

# Vickers Indentation Curves of Magnesium Oxide (MgO)

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Citation Report

#	ARTICLE	IF	CITATIONS
1	The Hardness Of Ion Implanted Ceramics. Materials Research Society Symposia Proceedings, 1985, 60, 515.	0.1	4
2	Indentation Curves of Surface Films. ASLE Transactions, 1986, 29, 532-538.	0.6	3
3	Mechanical property measurements on ion-irradiated copper and Cu-Zr. Journal of Nuclear Materials, 1986, 141-143, 548-552.	2.7	44
4	A method for interpreting the data from depth-sensing indentation instruments. Journal of Materials Research, 1986, 1, 601-609.	2.6	2,592
5	Limits to the hardness testing of films thinner than $1\frac{1}{4}\mu\text{m}$ . Thin Solid Films, 1987, 148, 171-180.	1.8	42
6	Thin film characterization using a mechanical properties microprobe. Thin Solid Films, 1987, 153, 185-196.	1.8	93
7	The mechanical properties of thin films: A review. Thin Solid Films, 1987, 154, 109-124.	1.8	131
8	Elastic analysis of some punch problems for a layered medium. International Journal of Solids and Structures, 1987, 23, 1657-1664.	2.7	768
9	Characterizing the hardness and modulus of thin films using a mechanical properties microprobe. Thin Solid Films, 1988, 161, 117-122.	1.8	70
10	Microhardness and microstructure of ion-beam-sputtered, nitrogen-doped NiFe films. Thin Solid Films, 1988, 166, 299-308.	1.8	49
11	Finite element simulation of indentation experiments. International Journal of Solids and Structures, 1988, 24, 881-891.	2.7	293
12	Stresses and deformation processes in thin films on substrates. Critical Reviews in Solid State and Materials Sciences, 1988, 14, 225-268.	12.3	537
13	Nanoindentation of silver-relations between hardness and dislocation structure. Journal of Materials Research, 1989, 4, 94-101.	2.6	95
14	The hardness and Young's modulus of amorphous hydrogenated carbon and silicon films measured with an ultralow load indenter. Journal of Applied Physics, 1989, 66, 5805-5808.	2.5	136
15	The study of mechanical properties of a-C:H films by Brillouin scattering and ultralow load indentation. Journal of Applied Physics, 1989, 66, 4729-4735.	2.5	96
16	Microhardness modification of nickel by ion beam mixing. Journal Physics D: Applied Physics, 1989, 22, 1510-1514.	2.8	1
17	Mechanical properties of thin films. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1989, 20, 2217-2245.	1.4	2,255
18	Mechanical property changes in ion-irradiated metals: Part II. high-strength Cu-Ni-be alloy. Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science, 1989, 20, 2689-2693.	1.4	3

#	ARTICLE	IF	CITATIONS
19	Measuring stiffnesses and residual stresses of silicon nitride thin films. Journal of Electronic Materials, 1990, 19, 903.	2.2	76
20	The hardness and Young's modulus of a-C:H films. Vacuum, 1990, 41, 1381-1382.	3.5	9
21	The effect of the interfacial strength on the mechanical properties of aluminum films. Thin Solid Films, 1990, 187, 295-307.	1.8	43
22	Paper Paper XIX (i) Measurements of thin films adhesion and mechanical properties with indentation curves. Tribology Series, 1990, 17, 429-434.	0.1	3
23	Improved surface properties of polymer materials by multiple ion beam treatment. Journal of Materials Research, 1991, 6, 610-628.	2.6	158
24	The Determination of Surface Plastic and Elastic Properties by Ultra Micro-indentation. Metrologia, 1991, 28, 463-469.	1.2	125
25	The AC-Indentation Technique and its Application to Al and Al-Si Coatings. Materials Research Society Symposia Proceedings, 1991, 226, 165.	0.1	0
26	Microindentation fatigue tests on submicron carbon films. Surface and Coatings Technology, 1991, 47, 696-709.	4.8	19
27	Characterization of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> in a mechanical properties microprobe. Scripta Metallurgica Et Materialia, 1992, 26, 7-12.	1.0	2
28	Measurement of Thin Film Mechanical Properties Using Nanoindentation. MRS Bulletin, 1992, 17, 28-33.	3.5	792
29	An improved technique for determining hardness and elastic modulus using load and displacement sensing indentation experiments. Journal of Materials Research, 1992, 7, 1564-1583.	2.6	22,457
30	Microhardness and Young's modulus of diamond and diamondlike carbon films. Journal of Applied Physics, 1992, 72, 2791-2796.	2.5	138
31	A study of the mechanics of microindentation using finite elements. Journal of Materials Research, 1992, 7, 618-626.	2.6	203
32	On the generality of the relationship among contact stiffness, contact area, and elastic modulus during indentation. Journal of Materials Research, 1992, 7, 613-617.	2.6	1,355
33	In Situ Measurement of the Elastic Moduli of Glass-Ceramic Thick Films. Journal of the American Ceramic Society, 1992, 75, 1284-1286.	3.8	3
34	Elastic contact versus indentation modeling of multi-layered materials. International Journal of Solids and Structures, 1992, 29, 2471-2492.	2.7	404
35	The microhardness indentation load/size effect in rutile and cassiterite single crystals. Journal of Materials Science, 1993, 28, 917-926.	3.7	363
36	Indentation Creep of Hydrated Soda-Lime Silicate Glass Determined by Nanoindentation. Journal of the American Ceramic Society, 1993, 76, 904-912.	3.8	29

