

# Kaiyang Zeng

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/3998804/kaiyang-zeng-publications-by-citations.pdf>

**Version:** 2024-04-18

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

246  
papers

7,014  
citations

43  
h-index

72  
g-index

259  
ext. papers

8,009  
ext. citations

6.1  
avg, IF

6.08  
L-index

#	Paper	IF	Citations
246	Discrete and continuous deformation during nanoindentation of thin films. <i>Acta Materialia</i> , <b>2000</b> , 48, 2277-2295	8.4	450
245	Ferroelectricity of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskite. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 1155-61	6.4	260
244	Self-surface charge exfoliation and electrostatically coordinated 2D hetero-layered hybrids. <i>Nature Communications</i> , <b>2017</b> , 8, 14224	17.4	243
243	Analysis of nanoindentation creep for polymeric materials. <i>Journal of Applied Physics</i> , <b>2004</b> , 95, 3655-3666	6.5	180
242	Extended finite element method with edge-based strain smoothing (ESm-XFEM) for linear elastic crack growth. <i>Computer Methods in Applied Mechanics and Engineering</i> , <b>2012</b> , 209-212, 250-265	5.7	168
241	Morphology, thermal and mechanical behavior of polyamide 6/layered-silicate nanocomposites. <i>Composites Science and Technology</i> , <b>2003</b> , 63, 331-337	8.6	156
240	Nanoindentation and morphological studies on nylon 66 nanocomposites. I. Effect of clay loading. <i>Polymer</i> , <b>2004</b> , 45, 3341-3349	3.9	154
239	An analysis of load penetration curves from instrumented indentation. <i>Acta Materialia</i> , <b>2001</b> , 49, 3539-3554	5.4	133
238	High-performance piezoelectric nanogenerators composed of formamidinium lead halide perovskite nanoparticles and poly(vinylidene fluoride). <i>Nano Energy</i> , <b>2017</b> , 37, 126-135	17.1	113
237	Hepatocyte encapsulation for enhanced cellular functions. <i>Tissue Engineering</i> , <b>2000</b> , 6, 481-95		106
236	Investigation of mechanical properties of transparent conducting oxide thin films. <i>Thin Solid Films</i> , <b>2003</b> , 443, 60-65	2.2	100
235	Controlled indentation: A general approach to determine mechanical properties of brittle materials. <i>Acta Materialia</i> , <b>1996</b> , 44, 1127-1141	8.4	89
234	Self-polarized ferroelectric PVDF homopolymer ultra-thin films derived from Langmuir-Blodgett deposition. <i>Polymer</i> , <b>2012</b> , 53, 1404-1408	3.9	88
233	Nanoindentation and morphological studies on nylon 66/organoclay nanocomposites. II. Effect of strain rate. <i>Polymer</i> , <b>2004</b> , 45, 8221-8229	3.9	86
232	Mutual ferromagnetic-ferroelectric coupling in multiferroic copper-doped ZnO. <i>Advanced Materials</i> , <b>2011</b> , 23, 1635-40	24	85
231	A novel singular node-based smoothed finite element method (NS-FEM) for upper bound solutions of fracture problems. <i>International Journal for Numerical Methods in Engineering</i> , <b>2010</b> , 83, 1466-1497	2.4	82
230	MXenes with tunable work functions and their application as electron- and hole-transport materials in non-fullerene organic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 11160-11169	13	80

229	Enhancing the planar heterojunction perovskite solar cell performance through tuning the precursor ratio. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 7943-7949	13	79
228	Spectrum Tailored Defective 2D Semiconductor Nanosheets Aerogel for Full-Spectrum-Driven Photothermal Water Evaporation and Photochemical Degradation. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2004460	15.6	78
227	Material characterization based on dual indenters. <i>International Journal of Solids and Structures</i> , <b>2005</b> , 42, 69-83	3.1	76
226	Chemical degradation of composite restoratives. <i>Journal of Oral Rehabilitation</i> , <b>2001</b> , 28, 1015-21	3.4	75
225	Highly efficient, inverted polymer solar cells with indium tin oxide modified with solution-processed zwitterions as the transparent cathode. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 2009-17	9.5	74
224	Morphology, tensile and fracture characteristics of epoxy-alumina nanocomposites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 5670-5676	5.3	73
223	Scratch damage of polymers in nanoscale. <i>Acta Materialia</i> , <b>2004</b> , 52, 431-443	8.4	72
222	Engineered Molecular Chain Ordering in Single-Walled Carbon Nanotubes/Polyaniline Composite Films for High-Performance Organic Thermoelectric Materials. <i>Chemistry - an Asian Journal</i> , <b>2016</b> , 11, 1804-10	4.5	72
221	Uniqueness of reverse analysis from conical indentation tests. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 2498-2502	2.5	71
220	Experimental Measurement of Residual Stress Field around Sharp Indentation in Glass. <i>Journal of the American Ceramic Society</i> , <b>1994</b> , 77, 524-530	3.8	70
219	High-performance polymer solar cells with a conjugated zwitterion by solution processing or thermal deposition as the electron-collection interlayer. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 24155		69
218	Nanoscale mapping of lithium-ion diffusion in a cathode within an all-solid-state lithium-ion battery by advanced scanning probe microscopy techniques. <i>ACS Nano</i> , <b>2013</b> , 7, 1666-75	16.7	68
217	Ultrathin BaTiO <sub>3</sub> -based ferroelectric tunnel junctions through interface engineering. <i>Nano Letters</i> , <b>2015</b> , 15, 2568-73	11.5	67
216	Multi-Nonvolatile State Resistive Switching Arising from Ferroelectricity and Oxygen Vacancy Migration. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606165	24	64
215	A singular edge-based smoothed finite element method (ES-FEM) for bimaterial interface cracks. <i>Computational Mechanics</i> , <b>2010</b> , 45, 109-125	4	62
214	The Hertzian stress field and formation of cone cracks—Theoretical approach. <i>Acta Metallurgica Et Materialia</i> , <b>1992</b> , 40, 2595-2600		58
213	Characterization of mechanical properties of a Zr-based metallic glass by indentation techniques. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 384, 215-223	5.3	55
212	A comparative study of low dielectric constant barrier layer, etch stop and hardmask films of hydrogenated amorphous Si-(C, O, N). <i>Thin Solid Films</i> , <b>2004</b> , 460, 211-216	2.2	55

