Mark Hoffman

List of Publications by Year
in descending order

207 papers	6,265 citations	57631 44 h-index	110170 64 g-index
215 all docs	215 docs citations	215 times ranked	5155 citing authors

#	Article	IF	Citations
1	Effect of geometrical structure variations on the viscoelastic and anisotropic behaviour of cortical bone using multi-scale finite element modelling. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104153.	1.5	17
2	Fracture and electricâ€fieldâ€induced crack growth behavior in NBTâ€6BT relaxor ferroelectrics. Journal of the American Ceramic Society, 2021, 104, 2158-2169.	1.9	2
3	Effect of HAP crystallite orientation upon corrosion and tribocorrosion behavior of bovine and human dental enamel. Corrosion Science, 2021, 190, 109670.	3.0	3
4	The wear behaviour of remineralised human dental enamel: An in vitro study. Wear, 2020, 444-445, 203165.	1.5	4
5	Electrical fatigue in 0.94Na0.5Bi0.5TiO3â€“0.06BaTiO3: Influence of the surface layer. Applied Physics Letters, 2020, 117, .	1.5	2
6	The complex structural mechanisms behind strain curves in bismuth sodium titanateâ€“barium titanate. Applied Physics Letters, 2020, 116, .	1.5	7
7	Electric-Field-Induced Phase Transformation and Frequency-Dependent Behavior of Bismuth Sodium Titanateâ€“Barium Titanate. Materials, 2020, 13, 1054.	1.3	14
8	Electrical fatigue behavior of NBT-BT-<i>x</i>KNN ferroelectrics: effect of ferroelectric phase transformations and oxygen vacancies. Journal of Materials Chemistry C, 2020, 8, 3887-3896.	2.7	16
9	Spontaneous relaxor to ferroelectric transition in lead-free relaxor piezoceramics and the role of point defects. Journal of the European Ceramic Society, 2020, 40, 2323-2330.	2.8	11
10	Nanomechanical and tribological characterization of silk and silk-titanate composite coatings. Tribology International, 2020, 146, 106195.	3.0	5
11	Functional surface layers in relaxor ferroelectrics. Journal of Materials Chemistry C, 2020, 8, 7663-7671.	2.7	5
12	Electrical fatigue failure in (Na 1/2 Bi 1/2)TiO 3 â€“BaTiO 3 relaxor ceramics. Journal of the American Ceramic Society, 2019, 102, 5997-6007.	1.9	11
13	In Situ Neutron Diffraction Studies on Poling of the Hard PZT Ceramic PIC181. Advanced Engineering Materials, 2019, 21, 1900159.	1.6	5
14	Effect of mechanical depoling on piezoelectric properties of Na0.5Bi0.5TiO3â€“xBaTiO3 in the morphotropic phase boundary region. Journal of Materials Science, 2018, 53, 1672-1679.	1.7	10
15	The Rising Importance of Precision Engineering. Engineering, 2018, 4, 759.	3.2	1
16	Electric fieldâ€“temperature phase diagrams for (Bi_{1/2}Na_{1/2})TiO₃â€“BaTiO₃â€“(K_{1/2}Na_{1/2})NbO<sub>3< relaxor ceramics. Journal of Materials Chemistry C, 2018, 6, 12224-12233.	2.7	28
17	Effect of contact load upon attrition-corrosion of human dental enamel. Wear, 2018, 414-415, 101-108.	1.5	7
18	Recent advances in understanding the fatigue and wear behavior of dental composites and ceramics. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 504-533.	1.5	94

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19	Influence of microstructure on symmetry determination of piezoceramics. Journal of Applied Crystallography, 2018, 51, 670-678.	1.9	11
20	Micro-AlN/nano-SiO2 co-filled silicone rubber composites with high thermal stability and excellent dielectric properties. Materials Letters, 2017, 209, 421-424.	1.3	35
21	Attrition-corrosion of human dental enamel: A review. Biosurface and Biotribology, 2017, 3, 196-210.	0.6	18
22	Influence of Bâ€Site Disorder on the Properties of Unpoled Bi_{1/2}Na_{1/2}TiO₃â€0.06Ba(Zr_{<i>x</i>}Ti_{1â€<i>x</i>})O₃ Piezoceramics. Journal of the American Ceramic Society, 2016, 99, 2801-2808.	1.9	30