#	ARTICLE	IF	CITATIONS
37	The a.c. indentation technique and its applications. <i>Materials Chemistry and Physics</i> , 1993, 33, 15-30.	4.0	21
38	Characterization of surface coatings by the scratch adhesion test and by indentation measurements. <i>Fresenius' Journal of Analytical Chemistry</i> , 1993, 346, 45-52.	1.5	22
39	Difficulties in estimating the rheological properties of diamond-like films by means of nanoindentation tests. <i>Thin Solid Films</i> , 1993, 229, 83-92.	1.8	21
40	Stability and elastic properties of amorphous Al <sub>i</sub> -Zr <sub>i</sub> -O films. <i>Journal of Non-Crystalline Solids</i> , 1993, 156-158, 612-616.	3.1	2
41	Energy principle of the indentation-induced inelastic surface deformation and hardness of brittle materials. <i>Acta Metallurgica Et Materialia</i> , 1993, 41, 1751-1758.	1.8	255
42	A note on the elastic contact stiffness of a layered medium. <i>Journal of Materials Research</i> , 1993, 8, 3229-3232.	2.6	30
43	Nanoindentation with a Surface Force Apparatus. , 1993, , 429-447.		50
44	A Simple Method for Determination of the Elastic Modulus of Thin Films on a Substrate. <i>Materials Research Society Symposia Proceedings</i> , 1993, 308, 177.	0.1	15
45	Study of Bulk and Film-Substrate Composite Materials Behaviour Under Vickers Indentation By Three-Dimensional Finite Element Simulation. <i>Materials Research Society Symposia Proceedings</i> , 1993, 308, 183.	0.1	3
46	Mechanical testing of thin films. <i>International Materials Reviews</i> , 1994, 39, 24-45.	19.3	132
47	Elastic relaxation of indented coated substrates using a coated cavity model. <i>Surface and Coatings Technology</i> , 1994, 67, 119-123.	4.8	2
48	Kinetic microhardness measurements of sialon-based ceramics. <i>Journal of Materials Science</i> , 1994, 29, 6551-6560.	3.7	14
49	The properties of TiN films deposited by filtered arc evaporation. <i>Surface and Coatings Technology</i> , 1994, 70, 97-106.	4.8	88
50	Composition Dependence of Hardness and Moduli in GeSi/Si-Heterostructures Measured by Nanoindentation. <i>Materials Research Society Symposia Proceedings</i> , 1994, 356, 277.	0.1	0
51	Indentation Characterisation of Carbon Materials. <i>Materials Research Society Symposia Proceedings</i> , 1995, 383, 85.	0.1	5
52	Study of thin alumina coatings sputtered on polyethylene terephthalate films. <i>Thin Solid Films</i> , 1995, 266, 198-204.	1.8	23
53	Elastic moduli of TiB <sub>2</sub> and C layers in a fiber reinforced glass ceramic composite. <i>Scripta Metallurgica Et Materialia</i> , 1995, 33, 789-794.	1.0	7
54	Vickers hardness from plastic energy. <i>Scripta Metallurgica Et Materialia</i> , 1995, 32, 617-620.	1.0	21

#	ARTICLE	IF	CITATIONS
55	The elastoplastic response of poly(methyl methacrylate) to indentation. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 1996, 452, 439-457.	2.1	101
56	Nanoindentation characterisation of the properties around reinforcements in a heat treated spray deposited 2014+15vol%SiCp metal-matrix composite. Scripta Materialia, 1996, 35, 1115-1120.	5.2	7
57	Mechanical characterization by nanoindentation of zirconium ion implanted alumina. Nuclear Instruments & Methods in Physics Research B, 1996, 108, 87-93.	1.4	8
58	The mechanical and structural properties of Ti films prepared by filtered arc deposition. Vacuum, 1996, 47, 1179-1188.	3.5	24
59	Localised micro-hardness measurements with a combined scanning force microscope/nanoindentation system. Thin Solid Films, 1996, 290-291, 348-354.	1.8	38
60	Sol-gel mullite matrix-SiC and -mullite 2D woven fabric composites with or without zirconia containing interphase: Elaboration and properties. Journal of the European Ceramic Society, 1996, 16, 301-314.	5.7	35
61	Controlled indentation: A general approach to determine mechanical properties of brittle materials. Acta Materialia, 1996, 44, 1127-1141.	7.9	103
62	Microstructure and tribology of TiB <sub>2</sub> and TiB <sub>2</sub> /TiN double-layer coatings. Surface and Coatings Technology, 1996, 84, 404-408.	4.8	16
63	Determination of the hardness and elastic modulus from continuous vickers indentation testing. Journal of Materials Science, 1996, 31, 3109-3114.	3.7	37
64	Elastic modulus determination from depth sensing indentation testing. Journal of Materials Science Letters, 1996, 15, 2141.	0.5	12
65	Investigation of the mechanical properties of two glassy carbon materials using pointed indenters. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1996, 74, 1085-1096.	0.6	17
66	Interfacial behaviour of 6061/Al <sub>2</sub> O <sub>3</sub> metal matrix composites. Materials Science and Technology, 1997, 13, 778-784.	1.6	10
67	Nanoindentation of Soft Films On Hard Substrates: Experiments And Finite Element Simulations. Materials Research Society Symposia Proceedings, 1997, 505, 109.	0.1	11
68	Nanoscale Indentation of Polymer Systems Using the Atomic Force Microscope. Journal of Adhesion, 1997, 64, 31-59.	3.0	146
69	Microhardness, Young's modulus and fracture toughness of alumina implanted with , , and . The effect of the residual stresses. Journal Physics D: Applied Physics, 1997, 30, 330-337.	2.8	19
70	Novel nanoindentation method for characterising multiphase materials. Thin Solid Films, 1997, 308-309, 297-303.	1.8	37
71	Microstructure and properties of spray-deposited 2014+15 vol pct SiC particulate-reinforced metal matrix composite. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 1261-1269.	2.2	26
72	Characterization of ceramic pastes by an indentation hardness test. Journal of the European Ceramic Society, 1997, 17, 1675-1683.	5.7	12

#	ARTICLE	IF	CITATIONS
73	Ageing behaviour of spray-deposited 18Ni(250) maraging steel + 10 vol.% Al <sub>2</sub> O <sub>3</sub> particulate-reinforced metal matrix composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1997, 225, 96-104.	5.6	6
74	Correlation between processing parameters and mechanical properties as a function of substrate polarisation and depth in a nitrided 316 L stainless steel using nanoindentation and scanning force microscopy. <i>Vacuum</i> , 1997, 48, 849-855.	3.5	24
75	Nanoindentation and scanning force microscopy as a novel method for the characterization of tribological transfer films. <i>Wear</i> , 1997, 212, 18-24.	3.1	19
76	Nanoindentation test on electron beam-irradiated boride layer of carbon-carbon composite for plasma facing component of large Tokamak device. <i>Journal of Nuclear Materials</i> , 1997, 244, 168-172.	2.7	5
77	Nanoindentation behavior of a two-dimensional carbon-carbon composite for nuclear applications. <i>Carbon</i> , 1997, 35, 1429-1437.	10.3	43
78	Mechanical properties of nanocomposite organosilicate films. <i>Journal of Materials Science</i> , 1998, 33, 3999-4005.	3.7	19
79	Mechanical study of sintered aromatic polyesters as revealed by microindentation measurements. <i>Journal of Materials Science</i> , 1998, 33, 3567-3571.	3.7	4
80	Local mechanical characterisation and modelling of the interfacial behaviour in Hi-Nicalon/BN/ $\alpha$ -Si <sub>3</sub> N <sub>4</sub> ceramic matrix composites by way of instrumented microindentation tests. <i>Journal of the European Ceramic Society</i> , 1998, 18, 1845-1855.	5.7	5
81	Influence of sample deformation and porosity on mechanical properties by instrumented microindentation technique. <i>Journal of the European Ceramic Society</i> , 1998, 18, 87-93.	5.7	28
82	Measurement of mechanical properties by ultra-low load indentation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1998, 253, 151-159.	5.6	890
83	Nano-indentation of polymeric surfaces. <i>Journal Physics D: Applied Physics</i> , 1998, 31, 2395-2405.	2.8	671
84	Influences of pileup on the measurement of mechanical properties by load and depth sensing indentation techniques. <i>Journal of Materials Research</i> , 1998, 13, 1049-1058.	2.6	807
85	Mechanical properties of poly(ethylene terephthalate) at the near surface from depth-sensing experiments. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1998, 78, 1283-1297.	0.6	55
86	Mechanical properties from instrumented indentation: Uncertainties due to tip-shape correction. <i>Journal of Materials Research</i> , 1998, 13, 2936-2944.	2.6	26
87	Prediction of nanoindentation hardness profile from a load-displacement curve. <i>Journal of Materials Research</i> , 1998, 13, 3519-3526.	2.6	14
88	Accurate determination of the mechanical properties of thin aluminum films deposited on sapphire flats using nanoindentations. <i>Journal of Materials Research</i> , 1999, 14, 2314-2327.	2.6	81
89	A critical examination of the fundamental relations used in the analysis of nanoindentation data. <i>Journal of Materials Research</i> , 1999, 14, 2296-2305.	2.6	383
90	Influence of deposition parameters on mechanical properties of sputter-deposited Cr <sub>2</sub> O <sub>3</sub> thin films. <i>Journal of Materials Research</i> , 1999, 14, 3623-3629.	2.6	23

