Yang-Tse Cheng

List of Publications by Year
in descending order

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224 papers	14,921 citations	21215 62 h-index	23841 115 g-index
233 all docs	233 docs citations	233 times ranked	13405 citing authors

#	Article	IF	Citations
1	Observation of the surface layer of lithium metal using in situ spectroscopy. Applied Physics Letters, 2022, 120, .	1.5	2
2	Effect of Binder Content on Silicon Microparticle Anodes for Lithium-Ion Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 423-423.	0.0	0
3	(Invited) Understanding the Coupled Electrochemical-Mechanical Behavior of Materials for Improving the Performance and Durability of Lithium-Ion Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 373-373.	0.0	0
4	High Depthâ€ofâ€Discharge Zinc Rechargeability Enabled by a Selfâ€Assembled Polymeric Coating. Advanced Energy Materials, 2021, 11, 2101594.	10.2	51
5	A Power-Law Decrease in Interfacial Resistance Between Li₇La₃Zr₂O₁₂ and Lithium Metal After Removing Stack Pressure. Journal of the Electrochemical Society, 2021, 168, 100522.	1.3	3
6	Unveiling the brittleness of hybrid organicâ€“inorganic 0-D histammonium zinc chlorometallate by nanoindentation. Applied Physics Letters, 2021, 119, 241903.	1.5	2
7	Structure and mechanical properties of electroplated mossy lithium: Effects of current density and electrolyte. Energy Storage Materials, 2020, 26, 276-282.	9.5	11
8	Freeze-dried low-tortuous graphite electrodes with enhanced capacity utilization and rate capability. Carbon, 2020, 159, 133-139.	5.4	28
9	Lithium Ion Battery Electrodes Made Using Dimethyl Sulfoxide (DMSO)â€”A Green Solvent. ACS Sustainable Chemistry and Engineering, 2020, 8, 11046-11051.	3.2	40
10	Lithium Substituted Poly(acrylic acid) as a Mechanically Robust Binder for Low-Cost Silicon Microparticle Electrodes. ACS Applied Energy Materials, 2020, 3, 10940-10949.	2.5	10
11	Effects of the Mixing Sequence on Making Lithium Ion Battery Electrodes. Journal of the Electrochemical Society, 2020, 167, 100518.	1.3	44
12	Communicationâ€”Fracture Behavior of Single LiNi_{0.33}Mn_{0.33}Co_{0.33}O₂ Particles Studied by Flat Punch Indentation. Journal of the Electrochemical Society, 2019, 166, A2749-A2751.	1.3	16
13	Mechanical behavior of electroplated mossy lithium at room temperature studied by flat punch indentation. Applied Physics Letters, 2019, 115, .	1.5	22
14	Effects of polymeric binders on the cracking behavior of silicon composite electrodes during electrochemical cycling. Journal of Power Sources, 2019, 438, 226938.	4.0	34
15	Influence of annealing atmosphere on Li2ZrO3-coated LiNi0.6Co0.2Mn0.2O2 and its high-voltage cycling performance. Electrochimica Acta, 2019, 300, 36-44.	2.6	57
16	The Influence of Polyvinylidene Fluoride (PVDF) Binder Properties on LiNi_{0.33}Co_{0.33}Mn_{0.33}O₂ (NMC) Electrodes Made by a Dry-Powder-Coating Process. Journal of the Electrochemical Society, 2019, 166, A2151-A2157.	1.3	36
17	Microstructure and deformation behavior of hot-rolled AZ31/Ti multilayers. Materials Research Express, 2019, 6, 0865a2.	0.8	4
18	Spatial Molecular Layer Deposition of Ultrathin Polyamide To Stabilize Silicon Anodes in Lithium-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 4135-4143.	2.5	20

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19	Improving Ionic Conductivity with Bimodal-Sized Li₇La₃Zr₂O₁₂ Fillers for Composite Polymer Electrolytes. ACS Applied Materials & Interfaces, 2019, 11, 12467-12475.	4.0	100
20	Influence of polymeric binders on mechanical properties and microstructure evolution of silicon composite electrodes during electrochemical cycling. Journal of Power Sources, 2019, 425, 170-178.	4.0	46
21	Oxidative Pyrolysis of Si/Polyacrylonitrile Composites as an Unconventional Approach to Fabricate High Performance Lithium Ion Battery Negative Electrodes. Journal of the Electrochemical Society, 2019, 166, A3716-A3722.	1.3	2
