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**Mechanical Properties of Nanometre Volumes of
Material: use of the Elastic Response of Small Area Indentation**

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#	Paper	IF	Citations
124	A shear model for STM imaging of layered materials. 1989 , 1, 9823-9831		18
123	Mechanical properties of thin films. 1989 , 20, 2217-2245		2024
122	Imaging by Sliding Planes in Scanning Tunnelling Microscopy. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 159, 283		
121	Mechanical Properties Of Carbon-Implanted Niobium. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 188, 121		1
120	Mechanical Properties Of Coatings And Interfaces. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 188, 127		3
119	Mechanical Properties Of Silica Coatings. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 188, 133		1
118	Measuring stiffnesses and residual stresses of silicon nitride thin films. 1990 , 19, 903-909		64
117	Interaction forces of a sharp tungsten tip with molecular films on silicon surfaces. 1990 , 65, 2270-2273		149
116	Inelastic flow processes in nanometre volumes of solids. 1990 , 2, 5317-5326		93
115	The AC-Indentation Technique and its Application to Al and Al-Si Coatings. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 226, 165		
114	Determination of the Mechanical Properties OP Integrated Circuit Packaging Materials using a Focused Acoustic Beam Technique. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 239, 281		4
113	Influence of Adsorbate Monolayer on the Nano-Mechanics of TIP-Substrate Interactions. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 239, 313		6
112	Monitoring Time-Dependent Deformation in Small Volumes. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 239, 325		21
111	The Elastic, Plastic, and Time Dependent Properties of thin Films as Determined by Ultra low Load Indentation. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 239, 337		13
110	Acoustic Emissions During Indentation Tests. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 239, 361		18
109	.		5
108	Limits of imaging resolution for atomic force microscopy of molecules. 1991 , 59, 3536-3538		105

107	Alternative Materials for Micro-Electro-Mechanical Device Construction. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 276, 241	2
106	. 1992 ,	10
105	Nanoindentation experiments on some amorphous hydrogenated carbon (a-C:H) thin films on silicon. 1992 , 27, 3939-3952	21
104	Finite-element analysis of indentation experiments in surface-coated materials. <i>Experimental Mechanics</i> , 1993 , 33, 201-204	2.6 5
103	Dynamics of Atomically Thin Layers-Surface Interactions in Tip-Substrate Geometry. 1993 , 32, 1394-1400	16
102	Nanoindentation studies of the chemomechanical effect in sapphire. 1994 , 29, 5529-5540	41
101	Studies on Wear Mechanism of Ultrathin Protective Carbon Overcoat by Micro-Wear Scan Technique. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 356, 755	4
100	Measurement methods to determine the elastic properties of oxides at elevated temperatures. 1994 , 12, 85-94	9
99	Light optical deformation measurements in microbars with nanometer resolution. 1995 , 2, 83-91	9
98	A new proposal for design of high-accuracy nano-indenters. 1995 , 6, 16-21	17
97	Detection of Similar Elastic Properties Using a Magnetic Force Controlled Afm. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 436, 385	7
96	Light optical deformation measurements in microbars with nanometer resolution. 1996 , 2, 83-91	9
95	Nano Scale Creep and the Role of Defects. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 436, 201	15
94	Tip-surface interactions studied using a force controlled atomic force microscope in ultrahigh vacuum. 1997 , 70, 2238-2240	16
93	Scanning Stiffness Microscopy - A Novel Technique for Detecting Sub-Surface Cracks. <i>Materials Research Society Symposia Proceedings</i> , 1997 , 473, 285	
92	Nano-Scale Indentation Creep Testing at Non-Ambient Temperature. 1998 , 67, 153-165	34
91	Nanosopic Modelling of the Adhesion, Indentation and Fracture Characteristics of Metallic Systems via Molecular Dynamics Simulations. 1998 , 36-48	1
90	An Investigation of Thin-Film Coating/Substrate Systems by Nanoindentation. 1998 , 120, 154-162	8