#	ARTICLE	IF	CITATIONS
91	A continuum dislocation model of Vickers indentation on a zirconia. <i>Acta Materialia</i> , 1999, 47, 2243-2257.	7.9	10
92	Mechanical properties of carbon-carbon composite components determined using nanoindentation. <i>Carbon</i> , 1999, 37, 1679-1684.	10.3	37
93	Effect of heat treatment on elastic properties of separated thermal barrier coatings. <i>Journal of Materials Research</i> , 1999, 14, 4643-4650.	2.6	73
94	Substrate effects on nanoindentation mechanical property measurement of soft films on hard substrates. <i>Journal of Materials Research</i> , 1999, 14, 292-301.	2.6	325
96	Contact Mechanics. , 2000, , 1-19.		0
97	A Scaling Approach to Modeling Indentation Measurements. <i>Materials Research Society Symposia Proceedings</i> , 2000, 649, 111.	0.1	2
98	Mechanical Measurements at a Submicrometric Scale: Viscoelastic Materials. <i>Materials Research Society Symposia Proceedings</i> , 2000, 651, 1.	0.1	0
99	Nanoindentation as a tool for characterising the mechanical properties of tribological transfer films. <i>Wear</i> , 2000, 245, 196-203.	3.1	31
100	Micromechanical estimation of composite hardness using nanoindentation technique for thin-film coated system. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 285, 172-179.	5.6	58
102	Study by atomic force microscopy of elementary deformation mechanisms involved in low load indentations in MgO crystals. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2000, 80, 2325-2335.	0.6	27
103	Identification strategies for recovering material parameters from indentation experiments. , 2000, , 181-190.		1
104	Mapping surface elastic properties of stiff and compliant materials on the nanoscale using ultrasonic force microscopy. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2000, 80, 2299-2323.	0.6	62
105	Elastoplastic Properties of Starch-Based Materials as Revealed by Microindentation Measurements. <i>Journal of Macromolecular Science - Physics</i> , 2000, 39, 749-759.	1.0	11
106	Nanoindentation of CVD diamond: comparison of an FE model with analytical and experimental data. <i>Diamond and Related Materials</i> , 2001, 10, 765-769.	3.9	25
107	EVALUATION OF THE MECHANICAL PROPERTIES OF CERAMICS AND THIN HARD CERAMIC COATINGS USING NANOINDENTATION. <i>Nondestructive Testing and Evaluation</i> , 2001, 17, 275-298.	2.1	8
108	On the identification of elastoviscoplastic constitutive laws from indentation tests. <i>Inverse Problems in Science and Engineering</i> , 2001, 9, 19-44.	0.5	37
109	Nanoindentation load-displacement behavior of pure face centered cubic metal thin films on a hard substrate. <i>Thin Solid Films</i> , 2001, 385, 198-204.	1.8	54
110	An analysis of load-penetration curves from instrumented indentation. <i>Acta Materialia</i> , 2001, 49, 3539-3551.	7.9	153

#	ARTICLE	IF	CITATIONS
111	An inverse method for determining material properties of a multi-layer medium by boundary element method. <i>International Journal of Solids and Structures</i> , 2001, 38, 8907-8920.	2.7	4
112	Kinetics of adhesion on a viscoelastic sample by force microscopy. <i>Tribology Letters</i> , 2001, 10, 189-193.	2.6	13
113	A note on a common mistake in the analysis of nanoindentation data. <i>Journal of Materials Research</i> , 2001, 16, 336-339.	2.6	42
114	First Prize Mechanical Properties of Thin Films Quantified Via Instrumented Indentation. <i>Surface Engineering</i> , 2001, 17, 140-145.	2.2	17
115	Indentation of elastically anisotropic half-spaces by cones and parabolae of revolution. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001, 81, 447-466.	0.6	142
116	Do residual nano indentations in metals and ceramics relax with time?. <i>Journal Physics D: Applied Physics</i> , 2001, 34, L70-L78.	2.8	18
117	Fundamental relations used in nanoindentation: Critical examination based on experimental measurements. <i>Journal of Materials Research</i> , 2002, 17, 2227-2234.	2.6	60
118	A numerical and experimental study of the indentation mechanics of plasticine. <i>Journal of Strain Analysis for Engineering Design</i> , 2002, 37, 141-150.	1.8	15
119	Depth-sensing indentation at macroscopic dimensions. <i>Journal of Materials Research</i> , 2002, 17, 2679-2690.	2.6	44
120	Scaling relationships for indentation measurements. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2002, 82, 1821-1829.	0.6	158
121	Understanding nanoindentation unloading curves. <i>Journal of Materials Research</i> , 2002, 17, 2660-2671.	2.6	396
122	Nanoindentation around Vickers microindentation in MgO (100) crystal. <i>International Journal of Materials Research</i> , 2002, 93, 875-878.	0.8	3
123	Raman imaging of stress-induced phase transformation in transparent ZnSe ceramic and sapphire single crystals. <i>Journal of Raman Spectroscopy</i> , 2002, 33, 789-795.	2.5	29
124	Mechanical properties of silica (meth)acrylate hybrid coatings on polycarbonate substrate. <i>Polymer</i> , 2002, 43, 6169-6181.	3.8	100
125	Indentation properties of the filler and matrix in polymer composites. <i>Journal of Materials Science Letters</i> , 2002, 21, 85-88.	0.5	4
126	Nanoindentation measurements of combustion CVD Al <sub>2</sub> O <sub>3</sub> and YSZ films. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2003, 359, 112-118.	5.6	48
127	Study of the dislocation structure involved in a nanoindentation test by atomic force microscopy and controlled chemical etching. <i>Acta Materialia</i> , 2003, 51, 1059-1065.	7.9	62
128	Investigation of mechanical properties of transparent conducting oxide thin films. <i>Thin Solid Films</i> , 2003, 443, 60-65.	1.8	110