22	Structural, electrochemical and Li-ion transport properties of Zr-modified LiNi0.8Co0.1Mn0.1O2 positive electrode materials for Li-ion batteries. Journal of Power Sources, 2019, 410-411, 45-52.	4.0	156
23	Depth sensing indentation of magnesium/boron nitride nanocomposites. Journal of Composite Materials, 2019, 53, 1751-1763.	1.2	8
24	Effects of Cobalt Deficiency on Nickel-Rich Layered LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Positive Electrode Materials for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 982-989.	4.0	54
25	Examining the validity of Stoney-equation for in-situ stress measurements in thin film electrodes using a large-deformation finite-element procedure. Journal of Power Sources, 2018, 387, 126-134.	4.0	13
26	Nonstoichiometry and Liâ€ion transport in lithium zirconate: The role of oxygen vacancies. Journal of the American Ceramic Society, 2018, 101, 4053-4065.	1.9	20
27	Indentation-based rate-dependent plastic deformation of polycrystalline pure magnesium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2018, 716, 63-71.	2.6	24
28	Mechanical Property Evolution of Silicon Composite Electrodes Studied by Environmental Nanoindentation. Advanced Energy Materials, 2018, 8, 1702578.	10.2	51
29	Stress evolution in elastic-plastic electrodes during electrochemical processes: A numerical method and its applications. Journal of the Mechanics and Physics of Solids, 2018, 116, 403-415.	2.3	46
30	Role of polymeric binders on mechanical behavior and cracking resistance of silicon composite electrodes during electrochemical cycling. Journal of Power Sources, 2018, 387, 9-15.	4.0	55
31	Application of Cross-Linked Polyborosiloxanes and Organically Modified Boron Silicate Binders in Silicon-Containing Anodes for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A731-A735.	1.3	9
32	Linking lignin source with structural and electrochemical properties of lignin-derived carbon materials. RSC Advances, 2018, 8, 38721-38732.	1.7	42
33	Layerâ€byâ€Layer Synthesis of Thick Mesoporous TiO₂ Films with Vertically Oriented Accessible Nanopores and Their Application for Lithiumâ€ion Battery Negative Electrodes. Advanced Functional Materials, 2018, 28, 1801849.	7.8	35
34	Effects of adhesion and cohesion on the electrochemical performance and durability of silicon composite electrodes. Journal of Power Sources, 2018, 397, 223-230.	4.0	36
35	Unveiling the Critical Role of Polymeric Binders for Silicon Negative Electrodes in Lithium-Ion Full Cells. ACS Applied Materials & Interfaces, 2017, 9, 3562-3569.	4.0	55
36	Chemically stable artificial SEI for Li-ion battery electrodes. Applied Physics Letters, 2017, 110, .	1.5	21

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37	Solvent-free dry powder coating process for low-cost manufacturing of LiNi1/3Mn1/3Co1/3O2 cathodes in lithium-ion batteries. Journal of Power Sources, 2017, 352, 187-193.	4.0	83
38	A nanoindentation study of the viscoplastic behavior of pure lithium. Scripta Materialia, 2017, 130, 191-195.	2.6	60
39	Charge Transport in Electronicâ€“Ionic Composites. Journal of Physical Chemistry Letters, 2017, 8, 5385-5389.	2.1	13
40	Systematic Investigation of the Alucone-Coating Enhancement on Silicon Anodes. ACS Applied Materials & Interfaces, 2017, 9, 40143-40150.	4.0	18
41	In situ measurement of mechanical property and stress evolution in a composite silicon electrode. Journal of Power Sources, 2017, 366, 80-85.	4.0	51
42	High performance binder-free SiOx/C composite LIB electrode made of SiOx and lignin. Journal of Power Sources, 2017, 362, 236-242.	4.0	37
43	Rapid Characterization of Local Shape Memory Properties through Indentation. Scientific Reports, 2017, 7, 14827.	1.6	12
44	Binder-free lithium ion battery electrodes made of silicon and pyrolized lignin. RSC Advances, 2016, 6, 29308-29313.	1.7	29
45	Low-Temperature Treated Lignin as Both Binder and Conductive Additive for Silicon Nanoparticle Composite Electrodes in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 32341-32348.	4.0	65
