

# David Bahr

## List of Publications by Year in descending order

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265  
papers

6,945  
citations

53794

45  
h-index

79698

73  
g-index

268  
all docs

268  
docs citations

268  
times ranked

5714  
citing authors

#	ARTICLE	IF	CITATIONS
1	Non-linear deformation mechanisms during nanoindentation. <i>Acta Materialia</i> , 1998, 46, 3605-3617.	7.9	355
2	Efficiency of energy conversion for devices containing a piezoelectric component. <i>Journal of Micromechanics and Microengineering</i> , 2004, 14, 717-721.	2.6	233
3	Thermal and mechanical properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/cellulose nanowhiskers composites. <i>Polymer</i> , 2010, 51, 2652-2660.	3.8	213
4	Hydrogen effects on dislocation activity in austenitic stainless steel. <i>Acta Materialia</i> , 2006, 54, 2677-2684.	7.9	202
5	Yield strength predictions from the plastic zone around nanocontacts. <i>Acta Materialia</i> , 1998, 47, 333-343.	7.9	197
6	Plastic strain and strain gradients at very small indentation depths. <i>Acta Materialia</i> , 2001, 49, 1021-1034.	7.9	162
7	Multiscale modeling and simulation of deformation in nanoscale metallic multilayer systems. <i>International Journal of Plasticity</i> , 2014, 52, 33-50.	8.8	128
8	Mechanical properties of cubic zinc carboxylate IRMOF-1 metal-organic framework crystals. <i>Physical Review B</i> , 2007, 76, .	3.2	124
9	Analysis of heterogeneous deformation and dislocation dynamics in single crystal micropillars under compression. <i>International Journal of Plasticity</i> , 2010, 26, 239-257.	8.8	120
10	Design, fabrication and testing of the P3 micro heat engine. <i>Sensors and Actuators A: Physical</i> , 2003, 104, 290-298.	4.1	108
11	Analysis of plastic deformation in nanoscale metallic multilayers with coherent and incoherent interfaces. <i>International Journal of Plasticity</i> , 2011, 27, 1618-1639.	8.8	108
12	Effects of Cellulose Nanowhiskers on Mechanical, Dielectric, and Rheological Properties of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/Cellulose Nanowhisiker Composites. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 2941-2951.	3.7	108
13	Molecular dynamics simulations of plastic deformation in Nb/NbC multilayers. <i>International Journal of Plasticity</i> , 2014, 59, 119-132.	8.8	102
14	Characterization of flexible ECoG electrode arrays for chronic recording in awake rats. <i>Journal of Neuroscience Methods</i> , 2008, 173, 279-285.	2.5	99
15	Direct observation of plasticity and quantitative hardness measurements in single crystal cyclotrimethylene trinitramine by nanoindentation. <i>Philosophical Magazine</i> , 2009, 89, 2381-2402.	1.6	98
16	The coordinated buckling of carbon nanotube turfs under uniform compression. <i>Nanotechnology</i> , 2008, 19, 175704.	2.6	97
17	Elastic loading and elastoplastic unloading from nanometer level indentations for modulus determinations. <i>Journal of Materials Research</i> , 1998, 13, 421-439.	2.6	96
18	Optimization of electromechanical coupling for a thin-film PZT membrane: I. Modeling. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 1797-1803.	2.6	93

