

# David Bahr

## List of Publications by Year in descending order

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264  
papers

6,945  
citations

53751

45  
h-index

79644

73  
g-index

268  
all docs

268  
docs citations

268  
times ranked

5714  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Multiscale Simulation Approach for the Mechanical Response of Copper/Nickel Nanofoams With Experimental Validation. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2022, 144, .	0.8	2
2	Critical Issues in MEMS Property Measurement and Variation Measured by Nanoindentation: Error Sources and Uncertainty. <i>Journal of Microelectromechanical Systems</i> , 2022, 31, 226-233.	1.7	1
3	Role of ripples in altering the electronic and chemical properties of graphene. <i>Journal of Chemical Physics</i> , 2022, 156, 054708.	1.2	2
4	Multi-Scale Analyses and Modeling of Metallic Nano-Layers. <i>Materials</i> , 2021, 14, 450.	1.3	2
5	Effect of ionizing radiation and chewing simulation on human enamel and zirconia. <i>Journal of Prosthodontic Research</i> , 2021, 65, 67-72.	1.1	0
6	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.	4.0	7
7	Establishing a Cold Spray Particle Deposition Window on Polymer Substrate. <i>Journal of Thermal Spray Technology</i> , 2021, 30, 1069-1080.	1.6	14
8	Control of copper nanoparticle metallization on electrospun fibers via Pd and Ag seed-assisted templating. <i>Journal of Materials Science</i> , 2021, 56, 16307-16323.	1.7	1
9	Workshop focuses on the rise in MSE undergraduates. <i>MRS Bulletin</i> , 2021, 46, 5-11.	1.7	0
10	Flow-induced bending deformation of electrospun polymeric filtration membranes using the "leaky" bulge test. <i>Polymer</i> , 2021, 235, 124274.	1.8	2
11	Conformal Coating of Metallic Shells on Carbon Nanotube Turfs. <i>MRS Advances</i> , 2020, 5, .	0.5	0
12	Well-Adhered Copper Nanocubes on Electrospun Polymeric Fibers. <i>Nanomaterials</i> , 2020, 10, 1982.	1.9	3
13	Predictions of decreased surface roughness after shot peening using controlled media dimensions. <i>Journal of Materials Science and Technology</i> , 2020, 58, 120-129.	5.6	21
14	The structure and mechanical properties of Cu50Ni50 alloy nanofoams formed via polymeric templating. <i>MRS Communications</i> , 2020, 10, 286-291.	0.8	3
15	A Thermal and Nanomechanical Study of Molecular Crystals as Versatile Mocks for Pentaerythritol Tetranitrate. <i>Crystals</i> , 2020, 10, 126.	1.0	6
16	Nisin infusion into surface cracks in oxide coatings to create an antibacterial metallic surface. <i>Materials Science and Engineering C</i> , 2019, 105, 110034.	3.8	5
17	Hardening Particulate Ti Media Through Controlled Oxidation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2019, 50, 3980-3984.	1.1	2
18	Application of oxidized metallic surfaces as a medium to store biochemical agents with antimicrobial properties. <i>Surface and Coatings Technology</i> , 2019, 372, 312-318.	2.2	3