46	Design of Nanostructured Heterogeneous Solid Ionic Coatings through a Multiscale Defect Model. ACS Applied Materials & Interfaces, 2016, 8, 5687-5693.	4.0	53
47	Synergetic Effects of Inorganic Components in Solid Electrolyte Interphase on High Cycle Efficiency of Lithium Ion Batteries. Nano Letters, 2016, 16, 2011-2016.	4.5	320
48	Voltage hysteresis of lithium ion batteries caused by mechanical stress. Physical Chemistry Chemical Physics, 2016, 18, 4721-4727.	1.3	152
49	High Capacity Silicon Electrodes with Nafion as Binders for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2016, 163, A401-A405.	1.3	74
50	Effects of stress on lithium transport in amorphous silicon electrodes for lithium-ion batteries. Nano Energy, 2015, 13, 192-199.	8.2	58
51	Experimental and Theoretical Characterization of Electrode Materials that Undergo Large Volume Changes and Application to the Lithiumâ€“Silicon System. Journal of Physical Chemistry C, 2015, 119, 5341-5349.	1.5	39
52	General method to predict voltage-dependent ionic conduction in a solid electrolyte coating on electrodes. Physical Review B, 2015, 91, .	1.1	141
53	Unravelling the Impact of Reaction Paths on Mechanical Degradation of Intercalation Cathodes for Lithium-Ion Batteries. Journal of the American Chemical Society, 2015, 137, 13732-13735.	6.6	61
54	Spherical indentation of NiTi-based shape memory alloys. Journal of Alloys and Compounds, 2015, 651, 724-730.	2.8	30

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55	Electrode Side Reactions, Capacity Loss and Mechanical Degradation in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2015, 162, A2026-A2035.	1.3	165
56	Toward High Cycle Efficiency of Siliconâ€Based Negative Electrodes by Designing the Solid Electrolyte Interphase. Advanced Energy Materials, 2015, 5, 1401398.	10.2	72
57	Asymmetric Rate Behavior of Si Anodes for Lithiumâ€Ion Batteries: Ultrafast Deâ€Lithiation versus Sluggish Lithiation at High Current Densities. Advanced Energy Materials, 2015, 5, 1401627.	10.2	50
58	A non-destructive method for measuring the mechanical properties of ultrathin films prepared by atomic layer deposition. Applied Physics Letters, 2014, 105, .	1.5	16
59	Stacked-cup-type MWCNTs as highly stable lithium-ion battery anodes. Journal of Applied Electrochemistry, 2014, 44, 179-187.	1.5	15
60	Preface: Mechanical characterization of soft materials. Acta Mechanica Sinica/Lixue Xuebao, 2014, 30, 1-1.	1.5	2
61	Ternary composites of delaminated-MnO₂/PDDA/functionalized-CNOs for high-capacity supercapacitor electrodes. Journal of Materials Chemistry A, 2014, 2, 20367-20373.	5.2	35
62	Atomic Layered Coating Enabling Ultrafast Surface Kinetics at Silicon Electrodes in Lithium Ion Batteries. Journal of Physical Chemistry Letters, 2013, 4, 3387-3391.	2.1	84
63	Understanding Diffusion-Induced-Stresses in Lithium Ion Battery Electrodes. , 2013, , 203-215.		1
64	Electrochemical Study of Functionalized Carbon Nano-Onions for High-Performance Supercapacitor Electrodes. Journal of Physical Chemistry C, 2012, 116, 15068-15075.	1.5	105
65	Potentiostatic Intermittent Titration Technique for Electrodes Governed by Diffusion and Interfacial Reaction. Journal of Physical Chemistry C, 2012, 116, 1472-1478.	1.5	119
66	Improved bending fatigue and corrosion properties of a Mgâ€“Alâ€“Mn alloy by super vacuum die casting. Scripta Materialia, 2012, 67, 879-882.	2.6	28
67	Battery Cycle Life Prediction with Coupled Chemical Degradation and Fatigue Mechanics. Journal of the Electrochemical Society, 2012, 159, A1730-A1738.	1.3	286
68	Aligned TiO2 Nanotube Arrays As Durable Lithium-Ion Battery Negative Electrodes. Journal of Physical Chemistry C, 2012, 116, 18669-18677.	1.5	111
69	Potentiostatic intermittent titration technique (PITT) for spherical particles with finite interfacial kinetics. Electrochimica Acta, 2012, 75, 56-61.	2.6	53
70	Surface form memory in NiTi shape memory alloys by laser shock indentation. Journal of Materials Science, 2012, 47, 2088-2094.	1.7	16