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19	Mechanical behavior of a carbon nanotube turf. <i>Scripta Materialia</i> , 2007, 56, 157-160.	5.2	93
20	A MEMS fabricated flexible electrode array for recording surface field potentials. <i>Journal of Neuroscience Methods</i> , 2006, 153, 147-153.	2.5	89
21	Nanoindentation-induced defect–interface interactions: phenomena, methods and limitations. <i>Acta Materialia</i> , 1999, 47, 4115-4123.	7.9	86
22	The influence of cellulose nanocrystals on the microstructure of cement paste. <i>Cement and Concrete Composites</i> , 2016, 74, 164-173.	10.7	86
23	Adhesion measurements using telephone cord buckles. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 443, 150-155.	5.6	85
24	Energy considerations regarding yield points during indentation. <i>Journal of Materials Research</i> , 1999, 14, 2269-2275.	2.6	81
25	Mechanical behavior assessment of sucrose using nanoindentation. <i>Journal of Materials Research</i> , 2007, 22, 2037-2045.	2.6	80
26	Optimization of electromechanical coupling for a thin-film PZT membrane: II. Experiment. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 1804-1809.	2.6	79
27	A resonant frequency tunable, extensional mode piezoelectric vibration harvesting mechanism. <i>Smart Materials and Structures</i> , 2008, 17, 065021.	3.5	77
28	Shock engineering the additive manufactured graphene-metal nanocomposite with high density nanotwins and dislocations for ultra-stable mechanical properties. <i>Acta Materialia</i> , 2018, 150, 360-372.	7.9	77
29	Mechanical compliance of photolithographically defined vertically aligned carbon nanotube turf. <i>Journal of Materials Science</i> , 2006, 41, 7872-7878.	3.7	76
30	Deformation mechanisms and strength in nanoscale multilayer metallic composites with coherent and incoherent interfaces. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	76
31	Recent Developments in Thin Film Adhesion Measurement. <i>IEEE Transactions on Device and Materials Reliability</i> , 2004, 4, 163-168.	2.0	74
32	Crystal orientation effect on dislocation nucleation and multiplication in FCC single crystal under uniaxial loading. <i>International Journal of Plasticity</i> , 2014, 52, 133-146.	8.8	74
33	Adhesion and acoustic emission analysis of failures in nitride films with a metal interlayer. <i>Acta Materialia</i> , 1997, 45, 5163-5175.	7.9	68
34	Adhesive properties of some fluoropolymer binders with the insensitive explosive 1,3,5-triamino-2,4,6-trinitrobenzene (TATB). <i>Journal of Colloid and Interface Science</i> , 2010, 352, 535-541.	9.4	60
35	Identifying slip systems around indentations in FCC metals. <i>Scripta Materialia</i> , 2003, 49, 1055-1060.	5.2	59
36	The effect of crystal orientation on the stochastic behavior of dislocation nucleation and multiplication during nanoindentation. <i>Acta Materialia</i> , 2013, 61, 1421-1431.	7.9	58

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37	Evaluation of contacts for a MEMS thermal switch. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 105012.	2.6	57
38	Mechanical deformation of PZT thin films for MEMS applications. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1999, 259, 126-131.	5.6	56
39	Dislocation Nucleation and Source Activation during Nanoindentation Yield Points. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2249-2255.	2.2	55
40	The impact of a variety of point defects on the inception of plastic deformation in dislocation-free metals. <i>Scripta Materialia</i> , 2012, 66, 339-342.	5.2	52
41	Fabrication and characterization of a thermal switch. <i>Sensors and Actuators A: Physical</i> , 2007, 133, 55-63.	4.1	51
42	Efficiency of energy conversion by piezoelectrics. <i>Applied Physics Letters</i> , 2006, 89, 104107.	3.3	49
43	Improved electro-mechanical performance of gold films on polyimide without adhesion layers. <i>Scripta Materialia</i> , 2015, 102, 23-26.	5.2	49
44	Plastic zone and pileup around large indentations. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1996, 27, 3793-3800.	2.2	48
45	Local and non-local behavior and coordinated buckling of CNT turfs. <i>Carbon</i> , 2011, 49, 1430-1438.	10.3	47
46	Effect of Solid Solution Impurities on Dislocation Nucleation During Nanoindentation. <i>Journal of Materials Research</i> , 2005, 20, 1947-1951.	2.6	45
47	Plastic zone evolution around small scale indentations. <i>Scripta Materialia</i> , 2000, 43, 783-788.	5.2	44
48	Thin-film fracture during nanoindentation of a titanium oxide film/titanium system. <i>Journal of Materials Research</i> , 2001, 16, 2634-2643.	2.6	43
49	Atomistic simulations of nanoindentation in the presence of vacancies. <i>Scripta Materialia</i> , 2010, 62, 598-601.	5.2	43
50	The effects of plasticity on adhesion of hard films on ductile interlayers. <i>Acta Materialia</i> , 2005, 53, 2555-2562.	7.9	41
51	Relationships between acoustic emission signals and physical phenomena during indentation. <i>Journal of Materials Research</i> , 1998, 13, 1065-1074.	2.6	40
52	Power production by a dynamic micro heat engine with an integrated thermal switch. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, S217-S223.	2.6	40
53	Effect of accelerated aging on dental zirconia-based materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 65, 256-263.	3.1	40
54	The mechanical properties of as-grown noncubic organic molecular crystals assessed by nanoindentation. <i>Journal of Materials Research</i> , 2017, 32, 2728-2737.	2.6	38