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19	Individual phase deformation and flow correlation to macroscopic constitutive properties of DP1180 steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2019, 756, 328-335.	2.6	10
20	Residual Stress Asymmetry in Thin Sheets of Double-Sided Shot Peened Aluminum. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 3094-3104.	1.2	4
21	An energy-based nanoindentation method to assess localized residual stresses and mechanical properties on shot-peened materials. <i>Journal of Materials Research</i> , 2019, 34, 1121-1129.	1.2	11
22	Indentation fracture behavior of energetic and inert molecular crystals. <i>Journal of Materials Research</i> , 2019, 34, 3954-3963.	1.2	9
23	Probing the Effect of Hydrogen on Elastic Properties and Plastic Deformation in Nickel Using Nanoindentation and Ultrasonic Methods. <i>Jom</i> , 2018, 70, 1068-1073.	0.9	15
24	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.	3.8	77
25	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.	1.7	16
26	Probing Adhesion of Metallic Nanoparticles on Polymeric Fibrous and Flat Architectures. <i>MRS Advances</i> , 2018, 3, 2749-2756.	0.5	2
27	The Mechanical Response of Arrays of Carbon Nanotubes Coated with Metallic Shells. <i>MRS Advances</i> , 2018, 3, 2801-2808.	0.5	1
28	Synthesis, microstructure, and mechanical properties of polycrystalline Cu nano-foam. <i>MRS Advances</i> , 2018, 3, 469-475.	0.5	5
29	Electronic structure and surface properties of $\text{MgB}_2$ (0001) upon oxygen adsorption. <i>Physical Review B</i> , 2018, 97, .		
30	The Mechanical Properties of Minimally Processed RDX. <i>Propellants, Explosives, Pyrotechnics</i> , 2017, 42, 659-664.	1.0	8
31	Layer thickness dependent strain rate sensitivity of Cu/amorphous CuNb multilayer. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	25
32	Age-hardening in a two component immiscible nanolaminate metal system. <i>Scripta Materialia</i> , 2017, 136, 33-36.	2.6	1
33	The effect of size and composition on the strength and hardening of Cu-Ni/Nb nanoscale metallic composites. <i>Journal of Materials Research</i> , 2017, 32, 2542-2550.	1.2	4
34	Substrate cracking in Ti-6Al-4V driven by pulsed laser irradiation and oxidation. <i>Surface and Coatings Technology</i> , 2017, 322, 46-50.	2.2	18
35	The mechanical properties of as-grown noncubic organic molecular crystals assessed by nanoindentation. <i>Journal of Materials Research</i> , 2017, 32, 2728-2737.	1.2	38
36	Uncovering the Thermo-Kinetic Origins of Phase Ordering in Mixed-Valence Antimony Tetroxide by First-Principles Modeling. <i>Inorganic Chemistry</i> , 2017, 56, 6545-6550.	1.9	3

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37	The effects of intrinsic properties and defect structures on the indentation size effect in metals. <i>Philosophical Magazine</i> , 2017, 97, 1902-1920.	0.7	11
38	Nanomechanics and Testing of Core-Shell Composite Ligaments for High Strength, Light Weight Foams. <i>MRS Advances</i> , 2017, 2, 3577-3583.	0.5	0
39	New Insights into Nanoindentation-Based Adhesion Testing. <i>Jom</i> , 2017, 69, 2237-2245.	0.9	24
40	Effect of accelerated aging on dental zirconia-based materials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 65, 256-263.	1.5	40
41	Nanoindentation of HMX and Idoxuridine to Determine Mechanical Similarity. <i>Crystals</i> , 2017, 7, 335.	1.0	14
42	The influence of cellulose nanocrystals on the microstructure of cement paste. <i>Cement and Concrete Composites</i> , 2016, 74, 164-173.	4.6	86
43	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.	2.2	9
44	Discontinuous Yield Behaviors Under Various Pre-Strain Conditions in Metals with Different Crystal Structures. <i>Materials Research Letters</i> , 2016, 4, 83-89.	4.1	4
45	Effects of applied strain on pileup morphology during quasi-static and dynamic nanoindentation of cyclic olefin copolymers. <i>Journal of Materials Research</i> , 2015, 30, 1779-1787.	1.2	1
46	Dislocation Activity Under Nanoscale Contacts Prior to Discontinuous Yield. <i>Materials Research Letters</i> , 2015, 3, 58-64.	4.1	7
47	Precipitation strengthening in nanocomposite Cr/Cu/Cr multilayer films. <i>Philosophical Magazine</i> , 2015, 95, 1780-1794.	0.7	5
48	Improved electro-mechanical performance of gold films on polyimide without adhesion layers. <i>Scripta Materialia</i> , 2015, 102, 23-26.	2.6	49
49	New pulverization parameter derived from indentation and dynamic compression of brittle microspheres. <i>Powder Technology</i> , 2015, 283, 57-65.	2.1	19
50	Coherent Interfaces Increase Strain-Hardening Behavior in Tri-Component Nano-Scale Metallic Multilayer Thin Films. <i>Materials Research Letters</i> , 2015, 3, 114-119.	4.1	9
51	Nanomechanical testing technique for millimeter-sized and smaller molecular crystals. <i>International Journal of Pharmaceutics</i> , 2015, 486, 324-330.	2.6	19
52	Mechanical and electrical performance of thermally stable Au/ZnO films. <i>Acta Materialia</i> , 2015, 91, 1-9.	3.8	4
53	The nanomechanical behavior of a graphite nanoplatelet/polycarbonate nanocomposite. <i>Polymer Testing</i> , 2015, 47, 87-91.	2.3	7
54	A stochastic crystal plasticity framework for deformation of micro-scale polycrystalline materials. <i>International Journal of Plasticity</i> , 2015, 68, 21-33.	4.1	35