71	Diffusion Induced Stresses and Strain Energy in a Phase-Transforming Spherical Electrode Particle. Journal of the Electrochemical Society, 2011, 158, A718-A724.	1.3	112
72	Liquid Metal Alloys as Self-Healing Negative Electrodes for Lithium Ion Batteries. Journal of the Electrochemical Society, 2011, 158, A845.	1.3	144

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73	Crack Pattern Formation in Thin Film Lithium-Ion Battery Electrodes. Journal of the Electrochemical Society, 2011, 158, A689.	1.3	242
74	Surface form memory by indentation and planarization of NiTi: displacements and mechanical energy density during constrained recovery. Journal of Materials Science, 2011, 46, 7401-7409.	1.7	5
75	Remote Controlled Multishape Polymer Nanocomposites with Selective Radiofrequency Actuations. Advanced Materials, 2011, 23, 3192-3196.	11.1	186
76	Whisker formation on a thin film tin lithium-ion battery anode. Journal of Power Sources, 2011, 196, 1474-1477.	4.0	25
77	Analysis on elasticâ€“plastic spherical contact and its deformation regimes, the one parameter regime and two parameter regime, by finite element simulation. Vacuum, 2011, 85, 898-903.	1.6	9
78	The search for high cycle life, high capacity, self healing negative electrodes for lithium ion batteries and a potential solution based on lithiated gallium. Materials Research Society Symposia Proceedings, 2011, 1333, 50401.	0.1	5
79	Mg-Ti: A Possible Biodegradable, Biocompatible, Mechanically Matched Material for Temporary Implants. Materials Research Society Symposia Proceedings, 2011, 1301, 111.	0.1	2
80	Obtaining Viscoelastic Properties from Instrumented Indentation. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 119-120.	0.3	1
81	Indentation of power law creep solids by self-similar indenters. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5613-5618.	2.6	6
82	Modeling diffusion-induced stress in nanowire electrode structures. Journal of Power Sources, 2010, 195, 5081-5088.	4.0	260
83	A Generalized Hasselman's Elastic and Surface Energy Criterion for Crack Propagation in Insertion Battery Electrodes. ECS Meeting Abstracts, 2010, , .	0.0	0
84	Mesopores inside electrode particles can change the Li-ion transport mechanism and diffusion-induced stress. Journal of Materials Research, 2010, 25, 1433-1440.	1.2	82
85	Application of Hasselmanâ€™s Crack Propagation Model to Insertion Electrodes. Electrochemical and Solid-State Letters, 2010, 13, A128.	2.2	52
86	Effects of Concentration-Dependent Elastic Modulus on Diffusion-Induced Stresses for Battery Applications. Journal of the Electrochemical Society, 2010, 157, A967.	1.3	145
87	Self-healable graphene polymer composites. Journal of Materials Chemistry, 2010, 20, 3508.	6.7	154
88	Diffusion-Induced Stress, Interfacial Charge Transfer, and Criteria for Avoiding Crack Initiation of Electrode Particles. Journal of the Electrochemical Society, 2010, 157, A508.	1.3	191
89	Automotive Traction Battery Needs and the Influence of Mechanical Degradation of Insertion-electrode Particles. ECS Transactions, 2009, 19, 1-27.	0.3	1
90	Obtaining shear relaxation modulus and creep compliance of linear viscoelastic materials from instrumented indentation using axisymmetric indenters of power-law profiles. Journal of Materials Research, 2009, 24, 3013-3017.	1.2	34

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91	Revealing Tripleâ€Shape Memory Effect by Polymer Bilayers. Macromolecular Rapid Communications, 2009, 30, 1823-1827.	2.0	234
92	Surface Form Memory in NiTi: Energy Density of Constrained Recovery During Indent Replication. Journal of Materials Engineering and Performance, 2009, 18, 538-542.	1.2	4
93	Influence of contact geometry on hardness behavior in nano-indentation. Vacuum, 2009, 84, 315-320.	1.6	17
94	The effect of free-machining elements on dry machining of B319 aluminum alloy. Journal of Materials Processing Technology, 2009, 209, 4638-4644.	3.1	38