89	Formation of Silicon Carbide in the Surface Layer of Metals by Dual High Energy Ion Implantation. 1999 , 40, 428-430	1
88	Determination of the Real Indenter Shape for Nanoindentation/Nanotribology Tests by Surface Metrological and Analytical Investigations. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 649, 361	2
87	Modelling the nano-scale phenomena in condensed matter physics via computer-based numerical simulations. 2000 , 325, 239-310	133
86	Nanoindentation on nominally pure and doped MgO crystals. 2001 , 156, 39-43	
85	Anomalous Elastic Properties of Si/Ge Superlattices: The Role of Interfaces. 2001 , 188, 1023-1040	8
84	Mechanical properties of thin films measured by nanoindenters. 2001 , 178, 56-62	22
83	Effect of neutron irradiation on hardening in MgO crystals. 2002 , 66,	6
82	Evaluation of the adhesion of TiN films using nanoindentation and scratch testing. 2002 , 82, 2191-2197	5
81	Hardness and elastic modulus from nanoindentations in nominally pure and doped MgO single crystals. 2002 , 82, 1159-1171	17
80	Nanoindentation on MgO crystals implanted with lithium ions. 2002 , 191, 154-157	5
79	Nanoindentation on neutron irradiated MgO crystals. 2002 , 191, 178-180	8
78	Microstructural characterization of MgO thin films grown by radio-frequency sputtering. Target and substrate-temperature effect. 2003 , 93, 4300-4305	31
77	Mechanical properties of sputtered silicon nitride thin films. 2003 , 94, 7868	88
76	Optical and mechanical properties of MgO crystals implanted with lithium ions. 2004 , 95, 2371-2378	7
75	Measurements of Viscoelastic Functions of Polymers in the Frequency-Domain Using Nanoindentation. 2004 , 8, 345-364	65
74	Cutting performance of DLC coated tools in dry machining aluminum alloys. 2004 , 187, 70-76	147
73	Deformation behavior of (Cu, Ag) _n intermetallics by nanoindentation. <i>Acta Materialia</i> , 2004 , 52, 4291-4803	234
72	Organosilicate Spin-on Glasses. 2004 , 151, F37	33

71	The Mechanics of Nanoimprint Forming. <i>Materials Research Society Symposia Proceedings</i> , 2004 , 841, R1.6.1	7
70	Some Issues in the Mechanical Forming of Nanoimprint Structures. 2005 , 18, 559-562	
69	Instrumented indentation testing for local characterisation of polymer properties after nanoimprint. 2005 , 78-79, 618-624	12
68	Size dependence of mechanical properties of gold at the micron scale in the absence of strain gradients. <i>Acta Materialia</i> , 2005 , 53, 1821-1830	8.4 1175
67	Nanoindentation. 2005 , 225-247	5
66	Influence of elastic strains on the mask ratio in glassy polymer nanoimprint. 2005 , 86, 081902	24
65	Elastic modulus and hardness of Cu ₆₀ Zn ₄₀ amorphous films. 2005 , 389, 75-79	44
64	Nanomechanical Properties of Solid Surfaces and Thin Films. 2005 , 575-622	3
63	Size effects in the deformation of sub-micron Au columns. 2006 , 86, 5567-5579	598
62	Atomistic simulations of nanoindentation. 2006 , 9, 42-50	80
61	Temperature effects on mechanical properties of zinc dithiophosphate tribofilms. 2006 , 39, 1558-1563	28
60	EFFECT OF VISCOUS LIQUID FILM ON DYNAMIC CONTACT IN ATOMIC FORCE MICROSCOPY. 2006 , 01, 97-106	1
59	Nanomechanical Properties of Solid Surfaces and Thin Films. 2007 , 1137-1166	1
58	Influence of the yttria content on the mechanical properties of Y ₂ O ₃ -ZrO ₂ thin films prepared by EB-PVD. 2007 , 81, 1457-1461	9
57	Deformation at the nanometer and micrometer length scales: Effects of strain gradients and dislocation starvation. 2007 , 515, 3152-3157	233
56	Microindentation as a local damage measurement technique. 2007 , 61, 34-36	26
55	Determination of the young modulus from elastic section of the Berkovich indenter loading curve. 2007 , 29, 228-234	12
54	Boundary Lubrication by Pure Crystalline Zinc Orthophosphate Powder in Oil. 2008 , 31, 139-148	14

