

Jae-il Jang

List of Publications by Year in descending order

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156
papers

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citations

53794

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158
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times ranked

4332
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#	ARTICLE	IF	CITATIONS
1	Nanomechanical and microstructural characterization on the synergetic strengthening in selectively laser melted austenitic stainless steel. <i>Scripta Materialia</i> , 2022, 209, 114359.	5.2	7
2	Decoupling the roles of constituent phases in the strengthening of hydrogenated nanocrystalline dual-phase high-entropy alloys. <i>Scripta Materialia</i> , 2022, 210, 114472.	5.2	8
3	Microstructure and shear strength of Au-20wt%Sn solder joints fabricated by thermo-compression bonding for LED packages. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 11002-11016.	2.2	2
4	Rate-dependent mechanical behavior of single-, bi-, twinned-, and poly-crystals of CoCrFeNi high-entropy alloy. <i>Journal of Materials Science and Technology</i> , 2022, 120, 253-264.	10.7	10
5	A Study on the Interrelationship between the Microstructural Features and the Elevated Temperature Strength of Multicomponent Al-Si-Cu-Ni Casting Alloys. <i>Journal of Korean Institute of Metals and Materials</i> , 2022, 60, 489-501.	1.0	2
6	Corrosion and Oxidation Resistance Behaviors of Ta-Containing Low Alloying Zirconium. <i>Metals and Materials International</i> , 2021, 27, 3079-3084.	3.4	2
7	Bimodality of incipient plastic strength in face-centered cubic high-entropy alloys. <i>Acta Materialia</i> , 2021, 202, 124-134.	7.9	36
8	Behavior of Dynamic Strain Aging in Zr-1.5Nb-0.4Sn-0.2Fe-0.1Cr Alloy Strip. <i>Journal of Korean Institute of Metals and Materials</i> , 2021, 59, 8-13.	1.0	2
9	Hydrogen uptake and its influence in selective laser melted austenitic stainless steel: A nanoindentation study. <i>Scripta Materialia</i> , 2021, 194, 113718.	5.2	20
10	Significance of grain refinement on micro-mechanical properties and structures of additively-manufactured CoCrFeNi high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2021, 807, 140898.	5.6	59
11	Oxidation-resistant coating of FeCrAl on Zr-alloy tubes using 3D printing direct energy deposition. <i>Surface and Coatings Technology</i> , 2021, 411, 126915.	4.8	21
12	Hierarchical refinement of primary phases in a multicomponent Al-14Si-CuNiMg casting alloy by ultrasonic melt treatment. <i>Materialia</i> , 2021, 16, 101070.	2.7	3
13	Indentation of glasses. <i>Progress in Materials Science</i> , 2021, 121, 100834.	32.8	54
14	Design of V-Substituted TiFe-Based Alloy for Target Pressure Range and Easy Activation. <i>Materials</i> , 2021, 14, 4829.	2.9	6
15	Exploring the hydrogen absorption and strengthening behavior in nanocrystalline face-centered cubic high-entropy alloys. <i>Scripta Materialia</i> , 2021, 203, 114069.	5.2	12
16	A Survey of Nanoindentation Studies on HPT-Processed Materials. <i>Advanced Engineering Materials</i> , 2020, 22, 1900648.	3.5	6
17	Mechanical Bonding of Aluminum Hybrid Alloy Systems through High-Pressure Torsion. <i>Advanced Engineering Materials</i> , 2020, 22, 1900483.	3.5	14
18	Size Effect on Microstructural Evolution and Micromechanical Responses of Mechanically Bonded Aluminum and Magnesium by High-Pressure Torsion. <i>Advanced Engineering Materials</i> , 2020, 22, 1900971.	3.5	3

