

# Zhen Tong

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8683299/publications.pdf>

Version: 2024-02-01

42  
papers

646  
citations

516710

16  
h-index

610901

24  
g-index

42  
all docs

42  
docs citations

42  
times ranked

422  
citing authors

#	ARTICLE	IF	CITATIONS
1	An atomistic investigation on the mechanism of machining nanostructures when using single tip and multi-tip diamond tools. <i>Applied Surface Science</i> , 2014, 290, 458-465.	6.1	60
2	Calibration of an interferometric on-machine probing system on an ultra-precision turning machine. <i>Measurement: Journal of the International Measurement Confederation</i> , 2018, 118, 96-104.	5.0	37
3	Fast-tool-servo micro-grooving freeform surfaces with embedded metrology. <i>CIRP Annals - Manufacturing Technology</i> , 2020, 69, 505-508.	3.6	36
4	Investigation of the shape transferability of nanoscale multi-tip diamond tools in the diamond turning of nanostructures. <i>Applied Surface Science</i> , 2014, 321, 495-502.	6.1	34
5	On-machine surface measurement and applications for ultra-precision machining: a state-of-the-art review. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 104, 831-847.	3.0	34
6	Investigation on the thermal effects during nanometric cutting process while using nanoscale diamond tools. <i>International Journal of Advanced Manufacturing Technology</i> , 2014, 74, 1709-1718.	3.0	33
7	Advances in the design and manufacturing of novel freeform optics. <i>International Journal of Extreme Manufacturing</i> , 2022, 4, 032004.	12.7	30
8	Molecular dynamic simulation of low-energy FIB irradiation induced damage in diamond. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2015, 358, 38-44.	1.4	27
9	Investigation of grinding mechanism of a 2D Cf/CaSiC composite by single-grain scratching. <i>Ceramics International</i> , 2019, 45, 13422-13430.	4.8	26
10	Investigation of focused ion beam induced damage in single crystal diamond tools. <i>Applied Surface Science</i> , 2015, 347, 727-735.	6.1	24
11	Development and Application of Interferometric On-Machine Surface Measurement for Ultraprecision Turning Process. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2019, 141, .	2.2	23
12	Review of geometric error measurement and compensation techniques of ultra-precision machine tools. <i>Light Advanced Manufacturing</i> , 2021, 2, 211.	5.1	23
13	Brazing diamond grits onto AA7075 aluminium alloy substrate with AgCuTi filler alloy by laser heating. <i>Chinese Journal of Aeronautics</i> , 2021, 34, 67-78.	5.3	21
14	Experimental and multiscale numerical investigation of wear mechanism and cutting performance of polycrystalline diamond tools in micro-end milling of titanium alloy Ti-6Al-4V. <i>International Journal of Refractory Metals and Hard Materials</i> , 2018, 74, 40-51.	3.8	19
15	Kinematics Error Compensation for a Surface Measurement Probe on an Ultra-Precision Turning Machine. <i>Micromachines</i> , 2018, 9, 334.	2.9	19
16	Investigation of a scale-up manufacturing approach for nanostructures by using a nanoscale multi-tip diamond tool. <i>International Journal of Advanced Manufacturing Technology</i> , 2015, 80, 699-710.	3.0	17
17	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
18	An atomistic investigation of the effect of strain on frictional properties of suspended graphene. <i>AIP Advances</i> , 2016, 6, .	1.3	16

#	ARTICLE	IF	CITATIONS
19	Theoretical model for subsurface microstructure prediction in micro-machining Ti-6Al-4V alloy "Experimental validation. International Journal of Mechanical Sciences, 2018, 148, 64-72.	6.7	15
20	Closed-loop form error measurement and compensation for FTS freeform machining. CIRP Annals - Manufacturing Technology, 2021, 70, 455-458.	3.6	14
21	Investigation of ion induced bending mechanism for nanostructures. Materials Research Express, 2015, 2, 015002.	1.6	13
22	Evolution of surface grain structure and mechanical properties in orthogonal cutting of titanium alloy. Journal of Materials Research, 2016, 31, 3919-3929.	2.6	12
23	Modulated diamond cutting for the generation of complicated micro/nanofluidic channels. Precision Engineering, 2019, 56, 136-142.	3.4	12
24	The influence of cutting parameters on the defect structure of subsurface in orthogonal cutting of titanium alloy. Journal of Materials Research, 2018, 33, 720-732.	2.6	10
25	Dislocation Dynamics-Based Modeling and Simulations of Subsurface Damages Microstructure of Orthogonal Cutting of Titanium Alloy. Micromachines, 2017, 8, 309.	2.9	9
26	Multiscale Analyses of Surface Failure Mechanism of Single-Crystal Silicon during Micro-Milling Process. Materials, 2017, 10, 1424.	2.9	9
27	Numerical Analysis of the Effects of Pulsed Laser Spot Heating Parameters on Brazing of Diamond Tools. Metals, 2019, 9, 612.	2.3	9
28	Analysis about diamond tool wear in nano-metric cutting of single crystal silicon using molecular dynamics method. , 2010, , .		8
29	Ion-beam-assisted fabrication and manipulation of metallic nanowires. Micro and Nano Letters, 2015, 10, 334-338.	1.3	6
30	A closed-loop feature-based FTS patterning and characterisation of functional structured surfaces. Surface Topography: Metrology and Properties, 2021, 9, 025012.	1.6	6
31	Integration of On-machine Surface Measurement into Fast Tool Servo Machining. Procedia CIRP, 2021, 101, 238-241.	1.9	4
32	Review on FIB-Induced Damage in Diamond Materials. Current Nanoscience, 2016, 12, 685-695.	1.2	4
33	Micro-grooving of brittle materials using textured diamond grinding wheels shaped by an integrated nanosecond laser system. International Journal of Advanced Manufacturing Technology, 2022, 119, 5389-5399.	3.0	4
34	Potential Analysis in Nanoturning of Single Crystal Silicon Using Molecular Dynamics. Advanced Materials Research, 2011, 239-242, 3236-3239.	0.3	3
35	A forward closed-loop virtual simulation system for milling process considering dynamics processing-machine interactions. International Journal of Advanced Manufacturing Technology, 2019, 104, 2317-2328.	3.0	3
36	A novel multiscale material plasticity simulation model for high-performance cutting AISI 4140 steel. International Journal of Advanced Manufacturing Technology, 2021, 116, 3891-3904.	3.0	3

#	ARTICLE	IF	CITATIONS
37	Computational Fluid Dynamics Analysis of an Aerostatic Journal Bearing with Slot-Entry Restrictors. <i>Advanced Science Letters</i> , 2011, 4, 2817-2821.	0.2	3
38	Nano-grooving by Using Multi-tip Diamond Tools. <i>Toxinology</i> , 2018, , 1-41.	0.2	1
39	Nano-grooving by Using Multi-tip Diamond Tools. <i>Micro/Nano Technologies</i> , 2018, , 97-137.	0.1	1
40	Development of the Concurrent Multiscale Discrete-Continuum Model and Its Application in Plasticity Size Effect. <i>Crystals</i> , 2022, 12, 329.	2.2	1
41	Deformation Mechanism of Diamond Nanocutting Single-Crystal Copper Using Molecular Dynamics Simulatio. <i>Advanced Materials Research</i> , 2011, 239-242, 2775-2778.	0.3	0
42	Nano-grooving by Using Multi-tip Diamond Tools. <i>Toxinology</i> , 2018, , 1-41.	0.2	0