## Xiang Guo

## List of Publications by Citations

Source: https://exaly.com/author-pdf/4066169/xiang-guo-publications-by-citations.pdf

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

51	804	18	<b>26</b>
papers	citations	h-index	g-index
52	902	4	4.27
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
51	Microstructures-based constitutive analysis for mechanical properties of gradient-nanostructured 304 stainless steels. <i>Acta Materialia</i> , <b>2017</b> , 128, 375-390	8.4	60
50	Analysis of the twin spacing and grain size effects on mechanical properties in hierarchically nanotwinned face-centered cubic metals based on a mechanism-based plasticity model. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2015</b> , 76, 162-179	5	59
49	Experimental measurement of wind-sand flux and sand transport for naturally mixed sands. <i>Physical Review E</i> , <b>2002</b> , 66, 021305	2.4	48
48	Micromechanical simulation of fracture behavior of bimodal nanostructured metals. <i>Materials Science &amp; Microstructure and Processing</i> , <b>2014</b> , 618, 479-489	5.3	38
47	Postbuckling of carbon nanotubes by atomic-scale finite element. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 124308	2.5	37
46	Determination of fracture toughness of AZ31 Mg alloy using the cohesive finite element method. <i>Engineering Fracture Mechanics</i> , <b>2012</b> , 96, 401-415	4.2	36
45	Effects of strain rate on the low cycle fatigue behavior of AZ31B magnesium alloy processed by SMAT. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 735, 536-546	5.7	36
44	Bending buckling of single-walled carbon nanotubes by atomic-scale finite element. <i>Composites Part B: Engineering</i> , <b>2008</b> , 39, 202-208	10	35
43	Investigation of non-local cracking in layered stainless steel with nanostructured interface. <i>Scripta Materialia</i> , <b>2010</b> , 63, 403-406	5.6	27
42	A continuum model for zigzag single-walled carbon nanotubes. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 08311	03.4	26
41	Ductility enhancement of layered stainless steel with nanograined interface layers. <i>Computational Materials Science</i> , <b>2012</b> , 55, 350-355	3.2	24
40	Simulation of ballistic performance of a two-layered structure of nanostructured metal and ceramic. <i>Composite Structures</i> , <b>2016</b> , 157, 163-173	5.3	23
39	Effect of surface mechanical attrition treatment on corrosion fatigue behavior of AZ31B magnesium alloy. <i>International Journal of Fatigue</i> , <b>2019</b> , 127, 461-469	5	22
38	Mesh dependence of transverse cracking in laminated metals with nanograined interface layers. Engineering Fracture Mechanics, <b>2013</b> , 105, 211-220	4.2	20
37	Static and dynamic mechanical behaviors of gradient-nanotwinned stainless steel with a composite structure: Experiments and modeling. <i>International Journal of Plasticity</i> , <b>2019</b> , 114, 272-288	7.6	20
36	Critical Strain of Carbon Nanotubes: An Atomic-Scale Finite Element Study. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2007</b> , 74, 347-351	2.7	19
35	Numerical simulation of ballistic performance of bimodal nanostructured metals. <i>Materials Science</i> & amp; Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 630, 13-26	5.3	18

