

# Taihua Zhang

## List of Publications by Year in descending order

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31  
papers

460  
citations

687363

13  
h-index

713466

21  
g-index

31  
all docs

31  
docs citations

31  
times ranked

392  
citing authors

#	ARTICLE	IF	CITATIONS
1	Experimental verification and theoretical analysis of the relationships between hardness, elastic modulus, and the work of indentation. <i>Applied Physics Letters</i> , 2008, 92, .	3.3	51
2	Influence of indenter tip roundness on hardness behavior in nanoindentation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 445-446, 323-327.	5.6	41
3	Nanoindentation size effect on stochastic behavior of incipient plasticity in a LiTaO <sub>3</sub> single crystal. <i>Engineering Fracture Mechanics</i> , 2020, 226, 106877.	4.3	40
4	The effects of tensile and compressive dwells on creep-fatigue behavior and fracture mechanism in welded joint of P92 steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 813, 141129.	5.6	26
5	Crystallographic orientation effect on the incipient plasticity and its stochastic behavior of a sapphire single crystal by spherical nanoindentation. <i>Ceramics International</i> , 2020, 46, 15554-15564.	4.8	24
6	Effect of Forced Air Cooling on the Microstructures, Tensile Strength, and Hardness Distribution of Dissimilar Friction Stir Welded AA5A06-AA6061 Joints. <i>Metals</i> , 2019, 9, 304.	2.3	23
7	Evaluation of Non-Equibiaxial Residual Stresses in Metallic Materials via Instrumented Spherical Indentation. <i>Metals</i> , 2020, 10, 440.	2.3	23
8	Nanoindentation Investigation on the Size-Dependent Creep Behavior in a Zr-Cu-Ag-Al Bulk Metallic Glass. <i>Metals</i> , 2019, 9, 613.	2.3	20
9	Nanoindentation-Induced Pile-Up in the Residual Impression of Crystalline Cu with Different Grain Size. <i>Crystals</i> , 2018, 8, 9.	2.2	19
10	Numerical investigation of spherical indentation on elastic-power-law strain-hardening solids with non-equibiaxial residual stresses. <i>MRS Communications</i> , 2019, 9, 360-369.	1.8	17
11	A cost-effective voice coil motor-based portable micro-indentation device for in situ testing. <i>Measurement: Journal of the International Measurement Confederation</i> , 2020, 165, 108105.	5.0	17
12	Nanoindentation Hardness Distribution and Strain Field and Fracture Evolution in Dissimilar Friction Stir-Welded AA 6061-AA 5A06 Aluminum Alloy Joints. <i>Advances in Materials Science and Engineering</i> , 2018, 2018, 1-11.	1.8	16
13	Room-Temperature Creep Behavior and Activation Volume of Dislocation Nucleation in a LiTaO <sub>3</sub> Single Crystal by Nanoindentation. <i>Materials</i> , 2019, 12, 1683.	2.9	15
14	An integrated method to determine elastic-plastic parameters by instrumented spherical indentation. <i>Journal of Materials Research</i> , 2014, 29, 1095-1103.	2.6	14
15	A novel torsion testing technique for micro-scale specimens based on electromagnetism. <i>Review of Scientific Instruments</i> , 2014, 85, 095106.	1.3	13
16	On the microstructural evolution and room-temperature creep behaviour of 9%Cr steel weld joint under prior creep-fatigue interaction. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2021, 44, 444-460.	3.4	13
17	Identification of the elastic-plastic constitutive model for measuring mechanical properties of metals by instrumented spherical indentation test. <i>MRS Communications</i> , 2017, 7, 221-228.	1.8	11
18	Effect of Applied Stress on the Mechanical Properties of a Zr-Cu-Ag-Al Bulk Metallic Glass with Two Different Structure States. <i>Materials</i> , 2017, 10, 711.	2.9	10

#	ARTICLE	IF	CITATIONS
19	Testing Effects on Shear Transformation Zone Size of Metallic Glassy Films Under Nanoindentation. <i>Micromachines</i> , 2018, 9, 636.	2.9	10
20	Orientation-Independent Yield Stress and Activation Volume of Dislocation Nucleation in LiTaO <sub>3</sub> Single Crystal by Nanoindentation. <i>Materials</i> , 2019, 12, 2799.	2.9	9
21	The effects of prior creep-fatigue on the strain rate sensitivity of a P92 welded joint. <i>Journal of Materials Science</i> , 2021, 56, 7111-7128.	3.7	9
22	Annealing effect on the structure relaxation and mechanical properties of a Polytetrafluoroethylene film by RF-magnetron sputtering. <i>Surface and Coatings Technology</i> , 2021, 405, 126591.	4.8	8
23	Relationships between the work recovery ratio of indentation and plastic parameters for instrumented spherical indentation. <i>MRS Communications</i> , 2015, 5, 89-94.	1.8	6
24	Microcompression Method for Determining the Size-Dependent Elastic Properties of PMMA Microcapsules Containing <i>n</i> -Octadecane. <i>Langmuir</i> , 2020, 36, 5176-5185.	3.5	6
25	Evaluation of subsurface damage layer of BK7 glass via cross-sectional surface nanoindentation. <i>Precision Engineering</i> , 2021, 67, 293-300.	3.4	4
26	Nanoindentation Characterization of Creep-fatigue Interaction on Local Creep Behavior of P92 Steel Welded Joint. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2021, 34, .	3.7	4
27	An instrumented indentation method for evaluating the effect of hydrostatic pressure on the yield strength of solid polymers. <i>Journal of Materials Research</i> , 2014, 29, 2973-2981.	2.6	3
28	Revealing Nanoindentation Size-Dependent Creep Behavior in a La-Based Metallic Glassy Film. <i>Nanomaterials</i> , 2019, 9, 1712.	4.1	3
29	Experimental Study of the Mechanical Properties of a Novel Supramolecular Polymer Filament Using a Microtensile Tester Based on Electronic Balance. <i>Experimental Techniques</i> , 2016, 40, 737-742.	1.5	2
30	Revealing the Plastic Mode of Time-Dependent Deformation of a LiTaO <sub>3</sub> Single Crystal by Nanoindentation. <i>Micromachines</i> , 2020, 11, 878.	2.9	2
31	Softening Behaviors of Severely Deformed Zn Alloy Studied by the Nanoindentation. <i>Coatings</i> , 2020, 10, 803.	2.6	1