Chengyong Wang

List of Publications by Citations

67 papers	1,053 citations	16 h-index	30 g-index
70 ext. papers	1,367 ext. citations	4.3 avg, IF	4.66 L-index

#	Paper	IF	Citations
67	Microstructure and properties of TiAlSiN coatings prepared by hybrid PVD technology. *Thin Solid Films*, **2009**, 517, 4950-4955	2.2	117
66	Research on the Chip Formation Mechanism during the high-speed milling of hardened steel. *International Journal of Machine Tools and Manufacture*, **2014**, 79, 31-48	9.4	70
65	Modelling the erosion rate in micro abrasive air jet machining of glasses. *Wear*, **2009**, 266, 968-974	3.5	63
64	Marble cutting with single point cutting tool and diamond segments. *International Journal of Machine Tools and Manufacture*, **2002**, 42, 1045-1054	9.4	55
63	Laser drilling of structural ceramics—A review. *Journal of the European Ceramic Society*, **2017**, 37, 1157-1173	3	53
62	Interfacial microstructure and performance of brazed diamond grits with NiCrP alloy. *Journal of Alloys and Compounds*, **2009**, 476, 884-888	5.7	51
61	Optimization of hybrid PVD process of TiAlN coatings by Taguchi method. *Applied Surface Science*, **2008**, 255, 1865-1869	6.7	50
60	Review: Porous Metal Filters and Membranes for Oil-Water Separation. *Nanoscale Research Letters*, **2018**, 13, 284	5	50
59	Tool wear in Ti-6Al-4V alloy turning under oils on water cooling comparing with cryogenic air mixed with minimal quantity lubrication. *International Journal of Advanced Manufacturing Technology*, **2015**, 81, 87-101	3.2	46
58	Chemical/mechanical polishing of diamond films assisted by molten mixture of LiNO3 and KNO3. *Thin Solid Films*, **2006**, 496, 698-702	2.2	37
57	Modeling and simulation of the high-speed milling of hardened steel SKD11 (62 HRC) based on SHPB technology. *International Journal of Machine Tools and Manufacture*, **2016**, 108, 13-26	9.4	32
56	Effect of different oil-on-water cooling conditions on tool wear in turning of compacted graphite cast iron. *Journal of Cleaner Production*, **2017**, 148, 477-489	10.3	28
55	Solid-State Nanopore. *Nanoscale Research Letters*, **2018**, 13, 56	5	26
54	Relationship of microstructure, mechanical properties and hardened steel cutting performance of TiSiN-based nanocomposite coated tool. *Journal of Manufacturing Processes*, **2017**, 28, 399-409	5	20
53	Near-Net Forming Complex Shaped Zr-Based Bulk Metallic Glasses by High Pressure Die Casting. *Materials*, **2018**, 11,	3.5	20
52	Drilling force and temperature of bone under dry and physiological drilling conditions. *Chinese Journal of Mechanical Engineering (English Edition)*, **2014**, 27, 1240-1248	2.5	19
51	Interaction of cemented carbide micro-drills and printed circuit boards during micro-drilling. *International Journal of Advanced Manufacturing Technology*, **2015**, 77, 1305-1314	3.2	15