23	Unipolar Fatigue Behavior of <scp>BCTZ</scp> Leadâ€Free Piezoelectric Ceramics. Journal of the American Ceramic Society, 2016, 99, 1287-1293.	1.9	30
24	High Bipolar Fatigue Resistance of BCTZ Leadâ€Free Piezoelectric Ceramics. Journal of the American Ceramic Society, 2016, 99, 174-182.	1.9	31
25	Geometrically necessary dislocations favor the Taylor uniform deformation mode in ultra-fine-grained polycrystals. Acta Materialia, 2016, 117, 35-42.	3.8	74
26	Facial deformations during nasal continuous positive airway pressure therapy. Journal of Biomechanics, 2016, 49, 3848-3854.	0.9	2
27	Piezoelectricity and rotostriction through polar and non-polar coupled instabilities in bismuth-based piezoceramics. Scientific Reports, 2016, 6, 28742.	1.6	23
28	Performance of silicone rubber composites with SiO₂ micro/nano-filler under AC corona discharge. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 2804-2815.	1.8	72
29	Dielectric properties, electric-field-induced polarization and strain behavior of Lead Zirconate Titanate-Strontium bismuth Niobate ceramics. Journal of Electroceramics, 2016, 36, 70-75.	0.8	2
30	Investigation of partial discharge in piezoelectric ceramics. Acta Materialia, 2016, 102, 284-291.	3.8	11
31	The ageing and de-ageing behaviour of (Ba0.85Ca0.15)(Ti0.9Zr0.1)O3 lead-free piezoelectric ceramics. Journal of Applied Physics, 2015, 118, .	1.1	10
32	Scratch Fracture of Polycrystalline Silicon Wafers. Journal of the American Ceramic Society, 2015, 98, 2587-2594.	1.9	6
33	An in vitro study of the wear mechanism of a leucite glass dental ceramic. Biosurface and Biotribology, 2015, 1, 50-61.	0.6	16
34	Dielectric, Polarization and Strain Response of Enhanced Complex Ceramics: The Study through Pb(Zr0.52Ti0.48)O3-SrBi2Ta2O9. Ferroelectrics, 2015, 488, 79-88.	0.3	1
35	Partial discharge characteristics of piezoelectric ceramics under bipolar and unipolar applied voltages. , 2015, , .		0
36	Optimized bio-inspired stiffening design for an engine nacelle. Bioinspiration and Biomimetics, 2015, 10, 066008.	1.5	1

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37	Effect of acidity upon attritionâ€“corrosion of human dental enamel. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 44, 23-34.	1.5	32
38	Grain size dependent texture evolution in severely rolled pure copper. Materials Characterization, 2015, 101, 180-188.	1.9	36
39	Nano/micro mechanics study of nanoindentation on thin Al/Pd films. Journal of Materials Research, 2015, 30, 699-708.	1.2	7
40	Interplay of strain mechanisms in morphotropic piezoceramics. Acta Materialia, 2015, 94, 319-327.	3.8	84
41	Cyclic electric field response of morphotropic Bi1/2Na1/2TiO3-BaTiO3 piezoceramics. Applied Physics Letters, 2015, 106, .	1.5	53
42	Effect of AC corona discharge on hydrophobic properties of silicone rubber nanocomposites. , 2015, , .		6
43	The effects of three different food acids on the attrition-corrosion wear of human dental enamel. Journal Physics D: Applied Physics, 2015, 48, 285401.	1.3	12
44	An<i>in vitro</i>study of the microstructure, composition and nanoindentation mechanical properties of remineralizing human dental enamel. Journal Physics D: Applied Physics, 2014, 47, 315403.	1.3	15
45	Finite element analysis of indentation of aluminium foam and sandwich panels with aluminium foam core. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 599, 125-133.	2.6	44
46	Measurement and analysis of field-induced crystallographic texture using curved position-sensitive diffraction detectors. Journal of Electroceramics, 2014, 32, 283-291.	0.8	24
47	Investigation of Partial Discharge and Fracture Strength in Piezoelectric Ceramics. Journal of the American Ceramic Society, 2014, 97, 1905-1911.	1.9	6