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55	Evaluation of a thermal interface material fabricated using thermocompression bonding of carbon nanotube turf. <i>Nanotechnology</i> , 2010, 21, 015702.	2.6	36
56	Size-dependent strength in nanolaminate metallic systems. <i>Journal of Materials Research</i> , 2011, 26, 1179-1187.	2.6	36
57	A stochastic crystal plasticity framework for deformation of micro-scale polycrystalline materials. <i>International Journal of Plasticity</i> , 2015, 68, 21-33.	8.8	35
58	Deformation mechanisms, size effects, and strain hardening in nanoscale metallic multilayers under nanoindentation. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	34
59	Effects of alloy and solution chemistry on the fracture of passive films on austenitic stainless steel. <i>Corrosion Science</i> , 2006, 48, 925-936.	6.6	32
60	Characterization of a dynamic micro heat engine with integrated thermal switch. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, S262-S269.	2.6	32
61	A model for an extensional mode resonator used as a frequency-adjustable vibration energy harvester. <i>Journal of Sound and Vibration</i> , 2010, 329, 277-288.	3.9	32
62	Strength and strain hardening behavior of Cu-based bilayers and trilayers. <i>Scripta Materialia</i> , 2011, 64, 641-644.	5.2	32
63	The mechanical response of core-shell structures for nanoporous metallic materials. <i>Philosophical Magazine</i> , 2013, 93, 736-748.	1.6	31
64	Stochastic effects in plasticity in small volumes. <i>International Journal of Plasticity</i> , 2014, 52, 117-132.	8.8	31
65	The Kinetics of Anodic Dissolution and Repassivation on Stainless Steel 304L in Solutions Containing Nitrate. <i>Journal of the Electrochemical Society</i> , 2011, 158, C194.	2.9	29
66	Mechanical and electromechanical behavior of oxide coatings grown on stainless steel 304L by nanosecond pulsed laser irradiation. <i>Surface and Coatings Technology</i> , 2013, 235, 860-866.	4.8	29
67	Effect of vacancies on incipient plasticity during contact loading. <i>Philosophical Magazine</i> , 2012, 92, 550-570.	1.6	28
68	The role of probe shape on the initiation of metal plasticity in nanoindentation. <i>Acta Materialia</i> , 2012, 60, 4729-4739.	7.9	28
69	Effects of Zn addition and thermal annealing on yield phenomena of CdTe and Cd <sub>0.96</sub> Zn <sub>0.04</sub> Te single crystals by nanoindentation. <i>Applied Physics Letters</i> , 2003, 82, 1200-1202.	3.3	27
70	Indentation induced film fracture in hard film “ soft substrate systems. <i>International Journal of Fracture</i> , 2003, 119/120, 339-349.	2.2	26
71	Mechanical measurements of passive film fracture on an austenitic stainless steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2003, 34, 1291-1296.	2.2	26
72	Thermocompression bonding of vertically aligned carbon nanotube turfs to metalized substrates. <i>Nanotechnology</i> , 2009, 20, 065703.	2.6	26