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55	Modification of the mechanical properties of carbon nanotube arrays using electron irradiation induced oxidation. <i>Meccanica</i> , 2015, 50, 575-583.	1.2	6
56	Elastic behavior of a core-shell metal-carbon nanotube composite foam. <i>MRS Communications</i> , 2014, 4, 77-81.	0.8	6
57	Enhanced hardness in epitaxial TiAlScN alloy thin films and rocksalt TiN/(Al,Sc)N superlattices. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	22
58	Multiscale modeling and simulation of deformation in nanoscale metallic multilayer systems. <i>International Journal of Plasticity</i> , 2014, 52, 33-50.	4.1	128
59	Guest editorial for the special issue in honor of Professor Hussein Zbib. <i>International Journal of Plasticity</i> , 2014, 52, 1-2.	4.1	0
60	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.	4.1	74
61	Fracture Behavior of Granular Polycrystalline Silicon Using Micro-scale and Macro-scale Indentation Techniques. <i>Metallurgical and Materials Transactions E</i> , 2014, 1, 20-26.	0.5	1
62	The effect of interfacial imperfections on plastic deformation in nanoscale metallic multilayer composites. <i>Computational Materials Science</i> , 2014, 86, 118-123.	1.4	10
63	Molecular dynamics simulations of plastic deformation in Nb/NbC multilayers. <i>International Journal of Plasticity</i> , 2014, 59, 119-132.	4.1	102
64	Characterization of Silicon Nanoparticles Formed from a Fluidized Bed Reactor and Their Incorporation onto Metal-Coated Carbon Fibers. <i>Jom</i> , 2014, 66, 82-86.	0.9	0
65	The void nucleation strengths of the Cu-Ni-Nb-based nanoscale metallic multilayers under high strain rate tensile loadings. <i>Computational Materials Science</i> , 2014, 82, 435-441.	1.4	21
66	Grain Boundary Contributions to Hydrogen-Affected Plasticity in Ni-201. <i>Jom</i> , 2014, 66, 1383-1389.	0.9	15
67	Wear behavior of Au-ZnO nanocomposite films for electrical contacts. <i>Journal of Materials Science</i> , 2014, 49, 6039-6047.	1.7	13
68	Statistical Quantification of the Impact of Surface Preparation on Yield Point Phenomena in Nickel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2014, 45, 4307-4315.	1.1	1
69	Stochastic effects in plasticity in small volumes. <i>International Journal of Plasticity</i> , 2014, 52, 117-132.	4.1	31
70	Elevated temperature dependence of hardness in tri-metallic nano-scale metallic multilayer systems. <i>Thin Solid Films</i> , 2014, 571, 247-252.	0.8	15
71	Deformation and fracture of a mudflat-cracked laser-fabricated oxide on Ti. <i>Journal of Materials Science</i> , 2013, 48, 4050-4058.	1.7	10
72	The effect of crystal orientation on the stochastic behavior of dislocation nucleation and multiplication during nanoindentation. <i>Acta Materialia</i> , 2013, 61, 1421-1431.	3.8	58