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19	Wallpapering-inspired spreading and wrinkling of atomically-thin materials. <i>Applied Surface Science</i> , 2020, 507, 145184.	6.1	2
20	Synthesis of Hybrid Nanocrystalline Alloys by Mechanical Bonding through High-Pressure Torsion. <i>Advanced Engineering Materials</i> , 2020, 22, 1901289.	3.5	26
21	A new Zr-rich intermetallic phase in an Al-14Si-3Cu-4.5Ni casting alloy with trace additions of Zr. <i>Intermetallics</i> , 2020, 117, 106667.	3.9	10
22	Direct nanofluidic channels via hardening and wrinkling of thin polymer films. <i>Nanoscale</i> , 2020, 12, 16895-16900.	5.6	0
23	Mechanical properties and structural stability of a bulk nanostructured metastable aluminum-magnesium system. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 796, 140050.	5.6	14
24	Effect of grain size on the strain rate sensitivity of CoCrFeNi high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 782, 139281.	5.6	32
25	Statistical nature of the incipient plasticity in amorphous alloys. <i>Scripta Materialia</i> , 2020, 187, 360-365.	5.2	14
26	Evaluation of Transition Temperature in Reactor Pressure Vessel Steels Using the Fracture Energy Transition Curve from a Small Punch Test. <i>Journal of Korean Institute of Metals and Materials</i> , 2020, 58, 522-532.	1.0	0
27	Bulk-State Reactions and Improving the Mechanical Properties of Metals through High-Pressure Torsion. <i>Materials Transactions</i> , 2019, 60, 1131-1138.	1.2	46
28	Influences of hydrogen charging method on the hydrogen distribution and nanomechanical properties of face-centered cubic high-entropy alloy: A comparative study. <i>Scripta Materialia</i> , 2019, 168, 76-80.	5.2	39
29	Nano-graining a particle-strengthened high-entropy alloy. <i>Scripta Materialia</i> , 2019, 163, 24-28.	5.2	38
30	Influence of hydrogen on incipient plasticity in CoCrFeMnNi high-entropy alloy. <i>Scripta Materialia</i> , 2019, 161, 23-27.	5.2	30
31	The influence of chemical heterogeneities on the local mechanical behavior of a high-entropy alloy: A micropillar compression study. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 721, 165-167.	5.6	11
32	Effects of interfacial layer-by-layer nanolayers on the stability of the Cu TSV: Diffusion barrier, adhesion, conformal coating, and mechanical property. <i>Materials Science in Semiconductor Processing</i> , 2018, 83, 33-41.	4.0	3
33	Unusual flow behavior of Fe-based soft magnetic amorphous ribbons under high temperature tensile loading. <i>Current Applied Physics</i> , 2018, 18, 411-416.	2.4	0
34	Influence of pre-strain on the gaseous hydrogen embrittlement resistance of a high-entropy alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018, 718, 43-47.	5.6	41
35	Indentation size effect for spherical nanoindentation on nanoporous gold. <i>Scripta Materialia</i> , 2018, 143, 10-14.	5.2	24
36	Micro-Scale Mechanical Behavior of Ultrafine-Grained Materials Processed by High-Pressure Torsion. <i>Materials Science Forum</i> , 2018, 941, 1495-1500.	0.3	2