48	Response of aluminium foam-cored sandwich panels to bending load. Composites Part B: Engineering, 2014, 64, 24-32.	5.9	45
49	Electric Fatigue of Leadâ€Free Piezoelectric Materials. Journal of the American Ceramic Society, 2014, 97, 665-680.	1.9	111
50	Correlation Between Piezoelectric Properties and Phase Coexistence in (<scp><scp>Ba</scp></scp>,<scp><scp>Ca</scp></scp>)(<scp><scp>Ti</scp></scp>,<scp><scp>Zr</scp></scp>)<scp><scp>O</scp Ceramics. Journal of the American Ceramic Society, 2014, 97, 2885-2891.	1.9	54
51	Twinning effects in a polycrystalline magnesium alloy under cyclic deformation. Acta Materialia, 2014, 62, 212-224.	3.8	46
52	Measurement of fracture strength in brittle thin films. Surface and Coatings Technology, 2014, 254, 1-10.	2.2	20
53	Toughening of unmodified polyvinylchloride through the addition of nanoparticulate calcium carbonate and titanate coupling agent. Journal of Applied Polymer Science, 2013, 127, 2339-2353.	1.3	31
54	Tailoring the Piezoelectric and Relaxor Properties of (<scp><scp>Bi</scp></scp>_{1/2}<scp><scp>Na</scp></scp>_{1/2})<scp><scp>TiO</scp></scp>₃â€ via Zirconium Doping. Journal of the American Ceramic Society, 2013, 96, 2881-2886.	1.9	48

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55	The Effect of Electric Poling on the Performance of Leadâ€Free (1âˆ’<i>x</i>)<scp><scp>Ba</scp></scp>(<scp><scp>Zr</scp></scp>_{0.2}<scp><scp>Ti</scp></scp>_{0.8})<scp Piezoceramics. Journal of the American Ceramic Society, 2013, 96, 3805-3811.	1.9	36
56	<i>In Situ</i> Xâ€ray Diffraction of Biased Ferroelastic Switching in Tetragonal Leadâ€free (1âˆ’<i>x</i>)<scp><scp>Ba</scp></scp>(<scp><scp>Zr</scp></scp>_{0.2}<scp><scp>Ti</scp></scp>_{0.8})<scp Piezoelectrics. Journal of the American Ceramic Society, 2013, 96, 2913-2920.	1.9	42
57	Origin of large recoverable strain in 0.94(Bi0.5Na0.5)TiO3-0.06BaTiO3 near the ferroelectric-relaxor transition. Applied Physics Letters, 2013, 102, .	1.5	58
58	Improvement of Ferroelectric Properties of PZT Ceramics by SBT Addition. Ferroelectrics, 2013, 451, 22-29.	0.3	1
59	Domain fragmentation during cyclic fatigue in 94%(Bi1/2Na1/2)TiO3-6%BaTiO3. Journal of Applied Physics, 2012, 112, .	1.1	37
60	Mechanics prediction of the fracture pattern on scratching wafers of single crystal silicon. Acta Materialia, 2012, 60, 4448-4460.	3.8	18
61	Indentation of metallic foam core sandwich panels with soft aluminium face sheets. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 558, 175-185.	2.6	11
62	Reduction of the piezoelectric performance in lead-free (1-x)Ba(Zr0.2Ti0.8)O3-x(Ba0.7Ca0.3)TiO3 piezoceramics under uniaxial compressive stress. Journal of Applied Physics, 2012, 112, .	1.1	45
63	Ferroelectric properties of Pb(Zr0.52Ti0.48)O3â€"Bi3.25La0.75Ti3O12 ceramics. Ceramics International, 2012, 38, S205-S209.	2.3	3
64	Electrical Fatigueâ€Induced Cracking in Lead Zirconate Titanate Piezoelectric Ceramic and Its Influence Quantitatively Analyzed by Refatigue Method. Journal of the American Ceramic Society, 2012, 95, 2593-2600.	1.9	21
65	A Highâ€Temperatureâ€Capacitor Dielectric Based on <scp><scp>K</scp></scp>_{0.5}<scp><scp>Na</scp></scp>_{0.5}<scp><scp>NbO</scp></scp>₃â€ <scp><scp>Bi</scp></scp>_{1/2}<scp><scp>Na</scp></scp>_{1/2}<scp><scp>TiO</scp></scp>₃â€" Journal of the American Ceramic Society, 2012, 95, 3519-3524.	1.9	121
66	Free vibration analysis of layered functionally graded beams with experimental validation. Materials & Design, 2012, 36, 182-190.	5.1	226
67	Buckling analysis of embedded nanotubes using gradient continuum theory. Mechanics of Materials, 2012, 45, 52-60.	1.7	28