#	ARTICLE	IF	CITATIONS
129	Experimental investigations of the normal loading of elastic spherical and conical indenters on to elastic flats. Philosophical Magazine, 2003, 83, 3427-3462.	1.6	28
130	Nanoindentation Methods in Interfacial Fracture Testing. , 2003, , 453-493.		5
131	Effect of Nd:YAG Laser Irradiation on the Hardness and Elastic Modulus of Human Dentin. Photomedicine and Laser Surgery, 2003, 21, 41-46.	0.9	7
132	Nanoindentation: Depth dependence of silicon hardness studied within contact theory. Physical Review B, 2003, 68, .	3.2	6
133	Indentation Analysis of Elastic-Plastic Homogeneous and Layered Media: Criteria for Determining the Real Material Hardness. Journal of Tribology, 2003, 125, 685-691.	1.9	52
134	Mechanical Characterization of a CVD Diamond Coating by Nanoindentation Test. Journal of Engineering Materials and Technology, Transactions of the ASME, 2003, 125, 309-314.	1.4	5
135	The use of a vickers indenter in depth sensing indentation for measuring elastic modulus and vickers hardness. Materials Research, 2004, 7, 483-491.	1.3	73
136	Influence of substrate bias on practical adhesion, toughness, and roughness of reactive dc-sputtered zirconium nitride films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 2041-2047.	2.1	15
137	Using multidimensional contact mechanics experiments to measure Poisson's ratio. Journal of Materials Research, 2004, 19, 58-65.	2.6	32
138	Characterization of Test Specimens. Tribology Series, 2004, 44, 115-150.	0.1	5
139	Atomistic simulation of the influence of pre-existing stress on the interpretation of nanoindentation data. Journal of Materials Research, 2004, 19, 3172-3180.	2.6	45
140	Hardness, elasticity, and fracture toughness of polycrystalline spinel germanium nitride and tin nitride. Journal of Materials Research, 2004, 19, 1392-1399.	2.6	28
141	Uniqueness of reverse analysis from conical indentation tests. Journal of Materials Research, 2004, 19, 2498-2502.	2.6	80
142	Zirconates as New Materials for Thermal Barrier Coatings. Journal of the American Ceramic Society, 2000, 83, 2023-2028.	3.8	1,068
143	Viscoelastic mechanical properties determined by nanoindentation tests and its numerical modelling of polypropylene modified by He+ particle implantation and eâ" irradiation. Progress in Organic Coatings, 2004, 51, 195-204.	3.9	15
144	Measurement of hardness and elastic modulus by instrumented indentation: Advances in understanding and refinements to methodology. Journal of Materials Research, 2004, 19, 3-20.	2.6	6,313
145	Determination of Young's modulus by nanoindentation. Science in China Series D: Earth Sciences, 2004, 47, 398.	0.9	42
146	Analysis of nanoindentation creep for polymeric materials. Journal of Applied Physics, 2004, 95, 3655-3666.	2.5	204

#	ARTICLE	IF	CITATIONS
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	Scaling, dimensional analysis, and indentation measurements. <i>Materials Science and Engineering Reports</i> , 2004, 44, 91-149.	31.8	878
149	Characterization of lubricated worn surfaces using a nano/micro-indenter. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 371, 222-228.	5.6	7
150	Estimation of biaxial surface stress by instrumented indentation with sharp indenters. <i>Acta Materialia</i> , 2004, 52, 1555-1563.	7.9	154
151	Observation and numerical simulation of an elastic-plastic solid loaded by a spherical indenter. <i>Journal of Materials Research</i> , 2004, 19, 3474-3483.	2.6	10
152	Dislocations and Indentations. <i>Dislocations in Solids</i> , 2004, , 447-550.	1.6	26
153	Study of adhesion forces and mechanical properties of human skin in vivo. <i>Journal of Adhesion Science and Technology</i> , 2004, 18, 1739-1758.	2.6	67
154	New relationship between Young's modulus and nonideally sharp indentation parameters. <i>Journal of Materials Research</i> , 2004, 19, 2144-2151.	2.6	17
155	An analysis of piling-up or sinking-in behaviour of elastic-plastic materials under a sharp indentation. <i>Philosophical Magazine</i> , 2004, 84, 2367-2380.	1.6	41
156	On the contact area for nanoindentation tests with Berkovich indenter: case study on soda-lime glass. <i>Materials Letters</i> , 2004, 58, 1349-1353.	2.6	56
157	Fracture study of organic-inorganic coatings using nanoindentation technique. <i>Journal of Non-Crystalline Solids</i> , 2004, 344, 60-65.	3.1	40
158	Determination of Adhesion Energy of CNxThin Film on Silicon from Micro-Scratch Testing. <i>Tribology Transactions</i> , 2004, 47, 130-137.	2.0	8
159	Simulation of instrumented indentation and material characterization. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 390, 202-209.	5.6	44
160	Study of mechanical properties of light-emitting polymer films by nano-indentation technique. <i>Thin Solid Films</i> , 2005, 477, 111-118.	1.8	26
161	Influence of growth temperature on microstructure and mechanical properties of nanocrystalline zirconium carbide films. <i>Thin Solid Films</i> , 2005, 479, 130-136.	1.8	53
162	Nanohardness and fracture toughness of combustion chemical vapor deposition deposited yttria stabilized zirconia-alumina films. <i>Thin Solid Films</i> , 2005, 483, 211-217.	1.8	14
163	Indentation of rigid cones into conical holes molded in elastic blocks. <i>Journal of Applied Physics</i> , 2005, 98, 073518.	2.5	8
164	Nanomechanical Properties of Solid Surfaces and Thin Films. , 2005, , 575-622.		5