95	Evolution of stress within a spherical insertion electrode particle under potentiostatic and galvanostatic operation. Journal of Power Sources, 2009, 190, 453-460.	4.0	404
96	Indentation-induced two-way shape memory surfaces. Journal of Materials Research, 2009, 24, 823-830.	1.2	14
97	Revisit of the two-dimensional indentation deformation of an elastic half-space. Journal of Materials Research, 2009, 24, 1976-1982.	1.2	7
98	Stress and Strain-Energy Distributions within Diffusion-Controlled Insertion-Electrode Particles Subjected to Periodic Potential Excitations. Journal of the Electrochemical Society, 2009, 156, A927.	1.3	126
99	Indentation in Shape Memory Alloys. , 2008, , 69-84.		2
100	Condensed water on superhydrophobic carbon films. Journal of Materials Research, 2008, 23, 2174-2178.	1.2	32
101	The influence of surface mechanics on diffusion induced stresses within spherical nanoparticles. Journal of Applied Physics, 2008, 104, .	1.1	259
102	Stress Distribution within Spherical Particles Undergoing Electrochemical Insertion and Extraction. ECS Transactions, 2008, 16, 127-139.	0.3	36
103	Quasi-static and Oscillatory Indentation in Linear Viscoelastic Solids. Materials Research Society Symposia Proceedings, 2007, 1049, 1.	0.1	0
104	The Role of Hydrogen Atmosphere on the Tribological Behavior of Non-Hydrogenated DLC Coatings against Aluminum. Tribology Transactions, 2007, 50, 178-186.	1.1	32
105	Finite element modeling of indentation-induced superelastic effect using a three-dimensional constitutive model for shape memory materials with plasticity. Journal of Applied Physics, 2007, 101, 053507.	1.1	19
106	Understanding indentation-induced two-way shape memory effect. Journal of Materials Research, 2007, 22, 2851-2855.	1.2	15
107	Novel tribological systems using shape memory alloys and thin films. Surface and Coatings Technology, 2007, 202, 998-1002.	2.2	22
108	Delamination mechanism maps for a strong elastic coating on an elasticâ€“plastic substrate subjected to contact loading. International Journal of Solids and Structures, 2007, 44, 3685-3699.	1.3	60

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109	Influence of indenter tip roundness on hardness behavior in nanoindentation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 445-446, 323-327.	2.6	41
110	A variable temperature mechanical analysis of ZDDP-derived antiwear films formed on 52100 steel. Wear, 2007, 262, 461-470.	1.5	59
111	A multi-technique characterization of ZDDP antiwear films formed on Al (Si) alloy (A383) under various conditions. Tribology Letters, 2007, 26, 103-117.	1.2	46
112	Dry sliding behaviour of non-hydrogenated DLC coatings against Al, Cu and Ti in ambient air and argon. Diamond and Related Materials, 2006, 15, 939-943.	1.8	42
113	Effects of micro- and nano-structures on the self-cleaning behaviour of lotus leaves. Nanotechnology, 2006, 17, 1359-1362.	1.3	414
114	Relationship between contact stiffness, contact depth, and mechanical properties for indentation in linear viscoelastic solids using axisymmetric indenters. Structural Control and Health Monitoring, 2006, 13, 561-569.	1.9	14
115	The behavior of an elasticâ€“perfectly plastic sinusoidal surface under contact loading. Wear, 2006, 261, 145-154.	1.5	86
116	Methods of obtaining instantaneous modulus of viscoelastic solids using displacement-controlled instrumented indentation with axisymmetric indenters of arbitrary smooth profiles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 423, 2-7.	2.6	24
117	The influence of superelastic NiTi interlayers on tribological properties of CrN hard coatings. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 438-440, 710-713.	2.6	13
118	Elevated temperature tribological behavior of non-hydrogenated diamond-like carbon coatings against 319 aluminum alloy. Surface and Coatings Technology, 2006, 200, 3996-4005.	2.2	65
119	A comparison of five categories of carbon-based tool coatings for dry drilling of aluminum. Surface and Coatings Technology, 2006, 200, 2970-2977.	2.2	69
