

# Jianfeng Xu

## List of Publications by Year in descending order

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55  
papers

534  
citations

687335

13  
h-index

752679

20  
g-index

56  
all docs

56  
docs citations

56  
times ranked

384  
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of cutting parameters on the ductile-brittle transition of single-crystal calcium fluoride during ultra-precision cutting. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 89, 219-225.	3.0	35
2	A 2.3-ps RMS Resolution Time-to-Digital Converter Implemented in a Low-Cost Cyclone V FPGA. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2019, 68, 3647-3660.	4.7	35
3	Experimental investigation of machinability in laser-assisted machining of fused silica. <i>International Journal of Advanced Manufacturing Technology</i> , 2018, 97, 267-278.	3.0	29
4	A Novel Read-Out Electronics Design Based on 1-Bit Sigma-Delta Modulation. <i>IEEE Transactions on Nuclear Science</i> , 2017, 64, 820-828.	2.0	26
5	Saturated imbibition under the influence of gravity and geometry. <i>Journal of Colloid and Interface Science</i> , 2018, 521, 226-231.	9.4	25
6	An Advanced 100-Channel Readout System for Nuclear Imaging. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2019, 68, 3200-3210.	4.7	23
7	Finite element analysis of the effect of tool rake angle on brittle-to-ductile transition in diamond cutting of silicon. <i>International Journal of Advanced Manufacturing Technology</i> , 2019, 104, 881-891.	3.0	22
8	Evaluation of Various Scintillator Materials in Radiation Detector Design for Positron Emission Tomography (PET). <i>Crystals</i> , 2020, 10, 869.	2.2	22
9	Modified Wettability of Micro-structured Steel Surfaces Fabricated by Elliptical Vibration Diamond Cutting. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2022, 9, 1387-1397.	4.9	18
10	Multiresponse Optimization for Laser-Assisted Machining of Fused Silica Using Response Surface Methodology. <i>Silicon</i> , 2019, 11, 3049-3063.	3.3	17
11	SPH/FEM modeling for laser-assisted machining of fused silica. <i>International Journal of Advanced Manufacturing Technology</i> , 2020, 106, 2049-2064.	3.0	17
12	Molecular Dynamics Simulation on Cutting Mechanism in the Hybrid Machining Process of Single-Crystal Silicon. <i>Nanoscale Research Letters</i> , 2021, 16, 66.	5.7	17
13	A preclinical PET detector constructed with a monolithic scintillator ring. <i>Physics in Medicine and Biology</i> , 2019, 64, 155009.	3.0	15
14	Enhancing the ductile machinability of single-crystal silicon by laser-assisted diamond cutting. <i>International Journal of Advanced Manufacturing Technology</i> , 2022, 118, 3265-3282.	3.0	15
15	Experimental Study of the Cutting Force During Laser-Assisted Machining of Fused Silica Based on Artificial Neural Network and Response Surface Methodology. <i>Silicon</i> , 2019, 11, 1903-1916.	3.3	14
16	Ultra-precise surface processing of LYSO scintillator crystals for Positron Emission Tomography. <i>Applied Surface Science</i> , 2019, 469, 573-581.	6.1	14
17	A depth encoding PET detector using four crystals to SiPM coupling and light sharing window method. <i>Medical Physics</i> , 2019, 46, 3385-3398.	3.0	13
18	PET detectors with 127 ps CTR for the Tachyon-II time-of-flight PET scanner. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2019, 933, 48-55.	1.6	12