50	Microstructures and mechanical properties of AlCrN/TiSiN nanomultilayer coatings consisting of fcc single-phase solid solution. *Applied Surface Science*, **2020**, 509, 145303	6.7	15
49	Experimental study on a micro-abrasive slurry jet for glass polishing. *International Journal of Advanced Manufacturing Technology*, **2017**, 89, 451-462	3.2	15
48	Mechanical and thermal damage in cortical bone drilling in vivo. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2019**, 233, 621-635	1.7	14
47	Investigation of Chip Formation Characteristics in Orthogonal Cutting of Graphite. *Materials and Manufacturing Processes*, **2009**, 24, 1365-1372	4.1	14
46	Investigation on chip deformation behaviors of Zr-based bulk metallic glass during machining. *Journal of Materials Processing Technology*, **2020**, 276, 116404	5.3	14
45	Polishing of ceramic tiles. *Materials and Manufacturing Processes*, **2002**, 17, 401-413	4.1	13
44	Experimental study of temperature rise during bone drilling process. *Medical Engineering and Physics*, **2020**, 78, 64-73	2.4	12
43	The effect of microstructure on corrosion behavior of a novel AlCrTiSiN ceramic coating. *Ceramics International*, **2020**, 46, 12584-12592	5.1	12
42	Dynamic stability of cemented carbide circular saw blades for woodcutting. *Journal of Materials Processing Technology*, **2016**, 238, 108-123	5.3	11
41	Adaptability of AlTiN-based coated tools with green cutting technologies in sustainable machining of 316L stainless steel. *Tribology International*, **2020**, 148, 106300	4.9	10
40	Prewetting Polypropylene-Wood Pulp Fiber Composite Nonwoven Fabric for Oil-Water Separation. *ACS Applied Materials & Interfaces*, **2020**, 12, 46923-46932	9.5	10
39	Performance of supercritical carbon dioxide (scCO2) mixed with oil-on-water (OoW) cooling in high-speed milling of 316L stainless steel. *Procedia CIRP*, **2018**, 77, 391-396	1.8	10
38	Investigations of new bulk metallic glass alloys fabricated using a high-pressure die-casting method based on industrial grade Zr raw material. *Journal of Alloys and Compounds*, **2019**, 792, 851-859	5.7	9
37	A Review on Surgical Instruments of Knee Arthroscopic Debridement and Total Hip Arthroplasty. *Procedia CIRP*, **2017**, 65, 291-298	1.8	9
36	Cr Powder-Activated Induction Brazing of Diamond Grits with Ag□Cu□Zn Alloy. *Materials and Manufacturing Processes*, **2008**, 23, 352-356	4.1	9
35	Controlling DNA Translocation Through Solid-state Nanopores. *Nanoscale Research Letters*, **2020**, 15, 80	5	9
34	A Comparison Review on Orthopedic Surgery Using Piezosurgery and Conventional Tools. *Procedia CIRP*, **2017**, 65, 99-104	1.8	8
33	Reduced bacterial adhesion on zirconium-based bulk metallic glasses by femtosecond laser nanostructuring. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2020**, 234, 387-397	1.7	8

32	Effects of Re addition on phase stability and mechanical properties of hexagonal OsB2. *Journal of the American Ceramic Society*, **2018**, 101, 151-158	3.8	7
31	Optimization of Milling Aluminum Alloy 6061-T6 using Modified Johnson-Cook Model. *Simulation Modelling Practice and Theory*, **2021**, 111, 102330	3.9	7
30	Effect of cryogenic oils-on-water compared with cryogenic minimum quantity lubrication in finishing turning of 17-4PH stainless steel. *Machining Science and Technology*, **2020**, 24, 1016-1036	2	6
29	Principle, process, and application of metal plasma electrolytic polishing: a review. *International Journal of Advanced Manufacturing Technology*, **2021**, 114, 1893-1912	3.2	6
28	Synthesis of osmium borides by mechanochemical method. *Journal of the American Ceramic Society*, **2017**, 100, 2419-2428	3.8	5
27	Tool path generation for five-axis machining of blisks with barrel cutters. *International Journal of Production Research*, **2019**, 57, 1300-1314	7.8	5
26	Effect of cutting parameters on cutting force and surface quality in cutting of articular cartilage. *Procedia CIRP*, **2020**, 89, 116-121	1.8	5
25	Research on machining compacted graphite iron under oil-on-water cooling and lubrication conditions based on modified material model. *International Journal of Advanced Manufacturing Technology*, **2019**, 105, 5061-5079	3.2	5
24	Machinability study of unidirectional CFRP laminates by slot milling. *International Journal of Advanced Manufacturing Technology*, **2019**, 100, 189-197	3.2	5
23	The advance of surgical blades in cutting soft biological tissue: a review. *International Journal of Advanced Manufacturing Technology*, **2021**, 113, 1817-1832	3.2	5
22	DYNAMIC ANALYSIS OF THE LENGTHENED SHRINK-FIT HOLDER AND CUTTING TOOL SYSTEM IN HIGH-SPEED MILLING. *Machining Science and Technology*, **2012**, 16, 157-172	2	4
21	Influence of cutting velocity on gradient microstructure of machined surface during turning of high-strength alloy steel. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 819, 141354	5.3	4
20	Chitosan/zinc nitrate microneedles for bacterial biofilm eradication. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2021**, 109, 911-920	3.5	4
19	Understanding the cutting mechanisms of composite structured soft tissues. *International Journal of Machine Tools and Manufacture*, **2021**, 161, 103685	9.4	4
18	High performance cutting of Zr-based bulk metallic glass: a review of chip formation. *Procedia CIRP*, **2018**, 77, 421-424	1.8	4
17	Multiple regression prediction model for cutting forces and surface roughness in micro-milling of TA2. *Procedia CIRP*, **2020**, 89, 233-238	1.8	3
16	Cryogenic drilling of aluminum-based printed circuit boards: a review and analysis. *Machining Science and Technology*, **2020**, 24, 321-339	2	3
15	High-Speed Machining of Malleable Cast Iron by Various Cutting Tools Coated by Physical Vapor Deposition. *Chinese Journal of Mechanical Engineering (English Edition)*, **2021**, 34,	2.5	3