211	Cubic silsesquioxane/polyimide nanocomposites with improved thermomechanical and dielectric properties. <i>Acta Materialia</i> , <b>2005</b> , 53, 2395-2404	8.4	54
210	Nanoindentation of polymers with a sharp indenter. <i>Journal of Materials Research</i> , <b>2005</b> , 20, 1597-1605	2.5	52
209	Failure Mechanism and Interface Engineering for NASICON-Structured All-Solid-State Lithium Metal Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 20895-20904	9.5	51
208	Stress gradient enhanced plasticity in a monolithic bulk metallic glass. <i>Intermetallics</i> , <b>2008</b> , 16, 1190-1198	9.5	51
207	The Hertzian stress field and formation of cone cracks. Determination of fracture toughness. <i>Acta Metallurgica Et Materialia</i> , <b>1992</b> , 40, 2601-2605		48
206	Extracting the mechanical properties of a viscoelastic polymeric film on a hard elastic substrate. <i>Journal of Materials Research</i> , <b>2004</b> , 19, 3053-3061	2.5	47
205	A singular edge-based smoothed finite element method (ES-FEM) for crack analyses in anisotropic media. <i>Engineering Fracture Mechanics</i> , <b>2011</b> , 78, 85-109	4.2	46
204	Investigation of the non-volatile resistance change in noncentrosymmetric compounds. <i>Scientific Reports</i> , <b>2012</b> , 2, 587	4.9	44
203	Vickers indentations in glass Residual stress fields and iso-stress contour maps. <i>Acta Metallurgica Et Materialia</i> , <b>1995</b> , 43, 1935-1943		41
202	Comparison of mechanical properties of porous and non-porous low-k dielectric films. <i>Microelectronic Engineering</i> , <b>2004</b> , 71, 221-228	2.5	40
201	Temperature-Dependent Lithium-Ion Diffusion and Activation Energy of LiCoNiMnO Thin-Film Cathode at Nanoscale by Using Electrochemical Strain Microscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 13999-14005	9.5	39
200	Composite NASICON (NaZrSiPO) Solid-State Electrolyte with Enhanced Na Ionic Conductivity: Effect of Liquid Phase Sintering. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 40125-40133	9.5	39
199	Cycling effects on surface morphology, nanomechanical and interfacial reliability of LiMn2O4 cathode in thin film lithium ion batteries. <i>Electrochimica Acta</i> , <b>2012</b> , 68, 52-59	6.7	38
198	The effect of oxidation on the corrosion resistance and mechanical properties of a Zr-based metallic glass. <i>Corrosion Science</i> , <b>2011</b> , 53, 3557-3565	6.8	38
197	Nanoindentation study of Zn-based Pb free solders used in fine pitch interconnect applications. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 423, 57-63	5.3	38
196	Simulation of instrumented indentation and material characterization. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2005</b> , 390, 202-209	5.3	38
195	Elucidating the charge carrier transport and extraction in planar heterojunction perovskite solar cells by Kelvin probe force microscopy. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 17464-17472	13	38
194	In situ studies of lithium-ion diffusion in a lithium-rich thin film cathode by scanning probe microscopy techniques. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 22235-42	3.6	37

193	Determination of the hardness and elastic modulus of low-k thin films and their barrier layer for microelectronic applications. <i>Microelectronic Engineering</i> , <b>2003</b> , 70, 115-124	2.5	37
192	Recent advances of bismuth based anode materials for sodium-ion batteries. <i>Materials Technology</i> , <b>2018</b> , 33, 563-573	2.1	36
191	Residual stress measurement in thin films at sub-micron scale using Focused Ion Beam milling and imaging. <i>Thin Solid Films</i> , <b>2012</b> , 520, 2073-2076	2.2	36
190	Adhesion study of low-k/Si system using 4-point bending and nanoscratch test. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , <b>2005</b> , 121, 193-198	3.1	36
189	Heterogeneous ZIF-L membranes with improved hydrophilicity and anti-bacterial adhesion for potential application in water treatment.. <i>RSC Advances</i> , <b>2019</b> , 9, 1591-1601	3.7	34
188	The resistive switching in TiO <sub>2</sub> films studied by conductive atomic force microscopy and Kelvin probe force microscopy. <i>AIP Advances</i> , <b>2013</b> , 3, 082107	1.5	34
187	Mechanical Properties of Microcrystalline Metal-Organic Frameworks (MOFs) Measured by Bimodal Amplitude Modulated-Frequency Modulated Atomic Force Microscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 32202-32210	9.5	33
186	In-situ nanoscale mapping of surface potential in all-solid-state thin film Li-ion battery using Kelvin probe force microscopy. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 063723	2.5	33
185	Origin of the enhanced polarization in La and Mg co-substituted BiFeO <sub>3</sub> thin film during the fatigue process. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 042902	3.4	33
184	Enhanced photovoltaic effects and switchable conduction behavior in BiFe <sub>0.6</sub> Sc <sub>0.4</sub> O <sub>3</sub> thin films. <i>Acta Materialia</i> , <b>2015</b> , 88, 83-90	8.4	32
183	Vickers indentations in glass. Comparison of finite element analysis and experiments. <i>Acta Metallurgica Et Materialia</i> , <b>1995</b> , 43, 1945-1954		32
182	Structure, Stability, and Kinetics of Vacancy Defects in Monolayer PtSe: A First-Principles Study. <i>ACS Omega</i> , <b>2017</b> , 2, 8640-8648	3.9	31
181	Piezoelectric properties and surface potential of green abalone shell studied by scanning probe microscopy techniques. <i>Acta Materialia</i> , <b>2011</b> , 59, 3667-3679	8.4	31
180	Pore Sealing by NH <sub>3</sub> Plasma Treatment of Porous Low Dielectric Constant Films. <i>Journal of the Electrochemical Society</i> , <b>2007</b> , 154, G85	3.9	31
179	Substrate-Friendly Growth of Large-Sized Ni(OH) <sub>2</sub> Nanosheets for Flexible Electrochromic Films. <i>Small</i> , <b>2017</b> , 13, 1700084	11	30
178	Resistive switching and polarization reversal of hydrothermal-method-grown undoped zinc oxide nanorods by using scanning probe microscopy techniques. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 11412-22	9.5	30
177	Tuning of multifunctional Cu-doped ZnO films and nanowires for enhanced piezo/ferroelectric-like and gas/photoresponse properties. <i>Nanoscale</i> , <b>2014</b> , 6, 1680-90	7.7	30
176	In situ study of topography, phase and volume changes of titanium dioxide anode in all-solid-state thin film lithium-ion battery by biased scanning probe microscopy. <i>Journal of Power Sources</i> , <b>2012</b> , 197, 224-230	8.9	30