53	Shear striations and deformation kinetics in highly deformed Zr-based bulk metallic glasses. <i>Acta Materialia</i> , 2008 , 56, 4635-4646	8.4	93
52	Nanomechanical properties of surface-modified titanium alloys for biomedical applications. 2008 , 4, 1545-52		20
51	Determination of dislocation density from hardness measurements in metals. 2008 , 62, 3812-3814		68
50	Nanomechanical Properties of Solid Surfaces and Thin Films. 2008 , 607-653		
49	UV irradiation and aging effects on nanoscale mechanical properties of ultra high molecular weight polyethylene for biomedical implants. 2008 , 37, 346-352		35
48	Strength characteristics of Mg ₂ Ni alloys. 2009 , 41, 294-302		3
47	Bonding Structure and Mechanical Properties of Ti-B-C Coatings. 2009 , 6, S107-S112		17
46	Effects of TiN sublayers on the response of TiSiN nanocomposite coatings to nanoindentation and scratching contacts. 2010 , 527, 4447-4457		34
45	Frictional shear induced modification of the mechanical properties of TiAl(Nb) intermetallics near the surface. 2010 , 508, 446-452		1
44	Nanomechanical Properties of Solid Surfaces and Thin Films. 2011 , 391-437		1
43	Surface Plasticization of Poly(ether ether ketone). 2011 , 47, 2244-2258		26
42	Cyclodextrin-based reactive porogen for nanoporous ultra-low dielectrics. 2011 , 11, S313-S318		2
41	Chromite vs. magnetite as an erodent for coatings to be applied in steam turbines. 2012 , 296, 479-483		4
40	In-Situ Nanoindentation in the Transmission Electron Microscope. 2012 , 255-277		
39	Continuous stiffness mode nanoindentation response of poly(methyl methacrylate) surfaces. 2013 , 31, 1096-1107		8
38	Incipient plasticity and deformation mechanisms in single-crystal Mg during spherical nanoindentation. <i>Acta Materialia</i> , 2013 , 61, 2953-2965	8.4	72
37	Oscillation-induced softening in copper and molybdenum from nano- to micro-length scales. 2013 , 572, 56-64		23
36	The continuous stiffness measurement technique in nanoindentation intrinsically modifies the strength of the sample. 2013 , 93, 449-467		26