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37	Activation energy for plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A high temperature nanoindentation study. <i>Scripta Materialia</i> , 2018, 156, 129-133.	5.2	44
38	Fabrication of nanocomposites through diffusion bonding under high-pressure torsion. <i>Journal of Materials Research</i> , 2018, 33, 2700-2710.	2.6	41
39	Direct Bonding of Aluminum-Copper Metals through High-Pressure Torsion Processing. <i>Advanced Engineering Materials</i> , 2018, 20, 1800642.	3.5	30
40	Statistical analysis of the size- and rate-dependence of yield and plastic flow in nanocrystalline copper pillars. <i>Acta Materialia</i> , 2017, 127, 332-340.	7.9	11
41	A novel way to estimate the nanoindentation hardness of only-irradiated layer and its application to ion irradiated Fe-12Cr alloy. <i>Journal of Nuclear Materials</i> , 2017, 487, 343-347.	2.7	10
42	Self-similarity in the structure of coarsened nanoporous gold. <i>Scripta Materialia</i> , 2017, 137, 46-49.	5.2	34
43	Resistance of CoCrFeMnNi high-entropy alloy to gaseous hydrogen embrittlement. <i>Scripta Materialia</i> , 2017, 135, 54-58.	5.2	166
44	Defect structure and hardness in nanocrystalline CoCrFeMnNi High-Entropy Alloy processed by High-Pressure Torsion. <i>Journal of Alloys and Compounds</i> , 2017, 711, 143-154.	5.5	100
45	Hydrogen-induced nanohardness variations in a CoCrFeMnNi high-entropy alloy. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 12015-12021.	7.1	35
46	Micro-mechanical and tribological properties of aluminum-magnesium nanocomposites processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2017, 684, 318-327.	5.6	55
47	Annealing effect on plastic flow in nanocrystalline CoCrFeMnNi high-entropy alloy: A nanomechanical analysis. <i>Acta Materialia</i> , 2017, 140, 443-451.	7.9	61
48	Indentation size effect in nanoporous gold. <i>Acta Materialia</i> , 2017, 138, 52-60.	7.9	36
49	Significant strengthening of nanocrystalline Ni sub-micron pillar by cyclic loading in elastic regime. <i>Scripta Materialia</i> , 2017, 140, 31-34.	5.2	5
50	Critical bending radius of thin single-crystalline silicon with dome and pyramid surface texturing. <i>Scripta Materialia</i> , 2017, 140, 1-4.	5.2	17
51	Wall-thickness-dependent strength of nanotubular ZnO. <i>Scientific Reports</i> , 2017, 7, 4327.	3.3	6
52	Nano- and Micro-Mechanical Properties of Ultrafine-Grained Materials Processed by Severe Plastic Deformation Techniques. <i>Advanced Engineering Materials</i> , 2017, 19, 1600578.	3.5	42
53	Fabrication of hybrid metal systems through the application of high-pressure torsion. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 194, 012002.	0.6	4
54	Micro-Mechanical Response of an Al-Mg Hybrid System Synthesized by High-Pressure Torsion. <i>Materials</i> , 2017, 10, 596.	2.9	21

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55	Micro-Mechanical Behavior of an Exceptionally Strong Metal Matrix Nanocomposite Processed by High-Pressure Torsion. <i>Advanced Engineering Materials</i> , 2016, 18, 1001-1008.	3.5	32
56	Time-dependent nanoscale plasticity in nanocrystalline nickel rods and tubes. <i>Scripta Materialia</i> , 2016, 112, 79-82.	5.2	8
57	Hydrogen-induced softening in nanocrystalline Ni investigated by nanoindentation. <i>Philosophical Magazine</i> , 2016, 96, 3442-3450.	1.6	11
58	Decoupling the contributions of constituent layers to the strength and ductility of a multi-layered steel. <i>Acta Materialia</i> , 2016, 121, 164-172.	7.9	65
59	Spherical nanoindentation creep behavior of nanocrystalline and coarse-grained CoCrFeMnNi high-entropy alloys. <i>Acta Materialia</i> , 2016, 109, 314-322.	7.9	156
60	On the contributions of different micromechanisms for enhancement in the strength of Ti-6Al-4V alloy upon B addition: A nanomechanical analysis. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 649, 123-127.	5.6	13
61	Nanomechanical behavior and structural stability of a nanocrystalline CoCrFeNiMn high-entropy alloy processed by high-pressure torsion. <i>Journal of Materials Research</i> , 2015, 30, 2804-2815.	2.6	101
62	Strain-dependent transition of time-dependent deformation mechanism in single-crystal ZnO evaluated by spherical nanoindentation. <i>Philosophical Magazine</i> , 2015, 95, 1896-1906.	1.6	5
63	Time-dependent mechanical-electrical coupled behavior in single crystal ZnO nanorods. <i>Scientific Reports</i> , 2015, 5, 9716.	3.3	3
64	The role of hydrogen in hardening/softening steel: Influence of the charging process. <i>Scripta Materialia</i> , 2015, 107, 46-49.	5.2	99
65	Strain-Dependent Plasticity Evolution of Window Glass. <i>Journal of the American Ceramic Society</i> , 2015, 98, 186-189.	3.8	4
66	Microalloying Effect on the Activation Energy of Hot Deformation. <i>Steel Research International</i> , 2015, 86, 817-820.	1.8	2
67	Enhancement of strain-rate sensitivity and shear yield strength of a magnesium alloy processed by high-pressure torsion. <i>Scripta Materialia</i> , 2015, 94, 44-47.	5.2	56
68	Evolution of hardness, microstructure, and strain rate sensitivity in a Zn-22% Al eutectoid alloy processed by high-pressure torsion. <i>IOP Conference Series: Materials Science and Engineering</i> , 2014, 63, 012101.	0.6	2
69	On the nanomechanical characteristics of thermally-treated alloy 690: Grain boundaries versus grain interior. <i>Journal of Alloys and Compounds</i> , 2014, 582, 141-145.	5.5	21
70	Stress-dependent hardening-to-softening transition of hydrogen effects in nanoindentation of a linepipe steel. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 1897-1902.	7.1	38
71	Evolution of plasticity, strain-rate sensitivity and the underlying deformation mechanism in Zn-22% Al during high-pressure torsion. <i>Scripta Materialia</i> , 2014, 75, 102-105.	5.2	54
72	Nanoindentation for probing the mechanical behavior of molecular crystals—a review of the technique and how to use it. <i>CrystEngComm</i> , 2014, 16, 12-23.	2.6	138