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73	The effects of hydrogen on deformation and cross slip in a BCC titanium alloy. Scripta Materialia, 2001, 45, 839-845.	5.2	25
74	High strain behavior of composite thin film piezoelectric membranes. Microelectronic Engineering, 2004, 75, 12-23.	2.4	25
75	Defect and surface asperity dependent yield during contact loading of an organic molecular single crystal. Philosophical Magazine, 2011, 91, 1276-1285.	1.6	25
76	Layer thickness dependent strain rate sensitivity of Cu/amorphous CuNb multilayer. Applied Physics Letters, 2017, 110, .	3.3	25
77	The mechanical behavior of a passivating surface under potentiostatic control. Journal of Materials Research, 1997, 12, 3345-3353.	2.6	24
78	Electrostatic Shielding in Patterned Carbon Nanotube Field Emission Arrays. Journal of Physical Chemistry C, 2007, 111, 7514-7520.	3.1	24
79	New Insights into Nanoindentation-Based Adhesion Testing. Jom, 2017, 69, 2237-2245.	1.9	24
80	Structural and Mechanical Characteristics of Anodic Oxide Films on Titanium. Corrosion, 2001, 57, 523-531.	1.1	23
81	A study of fracture and defects in single crystal YAG. Journal of Crystal Growth, 2004, 267, 502-509.	1.5	23
82	Microstructure and grain growth of polycrystalline silicon grown in fluidized bed reactors. Journal of Crystal Growth, 2009, 311, 1496-1500.	1.5	23
83	A facility for characterizing the dynamic mechanical behavior of thin membranes for microelectromechanical systems. Review of Scientific Instruments, 2002, 73, 2067-2072.	1.3	22
84	Time-dependent contact behavior between diamond and a CNT turf. Nanotechnology, 2011, 22, 295702.	2.6	22
85	Enhanced hardness in epitaxial TiAlScN alloy thin films and rocksalt TiN/(Al,Sc)N superlattices. Applied Physics Letters, 2014, 105, .	3.3	22
86	Grain growth and mechanical properties in bulk polycrystalline silicon. Journal of Materials Science, 2001, 36, 5441-5446.	3.7	21
87	Yield and Deformation in Biaxially Stressed Multilayer Metallic Thin Films. Journal of Engineering Materials and Technology, Transactions of the ASME, 2009, 131, .	1.4	21
88	Microstructureâ€œmechanical and chemical behavior relationships in passive thin films. Thin Solid Films, 2010, 518, 2757-2763.	1.8	21
89	The void nucleation strengths of the Cuâ€œNiâ€œNb- based nanoscale metallic multilayers under high strain rate tensile loadings. Computational Materials Science, 2014, 82, 435-441.	3.0	21
90	Predictions of decreased surface roughness after shot peening using controlled media dimensions. Journal of Materials Science and Technology, 2020, 58, 120-129.	10.7	21