68	Ceramic-like wear behaviour of human dental enamel. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 8, 47-57.	1.5	37
69	Bipolar and Unipolar Fatigue of Ferroelectric BNTâ€Based Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 529-535.	1.9	83
70	Effect of Ferroelectric Longâ€Range Order on the Unipolar and Bipolar Electric Fatigue in <scp>Bi_{1/2}Na_{1/2}TiO₃</scp>â€Based Leadâ€Free Piezoceramics. Journal of the American Ceramic Society, 2011, 94, 3927-3933.	1.9	82
71	<scp>FIB</scp> Tomographic Analysis of Subsurface Indentation Crack Interactions with Pores in Alumina. Journal of the American Ceramic Society, 2011, 94, 4017-4024.	1.9	4
72	Temperature Dependence on Domain Switching Behavior in Lead Zirconate Titanate Under Electrical Load via <i>In Situ</i> Neutron Diffraction. Journal of the American Ceramic Society, 2011, 94, 3202-3205.	1.9	10

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73	Mechanical properties and scratch resistance of filtered-arc-deposited titanium oxide thin films on glass. Thin Solid Films, 2011, 519, 7925-7931.	0.8	19
74	Investigation of the domain switching zone near a crack tip in pre-poled lead zirconate titanate ceramic via in situ X-ray diffraction. Scripta Materialia, 2011, 64, 1-4.	2.6	19
75	Characterization of the chemically deposited hydroxyapatite coating on a titanium substrate. Journal of Materials Science: Materials in Medicine, 2011, 22, 1-9.	1.7	27
76	Cooperation of length scales and orientations in the deformation of bovine bone. Acta Biomaterialia, 2011, 7, 2943-2951.	4.1	26
77	Mechanical stability of twoâ€step chemically deposited hydroxyapatite coating on Ti substrate: Effects of various surface pretreatments. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2011, 99B, 58-69.	1.6	22
78	Transition from dislocation controlled plasticity to grain boundary mediated shear in nanolayered aluminum/palladium thin films. Thin Solid Films, 2011, 519, 3213-3220.	0.8	29
79	Fatigue Crack Growth in Ultrafine Grained Aluminium Alloy. Materials Science Forum, 2011, 690, 254-257.	0.3	0
80	Electric-field-induced strain mechanisms in lead-free 94%(Bi1/2Na1/2)TiO3â€"6%BaTiO3. Applied Physics Letters, 2011, 98, .	1.5	143
81	Elastic and viscoelastic properties of porcine subdermal fat using MRI and inverse FEA. Biomechanics and Modeling in Mechanobiology, 2010, 9, 703-711.	1.4	25
82	Anisotropy effects on the reliability of single-crystal silicon. Scripta Materialia, 2010, 63, 997-1000.	2.6	20
83	On the wear mechanism of human dental enamel. Journal of the Mechanical Behavior of Biomedical Materials, 2010, 3, 347-356.	1.5	49
84	Experimental and analytical study on the deformation response of closed-cell Al foam panels to local contact damageâ€"Mechanical properties extraction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 6033-6045.	2.6	8
85	Effect of coating thickness on the deformation behaviour of diamond-like carbonâ€"silicon system. Thin Solid Films, 2010, 518, 2021-2028.	0.8	13
86	The use of the scratch test to measure the fracture strength of brittle thin films. Thin Solid Films, 2010, 518, 4911-4917.	0.8	25
87	Effect of substrate roughness on the contact damage of thin brittle films on brittle substrates. Thin Solid Films, 2010, 518, 5242-5248.	0.8	6
88	Design of functionally graded carbon coatings against contact damage. Thin Solid Films, 2010, 518, 5769-5776.	0.8	26
89	Effect of coating thickness on the deformation mechanisms in PVD TiN-coated steel. Surface and Coatings Technology, 2010, 204, 1764-1773.	2.2	38
90	Dynamic processes of domain switching in lead zirconate titanate under cyclic mechanical loading by in situ neutron diffraction. Acta Materialia, 2010, 58, 1897-1908.	3.8	12

