

Junlan Wang

List of Publications by Year in descending order

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66
papers

1,930
citations

257101

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264894

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69
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docs citations

69
times ranked

2061
citing authors

#	ARTICLE	IF	CITATIONS
1	Engineering the Interface: Effects of Interfacial Adhesion and Substrate Thickness on the Ductility of Polymer-supported Metal Films. <i>Experimental Mechanics</i> , 2022, 62, 49-58.	1.1	5
2	Effect of pulse duration and confinement on laser-induced stress waves for high strain-rate material testing. <i>Optics and Lasers in Engineering</i> , 2022, 151, 106919.	2.0	1
3	Microstructure, mechanical properties and elemental composition of the terrestrial isopod <i>Armadillidium vulgare</i> cuticle. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 132, 105299.	1.5	2
4	All solid thick oxide cathodes based on low temperature sintering for high energy solid batteries. <i>Energy and Environmental Science</i> , 2021, 14, 5044-5056.	15.6	41
5	Evolution of the Laser-Induced Spallation Technique in Film Adhesion Measurement. <i>Applied Mechanics Reviews</i> , 2021, 73, 030802.	4.5	26
6	Effect of annealing process on mechanical properties of n-type $\text{La}_{1.9}\text{Ce}_{0.1}\text{CuO}_4$ superconducting films by depth sensing nanoindentation. <i>Materials Research Express</i> , 2019, 6, 056418.	0.8	0
7	Residual Stresses in Cu/Ni Multilayer Thin Films Measured Using the Si^2I^* Method. <i>Experimental Mechanics</i> , 2019, 59, 111-120.	1.1	14
8	Optical properties of VO_2 thin films deposited on different glass substrates. <i>Optical Materials Express</i> , 2019, 9, 663.	1.6	20
9	The limiting layer of fish scales: Structure and properties. <i>Acta Biomaterialia</i> , 2018, 67, 319-330.	4.1	53
10	Coupled annealing temperature and layer thickness effect on strengthening mechanisms of Ti/Ni multilayer thin films. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 88, 72-82.	2.3	28
11	Laser-Induced Spallation of Microsphere Monolayers. <i>Langmuir</i> , 2016, 32, 7730-7734.	1.6	4
12	Multilayer $\text{ITO}/\text{VO}_2/\text{TiO}_2$ thin films for control of solar and thermal spectra. <i>Solar Energy Materials and Solar Cells</i> , 2016, 154, 88-93.	3.0	29
13	High Strain-Rate Ductile to Brittle Transition in Nanoporous Zeolite. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016, , 129-139.	0.3	0
14	Microstructural evolution and surface strengthening of pulse-laser treated Ti/Ni multilayer thin films. <i>Extreme Mechanics Letters</i> , 2015, 4, 45-51.	2.0	10
15	Influence of grain size on transition temperature of thermochromic VO_2 . <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	82
16	Influence of Na diffusion on thermochromism of vanadium oxide films and suppression through mixed-alkali effect. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 200, 50-58.	1.7	15
17	Orientation-Dependent Hardness in As-Deposited and Low-Temperature Annealed Ti/Ni Multilayer Thin Films. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2015, 82, .	1.1	13
18	Coupled effects of deposition and annealing temperatures on optical, electrical and mechanical properties of titanium oxide thin films. <i>Vacuum</i> , 2015, 120, 155-161.	1.6	11

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19	Laser-induced surface acoustic waves: An alternative method to nanoindentation for the mechanical characterization of porous nanostructured thin film electrode media. <i>Mechanics of Materials</i> , 2015, 91, 333-342.	1.7	26
20	Correlation Between Laser-Induced Surface Acoustic Waves and Nanoindentation on Elastic Modulus Measurement of a Nanoporous Zeolite Thin Film. <i>Experimental Mechanics</i> , 2015, 55, 647-650.	1.1	7
21	Microstructure and Mechanical Anisotropy of Crab Cancer Magister Exoskeletons. <i>Experimental Mechanics</i> , 2014, 54, 229-239.	1.1	16
22	A Force Domain Analog-to-Digital Converter Applied to Microscale Tensile Test. <i>Experimental Mechanics</i> , 2013, 53, 795-806.	1.1	6
23	Molecular dynamics simulation of thin film interfacial strength dependency on lattice mismatch. <i>Thin Solid Films</i> , 2013, 537, 190-197.	0.8	17
24	Optical properties of super stoichiometric TiN _{1+x} thin films. <i>Thin Solid Films</i> , 2012, 524, 272-277.	0.8	7
25	Bioactive Materials for Regenerative Medicine: Zeolite-Hydroxyapatite Bone Mimetic Coatings. <i>Advanced Engineering Materials</i> , 2012, 14, 200-206.	1.6	30
26	Zeolite as a wear-resistant coating. <i>Microporous and Mesoporous Materials</i> , 2012, 151, 346-351.	2.2	23
27	Insight into On-Wafer Crystallization of Pure-Silica-Zeolite Films through Nutrient Replenishment. <i>Langmuir</i> , 2011, 27, 3283-3285.	1.6	4
28	Microstructure and Mechanical Properties of Dungeness Crab Exoskeletons. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2011, , 93-99.	0.3	3
29	An overview of interface-dominated deformation mechanisms in metallic multilayers. <i>Current Opinion in Solid State and Materials Science</i> , 2011, 15, 20-28.	5.6	390
30	Thermal fracture of oxidized polydimethylsiloxane during soft lithography of nanopost arrays. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 054013.	1.5	34
31	Finite element simulation of cell-substrate decohesion by laser-induced stress waves. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2010, 3, 268-277.	1.5	18
32	Pure-Silica-Zeolite Low-Dielectric Constant Materials. , 2009, , 335-364.		2
33	Engineering size-scaling of plastic deformation in nanoscale asperities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 9580-9585.	3.3	21
34	On-Wafer Crystallization of Ultralow-κ Pure Silica Zeolite Films. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4777-4780.	7.2	30
35	Mechanical behavior of Au-In intermetallics for low temperature solder diffusion bonding. <i>Journal of Materials Science</i> , 2009, 44, 6155-6161.	1.7	18
36	High strain-rate spallation and fracture of tungsten by laser-induced stress waves. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009, 504, 73-80.	2.6	24