35	Nanoindentation response of poly(ether ether ketone) surfaces: A semicrystalline bimodal behavior. 2013 , 130, n/a-n/a		3
34	Structural and mechanical properties of annealed thin films of pure and carbon doped titania. 2014 , 259, 129-135		5
33	On the possibility of estimating the fracture toughness of enamel. 2014 , 30, 1224-33		7
32	Nanoindentation Experimental Study on Mechanical Properties of As-cast BNi-2 Solder Alloy. 2015 , 130, 652-661		6
31	Nanoindentation measurements of Teflon-AF nanosheets. 2015 , 132, n/a-n/a		4
30	Determination of the strain-rate sensitivity of ultrafine-grained materials by spherical nanoindentation. <i>Journal of Materials Research</i> , 2017 , 32, 1466-1473	2.5	19
29	Comparative study of the mechanical properties of different tungsten materials for fusion applications. 2017 , T170, 014068		7
28	Dynamic nanoindentation testing: is there an influence on a material's hardness?. 2017 , 5, 486-493		23
27	Comparison of three approaches to determine the projected area in contact from finite element Berkovich nanoindentation simulations in tungsten. 2017 , 257, 012013		2
26	Progress of in situ synchrotron X-ray diffraction studies on the mechanical behavior of materials at small scales. 2018 , 94, 384-434		38
25	Essential refinements of spherical nanoindentation protocols for the reliable determination of mechanical flow curves. 2018 , 146, 69-80		23
24	Indentation Methods for the Characterization of Carbon-Based Polymer Nanocomposites. 2018 , 79-111		
23	Research on the machinability of A-plane sapphire under diamond wire sawing in different sawing directions. <i>Ceramics International</i> , 2019 , 45, 10310-10320	5.1	20
22	Big Data Nanoindentation and Analytics Reveal the Multi-Staged, Progressively-Homogenized, Depth-Dependent Upscaling of Rocks Properties. <i>Rock Mechanics and Rock Engineering</i> , 2021 , 54, 1501-1532	5.7	4
21	Nanoindentation in multi-modal map combinations: a correlative approach to local mechanical property assessment. <i>Journal of Materials Research</i> , 2021 , 36, 2235-2250	2.5	5
20	Solid solution hardening in CrMnFeCoNi-based high entropy alloy systems studied by a combinatorial approach. <i>Journal of Materials Research</i> , 2021 , 36, 2558-2570	2.5	3
19	Mechanical characterization of boron carbide single crystals. <i>Journal of the American Ceramic Society</i> ,	3.8	1
18	Nano-Indentation Hardness and Strain Hardening of Silicon, Sodium Chloride and Tungsten Crystals. <i>Experimental Mechanics</i> , 1	2.6	

17	Nanomechanical Properties of Solid Surfaces and Thin Films. 2004 , 687-716		3
16	Shear Transformation Zones in Amorphous Polymers: Geometrical and Micromechanical Properties. 2016 , 1-27		1
15	Application of SPM and Related Techniques to the Mechanical Properties of Biotoool Materials. <i>Nanoscience and Technology</i> , 2009 , 71-103	0.6	1
14	Nanomechanics: Atomic Resolution and Frictional Energy Dissipation in Atomic Force Microscopy. 1995 , 353-366		5
13	Nanodeformation - Solid or Liquid?. 1995 , 123-127		
12	Continuous Stiffness Measurement Nanoindentation Experiments on Polymeric Glasses: Strain Rate Alteration. 2016 , 1-19		
11	Continuous Stiffness Measurement Nanoindentation Experiments on Polymeric Glasses: Strain Rate Alteration. 2019 , 315-332		
10	Shear Transformation Zones in Amorphous Polymers: Geometrical and Micromechanical Properties. 2019 , 333-359		
9	Novel Nanoindentation Techniques and Their Applications. 2008 , 309-345		
8	Effects of solutes on thermal stability, microstructure and mechanical properties in CrMnFeCoNi based alloys after high pressure torsion. <i>Acta Materialia</i> , 2022 , 227, 117689	8.4	0
7	Experimental Study of Mechanical Properties of Polypropylene Random Copolymer and Rice-Husk-Based Biocomposite by Using Nanoindentation.. <i>Materials</i> , 2022 , 15,	3.5	1
6	The contribution of plastic sink-in to the static friction of single asperity microscopic contacts. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021 , 477,	2.4	
5	Backstresses in geologic materials quantified by nanoindentation load-drop experiments. 1-15		1
4	Numerical and experimental crossed analysis of coated nanostructures through nanoindentation. 2023 , 245, 108091		0
3	Enhanced Corrosion Resistance of AlTiCrFeMoSi High Entropy Alloy Coating by Magnetron Sputtering. 2023 , 13, 332		0
2	Nanomechanics of minerals: understandings and developments through instrumented nanoindentation techniques. 2023 , 50,		0
1	Mechanical performance and microstructure of the grade 91 stainless steel produced via Directed Energy deposition laser technique. 2023 , 227, 111804		0