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91	The effects of water and frequency on fatigue crack growth rate in modified and unmodified polyvinyl chloride. Polymer Engineering and Science, 2010, 50, 352-364.	1.5	4
92	Closed form solution for a line inclusion in magnetoelectroelastic media. International Journal of Applied Electromagnetics and Mechanics, 2010, 34, 119-129.	0.3	1
93	Substrate effects on the mechanical properties and contact damage of diamond-like carbon thin films. Diamond and Related Materials, 2010, 19, 1273-1280.	1.8	23
94	Correlation of nanoindentation-induced deformation microstructures in diamondlike carbon coatings on silicon substrates with simulation studies. Journal of Materials Research, 2010, 25, 910-920.	1.2	2
95	Nanoindentation-induced deformation behaviour of tetrahedral amorphous carbon coating deposited by filtered cathodic vacuum arc. Diamond and Related Materials, 2010, 19, 1423-1430.	1.8	5
96	Contact damage of tetrahedral amorphous carbon thin films on silicon substrates. Journal of Materials Research, 2009, 24, 3286-3293.	1.2	2
97	Visualization of highly graded oxygen vacancy profiles in lead-zirconate-titanate by spectrally resolved cathodoluminescence spectroscopy. Applied Physics Letters, 2009, 95, .	1.5	1
98	STRUCTURAL RESPONSE OF ALUMINIUM FOAM HYBRID SANDWICH PANELS UNDER THREE-POINT BENDING LOADING. International Journal of Modern Physics B, 2009, 23, 1733-1738.	1.0	5
99	Structural Integrity of Enamel: Experimental and Modeling. Journal of Dental Research, 2009, 88, 529-533.	2.5	39
100	Reverse size effect in the fracture strength of brittle thin films. Scripta Materialia, 2009, 60, 937-940.	2.6	14
101	The effects of frequency on fatigue threshold and crack propagation rate in modified and unmodified polyvinyl chloride. Polymer Engineering and Science, 2009, 49, 1299-1310.	1.5	8
102	Fracture Strength of Polycrystalline Silicon Wafers for the Photovoltaic Industry. Journal of the American Ceramic Society, 2009, 92, 2713-2717.	1.9	21
103	Mechanical behaviour and energy absorption of closed-cell aluminium foam panels in uniaxial compression. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 517, 37-45.	2.6	99
104	Characterisation of nanolayered aluminium/palladium thin films using nanoindentation. Thin Solid Films, 2009, 517, 3698-3703.	0.8	24
105	Effect of microstructure upon elastic behaviour of human tooth enamel. Journal of Biomechanics, 2009, 42, 1075-1080.	0.9	57
106	Toughening of unmodified polyvinylchloride through the addition of nanoparticulate calcium carbonate. Polymer, 2009, 50, 4066-4079.	1.8	70
107	Evaluation of crack-tip stress fields on microstructural-scale fracture in Alâ€“Al2O3 interpenetrating network composites. Acta Materialia, 2009, 57, 570-581.	3.8	14
108	Frequency effects on fatigue crack growth and crack tip domain-switching behavior in a lead zirconate titanate ceramic. Acta Materialia, 2009, 57, 3932-3940.	3.8	42

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109	On the critical parameters that regulate the deformation behaviour of tooth enamel. Biomaterials, 2008, 29, 2697-2703.	5.7	58
110	Transmission electron microscope characterisation of molar-incisor-hypomineralisation. Journal of Materials Science: Materials in Medicine, 2008, 19, 3187-3192.	1.7	50
111	Deformation mechanisms of TiN multilayer coatings alternated by ductile or stiff interlayers. Acta Materialia, 2008, 56, 852-861.	3.8	83
112	Ferroelastic domain switching fatigue in lead zirconate titanate ceramics. Acta Materialia, 2008, 56, 1577-1587.	3.8	26
113	A simple nanoindentation-based methodology to assess the strength of brittle thin films. Acta Materialia, 2008, 56, 1633-1641.	3.8	22