175	Stable ferroelectric perovskite structure with giant axial ratio and polarization in epitaxial BiFe <sub>0.6</sub> Ga <sub>0.4</sub> O <sub>3</sub> thin films. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 2648-53	9.5	30
174	Morphology and mechanical properties of intermetallic compounds in SnAgCu solder joints. <i>Microelectronic Engineering</i> , <b>2010</b> , 87, 2416-2422	2.5	30
173	Nanoscale characterization of charged/discharged lithium-rich thin film cathode by scanning probe microscopy techniques. <i>Journal of Power Sources</i> , <b>2017</b> , 352, 9-17	8.9	28
172	Grain boundary effects on Li-ion diffusion in a Li <sub>1.2</sub> Co <sub>0.13</sub> Ni <sub>0.13</sub> Mn <sub>0.54</sub> O <sub>2</sub> thin film cathode studied by scanning probe microscopy techniques. <i>RSC Advances</i> , <b>2016</b> , 6, 94000-94009	3.7	28
171	Determining interfacial properties of submicron low-k films on Si substrate by using wedge indentation technique. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 123531	2.5	27
170	Mechanical Polishing Effects Toward Surface Domain Evolution in Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> PbTiO <sub>3</sub> Single Crystals. <i>Journal of the American Ceramic Society</i> , <b>2011</b> , 94, 1079-1086	3.8	26
169	Assessment of smoothed point interpolation methods for elastic mechanics. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2010</b> , 26, 1635-1655	2.6	26
168	Analysis of penetration curves produced by sharp indentations on ceramic materials. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>1996</b> , 74, 1107-1116		25
167	Comparison of Slow Crack Growth Behavior in Alumina and SiC-Whisker-Reinforced Alumina. <i>Journal of the American Ceramic Society</i> , <b>1993</b> , 76, 1673-1680	3.8	25
166	Sustainable Fuel Production from Ambient Moisture via Ferroelectrically Driven MoS Nanosheets. <i>Advanced Materials</i> , <b>2020</b> , 32, e2000971	24	24
165	Chemical Bonding Construction of Reduced Graphene Oxide-Anchored Few-Layer Bismuth Oxychloride for Synergistically Improving Sodium-Ion Storage. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 7311-7319	9.6	24
164	Nanoscale piezoelectric and ferroelectric behaviors of seashell by piezoresponse force microscopy. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 187202	2.5	24
163	Determining the interfacial toughness of low-k films on Si substrate by wedge indentation: Further studies. <i>Acta Materialia</i> , <b>2008</b> , 56, 977-984	8.4	24
162	Study of mechanical properties of light-emitting polymer films by nano-indentation technique. <i>Thin Solid Films</i> , <b>2005</b> , 477, 111-118	2.2	24
161	Giant Piezoelectricity of Ternary Perovskite Ceramics at High Temperatures. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1807920	15.6	23
160	Effect of electric-field on the perpendicular magnetic anisotropy and strain properties in CoFeB/MgO magnetic tunnel junctions. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 052403	3.4	23
159	Characterization of mechanical properties of polymers by nanoindentation tests. <i>Philosophical Magazine</i> , <b>2006</b> , 86, 4487-4506	1.6	23
158	Uniaxial strain-induced ferroelectric phase with a giant axial ratio in a (110) BiFeO <sub>3</sub> thin film. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	22