#	ARTICLE	IF	CITATIONS
19	Simulation study of a high-performance brain PET system with dodecahedral geometry. Medical Physics, 2018, 45, 3297-3304.	3.0	10
20	An 8.8 ps RMS Resolution Time-To-Digital Converter Implemented in a 60 nm FPGA with Real-Time Temperature Correction. Sensors, 2020, 20, 2172.	3.8	10
21	Methods to Compensate the Time Walk Errors in Timing Measurements for PET Detectors. IEEE Transactions on Radiation and Plasma Medical Sciences, 2020, 4, 555-562.	3.7	9
22	A simulation investigation on elliptical vibration cutting of single-crystal silicon. International Journal of Advanced Manufacturing Technology, 2020, 108, 2231-2243.	3.0	8
23	Thermal Field Modeling and Experimental Analysis in Laser-Assisted Machining of Fused Silica. Silicon, 2021, 13, 3163-3176.	3.3	8
24	Predistorting Projected Fringes for High-Accuracy 3-D Phase Mapping in Fringe Projection Profilometry. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	8
25	Effect of temperature on ductile-to-brittle transition in diamond cutting of silicon. International Journal of Advanced Manufacturing Technology, 2021, 116, 3447-3462.	3.0	8
26	Design study of a PET detector with 0.5 mm crystal pitch for high-resolution preclinical imaging. Physics in Medicine and Biology, 2021, 66, 135013.	3.0	8
27	Fabrication of Antireflection Micro/Nanostructures on the Surface of Aluminum Alloy by Femtosecond Laser. Micromachines, 2021, 12, 1406.	2.9	8
28	Mind-Tracker PET: A wearable PET camera for brain imaging. , 2017, , .		7
29	Methods to Improve Light Transport Efficiency in LYSO Crystals Based on Characteristics of Optical Reflectance. IEEE Transactions on Nuclear Science, 2019, 66, 2100-2106.	2.0	7
30	Molecular dynamics simulation on structure evolution of silica glass in nano-cutting at high temperature. Molecular Simulation, 2020, 46, 957-965.	2.0	7
31	Effect of tool rake angle on the material removal mechanism transition of single-crystal silicon: a molecular dynamics study. International Journal of Advanced Manufacturing Technology, 2021, 115, 3631-3644.	3.0	7
32	LOR-PET: a novel PET camera constructed with a monolithic scintillator ring. , 2017, , .		6
33	A novel fabrication technique of toughened TiC-based solid solution cermets using mechanochemical synthesis. Journal of Materials Science, 2020, 55, 12776-12788.	3.7	6
34	Molecular dynamic simulation of tool groove wear in nanoscale cutting of silicon. AIP Advances, 2020, 10, 015327.	1.3	6
35	Dimensionality reduction of ultrasonic array data for characterization of inclined defects based on supervised locality preserving projection. Ultrasonics, 2022, 119, 106625.	3.9	6
36	Design of an ultrasonic elliptical vibration device with two stationary points for ultra-precision cutting. Ultrasonics, 2022, 120, 106662.	3.9	6

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37	Nanoscale dynamics of MEMS TFC active slider. <i>Microsystem Technologies</i> , 2014, 20, 1767-1770.	2.0	5
38	Influence of micro grooves of diamond tool on silicon cutting: a molecular dynamic study. <i>Molecular Simulation</i> , 2020, 46, 92-101.	2.0	4
39	Simulation study of DOI measurement based on light-sharing-window method. , 2017, , .		3
40	Formation mechanism and compensation methods of profile error in focused ion beam milling of three-dimensional optical microstructures. <i>SN Applied Sciences</i> , 2020, 2, 1.	2.9	3
41	Design of a self-centring drill bit for orthopaedic surgery: A systematic comparison of the drilling performance. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 123, 104727.	3.1	3
42	Experimental studies of the decoding performances of a semi-monolithic scintillator detector. , 2018, , .		2
43	Depth of Interaction Measurements Based on Rectangular Light Sharing Window Technology and Nine-Crystals-to-One-SiPM Coupling Method. <i>IEEE Transactions on Radiation and Plasma Medical Sciences</i> , 2021, 5, 306-314.	3.7	2
44	Numerical Modeling and Experimental Study of Laser Assisted Machining of Fused Silica. <i>Silicon</i> , 0, , 1.	3.3	2
45	A Novel Portable Gamma Radiation Sensor Based on a Monolithic Lutetium-Yttrium Oxyorthosilicate Ring. <i>Sensors</i> , 2021, 21, 3376.	3.8	2
46	Quantum effects of gas flow in nanochannels. <i>Nanotechnology Reviews</i> , 2021, 10, 254-263.	5.8	1
47	Molecular Dynamic Simulation of Micro-Structured Diamond Tool in Silicon Carbide Cutting. <i>Journal of Micro and Nano-Manufacturing</i> , 2021, , .	0.7	1
48	Optical Simulation and Experimental Assessment with Timeâ€‘Walk Correction of TOFâ€‘PET Detectors with Multi-Ended Readouts. <i>Sensors</i> , 2021, 21, 4681.	3.8	1
49	Development and Evaluation of a Dual-Layer-Offset PET Detector Constructed with Different Reflectors. <i>Crystals</i> , 2022, 12, 93.	2.2	1
50	Characteristics of melt convection during Kyropoulos sapphire crystal growth. <i>International Journal of Materials Research</i> , 2014, 105, 961-967.	0.3	0
51	Collision-Free Path Planning of Dual-Manipulator System Based on Energy Conversion. , 2018, , .		0
52	Pipeline-based real-time single event data sorter for coincidence detection. , 2019, , .		0
53	Design, fabrication and evaluation of anti-reflection films coated on LYSO scintillators. , 2019, , .		0
54	A Novel Preclinical PET Scanner Constructed with Stacks of Sliced Monolithic Scintillator Rings. , 2019, , .		0

#	ARTICLE	IF	CITATIONS
55	Effect of Air Damping on the Vibration Characteristics of Hemispherical Fused Silica Resonators. , 2022, , .		0