Chengyong Wang

List of Publications by Year
in descending order

70	1,716	304743	315739
papers	citations	22 h-index	38 g-index

70	70	70	1320
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Microstructure and properties of TiAlSiN coatings prepared by hybrid PVD technology. Thin Solid Films, 2009, 517, 4950-4955.	1.8	137
2	Laser drilling of structural ceramicsâ€"A review. Journal of the European Ceramic Society, 2017, 37, 1157-1173.	5.7	88
3	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.	13.4	84
4	Review: Porous Metal Filters and Membranes for Oilâ€"Water Separation. Nanoscale Research Letters, 2018, 13, 284.	5.7	77
5	Modelling the erosion rate in micro abrasive air jet machining of glasses. Wear, 2009, 266, 968-974.	3.1	75
6	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.	3.0	65
7	Marble cutting with single point cutting tool and diamond segments. International Journal of Machine Tools and Manufacture, 2002, 42, 1045-1054.	13.4	63
8	Interfacial microstructure and performance of brazed diamond grits with Niâ€"Crâ€"P alloy. Journal of Alloys and Compounds, 2009, 476, 884-888.	5.5	60
9	Optimization of hybrid PVD process of TiAlN coatings by Taguchi method. Applied Surface Science, 2008, 255, 1865-1869.	6.1	54
10	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.	13.4	50
11	Chemical/mechanical polishing of diamond films assisted by molten mixture of LiNO3 and KNO3. Thin Solid Films, 2006, 496, 698-702.	1.8	47
12	Solid-State Nanopore. Nanoscale Research Letters, 2018, 13, 56.	5.7	44
13	Near-Net Forming Complex Shaped Zr-Based Bulk Metallic Glasses by High Pressure Die Casting. Materials, 2018, 11, 2338.	2.9	39
14	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.	9.3	38
15	Optimization of Milling Aluminum Alloy 6061-T6 using Modified Johnson-Cook Model. Simulation Modelling Practice and Theory, 2021, 111, 102330.	3.8	31
16	Prewetting Polypropylene-Wood Pulp Fiber Composite Nonwoven Fabric for Oilâ€"Water Separation. ACS Applied Materials & Interfaces, 2020, 12, 46923-46932.	8.0	30
17	Microstructures and mechanical properties of AlCrN/TiSiN nanomultilayer coatings consisting of fcc single-phase solid solution. Applied Surface Science, 2020, 509, 145303.	6.1	30
18	Dynamic stability of cemented carbide circular saw blades for woodcutting. Journal of Materials Processing Technology, 2016, 238, 108-123.	6.3	28

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19	Drilling force and temperature of bone under dry and physiological drilling conditions. Chinese Journal of Mechanical Engineering (English Edition), 2014, 27, 1240-1248.	3.7	27
20	Relationship of microstructure, mechanical properties and hardened steel cutting performance of TiSiN-based nanocomposite coated tool. Journal of Manufacturing Processes, 2017, 28, 399-409.	5.9	25
21	Investigation on chip deformation behaviors of Zr-based bulk metallic glass during machining. Journal of Materials Processing Technology, 2020, 276, 116404.	6.3	25
22	The effect of microstructure on corrosion behavior of a novel AlCrTiSiN ceramic coating. Ceramics International, 2020, 46, 12584-12592.	4.8	25
23	Principle, process, and application of metal plasma electrolytic polishing: a review. International Journal of Advanced Manufacturing Technology, 2021, 114, 1893-1912.	3.0	25
24	Controlling DNA Translocation Through Solid-state Nanopores. Nanoscale Research Letters, 2020, 15, 80.	5.7	25
25	Experimental study of temperature rise during bone drilling process. Medical Engineering and Physics, 2020, 78, 64-73.	1.7	24
26	Chitosan/zinc nitrate microneedles for bacterial biofilm eradication. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 911-920.	3.4	24
27	Advances in machining of hard tissues â€“ From material removal mechanisms to tooling solutions. International Journal of Machine Tools and Manufacture, 2022, 172, 103838.	13.4	24
28	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.	1.8	23
29	Antibacterial Performance of Zr-BMG, Stainless Steel, and Titanium Alloy with Laser-Induced Periodic Surface Structures. ACS Applied Bio Materials, 2022, 5, 272-284.	4.6	23
30	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.	1.8	21
31	Adaptability of AlTiN-based coated tools with green cutting technologies in sustainable machining of 316L stainless steel. Tribology International, 2020, 148, 106300.	5.9	21
32	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.	1.9	20
33	Interaction of cemented carbide micro-drills and printed circuit boards during micro-drilling. International Journal of Advanced Manufacturing Technology, 2015, 77, 1305-1314.	3.0	19
34	Experimental study on a micro-abrasive slurry jet for glass polishing. International Journal of Advanced Manufacturing Technology, 2017, 89, 451-462.	3.0	19
35	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.	5.5	18
36	Investigation of Chip Formation Characteristics in Orthogonal Cutting of Graphite. Materials and Manufacturing Processes, 2009, 24, 1365-1372.	4.7	16