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91	Examining chemical structure at the interface between a polymer binder and a pharmaceutical crystal with neutron reflectometry. <i>Polymer</i> , 2011, 52, 3762-3768.	3.8	20
92	Fracture of polycrystalline silicon. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 351, 166-173.	5.6	19
93	Dislocation nucleation and multiplication in small volumes: The onset of plasticity during indentation testing. <i>Jom</i> , 2009, 61, 56-60.	1.9	19
94	Crystallographic orientation and indenter radius effects on the onset of plasticity during nanoindentation. <i>Journal of Materials Research</i> , 2012, 27, 3058-3065.	2.6	19
95	The role of density in the mechanical response of CNT turfs. <i>Carbon</i> , 2013, 55, 335-342.	10.3	19
96	Effect of Interfaces in the Work Hardening of Nanoscale Multilayer Metallic Composites During Nanoindentation: A Molecular Dynamics Investigation. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2013, 135, .	1.4	19
97	New pulverization parameter derived from indentation and dynamic compression of brittle microspheres. <i>Powder Technology</i> , 2015, 283, 57-65.	4.2	19
98	Nanomechanical testing technique for millimeter-sized and smaller molecular crystals. <i>International Journal of Pharmaceutics</i> , 2015, 486, 324-330.	5.2	19
99	Substrate cracking in Ti-6Al-4V driven by pulsed laser irradiation and oxidation. <i>Surface and Coatings Technology</i> , 2017, 322, 46-50.	4.8	18
100	Hydrogen and deformation: Nano- and microindentation studies. <i>Jom</i> , 2003, 55, 47-50.	1.9	17
101	Analysis of dislocation mechanisms around indentations through slip step observations. <i>Journal of Materials Science</i> , 2007, 42, 889-900.	3.7	17
102	Quantitative characterization of carbon nanotube turf topology by SEM analysis. <i>Journal of Materials Science</i> , 2011, 46, 3119-3126.	3.7	17
103	Finite element analysis and experimental investigation of the Hertzian assumption on the characterization of initial plastic yield. <i>Journal of Materials Research</i> , 2009, 24, 1059-1068.	2.6	16
104	Thermal stability and strength of Mo/Pt multilayered films. <i>Journal of Materials Science</i> , 2010, 45, 354-362.	3.7	16
105	Crack incubation in shot peened AA7050 and mechanism for fatigue enhancement. <i>Fatigue and Fracture of Engineering Materials and Structures</i> , 2018, 41, 71-83.	3.4	16
106	Quantifying improvements in adhesion of platinum films on brittle substrates. <i>Journal of Materials Research</i> , 2004, 19, 1818-1825.	2.6	15
107	Molecular dynamic simulation of heat pulse propagation in multiwall carbon nanotubes. <i>Physical Review B</i> , 2007, 76, .	3.2	15
108	Characterization and modeling of a microcapillary driven liquid-vapor phase-change membrane actuator. <i>Sensors and Actuators A: Physical</i> , 2007, 134, 201-212.	4.1	15

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109	An energy method to analyze through thickness thin film fracture during indentation. Thin Solid Films, 2007, 515, 3298-3304.	1.8	15
110	Grain Boundary Contributions to Hydrogen-Affected Plasticity in Ni-201. Jom, 2014, 66, 1383-1389.	1.9	15
111	Elevated temperature dependence of hardness in tri-metallic nano-scale metallic multilayer systems. Thin Solid Films, 2014, 571, 247-252.	1.8	15
112	Probing the Effect of Hydrogen on Elastic Properties and Plastic Deformation in Nickel Using Nanoindentation and Ultrasonic Methods. Jom, 2018, 70, 1068-1073.	1.9	15
113	Nanoindentation: Localized Probes of Mechanical Behavior of Materials. Springer Handbooks, 2008, , 389-408.	0.6	15
114	Characterization of d.c.jet CVD diamond films on molybdenum. Diamond and Related Materials, 1996, 5, 1462-1472.	3.9	14
115	Length-scale-based hardening model for ultra-small volumes. Journal of Materials Research, 2004, 19, 2812-2821.	2.6	14
116	An in situ TEM study of phase formation in gold-aluminum couples. Journal of Materials Science, 2004, 39, 165-171.	3.7	14
117	Nanomechanical properties of ordered phthalocyanine Langmuir-Blodgett layers. Journal of Materials Research, 2004, 19, 1461-1470.	2.6	14
118	Structural and electrical characterization of PZT on gold for micromachined piezoelectric membranes. Applied Physics A: Materials Science and Processing, 2006, 85, 135-140.	2.3	14
119	Nanoindentation of HMX and Idoxuridine to Determine Mechanical Similarity. Crystals, 2017, 7, 335.	2.2	14
120	Establishing a Cold Spray Particle Deposition Window on Polymer Substrate. Journal of Thermal Spray Technology, 2021, 30, 1069-1080.	3.1	14
121	Yield Point Phenomena During Indentation. Materials Research Society Symposia Proceedings, 1998, 522, 83.	0.1	13
122	Influence of structure and chemistry on piezoelectric properties of lead zirconate titanate in a microelectromechanical systems power generation application. Journal of Materials Research, 2003, 18, 2079-2086.	2.6	13
123	Nanomechanical Testing for Fracture of Oxide Films. Journal of Materials Research, 2005, 20, 1490-1497.	2.6	13
124	Enhanced actuation and acoustic transduction by pressurization of micromachined piezoelectric diaphragms. Sensors and Actuators A: Physical, 2010, 161, 164-172.	4.1	13
125	Damage of the cell wall during extrusion and injection molding of wood plastic composites. Composites Part A: Applied Science and Manufacturing, 2010, 41, 1454-1460.	7.6	13
126	Wear behavior of Au-ZnO nanocomposite films for electrical contacts. Journal of Materials Science, 2014, 49, 6039-6047.	3.7	13