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73	Hydrogen-induced hardening and softening of Ni–Nb–Zr amorphous alloys: Dependence on the Zr content. <i>Scripta Materialia</i> , 2014, 93, 56-59.	5.2	30
74	Effect of hydrogen on the yielding behavior and shear transformation zone volume in metallic glass ribbons. <i>Acta Materialia</i> , 2014, 78, 213-221.	7.9	36
75	Assessment of surface-local strains from remnant microindents on a Zr-based metallic glass. <i>Metals and Materials International</i> , 2014, 20, 439-443.	3.4	9
76	High-cycle fatigue behavior of Zn–22% Al alloy processed by high-pressure torsion. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 618, 37-40.	5.6	9
77	Estimation of the Hall–Petch strengthening coefficient of steels through nanoindentation. <i>Scripta Materialia</i> , 2014, 87, 49-52.	5.2	68
78	Predicting flow curves of two-phase steels from spherical nanoindentation data of constituent phases: Isostrain method vs. non-isostrain method. <i>International Journal of Plasticity</i> , 2014, 59, 108-118.	8.8	47
79	Tensile Deformation Behavior and Phase Transformation in the Weld Coarse-Grained Heat-Affected Zone of Metastable High-Nitrogen Fe-18Cr-10Mn-N Stainless Steel. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2013, 44, 3069-3076.	2.2	8
80	Room-temperature anelasticity and viscoplasticity of Cu–Zr bulk metallic glasses evaluated using nanoindentation. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2013, 577, 101-104.	5.6	21
81	Nanoscale room temperature creep of nanocrystalline nickel pillars at low stresses. <i>International Journal of Plasticity</i> , 2013, 41, 53-64.	8.8	81
82	Time-dependent nanoscale plasticity of ZnO nanorods. <i>Acta Materialia</i> , 2013, 61, 7180-7188.	7.9	27
83	Hydrogen-induced toughness drop in weld coarse-grained heat-affected zones of linepipe steel. <i>Materials Characterization</i> , 2013, 82, 17-22.	4.4	26
84	Nanoindentation behavior of nanotwinned Cu: Influence of indenter angle on hardness, strain rate sensitivity and activation volume. <i>Acta Materialia</i> , 2013, 61, 7313-7323.	7.9	75
85	Indentation creep revisited. <i>Journal of Materials Research</i> , 2012, 27, 3-11.	2.6	85
86	Increased time-dependent room temperature plasticity in metallic glass nanopillars and its size-dependency. <i>International Journal of Plasticity</i> , 2012, 37, 108-118.	8.8	83
87	Indentation size effect and shear transformation zone size in a bulk metallic glass in two different structural states. <i>Acta Materialia</i> , 2012, 60, 6862-6868.	7.9	130
88	Correlation of particle impact conditions with bonding, nanocrystal formation and mechanical properties in kinetic sprayed nickel. <i>Acta Materialia</i> , 2012, 60, 3524-3535.	7.9	80
89	Experimental Analysis of the Elastic–Plastic Transition During Nanoindentation of Single Crystal Alpha–Silicon Nitride. <i>Journal of the American Ceramic Society</i> , 2012, 95, 2113-2115.	3.8	15
90	Martensitic phase transformation and pop-in in compression of austenitic steel nanoplates observed in situ by transmission electron microscopy. <i>Materials Letters</i> , 2012, 75, 107-110.	2.6	6