#	ARTICLE	IF	CITATIONS
165	Nanoindentation of coatings. Journal Physics D: Applied Physics, 2005, 38, R393-R413.	2.8	305
166	Modelling of sharp indentation experiments: some fundamental issues. Philosophical Magazine, 2006, 86, 5155-5177.	1.6	31
167	Sample size effect on nanoindentation of micro-/nanostructures. Acta Materialia, 2006, 54, 1699-1703.	7.9	46
168	Nanomechanical measurements with AFM in the elastic limit. Advances in Colloid and Interface Science, 2006, 120, 57-67.	14.7	65
169	Non-linear finite element constitutive modeling of mechanical properties of hard and superhard materials studied by indentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 422, 205-217.	5.6	19
170	Characterization of mechanical properties of thin films using nanoindentation test. Mechanics of Materials, 2006, 38, 1182-1198.	3.2	69
171	Influence of the average roughness Rms on the precision of the Young's modulus and hardness determination using nanoindentation technique with a Berkovich indenter. Surface and Coatings Technology, 2006, 201, 1191-1199.	4.8	69
172	Comparison of different analysis methods in nanoindentation and influence on the correction factor for contact area. Surface and Coatings Technology, 2006, 201, 1613-1619.	4.8	38
173	A Transparent Indenter Measurement Method for Mechanical Property Evaluation. Experimental Mechanics, 2006, 46, 91-103.	2.0	13
174	Hardness testing under a different light: combining synchrotron X-ray microdiffraction and indentation techniques for polymer fibres studies. Philosophical Magazine, 2006, 86, 5753-5767.	1.6	4
175	Post-Yielding Stress-Strain Determination Using Spherical Indentation. Mechanics of Advanced Materials and Structures, 2006, 13, 129-138.	2.6	15
176	Effect of sample tilt on nanoindentation behaviour of materials. Philosophical Magazine, 2007, 87, 2299-2312.	1.6	39
177	Assessment and Verification of a Novel Method for Near Surface Measurement of Mechanical Properties. Journal of Tribology, 2007, 129, 314-320.	1.9	6
178	Dependence of the mechanical properties of nanohoneycomb structures on porosity. Journal of Micromechanics and Microengineering, 2007, 17, 501-508.	2.6	27
179	Thin Films for Microelectronics and Photonics: Physics, Mechanics, Characterization, and Reliability. , 2007, , A135-A180.		8
180	Microindentation of a Zr<SUB>57</SUB>Ti<SUB>5</SUB>Cu<SUB>20</SUB>Ni<SUB>8</SUB>Al<SUB>10</SUB> Bulk Metallic Glass. Materials Transactions, 2007, 48, 1743-1747.	1.2	6
182	Nanomechanical Properties of Solid Surfaces and Thin Films. , 2007, , 1137-1166.		1
183	A systematic study of the validation of Oliver and Pharr's method. Journal of Materials Research, 2007, 22, 3385-3396.	2.6	14

#	ARTICLE	IF	CITATIONS
185	Determination of Young's modulus and Poisson's ratio for coatings. Surface and Coatings Technology, 2007, 201, 6470-6477.	4.8	32
186	Contribution of stratum corneum in determining bio-tribological properties of the human skin. Wear, 2007, 263, 1038-1043.	3.1	73
188	Nanoindentation of shape memory polymer networks. Polymer, 2007, 48, 3213-3225.	3.8	96
189	Nanomechanics of a high H/E carbonaceous material. Scripta Materialia, 2007, 57, 925-928.	5.2	3
190	Abnormal Hall-Petch behavior in nanocrystalline MgO ceramic. Journal of Materials Science, 2008, 43, 6139-6143.	3.7	53
191	In vivo measurements of the elastic mechanical properties of human skin by indentation tests. Medical Engineering and Physics, 2008, 30, 599-606.	1.7	526
192	Effects of indenter geometry and material properties on the correction factor of Sneddon's relationship for nanoindentation of elastic and elastic-plastic materials. Acta Materialia, 2008, 56, 1399-1405.	7.9	42
193	An analysis of nanoindentation in linearly elastic solids. International Journal of Solids and Structures, 2008, 45, 6018-6033.	2.7	144
194	An analysis of nanoindentation in elasto-plastic solids. International Journal of Solids and Structures, 2008, 45, 6399-6415.	2.7	44
195	An improved energy method for determining Young's modulus by instrumented indentation using a Berkovich tip. Journal of Materials Research, 2008, 23, 2106-2115.	2.6	12
196	Higher accuracy analysis of instrumented indentation data obtained with pointed indenters. Journal Physics D: Applied Physics, 2008, 41, 215407.	2.8	73
197	Study of the mechanical properties of hybrid coating as a function of their structures using nanoindentation. Journal of Non-Crystalline Solids, 2008, 354, 712-716.	3.1	16
198	Nanomechanical Properties of Solid Surfaces and Thin Films. , 2008, , 607-653.		0
199	Residual Stress Determination Using Nanoindentation Technique. , 2008, , 139-153.		6
200	An Improvement of the Doerner-Nix Function for Substrate Effects in Ultrathin Films. Materials Research Society Symposia Proceedings, 2008, 1086, 1.	0.1	1
201	Study on the Subsurface Damage of Single Crystal MgO Substrates. Key Engineering Materials, 0, 389-390, 7-12.	0.4	2
202	A Two-Parameter Function for Nanoscale Indentation Measurement of Near Surface Properties. Journal of Tribology, 2008, 130, .	1.9	2
203	The mechanical properties of the composited polyurethane coatings testing by nanoindentation. Proceedings of SPIE, 2008, , .	0.8	0

#	ARTICLE	IF	CITATIONS
204	Modélisation élastoplastique de la densification des verres de silice sous des sollicitations de contact à l'échelle micrométrique. <i>Mécanique Et Industries</i> , 2008, 9, 145-151.	0.2	0
205	Analysis of nanoindentation curves in the case of bulk amorphous polymers. <i>International Journal of Materials Research</i> , 2009, 100, 943-949.	0.3	16
206	Relation between structure and mechanical properties (elastoplastic and fracture behavior) of hybrid organic-inorganic coating. <i>Journal of Materials Science</i> , 2009, 44, 2752-2758.	3.7	19
207	An Instrumented Indentation Method for Young's Modulus Measurement with Accuracy Estimation. <i>Experimental Mechanics</i> , 2009, 49, 719-729.	2.0	26
208	Aqueous-Develop, Photosensitive Polynorbornene Dielectric: Properties and Characterization. <i>Journal of Electronic Materials</i> , 2009, 38, 778-786.	2.2	17
209	Characterization of the mechanical properties of a dermal equivalent compared with human skin <i>in vivo</i> by indentation and static friction tests. <i>Skin Research and Technology</i> , 2009, 15, 68-76.	1.6	166
210	Indentation of an elastic half space with material properties varying with depth. <i>International Journal of Engineering Science</i> , 2009, 47, 1274-1283.	5.0	33
211	Friction noise of human skin <i>in vivo</i> . <i>Wear</i> , 2009, 267, 1274-1280.	3.1	35
212	A new approach to describe the skin surface physical properties <i>in vivo</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2009, 68, 200-206.	5.0	55
213	Determination of plastic properties of metals by instrumented indentation using a stochastic optimization algorithm. <i>Journal of Materials Research</i> , 2009, 24, 936-947.	2.6	14
214	On the usage of the effectively shaped indenter concept for analysis of yield strength. <i>Journal of Materials Research</i> , 2009, 24, 1258-1269.	2.6	7
215	Measurements for Mechanical Reliability of Thin Films. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , 2009, , 337-358.	0.2	3
216	Characterization of Creep Properties of Zeolite Molecular Sieves Using Nanoindentation Test. , 2009, , .		0
217	Comparison of three different scales techniques for the dynamic mechanical characterization of two polymers (PDMS and SU8). <i>EPJ Applied Physics</i> , 2009, 48, 11201.	0.7	25
218	Identification of Young's Modulus from Indentation Testing and Inverse Analysis. <i>Journal of Solid Mechanics and Materials Engineering</i> , 2010, 4, 781-795.	0.5	8
219	A Load-Based Multiple-Partial Unloading Micro-Indentation Technique for Mechanical Property Evaluation. <i>Experimental Mechanics</i> , 2010, 50, 737-743.	2.0	18
220	Nanoscratch Characterization of GaN Epilayers on c- and a-Axis Sapphire Substrates. <i>Nanoscale Research Letters</i> , 2010, 5, 1812-1816.	5.7	19
221	Effect of annealing on the nanoscratch behavior of multilayer Si <sub>0.8</sub> Ge <sub>0.2</sub> /Si films. <i>Applied Surface Science</i> , 2010, 257, 911-916.	6.1	5

