemical Biology</i> , 2016, 12, 959-966.	3.9	141
100	Configuration Design of the Add-on Cyber-physical System with CNC Machine Tools and its Application Perspectives. <i>Procedia CIRP</i> , 2016, 56, 360-365.	1.0	30
101	Development of the supply chain oriented quality assurance system for aerospace manufacturing SMEs and its implementation perspectives. <i>Chinese Journal of Mechanical Engineering (English)</i> Tj ETQq1 1 0.784314 rrgBT /Overlock 10	1.0	10
102	Managing Complexity in Manufacturing Changeovers: A Sustainable Manufacturing-Oriented Approach and the Application Case Study. , 2016, , .		4
103	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
104	An innovative approach to cutting force modelling in diamond turning and its correlation analysis with tool wear. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2016, 230, 405-415.	1.5	36
105	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
106	Multiscale Multiphysics-Based Modeling and Analysis on the Tool Wear in Micro Drilling. <i>Journal of Multiscale Modeling</i> , 2016, 07, 1640002.	1.0	7
107	Multiphysics-based design and analysis of the high-speed aerostatic spindle with application to micro-milling. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2016, 230, 852-871.	1.0	33
108	Guided wave mode dispersion of transient acoustic emission on copper pipesâ€™Its visualisation and application to source location. <i>Mechanical Systems and Signal Processing</i> , 2016, 70-71, 881-890.	4.4	16

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109	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
110	AN INVESTIGATION ON SIMULATION AND IDENTIFICATION OF DIFFRACTED MOIRÉ PATTERNS OF OPTICAL ENCODERS WITH APPLICATION TO MACHINE TOOLS. , 2016, , .		0
111	Keynote presentation — 2: Smart tooling, smart machines and smart manufacturing: Working towards the Industry 4.0 and beyond. , 2015, , .		3
112	CFD based investigation on influence of orifice chamber shapes for the design of aerostatic thrust bearings at ultra-high speed spindles. Tribology International, 2015, 92, 211-221.	3.0	94
113	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
114	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
115	Micro-/Nano-machining through Mechanical Cutting. , 2015, , 35-59.		7
116	Appreciation of 2014 reviewers. International Journal of Advanced Manufacturing Technology, 2015, 80, 1-2.	1.5	22
117	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
118	Guest Editorial Introduction to the Focused Section on Mechatronics for Intelligent Manufacturing. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1001-1004.	3.7	1
119	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
120	Design of an instrumented smart cutting tool and its implementation and application perspectives. Smart Materials and Structures, 2014, 23, 035019.	1.8	30
121	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
122	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
123	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
124	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
125	Efficiency in contamination-free machining using microfluidic structures. CIRP Journal of Manufacturing Science and Technology, 2014, 7, 97-105.	2.3	10
126	An investigation on quantitative analysis of energy consumption and carbon footprint in the grinding process. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2014, 228, 950-956.	1.5	25

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127	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
128	An investigation on the micro cutting performance of diamond-like carbon coatings using finite element method. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 73, 1321-1340.	1.5	8
129	Engineering drawing man-hour forecasting based on BP-GA in design of chemical equipment. , 2014, , .		0
130	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
131	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
132	An innovative method for surface defects prevention in micro milling and its implementation perspectives. <i>Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology</i> , 2013, 227, 1347-1355.	1.0	12
133	Design and analysis of a self-sensing smart cutting tool integrated piezoelectric films for cutting force monitoring in ultra-precision machining. , 2013, , .		2
134	Structural Design and Simulation Analysis of Ejector Used in Automotive Power Steering Oil Discharge Equipment. <i>Applied Mechanics and Materials</i> , 2013, 274, 270-273.	0.2	0
135	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
136	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
137	Dynamics Design and Analysis of Direct-Drive Aerostatic Slideways in a Multi-Physics Simulation Environment. <i>International Journal of Mechanical Engineering Education</i> , 2013, 41, 315-328.	0.6	7
138	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
139	Design and analysis of a novel large-aperture grating device and its experimental validation. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2013, 227, 1349-1359.	1.5	10
140	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
141	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
142	Back Chip Temperature in Environmentally Conscious Turning with Conventional and Internally Cooled Cutting Tools. <i>Journal of Mechanical Engineering and Sciences</i> , 2013, 4, 356-372.	0.3	3
143	Design of a novel tensile testing device and its application in tensile testing experiments on copper micro wires. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2012, 226, 1594-1600.	1.5	2
144	The Ambulatory UV Light Soure Dry Curing Machine Designing. <i>Advanced Materials Research</i> , 2012, 472-475, 1107-1109.	0.3	0

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145	An investigation on the cutting performance of nano-crystalline diamond coatings on a micro-end mill. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2012, 226, 1421-1424.	1.5	14
146	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
147	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
148	Sustainability-oriented product modular design using kernel-based fuzzy c-means clustering and genetic algorithm. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2012, 226, 1635-1647.	1.5	26
149	Design and Analysis of a Novel Sensing Cutting Tool for Precision Turning. Key Engineering Materials, 2012, 516, 373-377.	0.4	1
150	Design and Performance Assessment of a 5-Axis Ultra-Precision Micro-Milling Machine. Applied Mechanics and Materials, 2012, 217-219, 1699-1704.	0.2	0
151	Application of axiomatic design theory to automotive body assembly in the sustainable manufacturing context. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2012, 226, 959-964.	1.5	2
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