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37	Sample boundary effect in nanoindentation of nano and microscale surface structures. Journal of the Mechanics and Physics of Solids, 2009, 57, 812-827.	2.3	17
38	Hydrofluoric-Acid-Resistant and Hydrophobic Pure-Silica-Zeolite MEL Low-Dielectric-Constant Films. Langmuir, 2009, 25, 5039-5044.	1.6	18
39	Numerical simulation of laser-induced thin film delamination. Thin Solid Films, 2008, 516, 971-981.	0.8	15
40	MEL-Type Pure-Silica Zeolite Nanocrystals Prepared by an Evaporation-Assisted Two-Stage Synthesis Method as Ultra-Low-k Materials. Advanced Functional Materials, 2008, 18, 1732-1738.	7.8	39
41	Pure-Silica Zeolite MFI and MEL Low-Dielectric-Constant Films with Fluoro-Organic Functionalization. Advanced Functional Materials, 2008, 18, 3454-3460.	7.8	68
42	Hydrophobicity-dependent friction and wear of spin-on zeolite thin films. Scripta Materialia, 2008, 58, 41-44.	2.6	13
43	Pressure and Temperature Effects on Stoichiometry and Microstructure of Nitrogen-Rich TiN Thin Films Synthesized via Reactive Magnetron DC-Sputtering. Journal of Nanomaterials, 2008, 2008, 1-9.	1.5	26
44	Nanomechanics and Nanostructured Multifunctional Materials: Experiments, Theories, and Simulations. Journal of Nanomaterials, 2008, 2008, 1-1.	1.5	3
45	Effect of calcination and polycrystallinity on mechanical properties of nanoporous MFI zeolites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 456, 58-63.	2.6	21
46	Grain size and grain boundary effects on the mechanical behavior of fully stabilized zirconia investigated by nanoindentation. Scripta Materialia, 2007, 56, 1095-1098.	2.6	54
47	Mechanical characterization of zeolite low dielectric constant thin films by nanoindentation. Thin Solid Films, 2007, 515, 3164-3170.	0.8	56
48	Design and Analysis of a MEMS Based Auto-Focusing System. , 2007, , .		0
49	Size effect in contact compression of nano- and microscale pyramid structures. Acta Materialia, 2006, 54, 3973-3982.	3.8	30
50	Surface Residual Stress Measurement Using Curvature Interferometry. Experimental Mechanics, 2006, 46, 39-46.	1.1	27
51	Pure-shear Failure of Thin Films by Laser-induced Shear Waves. Experimental Mechanics, 2006, 46, 637-645.	1.1	19
52	Mechanical and Dielectric Properties of Pure-Silica-Zeolite Low-k Materials. Angewandte Chemie - International Edition, 2006, 45, 6329-6332.	7.2	136
53	Interfacial adhesion of nanoporous zeolite thin films. Journal of Materials Research, 2006, 21, 505-511.	1.2	18
54	Cell adhesion measurement by laser-induced stress waves. Journal of Applied Physics, 2006, 100, 084701.	1.1	31

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55	Pulsed-laser induced shock wave in fused silica for thin film interfacial testing. , 2005, , .		0
56	Interfacial Adhesion of Pure-Silica-Zeolite Low-k Thin Films. Materials Research Society Symposia Proceedings, 2005, 875, 1.	0.1	0
57	Tensile and mixed-mode strength of a thin film-substrate interface under laser induced pulse loading. Journal of the Mechanics and Physics of Solids, 2004, 52, 999-1022.	2.3	50
58	Interfacial Adhesion of Nanoporous Zeolite Thin Films. , 2004, , .		0
59	Mixed-mode failure of thin films using laser-generated shear waves. Experimental Mechanics, 2003, 43, 323-330.	1.1	31
60	Dislocation Nucleation and Segregation in Nano-scale Contact of Stepped Surfaces. Materials Research Society Symposia Proceedings, 2003, 795, 39.	0.1	5
61	Laser-induced decompression shock development in fused silica. Journal of Applied Physics, 2003, 93, 9529-9536.	1.1	41
62	A Novel Technique for Mixed-mode Thin Film Adhesion Measurement. Materials Research Society Symposia Proceedings, 2002, 750, 1.	0.1	3
63	A parametric study of laser induced thin film spallation. Experimental Mechanics, 2002, 42, 74-83.	1.1	107
64	A parametric study of laser induced thin film spallation. , 2002, 42, 74.		22
65	Point-wise and whole-field laser speckle intensity fluctuation measurements applied to botanical specimens. Optics and Lasers in Engineering, 1997, 28, 443-456.	2.0	20
66	Correction to: Residual Stresses in Cu/Ni Multilayer Thin Films Measured Using the Sin2ψ Method. Experimental Mechanics, 0, , .	1.1	0