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91	Estimation of the shear transformation zone size in a bulk metallic glass through statistical analysis of the first pop-in stresses during spherical nanoindentation. Scripta Materialia, 2012, 66, 923-926.	5.2	92
92	Orientation-dependent indentation modulus and yielding in a high Mn twinning-induced plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 532, 500-504.	5.6	24
93	Further evidence for room temperature, indentation-induced nanocrystallization in a bulk metallic glass. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 545, 225-228.	5.6	6
94	Variations in DBTT and CTOD within weld heat-affected zone of API X65 pipeline steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 546, 258-262.	5.6	36
95	Indentation size effect in bulk metallic glass. Scripta Materialia, 2011, 64, 753-756.	5.2	75
96	Estimating the stress exponent of nanocrystalline nickel: Sharp vs. spherical indentation. Scripta Materialia, 2011, 65, 300-303.	5.2	49
97	Variations in overall- and phase-hardness of a new Ni-based superalloy during isothermal aging. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6121-6127.	5.6	52
98	Exploring Nanomechanical Behavior of Silicon Nanowires: AFM Bending Versus Nanoindentation. Advanced Functional Materials, 2011, 21, 279-286.	14.9	79
99	Influence of thermo-mechanical treatment on the precipitation strengthening behavior of Inconel 740, a Ni-based superalloy. Journal of Materials Research, 2011, 26, 1253-1259.	2.6	20
100	BLUNTNES MEASUREMENT OF A BERKOVICH INDENTER. International Journal of Modern Physics B, 2011, 25, 4273-4276.	2.0	2
101	Room temperature creep in amorphous alloys: Influence of initial strain and free volume. Scripta Materialia, 2010, 63, 1205-1208.	5.2	65
102	Effect of hydrogen on subsurface deformation during indentation of a bulk metallic glass. Intermetallics, 2010, 18, 1872-1875.	3.9	14
103	Nanoindentation analysis of time-dependent deformation in as-cast and annealed Cu-Zr bulk metallic glass. Intermetallics, 2010, 18, 1898-1901.	3.9	50
104	On the hardness of shear bands in amorphous alloys. Scripta Materialia, 2009, 61, 951-954.	5.2	49
105	Reappraisal of the work hardening behavior of bulk amorphous matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 513-514, 160-165.	5.6	1
106	Plasticity improvement of amorphous alloy via skim cold rolling. Metals and Materials International, 2009, 15, 209-214.	3.4	13
107	A nanoindentation study on the micromechanical characteristics of API X100 pipeline steel. Metals and Materials International, 2009, 15, 373-378.	3.4	52
108	Effects of impurities on the biodegradation behavior of pure magnesium. Metals and Materials International, 2009, 15, 955-961.	3.4	49