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127	Reliability and Properties of Pzt Thin Films for Mems Applications. Materials Research Society Symposia Proceedings, 1998, 546, 153.	0.1	12
128	Displacement amplification in curved piezoelectric diaphragm transducers. Sensors and Actuators A: Physical, 2008, 141, 262-265.	4.1	12
129	Pseudoelastic behavior of CuNi composite nanowires. Applied Physics Letters, 2009, 94, .	3.3	12
130	Mechanical properties of polycrystalline silicon solar cell feed stock grown via fluidized bed reactors. Journal of Materials Science, 2010, 45, 1560-1566.	3.7	12
131	Microstructural characterization of thin gold films on a polyimide substrate. Thin Solid Films, 2010, 518, 5896-5900.	1.8	12
132	Influence of Nitrate on Pit Stability in Austenitic Stainless Steel. Corrosion, 2010, 66, 075004-075004-12.	1.1	12
133	A new acoustic transducer with a pressure-deformed piezoelectric diaphragm. Sensors and Actuators A: Physical, 2012, 179, 204-210.	4.1	12
134	Coupling bulge testing and nanoindention to characterize materials properties of bulk micromachined structures. Microsystem Technologies, 2005, 11, 298-302.	2.0	11
135	Mechanical behavior of FCC single crystals at finite temperatures in the presence of point defects. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 588, 340-346.	5.6	11
136	The effects of intrinsic properties and defect structures on the indentation size effect in metals. Philosophical Magazine, 2017, 97, 1902-1920.	1.6	11
137	An energy-based nanoindentation method to assess localized residual stresses and mechanical properties on shot-peened materials. Journal of Materials Research, 2019, 34, 1121-1129.	2.6	11
138	Friction Measurement in MEMS Using a New Test Structure. Materials Research Society Symposia Proceedings, 1999, 605, 129.	0.1	10
139	Dislocations in yttrium orthovanadate. Journal of Crystal Growth, 2004, 266, 411-414.	1.5	10
140	Deformation and fracture of a mudflat-cracked laser-fabricated oxide on Ti. Journal of Materials Science, 2013, 48, 4050-4058.	3.7	10
141	Phenomenological constitutive model for a CNT turf. International Journal of Solids and Structures, 2013, 50, 2224-2230.	2.7	10
142	The effect of interfacial imperfections on plastic deformation in nanoscale metallic multilayer composites. Computational Materials Science, 2014, 86, 118-123.	3.0	10
143	Electronic structure and surface properties of $MgB_2$ (0001) upon oxygen adsorption. Physical Review B, 2018, 97, .		
144	Individual phase deformation and flow correlation to macroscopic constitutive properties of DP1180 steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 756, 328-335.	5.6	10