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73	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.	2.2	29
74	Mechanical behavior of FCC single crystals at finite temperatures in the presence of point defects. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 588, 340-346.	2.6	11
75	Phenomenological constitutive model for a CNT turf. <i>International Journal of Solids and Structures</i> , 2013, 50, 2224-2230.	1.3	10
76	The role of density in the mechanical response of CNT turfs. <i>Carbon</i> , 2013, 55, 335-342.	5.4	19
77	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, .	0.8	19
78	The mechanical response of core-shell structures for nanoporous metallic materials. <i>Philosophical Magazine</i> , 2013, 93, 736-748.	0.7	31
79	Variation in the nanoindentation hardness of platinum. <i>Journal of Materials Research</i> , 2013, 28, 2819-2828.	1.2	7
80	Deformation and Fracture of Oxides Fabricated on 304L Stainless Steel via Pulsed Laser Irradiation. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1424, 73.	0.1	2
81	Effect of vacancies on incipient plasticity during contact loading. <i>Philosophical Magazine</i> , 2012, 92, 550-570.	0.7	28
82	Inception of plasticity in copper single crystal in presence of stacking fault tetrahedra. <i>Materials Science and Technology</i> , 2012, 28, 1141-1146.	0.8	7
83	Deformation mechanisms, size effects, and strain hardening in nanoscale metallic multilayers under nanoindentation. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	34
84	The role of probe shape on the initiation of metal plasticity in nanoindentation. <i>Acta Materialia</i> , 2012, 60, 4729-4739.	3.8	28
85	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.	1.8	108
86	Crystallographic orientation and indenter radius effects on the onset of plasticity during nanoindentation. <i>Journal of Materials Research</i> , 2012, 27, 3058-3065.	1.2	19
87	Effect of solute hydrogen on toughness of feedstock polycrystalline silicon for solar cell applications. <i>Scripta Materialia</i> , 2012, 67, 756-759.	2.6	3
88	Our Strength in Numbers: A Closer Look at TMS's Membership Development Efforts. <i>Jom</i> , 2012, 64, 894-895.	0.9	0
89	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.	2.6	52
90	A new acoustic transducer with a pressure-deformed piezoelectric diaphragm. <i>Sensors and Actuators A: Physical</i> , 2012, 179, 204-210.	2.0	12

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91	Characterization of granular silicon, powders, and agglomerates from a fluidized bed reactor. <i>Journal of Materials Science</i> , 2012, 47, 2583-2590.	1.7	6
92	Defect and surface asperity dependent yield during contact loading of an organic molecular single crystal. <i>Philosophical Magazine</i> , 2011, 91, 1276-1285.	0.7	25
93	Strength and strain hardening behavior of Cu-based bilayers and trilayers. <i>Scripta Materialia</i> , 2011, 64, 641-644.	2.6	32
94	Examining chemical structure at the interface between a polymer binder and a pharmaceutical crystal with neutron reflectometry. <i>Polymer</i> , 2011, 52, 3762-3768.	1.8	20
95	Analysis of plastic deformation in nanoscale metallic multilayers with coherent and incoherent interfaces. <i>International Journal of Plasticity</i> , 2011, 27, 1618-1639.	4.1	108
96	Strength and aging behavior of Mo/Pt multilayers. <i>Journal of Materials Science</i> , 2011, 46, 108-116.	1.7	4
97	Quantitative characterization of carbon nanotube turf topology by SEM analysis. <i>Journal of Materials Science</i> , 2011, 46, 3119-3126.	1.7	17
98	Probing the Strain Hardening Response of Small Wear Volumes with Nanoindentation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2011, 42, 2226-2232.	1.1	3
99	Local and non-local behavior and coordinated buckling of CNT turfs. <i>Carbon</i> , 2011, 49, 1430-1438.	5.4	47
100	Time-dependent contact behavior between diamond and a CNT turf. <i>Nanotechnology</i> , 2011, 22, 295702.	1.3	22
101	Fabrication and Characterization of Two Compliant Electrical Contacts for MEMS: Gallium Microdroplets and Carbon Nanotube Turfs. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1299, 1.	0.1	0
102	Inception of plasticity in the presence of vacancies in FCC single crystals: indenter size effect. <i>Materials Research Society Symposia Proceedings</i> , 2011, 1297, 59.	0.1	0
103	Size-dependent strength in nanolaminate metallic systems. <i>Journal of Materials Research</i> , 2011, 26, 1179-1187.	1.2	36
104	Fabrication, structure, and performance of a microfabricated gallium electrical switch contact. <i>Journal of Materials Research</i> , 2011, 26, 2428-2437.	1.2	2
105	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.	1.3	29
106	Challenges Below the Grain Scale and Multiscale Models. , 2011, , 555-590.		0
107	Thermal stability and strength of Mo/Pt multilayered films. <i>Journal of Materials Science</i> , 2010, 45, 354-362.	1.7	16
108	Mechanical properties of polycrystalline silicon solar cell feed stock grown via fluidized bed reactors. <i>Journal of Materials Science</i> , 2010, 45, 1560-1566.	1.7	12