14	Feasibility study of oil-on-water cooling in high-speed end milling of hardened steel. *International Journal of Advanced Manufacturing Technology*, **2020**, 107, 271-292	3.2	2
13	Controllable fabrication of solid state nanopores array by electron beam shrinking. *International Journal of Machine Tools and Manufacture*, **2020**, 159, 103623	9.4	2
12	Influence of annealing on microstructures and mechanical properties of arc-deposited AlCrTiSiN coating. *Surface and Coatings Technology*, **2021**, 421, 127470	4.4	2
11	Amorphous Silicon Nanowires Grown on Silicon Oxide Film by Annealing. *Nanoscale Research Letters*, **2017**, 12, 487	5	1
10	Advances in machining of hard tissues From material removal mechanisms to tooling solutions. *International Journal of Machine Tools and Manufacture*, **2022**, 172, 103838	9.4	1
9	Investigation of the chip adhesion mechanisms in micro-drilling of high ceramic-content particle-filled GFRPs. *Machining Science and Technology*, **2020**, 24, 861-881	2	1
8	Enhancing Staphylococcus aureus sterilization of stainless steel by the synergistic effect of surface structure and physical washing. *Colloids and Surfaces B: Biointerfaces*, **2021**, 197, 111393	6	1
7	Fatigue Behavior of Zr58Cu15.46Ni12.74Al10.34Nb2.76Y0.5 Bulk Metallic Glass Fabricated by Industrial-Grade Zirconium Raw Material. *Metals*, **2021**, 11, 187	2.3	1
6	Failure behavior and influence of surgical tool edges in soft tissue cutting. *Journal of Manufacturing Processes*, **2021**, 68, 69-78	5	1
5	Effect of nozzles on cutting performance when machining with oil-on-water cooling technique. *International Journal of Advanced Manufacturing Technology*, **2021**, 112, 313-322	3.2	0
4	Light emission of Zr-based bulk metallic glass during high-speed cutting: From generation mechanism to control strategies. *Journal of Materials Processing Technology*, **2022**, 117598	5.3	0
3	Tool performance on micro-abrasive post-treatment coated carbide. *International Journal of Advanced Manufacturing Technology*, **2020**, 109, 943-951	3.2	
2	Study on cutting force of reaming porcine bone and substitute bone. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2022**, 236, 94-102	1.7	
1	Understanding the structure and cutting mechanism of shaver blades: A case study on articular cartilage.. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, **2022**, 9544119221098508	1.7	