157	Room temperature ferroelectricity of hybrid organic/inorganic perovskites with mixed iodine and bromine. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 9665-9676	13	21
156	Nanoscale elasticity mappings of micro-constituents of abalone shell by band excitation-contact resonance force microscopy. <i>Nanoscale</i> , <b>2014</b> , 6, 2177-85	7.7	21
155	Structural-failure resistance of metal-organic frameworks toward multiple-cycle CO sorption. <i>Chemical Communications</i> , <b>2017</b> , 53, 8653-8656	5.8	21
154	Residual Stress Fields at the Surface of Sharp Pyramid Indentations. <i>Journal of the American Ceramic Society</i> , <b>2005</b> , 81, 689-694	3.8	21
153	Enhanced Thermoelectric Properties of Polyaniline Nanofilms Induced by Self-Assembled Supramolecules. <i>Chemistry - an Asian Journal</i> , <b>2016</b> , 11, 1955-62	4.5	20
152	Inorganic sodium solid-state electrolyte and interface with sodium metal for room-temperature metal solid-state batteries. <i>Energy Storage Materials</i> , <b>2021</b> , 34, 28-44	19.4	20
151	Spatially Probed Plasmonic Photothermic Nanoheater Enhanced Hybrid Polymeric-Metallic PVDF-Ag Nanogenerator. <i>Small</i> , <b>2018</b> , 14, 1702268	11	20
150	Polarization rotation in copper doped zinc oxide (ZnO:Cu) thin films studied by Piezoresponse Force Microscopy (PFM) techniques. <i>Acta Materialia</i> , <b>2017</b> , 123, 394-403	8.4	19
149	Stable bipolar surface potential behavior of copper-doped zinc oxide films studied by Kelvin probe force microscopy. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 232103	3.4	19
148	The mechanical properties of ultra-low-dielectric-constant films. <i>Thin Solid Films</i> , <b>2004</b> , 462-463, 227-230	2.2	19
147	Resistive switching behavior in copper doped zinc oxide (ZnO:Cu) thin films studied by using scanning probe microscopy techniques. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 709, 535-541	5.7	18
146	Nano-hierarchical structure and electromechanical coupling properties of clamshell. <i>Journal of Structural Biology</i> , <b>2012</b> , 180, 73-83	3.4	18
145	Bipolar charge storage characteristics in copper and cobalt co-doped zinc oxide (ZnO) thin film. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2012</b> , 4, 5276-80	9.5	18
144	Nanomechanical characterization of sputtered RuO <sub>2</sub> thin film on silicon substrate for solid state electronic devices. <i>Thin Solid Films</i> , <b>2011</b> , 519, 1914-1922	2.2	18
143	Modulated Hydrothermal Synthesis of Highly Stable MOF-808(Hf) for Methane Storage. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 17042-17053	8.3	18
142	Microstructural and Electrochemical Properties of Al- and Ga-Doped Li <sub>7</sub> La <sub>3</sub> Zr <sub>2</sub> O <sub>12</sub> Garnet Solid Electrolytes. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 4708-4719	6.1	17
141	Studies of chain substitution caused sub-fibril level differences in stiffness and ultrastructure of wildtype and oim/oim collagen fibers using multifrequency-AFM and molecular modeling. <i>Biomaterials</i> , <b>2016</b> , 107, 15-22	15.6	17
140	Communication Poly(ethylene oxide)-Immobilized Ionogel with High Ionic Liquid Loading and Superior Ionic Conductivity. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, A2887-A2889	3.9	17

- 139 Probing nanoscale functionalities of metal-organic framework nanocrystals. *Nanoscale*, **2017**, 9, 12163-12169 17
- 138 Characterization of tetra methyl cyclo tetra siloxanes-based low-k dielectric film. *Thin Solid Films*, **2004**, 462-463, 213-218 2.2 17
- 137 Elastic modulus determined by Hertzian indentation. *Journal of Materials Science*, **1992**, 27, 3789-3792 4.3 17
- 136 Flexible, stable, fast-ion-conducting composite electrolyte composed of nanostructured Na-super-ion-conductor framework and continuous Poly(ethylene oxide) for all-solid-state Na battery. *Journal of Power Sources*, **2020**, 454, 227949 8.9 16
- 135 Probing the Ionic and Electrochemical Phenomena during Resistive Switching of NiO Thin Films. *ACS Applied Materials & Interfaces*, **2018**, 10, 8092-8101 9.5 16
- 134 Direct stamping and capillary flow patterning of solution processable piezoelectric polyvinylidene fluoride films. *Polymer*, **2013**, 54, 5330-5337 3.9 16
- 133 The correlation between glass formation and hardness of the amorphous phase. *Scripta Materialia*, **2011**, 65, 747-750 5.6 16
- 132 Elastic modulus, hardness and fracture behavior of Pb(Zn<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>BiTiO<sub>3</sub> single crystal. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2008**, 472, 35-42 5.3 16
- 131 Effect of residual shear bands on serrated flow in a metallic glass. *Materials Letters*, **2005**, 59, 3325-3329 3.3 16
- 130 Nano-Wear Mechanism for Ultra-High Molecular Weight Polyethylene (UHMWPE) Sliding Against a Model Hard Asperity. *Tribology Letters*, **2004**, 17, 613-622 2.8 16
- 129 Effect of processing parameters on electroless Cu seed layer properties. *Thin Solid Films*, **2004**, 462-463, 197-201 2.2 16
- 128 Design of the Hybrid Metal-Organic Frameworks as Potential Supramolecular Piezo-/Ferroelectrics. *Journal of Physical Chemistry C*, **2019**, 123, 3122-3129 3.8 16
- 127 Probing of Local Multifield Coupling Phenomena of Advanced Materials by Scanning Probe Microscopy Techniques. *Advanced Materials*, **2018**, 30, e1803064 24 16
- 126 Microstructural evolution of charged defects in the fatigue process of polycrystalline BiFeO<sub>3</sub> thin films. *Acta Materialia*, **2015**, 82, 190-197 8.4 15
- 125 Probing the Coexistence of Ferroelectric and Relaxor States in BiNaTiO-Based Ceramics for Enhanced Piezoelectric Performance. *ACS Applied Materials & Interfaces*, **2020**, 12, 30548-30556 9.5 15
- 124 Understanding nature's residual strain engineering at the human dentine-enamel junction interface. *Acta Biomaterialia*, **2016**, 32, 256-263 10.8 15
- 123 Cycling Effect on Morphological and Interfacial Properties of RuO<sub>2</sub> Anode Film in Thin-Film Lithium Ion Microbatteries. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2013**, 44, 26-34 2.3 15
- 122 Residual stress measurement in thin films using the semi-destructive ring-core drilling method using Focused Ion Beam. *Procedia Engineering*, **2011**, 10, 2190-2195 15