#	ARTICLE	IF	CITATIONS
222	Effective silver-assisted welding of YBCO blocks: mechanical versus electrical properties. Superconductor Science and Technology, 2010, 23, 045013.	3.5	9
223	Nanoindentation in materials research: Past, present, and future. MRS Bulletin, 2010, 35, 897-907.	3.5	149
224	ALTERNATIVE METHODS TO EXTRACT THE HARDNESS AND ELASTIC MODULUS OF THIN FILMS FROM NANOINDENTATION LOAD-DISPLACEMENT DATA. International Journal of Applied Mechanics, 2010, 02, 41-68.	2.2	13
225	MEASUREMENT OF THE HARDNESS OF ULTRA-THIN FILMS BY THE FIRST DERIVATIVE OF LOAD-DISPLACEMENT CURVE FROM NANOINDENTATION DATA. International Journal of Modern Physics B, 2010, 24, 256-266.	2.0	5
226	Further analysis of energy-based indentation relationship among Young's modulus, nominal hardness, and indentation work. Journal of Materials Research, 2010, 25, 1131-1136.	2.6	15
227	Determining Hardness and Elastic Modulus of Asphalt by Nanoindentation. International Journal of Geomechanics, 2010, 10, 106-116.	2.7	85
228	Contact Problems at Nano/Microscale and Depth Sensing Indentation Techniques. Materials Science Forum, 2010, 662, 53-76.	0.3	17
229	Nanomechanical Properties of Solid Surfaces and Thin Films. , 2011, , 391-437.		1
230	Nanoindentation. Mechanical Engineering Series, 2011, , .	0.2	406
231	Study of microstructure and nanomechanical properties of Zr films prepared by pulsed magnetron sputtering. Applied Surface Science, 2011, 257, 9909-9914.	6.1	33
232	A Model for the Calculation of Mechanical Properties of Hydroxyapatite Coatings on Ti6Al4V Substrate Using Finite Element Methods. Mathematical and Computational Applications, 2011, 16, 136-147.	1.3	0
233	Identification of constitutive model for rubber elasticity from micro-indentation tests on natural rubber and validation by macroscopic tests. Mechanics of Materials, 2011, 43, 775-786.	3.2	21
234	Effect of human ageing on skin rheology and tribology. Wear, 2011, 271, 2364-2369.	3.1	34
235	Surface Plasticization of Poly(ether ether ketone). European Polymer Journal, 2011, 47, 2244-2258.	5.4	34
236	Unification of hardness determination and possibility of transferring it to dimensional values. Measurement Techniques, 2011, 54, 781-789.	0.6	2
237	Tip bluntness transition measured with atomic force microscopy and the effect on hardness variation with depth in silicon dioxide nanoindentation. International Journal of Precision Engineering and Manufacturing, 2011, 12, 345-354.	2.2	13
238	Aqueous-Develop, Photosensitive Polynorbornene Dielectric: Optimization of Mechanical and Electrical Properties. Journal of Electronic Materials, 2011, 40, 2126-2138.	2.2	7
239	Substrate effect and application of the elastic foundation model to evaluate atomic force microscope nanoindentations of thin polymeric films. Polymer Engineering and Science, 2011, 51, 1507-1512.	3.1	10

#	ARTICLE	IF	CITATIONS
240	Nanomechanical characteristics of annealed Si/SiGe superlattices. Applied Surface Science, 2011, 257, 8887-8893.	6.1	12
241	Contact response of ceramics. Comptes Rendus - Mecanique, 2011, 339, 466-472.	2.1	4
242	Second-order effects at microindentation of elastic polymers using sharp indenters. Materials & Design, 2011, 32, 3645-3653.	5.1	7
243	Contribution of plastic deformation of Ti <sub>3</sub> SiC <sub>2</sub> to the crack deflection in the Al <sub>2</sub> O <sub>3</sub> /Ti <sub>3</sub> SiC <sub>2</sub> composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 3270-3274.	5.6	6
244	Determination of mechanical properties by nanoindentation in the case of viscous materials. International Journal of Materials Research, 2012, 103, 715-722.	0.3	34
245	A concave indenter on a piezoelectromagneto-elastic substrate or a layer elastically supported. Journal of Strain Analysis for Engineering Design, 2012, 47, 362-378.	1.8	15
246	Extension of a Microscale Indentation Fracture Model to Nanoscale Contact in Purview of Mechanical Nanofabrication Processes. , 2012, , .		0
247	Analysis of large-strain microindentation of crystalline polymers. , 2012, , 61-95.		0
248	Use of MAX particles to improve the toughness of brittle ceramics. , 2012, , 133-158.		3
249	High-Throughput On-Chip Large Deformation of Silicon Nanoribbons and Nanowires. Journal of Microelectromechanical Systems, 2012, 21, 822-829.	2.5	23
250	Silica xerogel films hybridized with carbon nanotubes by single step sol-gel processing. Journal of Non-Crystalline Solids, 2012, 358, 550-556.	3.1	21
251	Electrical and mechanical characterization by instrumented indentation technique of La <sub>0.85</sub> Sr <sub>0.15</sub> Ga <sub>0.8</sub> Mg <sub>0.2</sub> O <sub>3</sub> electrolyte for SOFCs. Journal of the European Ceramic Society, 2012, 32, 4287-4293.	5.7	10
252	Non contact method for in vivo assessment of skin mechanical properties for assessing effect of ageing. Medical Engineering and Physics, 2012, 34, 172-178.	1.7	58
253	Continuous stiffness mode nanoindentation response of poly(methyl methacrylate) surfaces. Chinese Journal of Polymer Science (English Edition), 2013, 31, 1096-1107.	3.8	9
254	Influence of nitrogen flow rate on microstructural and nanomechanical properties of ZrN thin films prepared by pulsed DC magnetron sputtering. Applied Surface Science, 2013, 280, 117-123.	6.1	62
255	Structural and mechanical properties of pre-strained transparent conducting oxide films on flexible substrate. Surface and Coatings Technology, 2013, 231, 443-446.	4.8	9
256	Thermal Failure of Multilayer SiGe/Si. Tribology Letters, 2013, 52, 461-467.	2.6	1
257	Nanomechanical properties of hybrid coatings for bone tissue engineering. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 25, 48-62.	3.1	33