114	Influence of processing parameters on the bond toughness of roll-bonded aluminium strip. Scripta Materialia, 2008, 58, 959-962.	2.6	61
115	Effect of substrate roughness on the contact damage of DLC coatings. Diamond and Related Materials, 2008, 17, 975-979.	1.8	31
116	An indirect implicit technique for modelling piezoelectric ceramics. Computational Materials Science, 2008, 43, 629-640.	1.4	8
117	Effect of temperature on metastable phases induced in silicon during nanoindentation. Journal of Materials Research, 2008, 23, 245-249.	1.2	8
118	Contact damage evolution in diamondlike carbon coatings on ductile substrates. Journal of Materials Research, 2008, 23, 27-36.	1.2	33
119	Berkovich indentation of diamondlike carbon coatings on silicon substrates. Journal of Materials Research, 2008, 23, 1862-1869.	1.2	16
120	Neutron diffraction study of the polarization reversal mechanism in [111]c-oriented Pb(Zn1âˆ•3Nb2âˆ•3)O3âˆ'xPbTiO3. Journal of Applied Physics, 2007, 101, 104108.	1.1	43
121	Time-resolved diffraction measurements of electric-field-induced strain in tetragonal lead zirconate titanate. Journal of Applied Physics, 2007, 101, 094104.	1.1	47
122	Microstructural response of TiN monolithic and multilayer coatings during microscratch testing. Journal of Materials Research, 2007, 22, 2312-2318.	1.2	41
123	Resistance of Thin Al Foam Panels to Deep Indentation. Materials Science Forum, 2007, 561-565, 357-360.	0.3	1
124	Strength Measurement in Brittle Thin Films. Materials Research Society Symposia Proceedings, 2007, 1049, 1.	0.1	0
125	Three dimensional imaging of deformation modes in TiN-based thin film coatings. Thin Solid Films, 2007, 515, 3190-3195.	0.8	23
126	Contact damage evolution in a diamond-like carbon (DLC) coating on a stainless steel substrate. Thin Solid Films, 2007, 515, 3196-3201.	0.8	77

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127	Microstructural effects on indentation failure mechanisms in TiN coatings: Finite element simulations. Acta Materialia, 2007, 55, 2489-2501.	3.8	74
128	Crack tip process zone domain switching in a soft lead zirconate titanate ceramic. Acta Materialia, 2007, 55, 5538-5548.	3.8	54
129	On the structureâ€"property relationship of sound and hypomineralized enamel. Acta Biomaterialia, 2007, 3, 865-872.	4.1	73
130	Fatigue crack propagation resistance in homogeneous and graded aluminaâ€"epoxy composites. International Journal of Fatigue, 2007, 29, 158-167.	2.8	15
131	Approximation of curved cracks under mixed-mode loading. Engineering Fracture Mechanics, 2007, 74, 1026-1040.	2.0	4
132	Fracture of Materials: Moving Forwards. Engineering Fracture Mechanics, 2007, 74, 1007-1008.	2.0	1
133	Ferroelastic domain switching in lead zirconate titanate measured by in situ neutron diffraction. Mechanics of Materials, 2007, 39, 283-290.	1.7	49
134	Effect of Grain Size on Mechanical Properties of Submicrometer 3Yâ€TZP: Fracture Strength and Hydrothermal Degradation. Journal of the American Ceramic Society, 2007, 90, 2830-2836.	1.9	106
135	Development of graded hydroxyapatite/CaCO3 composite structures for bone ingrowth. Journal of Materials Science: Materials in Medicine, 2007, 18, 1817-1824.	1.7	28
136	Deformation behaviour of DLC coatings on (111) silicon substrates. Thin Solid Films, 2007, 516, 267-271.	0.8	18
137	Direct measurement of the domain switching contribution to the dynamic piezoelectric response in ferroelectric ceramics. Applied Physics Letters, 2006, 89, 092901.	1.5	162
138	Deformation of a hard coating on ductile substrate system during nanoindentation: Role of the coating microstructure. Journal of Materials Research, 2006, 21, 437-447.	1.2	32