121	Surface morphology, elastic modulus and hardness of thin film cathodes for Li-ion rechargeable batteries. <i>Mechanics of Materials</i> , <b>2015</b> , 91, 323-332	3.3	14
120	A COMBINED EXTENDED AND EDGE-BASED SMOOTHED FINITE ELEMENT METHOD (ES-XFEM) FOR FRACTURE ANALYSIS OF 2D ELASTICITY. <i>International Journal of Computational Methods</i> , <b>2011</b> , 08, 773-786	1.1	14
119	Deformation behavior of PZNB%PT single crystal during nanoindentation. <i>Philosophical Magazine</i> , <b>2008</b> , 88, 3105-3128	1.6	14
118	Mechanical Characterization of the Heat Affected Zone of Gold Wirebonds Using Nanoindentation. <i>Journal of Electronic Packaging, Transactions of the ASME</i> , <b>2004</b> , 126, 87-93	2	14
117	Interface delamination generated by indentation in thin film systems: a computational mechanics study. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2001</b> , 319-321, 893-897	5.3	14
116	Indentation Testing of an Al <sub>2</sub> O <sub>3</sub> /SiC Whisker Composite. <i>Ceramic Engineering and Science Proceedings</i> , 1005-1013	0.1	14
115	Voltage induced electrochemical reactions in the single lithium-rich layer-oxide nanoparticles. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 10257-64	3.6	13
114	Thermoelectric polymer films with a significantly high Seebeck coefficient and thermoelectric power factor obtained through surface energy filtering. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 13600-13609 <sup>13</sup>	1.3	13
113	Artificial two-dimensional polar metal by charge transfer to a ferroelectric insulator. <i>Communications Physics</i> , <b>2019</b> , 2,	5.4	13
112	Oxygen-vacancy-mediated negative differential resistance in La and Mg co-substituted BiFeO <sub>3</sub> thin film. <i>Journal of Applied Physics</i> , <b>2011</b> , 110, 124102	2.5	13
111	A novel variable power singular element in G space with strain smoothing for bi-material fracture analyses. <i>Engineering Analysis With Boundary Elements</i> , <b>2011</b> , 35, 1303-1317	2.6	13
110	Nanoscale characterization of solid electrolyte by Scanning Probe Microscopy techniques. <i>Electrochimica Acta</i> , <b>2020</b> , 334, 135553	6.7	13
109	Adsorption Mechanism of Amyloid Fibrils to Graphene Nanosheets and Their Structural Destruction. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 897-906	3.8	13
108	Optimizing the Thermoelectric Performance of Poly(3-hexylthiophene) through Molecular-Weight Engineering. <i>Chemistry - an Asian Journal</i> , <b>2018</b> , 13, 3246-3253	4.5	12
107	Understanding the Intrinsic Carrier Transport in Highly Oriented Poly(3-hexylthiophene): Effect of Side Chain Regioregularity. <i>Polymers</i> , <b>2018</b> , 10,	4.5	12
106	In situ studies of nanoscale electromechanical behavior of nacre under flexural stresses using band excitation PFM. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 5903-12	10.8	12
105	Thermal oxidation effect on corrosion behavior of Zr <sub>46</sub> Cu <sub>37.6</sub> Ag <sub>8.4</sub> Al <sub>8</sub> bulk metallic glass. <i>Intermetallics</i> , <b>2012</b> , 22, 84-91	3.5	12
104	Finite element analysis of interface delamination and buckling in thin film systems by wedge indentation. <i>Engineering Fracture Mechanics</i> , <b>2007</b> , 74, 1118-1125	4.2	12

103	Sepsis Reduces Bone Strength Before Morphologic Changes Are Identifiable. <i>Critical Care Medicine</i> , <b>2017</b> , 45, e1254-e1261	1.4	11
102	Piezo-/ferroelectric phenomena in biomaterials: A brief review of recent progress and perspectives. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2020</b> , 63, 1	3.6	11
101	Synergetically understanding the interaction between nano/microspheres and peptide for controllable drug loading via experimental and theoretical approaches. <i>Materials Science and Engineering C</i> , <b>2018</b> , 83, 169-176	8.3	11
100	ALTERNATIVE METHODS TO EXTRACT THE HARDNESS AND ELASTIC MODULUS OF THIN FILMS FROM NANOINDENTATION LOAD-DISPLACEMENT DATA. <i>International Journal of Applied Mechanics</i> , <b>2010</b> , 02, 41-68	2.4	11
99	A new analysis of nanoindentation load-displacement curves. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , <b>2002</b> , 82, 2223-2229		11
98	Decay of residual stress at indentation cracks during slow crack growth in soda-lime glass. <i>Acta Materialia</i> , <b>1996</b> , 44, 543-546	8.4	11
97	A 2D-SnSe film with ferroelectricity and its bio-realistic synapse application. <i>Nanoscale</i> , <b>2020</b> , 12, 21913-21922	2.1	11
96	Cycling effects on interfacial reliability of TiO <sub>2</sub> anode film in thin film lithium-ion microbatteries. <i>Journal of Solid State Electrochemistry</i> , <b>2012</b> , 16, 1877-1881	2.6	10
95	Tensile deformation behavior of nano-sized Mo particles reinforced SnAgCu solders. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 4166-4172	5.3	10
94	Extracting the elastic and viscoelastic properties of a polymeric film using a sharp indentation relaxation test. <i>Journal of Materials Research</i> , <b>2006</b> , 21, 2991-3000	2.5	10
93	Decomposition failure of Li <sub>1.5</sub> Al <sub>0.5</sub> Ge <sub>1.5</sub> (PO <sub>4</sub> ) <sub>3</sub> solid electrolytes induced by electric field: A multi-scenario study using Scanning Probe Microscopy-based techniques. <i>Journal of Power Sources</i> , <b>2020</b> , 471, 228468	8.9	10
92	Nanowires versus nanosheets [Effects of NiCo <sub>2</sub> O <sub>4</sub> nanostructures on ceramic membrane permeability and fouling potential. <i>Separation and Purification Technology</i> , <b>2019</b> , 215, 644-651	8.3	9
91	Effects of oxygen and moisture on the I-V characteristics of TiO <sub>2</sub> thin films. <i>Journal of Materiomics</i> , <b>2018</b> , 4, 228-237	6.7	9
90	In situ study of Li-ions diffusion and deformation in Li-rich cathode materials by using scanning probe microscopy techniques. <i>Journal Physics D: Applied Physics</i> , <b>2017</b> , 50, 313001	3	9
89	Finite element simulation and experimental determination of interfacial adhesion properties by wedge indentation. <i>Philosophical Magazine</i> , <b>2009</b> , 89, 1395-1413	1.6	9
88	Effects of O <sub>2</sub> and He on the properties of the trimethyl silane based low-k films. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2004</b> , 22, 1030		9
87	Characterization of TiAl alloy films for potential application in MEMS bimorph actuators. <i>Materials Science in Semiconductor Processing</i> , <b>2002</b> , 5, 35-38	4.3	9
86	Effects of CO <sub>2</sub> and O <sub>2</sub> on the property of tetra methyl tetra cyclo siloxanes based low-k film. <i>Thin Solid Films</i> , <b>2005</b> , 472, 195-202	2.2	9