120	Wear resistant self-healing tribological surfaces by using hard coatings on NiTi shape memory alloys. Surface and Coatings Technology, 2006, 201, 1053-1057.	2.2	26
121	Tribological behavior of diamond-like-carbon (DLC) coatings against aluminum alloys at elevated temperatures. Surface and Coatings Technology, 2006, 201, 3229-3234.	2.2	90
122	Effect of tribological media on tribological properties of multilayer Cr(N)/C(DLC) coatings. Surface and Coatings Technology, 2006, 201, 4341-4347.	2.2	14
123	Sliding wear of non-hydrogenated diamond-like carbon coatings against magnesium. Surface and Coatings Technology, 2006, 201, 4352-4356.	2.2	20
124	Two-way Shape Memory Surfaces. Materials Research Society Symposia Proceedings, 2006, 979, 1.	0.1	0
125	Nonlinear Analysis of Oscillatory Indentation in Elastic and Viscoelastic Solids. Physical Review Letters, 2006, 97, 075506.	2.9	47
126	Two-way indent depth recovery in a NiTi shape memory alloy. Applied Physics Letters, 2006, 88, 131904.	1.5	17

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127	Shape memory surfaces. Applied Physics Letters, 2006, 89, 041912.	1.5	45
128	Preview: 2005 MRS Fall Meeting. MRS Bulletin, 2005, 30, 745-783.	1.7	0
129	Zinc-dialkyl-dithiophosphate antiwear films: dependence on contact pressure and sliding speed. Wear, 2005, 258, 789-799.	1.5	51
130	Transfer of 319 Al alloy to titanium diboride and titanium nitride based (TiAlN, TiCN, TiN) coatings: effects of sliding speed, temperature and environment. Surface and Coatings Technology, 2005, 200, 2260-2270.	2.2	45
131	Effect of test atmosphere on the tribological behaviour of the non-hydrogenated diamond-like carbon coatings against 319 aluminum alloy and tungsten carbide. Surface and Coatings Technology, 2005, 200, 1783-1791.	2.2	51
132	Novel layered tribological coatings using a superelastic NiTi interlayer. Wear, 2005, 259, 842-848.	1.5	54
133	Vacuum tribological behavior of the non-hydrogenated diamond-like carbon coatings against aluminum: Effect of running-in in ambient air. Wear, 2005, 259, 795-799.	1.5	40
134	Relationships between initial unloading slope, contact depth, and mechanical properties for spherical indentation in linear viscoelastic solids. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 409, 93-99.	2.6	54
135	Modeling conical indentation in homogeneous materials and in hard films on soft substrates. Journal of Materials Research, 2005, 20, 521-528.	1.2	21
136	Determining the Instantaneous Modulus of Viscoelastic Solids Using Instrumented Indentation Measurements. Journal of Materials Research, 2005, 20, 3061-3071.	1.2	50
137	General relationship between contact stiffness, contact depth, and mechanical properties for indentation in linear viscoelastic solids using axisymmetric indenters of arbitrary profiles. Applied Physics Letters, 2005, 87, 111914.	1.5	39
138	Indentation stress dependence of the temperature range of microscopic superelastic behavior of nickel-titanium thin films. Journal of Applied Physics, 2005, 98, 033505.	1.1	26
139	Nanoscale Wear and Machining Behavior of Nanolayer Interfaces. Nano Letters, 2005, 5, 1992-1996.	4.5	27
140	Relationships between initial unloading slope, contact depth, and mechanical properties for conical indentation in linear viscoelastic solids. Journal of Materials Research, 2005, 20, 1046-1053.	1.2	87
141	Is the lotus leaf superhydrophobic?. Applied Physics Letters, 2005, 86, 144101.	1.5	533
142	Microscopic observations of condensation of water on lotus leaves. Applied Physics Letters, 2005, 87, 194112.	1.5	163
143	Modeling indentation in linear viscoelastic solids. Materials Research Society Symposia Proceedings, 2004, 841, R11.2.1.	0.1	1
144	Tribological Applications of Shape Memory and Superelastic Effects. Materials Research Society Symposia Proceedings, 2004, 843, 461.	0.1	1