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145	Nanoindentation and orientation imaging: Probing small volumes and thin films for mechanical properties. <i>Journal of Electronic Materials</i> , 2002, 31, 66-70.	2.2	9
146	Microstructural characterization and mechanical reliability of interfaces in piezoelectric based microelectromechanical systems. <i>Thin Solid Films</i> , 2003, 441, 180-186.	1.8	9
147	Effects of microstructure on the mechanical properties of copper films for high aspect ratio structures. <i>Microsystem Technologies</i> , 2004, 10, 451-455.	2.0	9
148	Environmental influence on interface interactions and adhesion of Au/SiO <sub>2</sub> . <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 493, 299-304.	5.6	9
149	Coherent Interfaces Increase Strain-Hardening Behavior in Tri-Component Nano-Scale Metallic Multilayer Thin Films. <i>Materials Research Letters</i> , 2015, 3, 114-119.	8.7	9
150	Environmental resistance of oxide tags fabricated on 304L stainless steel via nanosecond pulsed laser irradiation. <i>Surface and Coatings Technology</i> , 2016, 285, 87-97.	4.8	9
151	Indentation fracture behavior of energetic and inert molecular crystals. <i>Journal of Materials Research</i> , 2019, 34, 3954-3963.	2.6	9
152	NANOINDENTACIONES Y ULTRAESTRUCTURA EN MADERA DE EUCALYPTUS NITENS CON MICRO Y MESO GRIETAS. <i>Maderas: Ciencia Y Tecnologia</i> , 2007, 9, .	0.7	9
153	Characterization of low angle grain boundaries in yttrium orthovanadate. <i>Journal of Materials Science</i> , 2005, 40, 3347-3353.	3.7	8
154	The Mechanical Properties of Minimally Processed RDX. <i>Propellants, Explosives, Pyrotechnics</i> , 2017, 42, 659-664.	1.6	8
155	Examination of crystal defects with high-kV X-ray computed tomography. <i>Materials Letters</i> , 2005, 59, 1113-1116.	2.6	7
156	Environmentally Induced Failure of Gold Jewelry Alloys. <i>Gold Bulletin</i> , 2005, 38, 113-119.	2.7	7
157	Inception of plasticity in copper single crystal in presence of stacking fault tetrahedra. <i>Materials Science and Technology</i> , 2012, 28, 1141-1146.	1.6	7
158	Variation in the nanoindentation hardness of platinum. <i>Journal of Materials Research</i> , 2013, 28, 2819-2828.	2.6	7
159	Dislocation Activity Under Nanoscale Contacts Prior to Discontinuous Yield. <i>Materials Research Letters</i> , 2015, 3, 58-64.	8.7	7
160	The nanomechanical behavior of a graphite nanoplatelet/polycarbonate nanocomposite. <i>Polymer Testing</i> , 2015, 47, 87-91.	4.8	7
161	Antidelaminating, Thermally Stable, and Cost-Effective Flexible Kapton Platforms for Nitrate Sensors, Mercury Aptasensors, Protein Sensors, and p-Type Organic Thin-Film Transistors. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 11369-11384.	8.0	7
162	Characterization of a Liquid-Vapor Phase-Change Actuator. , 2005, , .		7

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163	Effect of thermal treatment on failure modes in tungsten wire. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 298, 73-78.	5.6	6
164	Residual Stress Control to Optimize Pzt Mems Performance. <i>Materials Research Society Symposia Proceedings</i> , 2002, 741, 5371.	0.1	6
165	Strength enhancement of single crystal laser components. <i>Journal of Materials Research</i> , 2003, 18, 2537-2539.	2.6	6
166	Complementary characterization techniques for identification of ferroelectric domains in KNbO <sub>3</sub> single crystals. <i>Materials Characterization</i> , 2008, 59, 688-692.	4.4	6
167	Characterization of granular silicon, powders, and agglomerates from a fluidized bed reactor. <i>Journal of Materials Science</i> , 2012, 47, 2583-2590.	3.7	6
168	Elastic behavior of a core-shell metal-carbon nanotube composite foam. <i>MRS Communications</i> , 2014, 4, 77-81.	1.8	6
169	Modification of the mechanical properties of carbon nanotube arrays using electron irradiation induced oxidation. <i>Meccanica</i> , 2015, 50, 575-583.	2.0	6
170	A Thermal and Nanomechanical Study of Molecular Crystals as Versatile Mocks for Pentaerythritol Tetranitrate. <i>Crystals</i> , 2020, 10, 126.	2.2	6
171	Microindentation method for in situ stress measurements in precipitated iron sulfate FILMS. <i>Corrosion Science</i> , 1998, 40, 1953-1975.	6.6	5
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