85	Wear debris generation mechanism for polymers studied by nanoscratching. <i>Philosophical Magazine</i> , <b>2005</b> , 85, 2101-2122	1.6	9
84	Identification of fracture sequences during sharp indentation of polycrystalline Al <sub>2</sub> O <sub>3</sub> . <i>Journal of Materials Research</i> , <b>1994</b> , 9, 1693-1700	2.5	9
83	Domain structure, local surface potential distribution and relaxation of Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -%PbTiO <sub>3</sub> (PZN-%PT) single crystals. <i>Journal of Materiomics</i> , <b>2016</b> , 2, 309-315	6.7	9
82	General Resolution Enhancement Method in Atomic Force Microscopy Using Deep Learning. <i>Advanced Theory and Simulations</i> , <b>2019</b> , 2, 1800137	3.5	9
81	Dual-Nitrogen-Doped Carbon Decorated on Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> to Stabilize the Intercalation of Three Sodium Ions. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 6870-6879	6.1	8
80	Structure-Function Correlative Microscopy of Peritubular and Intertubular Dentine. <i>Materials</i> , <b>2018</b> , 11,	3.5	8
79	Probing electrochemically induced resistive switching of TiO using SPM techniques. <i>Physical Chemistry Chemical Physics</i> , <b>2017</b> , 19, 31399-31409	3.6	8
78	Negative capacitance induced by redistribution of oxygen vacancies in the fatigued BiFeO <sub>3</sub> -based thin film. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 022904	3.4	8
77	Comparative Study of Trimethyl Silane and Tetramethylcyclotetrasiloxane-Based Low-k Films. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, G246	3.9	8
76	Oxidation behaviour of stainless steel Al coatings produced by co-sputtering and reactive sputtering. <i>Materials Letters</i> , <b>2000</b> , 46, 53-59	3.3	8
75	A Study of Perturbations in Structure and Elastic Modulus of Bone Microconstituents Using Bimodal Amplitude Modulated-Frequency Modulated Atomic Force Microscopy. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 478-486	5.5	8
74	Elevating the discharge plateau of prussian blue analogs through low-spin Fe redox induced intercalation pseudocapacitance. <i>Energy Storage Materials</i> , <b>2021</b> , 43, 182-189	19.4	8
73	Dynamic Fatigue of an Al <sub>2</sub> /SiC Whisker Composite in Water	2233-2250	8
72	Ferroelectric polarization relaxation in Au/Cu <sub>2</sub> O/ZnO/BiFeO <sub>3</sub> /Pt heterostructure. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 102902	3.4	7
71	Correlation of the resistive switching and polarization switching in zinc oxide thin films using scanning probe microscopy techniques. <i>Journal of Materials Research</i> , <b>2015</b> , 30, 3431-3442	2.5	7
70	Elastic-plastic deformation of Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -%PbTiO <sub>3</sub> single crystals during nanoindentation. <i>Philosophical Magazine</i> , <b>2010</b> , 90, 1685-1700	1.6	7
69	Preparation of high piezoelectric and flexible polyvinylidene fluoride nanofibers via lead zirconium titanate doping. <i>Ceramics International</i> , <b>2020</b> , 46, 28735-28741	5.1	7
68	Enhanced energy storage properties and temperature stability of fatigue-free La-modified PbZrO <sub>3</sub> films under low electric fields. <i>Science China Materials</i> , <b>2020</b> , 63, 2325-2334	7.1	7