34	Numerical investigation of fracture behavior of nanostructured Cu with bimodal grain size distribution. <i>Acta Mechanica</i> , <b>2014</b> , 225, 1093-1106	2.1	18	
33	Computer simulation of strength and ductility of nanotwin-strengthened coarse-grained metals. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2014</b> , 22, 075014	2	18	
32	Simulation of ballistic performance of coarse-grained metals strengthened by nanotwinned regions. <i>Modelling and Simulation in Materials Science and Engineering</i> , <b>2015</b> , 23, 085009	2	18	
31	The direct and indirect effects of nanotwin volume fraction on the strength and ductility of coarse-grained metals. <i>Materials Science &amp; Discourse and Processing</i> , 2016, 657, 234-243	5.3	18	
30	3D microstructure-based simulations of strength and ductility of bimodal nanostructured metals. <i>Materials Science &amp; amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 677, 76-88	5.3	15	
29	Prediction of mechanical properties in bimodal nanotwinned metals with a composite structure. <i>Composites Science and Technology</i> , <b>2016</b> , 123, 222-231	8.6	15	
28	The saturation state of strength and ductility of bimodal nanostructured metals. <i>Materials Letters</i> , <b>2016</b> , 175, 131-134	3.3	14	
27	Fatigue crack propagation behavior of fuel cell membranes after chemical degradation. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 27653-27664	6.7	14	
26	Mechanism for buckling of shield tunnel linings under hydrostatic pressure. <i>Tunnelling and Underground Space Technology</i> , <b>2015</b> , 49, 144-155	5.7	13	
25	A study of dynamic plasticity in austenite stainless steels with a gradient distribution of nanoscale twins. <i>Scripta Materialia</i> , <b>2017</b> , 133, 49-53	5.6	10	
24	Micromechanical modeling for mechanical properties of gradient-nanotwinned metals with a composite microstructure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 703, 180-186	5.3	9	
23	Numerical Investigation of the Bilinear Softening Law in the Cohesive Crack Model for Normal-Strength and High-Strength Concrete. <i>Advances in Structural Engineering</i> , <b>2012</b> , 15, 373-387	1.9	9	
22	Comment on "relevant length scale of barchan dunes". Physical Review Letters, 2004, 93, 039401	7.4	9	
21	Simulating Size and Volume Fraction-Dependent Strength and Ductility of Nanotwinned Composite Copper. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2016</b> , 83,	2.7	9	
20	Mechanism for the Pseudoelastic Behavior of FCC Shape Memory Nanowires. <i>Experimental Mechanics</i> , <b>2009</b> , 49, 183-190	2.6	8	
19	3D cohesive modeling of nanostructured metallic alloys with a Weibull random field in torsional fatigue. <i>International Journal of Mechanical Sciences</i> , <b>2015</b> , 101-102, 227-240	5.5	7	
18	Interface effects on the strength and ductility of bimodal nanostructured metals. <i>Acta Mechanica</i> , <b>2018</b> , 229, 3475-3487	2.1	6	
17	Effect of hydride precipitation on the fatigue cracking behavior in a zirconium alloy cladding tube. <i>International Journal of Fatigue</i> , <b>2019</b> , 129, 105230	5	6	

16	Axial-torsional high-cycle fatigue of both coarse-grained and nanostructured metals: A 3D cohesive finite element model with uncertainty characteristics. <i>Engineering Fracture Mechanics</i> , <b>2018</b> , 195, 30-43	4.2	5
15	Computational Investigation of Effects of Grain Size on Ballistic Performance of Copper.  International Journal for Computational Methods in Engineering Science and Mechanics, 2018, 19, 1-10	0.7	5
14	Surface Stress Effects on the Yield Strength in Nanotwinned Polycrystal Face-Centered-Cubic Metallic Nanowires. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2014</b> , 81,	2.7	5
13	Tensile Failure Modes in Nanograined Metals with Nanotwinned Regions. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2018</b> , 49, 5001-5014	2.3	5
12	Microstructure-Property Relations in the Tensile Behavior of Bimodal Nanostructured Metals. <i>Advanced Engineering Materials</i> , <b>2020</b> , 22, 2000097	3.5	4
11	The limit velocity and limit displacement of nanotwin-strengthened metals under ballistic impact. <i>Acta Mechanica</i> , <b>2018</b> , 229, 1741-1757	2.1	4
10	Influences of nanotwin volume fraction on the ballistic performance of coarse-grained metals. <i>Theoretical and Applied Mechanics Letters</i> , <b>2017</b> , 7, 265-268	1.8	3
9	Biaxial fatigue crack growth in proton exchange membrane of fuel cells based on cyclic cohesive finite element method. <i>International Journal of Mechanical Sciences</i> , <b>2021</b> , 189, 105946	5.5	3
8	Constitutive modeling of size-dependent deformation behavior in nano-dual-phase glass-crystal alloys. <i>International Journal of Plasticity</i> , <b>2021</b> , 137, 102918	7.6	3
7	Ballistic Performance of Nanostructured Metals Toughened by Elliptical Coarse-Grained Inclusions: A Finite Element Study with Failure Analysis. <i>Materials</i> , <b>2018</b> , 11,	3.5	2
6	Torsional Buckling of Single-Walled Carbon Nanotubes. <i>Computational Methods in Applied Sciences</i> (Springer), <b>2008</b> , 1-8	0.4	1
5	Tuning the strength-ductility synergy of nanograined Cu through nanotwin volume fraction. <i>Computational Materials Science</i> , <b>2022</b> , 203, 111073	3.2	O
4	Simulation of ductile fracture of zirconium alloys based on triaxiality dependent cohesive zone model. <i>Acta Mechanica</i> , <b>2021</b> , 232, 3723-3736	2.1	О
3	Local Monte Carlo Method for Fatigue Analysis of Coarse-Grained Metals with a Nanograined Surface Layer. <i>Metals</i> , <b>2018</b> , 8, 479	2.3	
2	Research on the Theoretical Predictiion of the Electric Field Generated by Wind-Blown Sand. <i>Key Engineering Materials</i> , <b>2003</b> , 243-244, 583-588	0.4	
1	Ballistic Performance of Bimodal Nanostructured and Nanotwin-Strengthened Metals <b>2018</b> , 205-224		