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109	Atomistic simulations of nanoindentation in the presence of vacancies. <i>Scripta Materialia</i> , 2010, 62, 598-601.	2.6	43
110	Enhanced actuation and acoustic transduction by pressurization of micromachined piezoelectric diaphragms. <i>Sensors and Actuators A: Physical</i> , 2010, 161, 164-172.	2.0	13
111	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.	5.0	60
112	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.	2.1	32
113	Thermal and mechanical properties of poly(3-hydroxybutyrate-co-3-hydroxyvalerate)/cellulose nanowhiskers composites. <i>Polymer</i> , 2010, 51, 2652-2660.	1.8	213
114	Analysis of heterogeneous deformation and dislocation dynamics in single crystal micropillars under compression. <i>International Journal of Plasticity</i> , 2010, 26, 239-257.	4.1	120
115	Microstructureâ€œmechanical and chemical behavior relationships in passive thin films. <i>Thin Solid Films</i> , 2010, 518, 2757-2763.	0.8	21
116	Microstructural characterization of thin gold films on a polyimide substrate. <i>Thin Solid Films</i> , 2010, 518, 5896-5900.	0.8	12
117	Spatial Variations in the Mechanical Properties and Electrical Properties of Carbon Nanotube Turfs. <i>Materials Research Society Symposia Proceedings</i> , 2010, 1258, 1.	0.1	1
118	Nanoindentation of Compliant Substrate Systems: Effects of Geometry and Compliance. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2010, 132, .	0.8	3
119	Evaluation of a thermal interface material fabricated using thermocompression bonding of carbon nanotube turf. <i>Nanotechnology</i> , 2010, 21, 015702.	1.3	36
120	Influence of Nitrate on Pit Stability in Austenitic Stainless Steel. <i>Corrosion</i> , 2010, 66, 075004-075004-12.	0.5	12
121	Damage of the cell wall during extrusion and injection molding of wood plastic composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 1454-1460.	3.8	13
122	Pseudoelastic behavior of Cuâ€œNi composite nanowires. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	12
123	Yield and Deformation in Biaxially Stressed Multilayer Metallic Thin Films. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2009, 131, .	0.8	21
124	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.	1.2	16
125	Dislocation nucleation and multiplication in small volumes: The onset of plasticity during indentation testing. <i>Jom</i> , 2009, 61, 56-60.	0.9	19
126	Failure Strains in Micromachined Piezoelectric Membranes. <i>Strain</i> , 2009, 45, 55-62.	1.4	1