67	Nanoscale Ferroelectric Characterization with Heterodyne Megasonic Piezoresponse Force Microscopy. <i>Advanced Science</i> , <b>2021</b> , 8, 2003993	13.6	7
66	Insight into the structure-capacity relationship in biomass derived carbon for high-performance sodium-ion batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 62, 497-504	12	7
65	Abnormal Ionic Conductivities in Halide NaBi O Cl Induced by Absorbing Water and a Derived Oxhydryl Group. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 8991-8997	16.4	6
64	Nanoindentation Study of Polymer Based Nanocomposites. <i>Journal of Metastable and Nanocrystalline Materials</i> , <b>2005</b> , 23, 363-366	0.2	6
63	High-Speed Piezoresponse Force Microscopy and Machine Learning Approaches for Dynamic Domain Growth in Ferroelectric Materials. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 9944-9952	9.5	6
62	Intrinsic low sodium/NASICON interfacial resistance paving the way for room temperature sodium-metal battery. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 601, 418-426	9.3	6
61	Tuning the structure of monomeric amyloid beta peptide by the curvature of carbon nanotubes. <i>Carbon</i> , <b>2019</b> , 153, 717-724	10.4	5
60	Ti Reactive Sintering of Electrically Conductive Al <sub>2</sub> O <sub>3</sub> /TiN Composite: Influence of Ti Particle Size and Morphology on Electrical and Mechanical Properties. <i>Materials</i> , <b>2017</b> , 10, 1348	3.5	5
59	Nanoscale domains and preferred cracking planes in Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> (5%)PbTiO <sub>3</sub> single crystals studied by piezoresponse force microscopy and fractography. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 124104	2.5	5
58	A three-dimensional finite element analysis of interface delamination in a ductile film/hard substrate system induced by wedge indentation. <i>Engineering Fracture Mechanics</i> , <b>2009</b> , 76, 2272-2280	4.2	5
57	Mechanical properties of CuAlO thin films prepared by plasma-enhanced chemical vapor deposition). <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2006</b> , 24, 537-541 <sup>2.9</sup>		5
56	Formation of TiSiN film using low frequency, high density inductively coupled plasma process. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2005</b> , 23, 2444		5
55	Fracture toughness anisotropy of a hot pressed Al <sub>2</sub> O <sub>3</sub> /SiCw composite. <i>Journal of Materials Science Letters</i> , <b>1990</b> , 9, 1085-1086		5
54	An edge-based smoothed finite element method for adaptive analysis. <i>Structural Engineering and Mechanics</i> , <b>2011</b> , 39, 767-793		5
53	Characterization of domain structure and imprint of Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> -4.5%PbTiO <sub>3</sub> (PZN-4.5%PT) single crystals by using PFM and SS-PFM techniques. <i>Ceramics International</i> , <b>2020</b> , 46, 4274-4279	5.1	5
52	Variation of contact resonance frequency during domain switching in PFM measurements for ferroelectric materials. <i>Journal of Materiomics</i> , <b>2020</b> , 6, 109-118	6.7	5
51	Local phenomena at grain boundaries: An alternative approach to grasp the role of oxygen vacancies in metallization of VO <sub>2</sub> . <i>Journal of Materiomics</i> , <b>2018</b> , 4, 360-367	6.7	5
50	Correlation of Electrochemical Effects and Resistive Switching in TiO <sub>2</sub> Thin Films. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, E147-E153	3.9	4

49	Ferroelectricity and dipole-dipole interactions in NH <sub>4</sub> TiOF <sub>3</sub> mesocrystals. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 232903	3-4	4
48	MEASUREMENT OF THE HARDNESS OF ULTRA-THIN FILMS BY THE FIRST DERIVATIVE OF LOAD-DISPLACEMENT CURVE FROM NANOINDENTATION DATA. <i>International Journal of Modern Physics B</i> , <b>2010</b> , 24, 256-266	1-1	4
47	ELECTRIC, MAGNETIC AND MECHANICAL COUPLING EFFECTS ON FERROELECTRIC PROPERTIES AND SURFACE POTENTIAL OF BiFeO <sub>3</sub> THIN FILM. <i>Functional Materials Letters</i> , <b>2011</b> , 04, 91-95	1-2	4
46	Chemical degradation of composite restoratives. <i>Journal of Oral Rehabilitation</i> , <b>2008</b> , 28, 1015-1021	3-4	4
45	Domain characterization of Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> (5%PbTiO <sub>3</sub> ) single crystals using scanning electron acoustic microscopy. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 074103	2-5	4
44	Deformation and fracture behaviors of [0 1 1]-poled Pb(Zn <sub>1/3</sub> Nb <sub>2/3</sub> )O <sub>3</sub> 7%PbTiO <sub>3</sub> single crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 498, 457-463	5-3	4
43	A Robust Solid-Solid Interface Using Sodium-Tin Alloy Modified Metallic Sodium Anode Paving Way for All-Solid-State Battery. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101228	21-8	4
42	Alleviating mechanical degradation of hexacyanoferrate via strain locking during Na <sup>+</sup> insertion/extraction for full sodium ion battery. <i>Nano Research</i> , 1	10	4
41	Characterization of Catalysts by Advanced Scanning Probe Microscopy and Spectroscopy. <i>ChemCatChem</i> , <b>2020</b> , 12, 3601-3620	5-2	3
40	Characterization of local electric properties of oxide materials using scanning probe microscopy techniques: A review. <i>Functional Materials Letters</i> , <b>2018</b> , 11, 1830002	1-2	3
39	Optically Governed Dynamic Surface Charge Redistribution of Hybrid Plasmo-Pyroelectric Nanosystems. <i>Small</i> , <b>2019</b> , 15, e1903042	11	3
38	Revealing the hydrothermal crystallization mechanism of ilmenite-type sodium niobate microplates: the roles of potassium ions. <i>CrystEngComm</i> , <b>2017</b> , 19, 5966-5972	3-3	3
37	Differences in surface mechanical properties of Zr-based bulk metallic glass related to stress condition. <i>Materials Letters</i> , <b>2020</b> , 264, 127315	3-3	3
36	Cyclic stress induced surface nanocrystallization adjacent to indentation edge of Zr-based bulk metallic glass at room temperature. <i>Applied Surface Science</i> , <b>2020</b> , 506, 145044	6-7	3
35	Study of the Freeze Casting Process by Artificial Neural Networks. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 40465-40474	9-5	3
34	Prediction of cross section fracture path of cortical bone through nanoindentation array. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2021</b> , 116, 104303	4-1	3
33	Correlation of resistance switching and polarization rotation in copper doped zinc oxide (ZnO:Cu) thin films studied by Scanning Probe Microscopy. <i>Journal of Materiomics</i> , <b>2019</b> , 5, 574-582	6-7	2
32	Studying the Localized Electrochemical Phenomena in Rechargeable Li-Ion Batteries by Scanning Probe Microscopy Techniques. <i>ACS Symposium Series</i> , <b>2013</b> , 23-53	0-4	2