#	ARTICLE	IF	CITATIONS
258	Preosteoblastic cell response on three-dimensional, organic-inorganic hybrid material scaffolds for bone tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 2283-2294.	4.0	56
259	Nanoindentation response of poly(ether ether ketone) surfaces—A semicrystalline bimodal behavior. <i>Journal of Applied Polymer Science</i> , 2013, 130, 4401-4409.	2.6	13
260	Dynamic nanoindentation by instrumented nanoindentation and force microscopy: a comparative review. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 815-833.	2.8	90
261	Heat Treatment Effects on Mechanical Properties of Atmospheric Plasma Sprayed FeB Coatings on Al Substrate. <i>Experimental Techniques</i> , 2014, 38, 67-75.	1.5	2
262	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
263	Wear and corrosion characteristics of novel alumina coatings produced by micro arc oxidation on AZ91D magnesium alloy. <i>Surface and Coatings Technology</i> , 2014, 258, 168-173.	4.8	30
264	Effect of microstructure and phase of nanostructured YSZ thermal barrier coatings on its thermal shock behaviour. <i>Surface Engineering</i> , 2015, 31, 64-73.	2.2	40
265	Constructing potentials to evaluate magneto-electro-elastic materials in contact with periodically rough surface. <i>European Journal of Mechanics, A/Solids</i> , 2015, 53, 89-98.	3.7	4
266	Mechanical properties of sol-gel coatings on polycarbonate: a review. <i>Journal of Sol-Gel Science and Technology</i> , 2015, 75, 710-719.	2.4	29
267	Measurement of elastic modulus by instrumented indentation in the macro-range: Uncertainty evaluation. <i>International Journal of Mechanical Sciences</i> , 2015, 101-102, 161-169.	6.7	27
268	Indenter Shape Characterization for the Nanoindentation Measurement of Nanostructured and Other Types of Materials. <i>Physics Procedia</i> , 2015, 72, 194-198.	1.2	11
269	Multi-scale simulation of nanoindentation on cast Inconel 718 and NbC precipitate for mechanical properties prediction. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016, 662, 385-394.	5.6	21
270	Work-of-indentation coupled to contact stiffness for calculating elastic modulus by instrumented indentation. <i>Mechanics of Materials</i> , 2016, 94, 170-179.	3.2	29
271	Nanomechanical Characterization of Solid Surfaces and Thin Films. , 2017, , 177-251.		1
272	Grid Indentation and Statistic Deconvolution: Limitations and Accuracy. <i>Key Engineering Materials</i> , 2017, 731, 15-22.	0.4	2
273	Tribological Behavior of a Flat or Circular Stamp Sliding on Piezoelectric/Piezomagnetic Composites. <i>International Journal of Applied Mechanics</i> , 2017, 09, 1750018.	2.2	5
274	Depth-sensing nanoindentation measurement techniques and applications. <i>Microsystem Technologies</i> , 2017, 23, 1595-1649.	2.0	45
275	Indentation of a hard transversely isotropic functionally graded coating by a conical indenter. <i>International Journal of Engineering Science</i> , 2017, 112, 63-75.	5.0	45



#	ARTICLE	IF	CITATIONS
276	A finite element correction method for sub-20â€”nm nanoindentation considering tip bluntness. International Journal of Solids and Structures, 2017, 129, 49-60.	2.7	10
277	Instrumented indentation of fused silica by Berkovich indenter. Journal of Non-Crystalline Solids, 2017, 475, 151-160.	3.1	56
279	The influence of the indentation size in relation to the size of the microstructure of three polycrystalline materials indented with a Berkovich indenter. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 706, 330-341.	5.6	11
280	Elastic-plastic property evaluation using a nearly flat instrumented indenter. International Journal of Solids and Structures, 2017, 104-105, 81-91.	2.7	12
281	Eco-bricks: a sustainable substitute for construction materials. , 2017, 16, 518-526.		13
282	Probing the Mechanical Response of Luminescent Dithiolâ€”Protected Ag<sub>29</sub>(BDT)<sub>12</sub>(TPP)<sub>4</sub> Cluster Crystals. ChemNanoMat, 2018, 4, 401-408.	2.8	6
283	Essential refinements of spherical nanoindentation protocols for the reliable determination of mechanical flow curves. Materials and Design, 2018, 146, 69-80.	7.0	37
284	A new method to extract elastic modulus of brittle materials from Berkovich indentation. Journal of the European Ceramic Society, 2018, 38, 349-353.	5.7	6
285	Fracture toughness estimation for high-strength rail steels using indentation test. Engineering Fracture Mechanics, 2018, 204, 469-481.	4.3	10
286	Some concerns about the current interpretation and analyses of indentation unloading $P \propto h$ curves highlighted with Young's modulus studies of single crystals of MgO (100). Journal of Applied Physics, 2018, 124, 095107.	2.5	7
287	Nanomechanical testing of third bodies. Current Opinion in Solid State and Materials Science, 2018, 22, 142-155.	11.5	13
288	In vivo mechanical characterization of human facial skin combining curved surface imaging and indentation techniques. Skin Research and Technology, 2019, 25, 142-149.	1.6	10
289	Electrically-functionalised nanoindenter dedicated to local capacitive measurements: Experimental set-up and data-processing procedure for quantitative analysis. Sensors and Actuators A: Physical, 2019, 294, 185-193.	4.1	4
290	Methodology for estimating the modulus of elasticity of bitumen under different aging conditions by AFM. Road Materials and Pavement Design, 2019, 20, S332-S346.	4.0	14
291	In vivo adhesive behavior of human facial skin by a modified indentation test. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 92, 172-178.	3.1	8
292	Nanoindentation analysis methods examined with finite element simulations. International Journal of Materials Research, 2019, 110, 91-100.	0.3	0
293	A robust inverse analysis method for elastoplastic behavior identification using the true geometry modeling of Berkovich indenter. International Journal of Mechanical Sciences, 2020, 171, 105370.	6.7	13
294	Cryogenic Stress-Driven Grain Growth Observed via Microcompression with in situ Electron Backscatter Diffraction. Jom, 2020, 72, 2051-2056.	1.9	11