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145	An energy-based method for analyzing instrumented spherical indentation experiments. Journal of Materials Research, 2004, 19, 149-157.	1.2	71
146	Microscopic shape memory and superelastic effects under complex loading conditions. Surface and Coatings Technology, 2004, 177-178, 512-517.	2.2	63
147	Scaling, dimensional analysis, and indentation measurements. Materials Science and Engineering Reports, 2004, 44, 91-149.	14.8	878
148	Effects of the ratio of hardness to Youngâ€™s modulus on the friction and wear behavior of bilayer coatings. Applied Physics Letters, 2004, 85, 4028-4030.	1.5	163
149	Mechamatronics: an automotive perspective. , 2004, 5388, 313.		3
150	Title is missing!. Tribology Letters, 2003, 15, 241-248.	1.2	71
151	Wear mechanisms in thermal spray steel coatings. Tribology Series, 2003, 41, 323-327.	0.1	1
152	Determining constitutive models from conical indentation: Sensitivity analysis. Journal of Materials Research, 2003, 18, 827-832.	1.2	85
153	Microscopic superelastic behavior of a nickel-titanium alloy under complex loading conditions. Applied Physics Letters, 2003, 82, 2811-2813.	1.5	111
154	Shape recovery and stress-induced martensite in TiNi following indentation and wear loading. European Physical Journal Special Topics, 2003, 112, 1147-1150.	0.2	4
155	Friction anisotropy at Ni(100)/(100) interfaces:â€ƒMolecular dynamics studies. Physical Review B, 2002, 66, .	1.1	55
156	Stress-induced growth of bismuth nanowires. Applied Physics Letters, 2002, 81, 3248-3250.	1.5	79
157	Characterization of Shape Memory and Superelastic Effects by Instrumented Indentation Experiments. Materials Research Society Symposia Proceedings, 2002, 750, 1.	0.1	0
158	Scaling relationships for indentation measurements. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 2002, 82, 1821-1829.	0.8	158
159	Recovery of microindents in a nickelâ€“titanium shape-memory alloy: A â€œself-healingâ€•effect. Applied Physics Letters, 2002, 80, 3310-3312.	1.5	120
160	On two indentation hardness definitions. Surface and Coatings Technology, 2002, 154, 124-130.	2.2	39
161	Scaling relationships in indentation of power-law creep solids using self-similar indenters. Philosophical Magazine Letters, 2001, 81, 9-16.	0.5	73
162	The effect of humidity on the sliding wear of plasma transfer wire arc thermal sprayed low carbon steel coatings. Surface and Coatings Technology, 2001, 146-147, 571-577.	2.2	19

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163	Wear of thermal spray deposited low carbon steel coatings on aluminum alloys. Wear, 2001, 251, 1023-1033.	1.5	75
164	A Scaling Approach to Modeling Indentation Measurements. Materials Research Society Symposia Proceedings, 2000, 649, 111.	0.1	2
165	What is indentation hardness?. Surface and Coatings Technology, 2000, 133-134, 417-424.	2.2	147
166	Hardness obtained from conical indentations with various cone angles. Journal of Materials Research, 2000, 15, 2830-2835.	1.2	49
167	Can stressâ€“strain relationships be obtained from indentation curves using conical and pyramidal indenters?. Journal of Materials Research, 1999, 14, 3493-3496.	1.2	237
168	Scaling relationships in conical indentation of elastic-perfectly plastic solids. International Journal of Solids and Structures, 1999, 36, 1231-1243.	1.3	194
169	Variable magnetic field magnetic force microscopy of the magnetization reversal in epitaxial iron (111) thin films. Journal of Magnetism and Magnetic Materials, 1998, 190, 60-70.	1.0	22
170	Further analysis of indentation loading curves: Effects of tip rounding on mechanical property measurements. Journal of Materials Research, 1998, 13, 1059-1064.	1.2	106
171	Relationships between hardness, elastic modulus, and the work of indentation. Applied Physics Letters, 1998, 73, 614-616.	1.5	520
172	Analysis of indentation loading curves obtained using conical indenters. Philosophical Magazine Letters, 1998, 77, 39-47.	0.5	63
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