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109	Predicting macroscopic plastic flow of high-performance, dual-phase steel through spherical nanoindentation on each microphase. <i>Journal of Materials Research</i> , 2009, 24, 816-822.	2.6	33
110	Instrumented indentation of a Pd-based bulk metallic glass: Constant loading-rate test vs constant strain-rate test. <i>Journal of Alloys and Compounds</i> , 2009, 483, 136-138.	5.5	10
111	Role of free volume in strain softening of as-cast and annealed bulk metallic glass. <i>Journal of Materials Research</i> , 2009, 24, 1405-1416.	2.6	53
112	Orowan strengthening effect on the nanoindentation hardness of the ferrite matrix in microalloyed steels. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 487, 552-557.	5.6	102
113	Extraction of flow properties of single-crystal silicon carbide by nanoindentation and finite-element simulation. <i>Acta Materialia</i> , 2008, 56, 3824-3832.	7.9	91
114	Influence of indenter angle on cracking in Si and Ge during nanoindentation. <i>Acta Materialia</i> , 2008, 56, 4458-4469.	7.9	114
115	Irreversible Structural Change Induced by Elastostatic Stress imposed on an Amorphous Alloy and Its Influence on the Mechanical Properties. <i>Metals and Materials International</i> , 2008, 14, 9-13.	3.4	34
116	Investigations on indentation size effects using a pile-up corrected hardness. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 074027.	2.8	34
117	A study on the evolution of subsurface deformation in a Zr-based bulk metallic glass during spherical indentation. <i>Journal Physics D: Applied Physics</i> , 2008, 41, 074017.	2.8	27
118	Rate-dependent inhomogeneous-to-homogeneous transition of plastic flows during nanoindentation of bulk metallic glasses: Fact or artifact?. <i>Applied Physics Letters</i> , 2007, 90, 211906.	3.3	35
119	A nanoindentation study on grain-boundary contributions to strengthening and aging degradation mechanisms in advanced 12 Cr ferritic steel. <i>Journal of Materials Research</i> , 2007, 22, 175-185.	2.6	30
120	Nanoindentation Analysis of Plasticity Evolution during Spherical Microindentation of Bulk Metallic Glass. <i>Materials Research Society Symposia Proceedings</i> , 2007, 1049, 1.	0.1	0
121	Influence of Indenter Geometry on the Deformation Behavior of Zr ₆₀ Cu ₃₀ Al ₁₀ Bulk Metallic Glass during Nanoindentation. <i>Materials Transactions</i> , 2007, 48, 1765-1769.	1.2	17
122	Influence of surface-roughness on indentation size effect. <i>Acta Materialia</i> , 2007, 55, 3555-3562.	7.9	134
123	Fracture toughness anisotropy in a API steel line-pipe. <i>Materials Letters</i> , 2007, 61, 5178-5180.	2.6	56
124	Atomic packing density and its influence on the properties of Cu-Zr amorphous alloys. <i>Scripta Materialia</i> , 2007, 57, 805-808.	5.2	165
125	An instrumented indentation technique for estimating fracture toughness of ductile materials: A critical indentation energy model based on continuum damage mechanics. <i>Acta Materialia</i> , 2006, 54, 1101-1109.	7.9	121
126	Surface roughness effect in instrumented indentation: A simple contact depth model and its verification. <i>Journal of Materials Research</i> , 2006, 21, 2975-2978.	2.6	65