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37	A Comparison Review on Orthopedic Surgery Using Piezosurgery and Conventional Tools. Procedia CIRP, 2017, 65, 99-104.	1.9	16
38	Polishing of ceramic tiles. Materials and Manufacturing Processes, 2002, 17, 401-413.	4.7	15
39	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.	2.5	15
40	A Review on Surgical Instruments of Knee Arthroscopic Debridement and Total Hip Arthroplasty. Procedia CIRP, 2017, 65, 291-298.	1.9	14
41	Understanding the cutting mechanisms of composite structured soft tissues. International Journal of Machine Tools and Manufacture, 2021, 161, 103685.	13.4	14
42	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.	3.0	13
43	Tool path generation for five-axis machining of blisks with barrel cutters. International Journal of Production Research, 2019, 57, 1300-1314.	7.5	12
44	Cr Powder-Activated Induction Brazing of Diamond Grits with Agâ€“Cuâ€“Zn Alloy. Materials and Manufacturing Processes, 2008, 23, 352-356.	4.7	11
45	High performance cutting of Zr-based bulk metallic glass: a review of chip formation. Procedia CIRP, 2018, 77, 421-424.	1.9	11
46	The advance of surgical blades in cutting soft biological tissue: a review. International Journal of Advanced Manufacturing Technology, 2021, 113, 1817-1832.	3.0	11
47	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.	5.6	11
48	Structure-Element Surface Modification Strategy Enhances the Antibacterial Performance of Zr-BMGs. ACS Applied Materials & Interfaces, 2022, 14, 8793-8803.	8.0	11
49	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	10
50	Multiple regression prediction model for cutting forces and surface roughness in micro-milling of TA2. Procedia CIRP, 2020, 89, 233-238.	1.9	10
51	Machinability study of unidirectional CFRP laminates by slot milling. International Journal of Advanced Manufacturing Technology, 2019, 100, 189-197.	3.0	9
52	Effect of cutting parameters on cutting force and surface quality in cutting of articular cartilage. Procedia CIRP, 2020, 89, 116-121.	1.9	9
53	Recent Advances in Soft Biological Tissue Manipulating Technologies. Chinese Journal of Mechanical Engineering (English Edition), 2022, 35, .	3.7	9
54	Synthesis of osmium borides by mechanochemical method. Journal of the American Ceramic Society, 2017, 100, 2419-2428.	3.8	8

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55	Controllable fabrication of solid state nanopores array by electron beam shrinking. International Journal of Machine Tools and Manufacture, 2020, 159, 103623.	13.4	7
56	Failure behavior and influence of surgical tool edges in soft tissue cutting. Journal of Manufacturing Processes, 2021, 68, 69-78.	5.9	7
57	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.	5.0	6
58	Light emission of Zr-based bulk metallic glass during high-speed cutting: From generation mechanism to control strategies. Journal of Materials Processing Technology, 2022, 305, 117598.	6.3	6
59	DYNAMIC ANALYSIS OF THE LENGTHENED SHRINK-FIT HOLDER AND CUTTING TOOL SYSTEM IN HIGH-SPEED MILLING. Machining Science and Technology, 2012, 16, 157-172.	2.5	5
60	Cryogenic drilling of aluminum-based printed circuit boards: a review and analysis. Machining Science and Technology, 2020, 24, 321-339.	2.5	5
61	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, .	3.7	5
62	Influence of annealing on microstructures and mechanical properties of arc-deposited AlCrTiSiN coating. Surface and Coatings Technology, 2021, 421, 127470.	4.8	5
63	Investigation of the chip adhesion mechanisms in micro-drilling of high ceramic-content particle-filled GFRPs. Machining Science and Technology, 2020, 24, 861-881.	2.5	4
64	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.	3.0	4
65	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	4
66	Effect of nozzles on cutting performance when machining with oil-on-water cooling technique. International Journal of Advanced Manufacturing Technology, 2021, 112, 313-322.	3.0	3
67	Amorphous Silicon Nanowires Grown on Silicon Oxide Film by Annealing. Nanoscale Research Letters, 2017, 12, 487.	5.7	1
68	Tool performance on micro-abrasive post-treatment coated carbide. International Journal of Advanced Manufacturing Technology, 2020, 109, 943-951.	3.0	1
69	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, 095441192110437.	1.8	0
70	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, , 095441192210985.	1.8	0