#	ARTICLE	IF	CITATIONS
295	Optimizing the Indirect Indentation Method for brittle material property measurements. <i>Ceramics International</i> , 2021, 47, 9635-9642.	4.8	1
296	Applications of depth-sensing indentation on asphalt materials: A review. <i>Construction and Building Materials</i> , 2021, 268, 121195.	7.2	5
297	Resistive-nanoindentation on gold: Experiments and modeling of the electrical contact resistance. <i>Review of Scientific Instruments</i> , 2021, 92, 035102.	1.3	6
298	Numerical Investigation of the Identifiability of Elastomer Mechanical Properties by Nano-Indentation and Shape-Manifold Approach. <i>Rubber Chemistry and Technology</i> , 2021, , .	1.2	0
299	Clustering analysis of grid nanoindentation data for cementitious materials. <i>Journal of Materials Science</i> , 2021, 56, 12238-12255.	3.7	12
300	Pop-In Phenomenon as a Fundamental Plasticity Probed by Nanoindentation Technique. <i>Materials</i> , 2021, 14, 1879.	2.9	25
301	A phenomenological study of the influence of the hardening type on the indentation F-h cyclic curve. <i>International Journal of Mechanical Sciences</i> , 2021, 197, 106336.	6.7	3
302	Berkovich nanoindentation of Zr <sub>55</sub> Cu <sub>30</sub> Al <sub>10</sub> Ni <sub>5</sub> bulk metallic glass at a constant loading rate. <i>Journal of Non-Crystalline Solids</i> , 2021, 561, 120750.	3.1	19
303	Water-assisted mechanical testing of polymeric thin-films. <i>Journal of Polymer Science</i> , 2022, 60, 1108-1129.	3.8	23
304	Energy feedthrough and microstructure evolution during direct laser peening of aluminum in femtosecond and picosecond regimes. <i>Journal of Applied Physics</i> , 2021, 130, .	2.5	10
305	Real-time high-temperature scanning indentation: Probing physical changes in thin-film metallic glasses. <i>Applied Materials Today</i> , 2021, 24, 101126.	4.3	2
306	Development of a multifunctional nanoindenter integrated in-situ Scanning Electron Microscope - application to the monitoring of piezoresponse and electro-mechanical failures. <i>Thin Solid Films</i> , 2021, 735, 138891.	1.8	2
307	Nanomechanical Properties of Solid Surfaces and Thin Films. , 2004, , 687-716.		3
308	Contact Mechanics. <i>Mechanical Engineering Series</i> , 2002, , 1-19.	0.2	8
309	Nanoindentation: Localized Probes of Mechanical Behavior of Materials. <i>Springer Handbooks</i> , 2008, , 389-408.	0.6	15
310	Contact Mechanics. <i>Mechanical Engineering Series</i> , 2011, , 1-19.	0.2	20
311	Contact Mechanics. <i>Mechanical Engineering Series</i> , 2004, , 1-20.	0.2	6
312	Apparent Indentation Plasticity in Ceramic Coated Systems. , 1995, , 219-229.		6

#	ARTICLE	IF	CITATIONS
313	Scanning Microdeformation Microscopy: Advances in Quantitative Micro- and Nanometrology. Nanoscience and Technology, 2013, , 227-259.	1.5	2
314	Mechanical Characterization Using Indentation Experiments. , 1993, , 417-428.		8
315	A Beginner's Guide to LPM Materials Properties Measurements. , 1997, , 421-438.		9
316	Surface Mechanical Properties Using Nanoindentation. , 1997, , 467-492.		10
317	Interprétation du module d'indentation dans le cas des matériaux anisotropes et/ou actifs. Materiaux Et Techniques, 2011, 99, 185-196.	0.9	5
318	Scaling relationships for indentation measurements. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 1821-1829.	0.6	10
319	Prediction of Friction Coefficients During Scratch Based on an Integrated Finite Element and Artificial Neural Network Method. Journal of Tribology, 2020, 142, .	1.9	8
320	Berkovich nanoindentation of borosilicate K9 glass. Optical Engineering, 2018, 57, 1.	1.0	17
322	Evaluation of Sharp Indentation Testing of Thin Films and Ribbons on Hard Substrates. Journal of Testing and Evaluation, 2002, 30, 64-73.	0.7	14
323	An Instrumented Microindentation Testing Device. Journal of Testing and Evaluation, 2001, 29, 50-59.	0.7	7
324	Measurement of hardness and elastic modulus by instrumented indentation: Advances in understanding and refinements to methodology. Journal of Materials Research, 2004, 19, 3-20.	2.6	52
325	Instrumented Indentation Testing. , 2000, , 232-243.		59
326	Investigation of PolyVinyl Chloride Plastisol Tissue-Mimicking Phantoms for MR- and Ultrasound-Elastography. Frontiers in Physics, 2020, 8, .	2.1	6
327	Nanomechanical Properties of Solid Surfaces and Thin Films. , 2004, , 687-716.		0
328	Title is missing!. Shinku/Journal of the Vacuum Society of Japan, 2007, 50, 96-100.	0.2	0
330	Principles and Applications of Indentation. , 2008, , 1-47.		3
331	Determination of Hardness and Modulus of Thin Films. , 2010, , 35-65.		0
332	Determination of Hardness and Modulus of Thin Films. , 2010, , 35-65.		0

#	ARTICLE	IF	CITATIONS
333	MICROHARDNESS AND MICROSTRUCTURE OF ION-BEAM-SPUTTERED, NITROGEN-DOPED NiFe FILMS. , 1988, , 299-308.		0
334	Thin Film and Near Surface Characterization Using Indentation Systems. , 1989, , 295-302.		2
335	Some Aspects of Method. , 1990, , 33-63.		1
336	Data Acquisition, Analysis and Simulation of Micro-indentations. , 1993, , 1651-1654.		0
338	Nanomechanical Properties of Solid Surfaces and Thin Films. , 1998, , .		0
339	Contraintes résiduelles et comportement mécanique de revêtements nickel-bore. Materiaux Et Techniques, 2019, 107, 205.	0.9	1
340	Using multidimensional contact mechanics experiments to measure Poisson's ratio. Journal of Materials Research, 2004, 19, 58-65.	2.6	0
341	Nanomechanical Characterization of Metallic Materials. , 2022, , 157-195.		1
343	A methodological framework for nanomechanical characterization of soft biomaterials and polymers. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 134, 105384.	3.1	3
344	Evidence of Plasticity-Driven Conductivity Drop in an Ultra-Low Dielectric Organosilicate Glass. Advanced Functional Materials, 0, , 2207354.	14.9	1
345	Overview of methods for measuring the mechanical strength of thin films. Modeling of Systems and Processes, 2022, 15, 110-128.	0.7	0
346	Toward an Instrumented Strength Microprobe - Origins of the Oliver-Pharr Method and Continued Advancements in Nanoindentation: Part 1. , 0, , .		0
347	Nanomechanical characterization of the hydrogen effect on high strength steels. International Journal of Pressure Vessels and Piping, 2023, 204, 104980.	2.6	0
348	Nanoindentation Methods in Interfacial Fracture Testing. , 2003, , 3-42.		0
349	Exploring the caveats associated with estimating the properties of amorphous glassy thermoset. Journal of Non-Crystalline Solids, 2024, 625, 122756.	3.1	0
350	Effect of Viscous Behavior on Young's Modulus Estimation of Thermoplastic Glassy Polymers via Nanoindentation. Journal of Materials Engineering and Performance, 0, , .	2.5	0
351	A machine learning perspective on the inverse indentation problem: uniqueness, surrogate modeling, and learning elasto-plastic properties from pile-up. Journal of the Mechanics and Physics of Solids, 2024, 185, 105557.	4.8	0