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127	Microstructure and grain growth of polycrystalline silicon grown in fluidized bed reactors. Journal of Crystal Growth, 2009, 311, 1496-1500.	0.7	23
128	Direct observation of plasticity and quantitative hardness measurements in single crystal cyclotrimethylene trinitramine by nanoindentation. Philosophical Magazine, 2009, 89, 2381-2402.	0.7	98
129	Deformation mechanisms and strength in nanoscale multilayer metallic composites with coherent and incoherent interfaces. Applied Physics Letters, 2009, 94, .	1.5	76
130	Thermocompression bonding of vertically aligned carbon nanotube turfs to metalized substrates. Nanotechnology, 2009, 20, 065703.	1.3	26
131	Environmental influence on interface interactions and adhesion of Au/SiO <sub>2</sub> . Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 493, 299-304.	2.6	9
132	Displacement amplification in curved piezoelectric diaphragm transducers. Sensors and Actuators A: Physical, 2008, 141, 262-265.	2.0	12
133	Characterization of flexible ECoG electrode arrays for chronic recording in awake rats. Journal of Neuroscience Methods, 2008, 173, 279-285.	1.3	99
134	Complementary characterization techniques for identification of ferroelectric domains in KNbO <sub>3</sub> single crystals. Materials Characterization, 2008, 59, 688-692.	1.9	6
135	Evaluation of contacts for a MEMS thermal switch. Journal of Micromechanics and Microengineering, 2008, 18, 105012.	1.5	57
136	A resonant frequency tunable, extensional mode piezoelectric vibration harvesting mechanism. Smart Materials and Structures, 2008, 17, 065021.	1.8	77
137	Mechanical and Electrical Reliability of a Chronically Implanted Metal-Polyimide Electrode Array. Materials Research Society Symposia Proceedings, 2008, 1116, 912.	0.1	1
138	Multiscale Modeling of Dislocation Mechanisms in Nanoscale Multilayered Composites. Materials Research Society Symposia Proceedings, 2008, 1130, 130101.	0.1	3
139	The coordinated buckling of carbon nanotube turfs under uniform compression. Nanotechnology, 2008, 19, 175704.	1.3	97
140	Lumped Parameter Analysis of an Enclosed Incompressible Squeeze Film and a Central Gas Bubble. Journal of Fluids Engineering, Transactions of the ASME, 2008, 130, .	0.8	0
141	THE EFFECT OF CRACKS AND VOIDS ON THE DYNAMIC YIELD OF RDX SINGLE CRYSTALS. , 2008, , .		0
142	Nanoindentation: Localized Probes of Mechanical Behavior of Materials. Springer Handbooks, 2008, , 389-408.	0.3	15
143	Indentation Response of Nanostructured Turfs. Materials Research Society Symposia Proceedings, 2007, 1049, 1.	0.1	0
144	Power production by a dynamic micro heat engine with an integrated thermal switch. Journal of Micromechanics and Microengineering, 2007, 17, S217-S223.	1.5	40

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145	Development of noncontact spring constant measurement and deflection characterization of piezoelectric devices. <i>Journal of Applied Physics</i> , 2007, 101, 044104.	1.1	1
146	Mechanical behavior assessment of sucrose using nanoindentation. <i>Journal of Materials Research</i> , 2007, 22, 2037-2045.	1.2	80
147	Mechanical properties of cubic zinc carboxylate IRMOF-1 metal-organic framework crystals. <i>Physical Review B</i> , 2007, 76, .	1.1	124
148	Electrostatic Shielding in Patterned Carbon Nanotube Field Emission Arrays. <i>Journal of Physical Chemistry C</i> , 2007, 111, 7514-7520.	1.5	24
149	Molecular dynamic simulation of heat pulse propagation in multiwall carbon nanotubes. <i>Physical Review B</i> , 2007, 76, .	1.1	15
150	Adhesion measurements using telephone cord buckles. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2007, 443, 150-155.	2.6	85
151	Fabrication and characterization of a thermal switch. <i>Sensors and Actuators A: Physical</i> , 2007, 133, 55-63.	2.0	51
152	Characterization and modeling of a microcapillary driven liquid-vapor phase-change membrane actuator. <i>Sensors and Actuators A: Physical</i> , 2007, 134, 201-212.	2.0	15
153	Mechanical behavior of a carbon nanotube turf. <i>Scripta Materialia</i> , 2007, 56, 157-160.	2.6	93
154	Analysis of dislocation mechanisms around indentations through slip step observations. <i>Journal of Materials Science</i> , 2007, 42, 889-900.	1.7	17
155	The aging of metallic thin films: Delamination, strain relaxation, and diffusion. <i>Jom</i> , 2007, 59, 50-53.	0.9	2
156	The Effect of Nonuniform Chemistry on Interfacial Fracture Toughness. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2256-2262.	1.1	4
157	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.	1.1	55
158	Deformation and Fracture from Nano to Macro: Honoring W.W. Gerberich's 70th Birthday. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2007, 38, 2153-2153.	1.1	0
159	An energy method to analyze through thickness thin film fracture during indentation. <i>Thin Solid Films</i> , 2007, 515, 3298-3304.	0.8	15
160	NANOINDENTACIONES Y ULTRAESTRUCTURA EN MADERA DE EUCALYPTUS NITENS CON MICRO Y MESO GRIETAS. <i>Maderas: Ciencia Y Tecnologia</i> , 2007, 9, .	0.7	9
161	Efficiency of energy conversion by piezoelectrics. <i>Applied Physics Letters</i> , 2006, 89, 104107.	1.5	49
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