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127	On the Characterization of Thin Film-only Mechanical Property Based on the Indentation Image Analysis. Materials Research Society Symposia Proceedings, 2006, 976, 1.	0.1	0
128	Mechanical properties of porous and fully dense low- $\hat{\rho}$ dielectric thin films measured by means of nanoindentation and the plane-strain bulge test technique. Journal of Materials Research, 2006, 21, 386-395.	2.6	49
129	Instrumented microindentation studies on long-term aged materials: work-hardening exponent and yield ratio as new degradation indicators. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 395, 295-300.	5.6	30
130	Indentation-induced phase transformations in silicon: influences of load, rate and indenter angle on the transformation behavior. Acta Materialia, 2005, 53, 1759-1770.	7.9	286
131	Application of instrumented indentation technique for enhanced fitness-for-service assessment of pipeline crack. International Journal of Fracture, 2005, 131, 15-33.	2.2	29
132	Evidence for nanoindentation-induced phase transformations in germanium. Applied Physics Letters, 2005, 86, 131907.	3.3	65
133	Cross-Sectional TEM Studies of Indentation-Induced Phase Transformations in Si: Indenter Angle Effects. Materials Research Society Symposia Proceedings, 2004, 843, 641.	0.1	0
134	Cross-Sectional TEM Studies of Indentation-Induced Phase Transformations in Si: Indenter Angle Effects. Materials Research Society Symposia Proceedings, 2004, 841, R10.4.1/T6.4.1.	0.1	0
135	UV Raman Scattering Analysis of Indented and Machined 6H-SiC and $\hat{2}$ -Si ₃ N ₄ Surfaces. Materials Research Society Symposia Proceedings, 2004, 843, 4101.	0.1	1
136	Weld crack assessments in API X65 pipeline: failure assessment diagrams with variations in representative mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 373, 122-130.	5.6	24
137	Characterization of Nanoindentations in Silicon by Cross-sectional TEM. Microscopy and Microanalysis, 2004, 10, 56-57.	0.4	0
138	Micro-Raman Mapping and Analysis of Indentation-Induced Phase Transformations in Germanium. Materials Research Society Symposia Proceedings, 2004, 841, R10.9.1/T6.9.1.	0.1	0
139	Title is missing!. Journal of Materials Science Letters, 2003, 22, 499-502.	0.5	11
140	Assessing welding residual stress in A335 P12 steel welds before and after stress-relaxation annealing through instrumented indentation technique. Scripta Materialia, 2003, 48, 743-748.	5.2	66
141	Experimental analysis of the practical LBZ effects on the brittle fracture performance of cryogenic steel HAZs with respect to crack arrest toughness near fusion line. Engineering Fracture Mechanics, 2003, 70, 1245-1257.	4.3	20
142	Evaluation of fracture toughness by small-punch testing techniques using sharp notched specimens. International Journal of Pressure Vessels and Piping, 2003, 80, 221-228.	2.6	52
143	Determination of welding residual stress distribution in API X65 pipeline using a modified magnetic Barkhausen noise method. International Journal of Pressure Vessels and Piping, 2003, 80, 641-646.	2.6	32
144	Effects of microstructural change on fracture characteristics in coarse-grained heat-affected zones of QLT-processed 9% Ni steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 340, 68-79.	5.6	77

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145	Determination of microstructural criterion for cryogenic toughness variation in actual HAZs using microstructure-distribution maps. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2003, 351, 183-189.	5.6	14
146	Cracking and Phase Transformation in Silicon During Nanoindentation. Materials Research Society Symposia Proceedings, 2003, 795, 451.	0.1	0
147	Instrumented Indentation Technique to Measure Flow Properties: A Novel Way to Enhance the Accuracy of Integrity Assessment. , 2003, , 367.		0
148	Metallurgical and Mechanical Features of API 5L X65 Pipeline Steel Weldment. , 2002, , 429.		3
149	Advanced Indentation Techniques: NDE for Flow Properties and Residual Stresses of Pipelines. , 2002, , 2045.		0
150	Evaluation of Welding Residual Stresses in Power Plant Facilities by Using a Newly Developed Indentation Technique. , 2002, , 249.		0
151	Crack-initiation toughness and crack-arrest toughness in advanced 9 pct Ni steel welds containing local brittle zones. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 2615-2622.	2.2	11
152	Evaluation of fracture toughness using small notched specimens. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 334, 207-214.	5.6	24
153	Fitness-for-Service Assessment for Weldments of the Natural Gas Pipeline by Using Failure Assessment Diagram. , 2002, , .		0
154	Micromechanism of local brittle zone phenomenon in weld heat-affected zones of advanced 9% Ni steel. Journal of Materials Science Letters, 2001, 20, 2149-2152.	0.5	10
155	The Effect of Microstructural Change on Fracture Behavior in Heat-Affected Zone of API 5L X65 Pipeline Steel. , 2000, , .		0
156	Evaluation of cryogenic fracture toughness in SMA-welded 9% Ni steels through modified CTOD test. Metals and Materials International, 1997, 3, 230-238.	0.2	5