31	PREPARATION, MORPHOLOGY AND MECHANICAL PROPERTIES OF EPOXY NANOCOMPOSITES WITH ALUMINA FILLERS. <i>International Journal of Modern Physics B</i> , <b>2010</b> , 24, 136-147	1.1	2
30	Instability pathways of hydrogel microlenses under concentrated loadings. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 023536	2.5	2
29	Interfacial delamination cracking shapes and stress states during wedge indentation in a soft-film-on-hard-substrate system. Computational simulation and experimental studies. <i>Journal of Materials Research</i> , <b>2011</b> , 26, 2511-2523	2.5	2
28	Experimental determination of micromachined discrete and continuous device spring constants using nanoindentation method <b>2002</b> ,		2
27	Breaking the Fundamental Limitations of Nanoscale Ferroelectric Characterization: Non-Contact Heterodyne Electrostrain Force Microscopy.. <i>Small Methods</i> , <b>2021</b> , 5, e2100639	12.8	2
26	Chapter 7: Metal-Organic Frameworks (MOFs) as Potential Hybrid Ferroelectric Materials. <i>RSC Smart Materials</i> , <b>2019</b> , 197-244	0.6	2
25	A new analysis of nanoindentation load-displacement curves		2
24	Humidity Effects on Domain Structure and Polarization Switching of Pb(ZnNb)O-x%PbTiO (PZN-x%PT) Single Crystals. <i>Materials</i> , <b>2021</b> , 14,	3.5	2
23	Conductivity Modulation of 3D-Printed Shellular Electrodes through Embedding Nanocrystalline Intermetallics into Amorphous Matrix for Ultrahigh-Current Oxygen Evolution. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100968	21.8	2
22	Enhanced discharged energy density of nanocomposites with dopamine@BaTiO3 whiskers. <i>Materials Technology</i> , <b>2020</b> , 35, 515-521	2.1	2
21	Ferroelectric Engineered Electrode-Composite Polymer Electrolyte Interfaces for All-Solid-State Sodium Metal Battery.. <i>Advanced Science</i> , <b>2022</b> , e2105849	13.6	2
20	Aerosol Deposited Freestanding Na3V2(PO4)3 Thin Film Micro Battery. <i>Materials Today Energy</i> , <b>2022</b> , 101006	7	2
19	Sustainable Fuel Production: Sustainable Fuel Production from Ambient Moisture via Ferroelectrically Driven MoS2 Nanosheets (Adv. Mater. 25/2020). <i>Advanced Materials</i> , <b>2020</b> , 32, 2070188 <sup>24</sup>		1
18	Determination of tensile properties of lead-free solder joints using nanoindentation <b>2010</b> ,		1
17	NANOINDENTATION AND INDENTATION CREEP OF POLYMERIC MATERIALS <b>2009</b> , 141-194		1
16	Wedge indentation studies of low-k films at inert, water and ambient environments. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2009</b> , 518, 132-138	5.3	1
15	Experimental Determination of Micromachined Discrete and Continuous Device Spring Constants Using Nanoindentation Method. <i>Analog Integrated Circuits and Signal Processing</i> , <b>2003</b> , 37, 45-56	1.2	1
14	Adhesion study of tetra methyl cyclo tetra siloxanes (TMCTS) and tri methyl silane (3MS)-based low-k films. <i>Microelectronic Engineering</i> , <b>2005</b> , 81, 35-43	2.5	1

13	Strong phonon-cavity coupling and parametric interaction in a single microcantilever under ambient conditions. <i>Journal Physics D: Applied Physics</i> , <b>2021</b> , 54, 475307	3	1
12	Ammonium Escorted Chloride Chemistry in Stabilizing Aqueous Chloride Ion Battery. <i>Materials Today Energy</i> , <b>2022</b> , 101020	7	1
11	Abnormal Ionic Conductivities in Halide NaBi3O4Cl2 Induced by Absorbing Water and a Derived Oxhydryl Group. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 9076-9082	3.6	0
10	Tuning the polarization rotation behavior in undoped zinc oxide thin films. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 810, 151900	5.7	0
9	Electrostatic force evolution during the tip-induced ferroelectric domain switching. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 194101	2.5	0
8	Chain substitution caused sub-fibril level differences in electromechanical structure and property of wild-type and oim/oim collagen fibers. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 235111	2.5	0
7	A new approach to determine wedge-indentation interfacial toughness in soft-film hard-substrate systems with application to low-k films on Si substrate. <i>Journal of Materials Research</i> , <b>2012</b> , 27, 2872-2883 <sup>5</sup>		
6	Studying Visco-Plasticity of Amorphous Polymers by Indentation Tests <b>2007</b> , 229-238		
5	Material Characterization Based on Instrumented Indentation. <i>Journal of Metastable and Nanocrystalline Materials</i> , <b>2005</b> , 23, 359-362	0.2	
4	Breaking the Fundamental Limitations of Nanoscale Ferroelectric Characterization: Non-Contact Heterodyne Electrostrain Force Microscopy (Small Methods 11/2021). <i>Small Methods</i> , <b>2021</b> , 5, 2170055 <sup>12.8</sup>		
3	Fracture Toughness and Interfacial Adhesion Strength of Thin Films <b>2010</b> , 67-98		
2	Fracture Toughness and Interfacial Adhesion Strength of Thin Films <b>2010</b> , 67-98		
1	Response and Implication of NASICON Solid-State Electrolytes to Local Electrical Stimulation: From Surface Engineering to Interfacial Manipulation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 46588-46597 <sup>9.5</sup>		