139	Domain Switching Under Cyclic Mechanical Loading in Lead Zirconate Titanate. Journal of the American Ceramic Society, 2006, 89, 3567-3569.	1.9	15
140	R-Curve and Stress?Strain Behavior of Ferroelastic Ceramics. Journal of the American Ceramic Society, 2006, 89, 3721-3727.	1.9	35
141	Crack propagation paths in layered, graded composites. Composites Part B: Engineering, 2006, 37, 490-498.	5.9	40
142	Contact deformation of TiN coatings on metallic substrates. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 8-13.	2.6	36
143	Ferroelastic contribution to the piezoelectric response in lead zirconate titanate by in situ stroboscopic neutron diffraction. Physica B: Condensed Matter, 2006, 385-386, 100-102.	1.3	3
144	Orientation-dependent lattice strains in lead zirconate titanate under mechanical compression by in situ neutron diffraction. Physica B: Condensed Matter, 2006, 385-386, 548-551.	1.3	11

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145	Investigation of sliding wear surfaces in alumina using transmission electron microscopy. Science and Technology of Advanced Materials, 2006, 7, 826-833.	2.8	11
146	Deformation and fracture of TiN and TiAlN coatings on a steel substrate during nanoindentation. Surface and Coatings Technology, 2006, 200, 3518-3526.	2.2	48
147	Zrâ€"Siâ€"N films fabricated using hybrid cathodic arc and chemical vapour deposition: Structure vs. properties. Surface and Coatings Technology, 2006, 200, 4213-4219.	2.2	39
148	Deposition of nanocomposite thin films by a hybrid cathodic arc and chemical vapour technique. Surface and Coatings Technology, 2006, 201, 4139-4144.	2.2	26
149	Sliding wear of calcium Î±-sialon ceramics. Wear, 2006, 260, 387-400.	1.5	13
150	Sliding wear behaviour of Ca Î±-sialon ceramics at 600Â°C in air. Wear, 2006, 260, 1356-1360.	1.5	16
151	Nanoindentation-induced deformation behaviour of diamond-like carbon coatings on silicon substrates. Thin Solid Films, 2006, 515, 1000-1004.	0.8	21
152	Fluorescence spectroscopy analysis of Alâ€"Al2O3 composites with coarse interpenetrating networks. Journal of Materials Science, 2006, 41, 7571-7579.	1.7	2
153	Layer orientation effects on the R-curve behavior of multilayered aluminaâ€"zirconia composites. Composites Part B: Engineering, 2006, 37, 449-458.	5.9	6
154	R-curve behaviour of 2Y-TZP with submicron grain size. Journal of the European Ceramic Society, 2006, 26, 3575-3582.	2.8	28
155	Three-dimensional study of indentation-induced cracks in an amorphous carbon coating on a steel substrate. Journal of Materials Research, 2006, 21, 2600-2605.	1.2	14
156	Determination of domain orientation in lead zirconate titanate ceramics by Raman spectroscopy. Applied Physics Letters, 2006, 88, 162903.	1.5	27
157	On the mechanical properties of aluminaâ€"epoxy composites with an interpenetrating network structure. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 393, 170-178.	2.6	55
158	Finite element simulations of crack propagation in functionally graded materials under flexural loading. Engineering Fracture Mechanics, 2005, 72, 2444-2467.	2.0	43
159	Deformation and fracture of Tiâ€"Siâ€"N nanocomposite films. Thin Solid Films, 2005, 479, 193-200.	0.8	35
160	Deformation mechanisms operating during nanoindentation of TiN coatings on steel substrates. Surface and Coatings Technology, 2005, 192, 11-18.	2.2	57
161	Nanocomposite Tiâ€"Siâ€"N, Zrâ€"Siâ€"N, Tiâ€"Alâ€"Siâ€"N, Tiâ€"Alâ€"Vâ€"Siâ€"N thin film coatings deposited by vacuum arc deposition. Surface and Coatings Technology, 2005, 200, 2228-2235.	2.2	117
162	The application of focused ion beam technology to the characterization of coatings. Surface and Coatings Technology, 2005, 198, 165-168.	2.2	43

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