Ming Dao

List of Publications by Year in Descending Order

168 papers	14,419 citations	56 h-index	119 g-index
187 ext. papers	16,437 ext. citations	6.3 avg, IF	6.5 L-index

#	Paper	IF	Citations
168	Microfluidic Size Exclusion Chromatography (SEC) for Extracellular Vesicles and Plasma Protein Separation.. *Small*, **2022**, e2104470	11	2
167	Analyses of internal structures and defects in materials using physics-informed neural networks.. *Science Advances*, **2022**, 8, eabk0644	14.3	3
166	Computational modeling of biomechanics and biorheology of heated red blood cells. *Biophysical Journal*, **2021**, 120, 4663-4671	2.9	5
165	Artificial intelligence velocimetry and microaneurysm-on-a-chip for three-dimensional analysis of blood flow in physiology and disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	21
164	Patient-Specific Organoid and Organ-on-a-Chip: 3D Cell-Culture Meets 3D Printing and Numerical Simulation. *Advanced Biology*, **2021**, 5, e2000024		6
163	Machine learning for deep elastic strain engineering of semiconductor electronic band structure and effective mass. *Npj Computational Materials*, **2021**, 7,	10.9	6
162	Investigation on non-equilibrium phase transition in wave rotor. *International Journal of Refrigeration*, **2021**, 124, 96-104	3.8	2
161	assay for single-cell characterization of impaired deformability in red blood cells under recurrent episodes of hypoxia. *Lab on A Chip*, **2021**, 21, 3458-3470	7.2	4
160	Characterization of the strain-rate-dependent mechanical response of single cell-cell junctions. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	6
159	Erythrocyte flow through the interendothelial slits of the splenic venous sinus. *Biomechanics and Modeling in Mechanobiology*, **2021**, 20, 2227-2245	3.8	0
158	Direct isolation of circulating extracellular vesicles from blood for vascular risk profiling in type 2 diabetes mellitus. *Lab on A Chip*, **2021**, 21, 2511-2523	7.2	7
157	Solid-state additive manufacturing of porous Ti-6Al-4V by supersonic impact. *Applied Materials Today*, **2020**, 21, 100865	6.6	6
156	Extraction of mechanical properties of materials through deep learning from instrumented indentation. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7052-7062	11.5	60
155	Multiscale Modeling of Diseases: Overview **2020**, 2541-2550		
154	Temperature-Induced Catch-Slip to Slip Bond Transit in Plasmodium falciparum-Infected Erythrocytes. *Biophysical Journal*, **2020**, 118, 105-116	2.9	3
153	Quantifying Fibrinogen-Dependent Aggregation of Red Blood Cells in Type 2 Diabetes Mellitus. *Biophysical Journal*, **2020**, 119, 900-912	2.9	12
152	Metallization of diamond. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 24634-24639	11.5	13

151	Mechanical fatigue of human red blood cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 19828-19834	11.5	13
150	Deep elastic strain engineering of bandgap through machine learning. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 4117-4122	11.5	50
149	Improved fatigue resistance of gradient nanograined Cu. *Acta Materialia*, **2019**, 166, 56-66	8.4	51
148	Quantifying Shear-Induced Deformation and Detachment of Individual Adherent Sickle Red Blood Cells. *Biophysical Journal*, **2019**, 116, 360-371	2.9	17
147	Faster Sickling Kinetics and Sickle Cell Shape Evolution during Repeated Deoxygenation and Oxygenation Cycles. *Experimental Mechanics*, **2019**, 59, 319-325	2.6	3
146	Ultralarge elastic deformation of nanoscale diamond. *Science*, **2018**, 360, 300-302	33.3	151
145	Enhanced repeated frictional sliding properties in 304 stainless steel with a gradient nanostructured surface. *Surface and Coatings Technology*, **2018**, 339, 14-19	4.4	9
144	Cytoskeleton Remodeling Induces Membrane Stiffness and Stability Changes of Maturing Reticulocytes. *Biophysical Journal*, **2018**, 114, 2014-2023	2.9	29
143	Nature-Inspired Hierarchical Steels. *Scientific Reports*, **2018**, 8, 5088	4.9	30
142	Multiscale Modeling of Diseases: Overview **2018**, 1-10		
141	Febrile Temperature Elevates the Expression of Phosphatidylserine on Plasmodium falciparum (FCR3CSA) Infected Red Blood Cell Surface Leading to Increased Cytoadhesion. *Scientific Reports*, **2018**, 8, 15022	4.9	9
140	Mechanics of diseased red blood cells in human spleen and consequences for hereditary blood disorders. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 9574-9579	11.5	52
139	Simultaneous polymerization and adhesion under hypoxia in sickle cell disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 9473-9478	11.5	31
138	Effects of notches on the deformation behavior of submicron sized metallic glasses: Insights from in situ experiments. *Acta Materialia*, **2018**, 154, 172-181	8.4	20
137	Circulating Tumor Cell Phenotyping via High-Throughput Acoustic Separation. *Small*, **2018**, 14, e1801131	11	71
136	Modeling of shrinkage during investment casting of thin-walled hollow turbine blades. *Journal of Materials Processing Technology*, **2017**, 244, 190-203	5.3	41
135	Sliding of coherent twin boundaries. *Nature Communications*, **2017**, 8, 1108	17.4	29
134	A deep convolutional neural network for classification of red blood cells in sickle cell anemia. *PLoS Computational Biology*, **2017**, 13, e1005746	5	98

133	Patient-specific modeling of individual sickle cell behavior under transient hypoxia. *PLoS Computational Biology*, **2017**, 13, e1005426	5	16
132	Isolation of exosomes from whole blood by integrating acoustics and microfluidics. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10584-10589	11.5	405
131	Soft tubular microfluidics for 2D and 3D applications. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 10590-10595	11.5	47
130	Biomechanics and biorheology of red blood cells in sickle cell anemia. *Journal of Biomechanics*, **2017**, 50, 34-41	2.9	58
129	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. *Biomaterials*, **2016**, 107, 15-22	15.6	17
128	Rolling behavior of a micro-cylinder in adhesional contact. *Scientific Reports*, **2016**, 6, 34063	4.9	4
127	Image classification of unlabeled malaria parasites in red blood cells. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2016**, 2016, 3981-3984	0.9	8
126	Biomechanics of red blood cells in human spleen and consequences for physiology and disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 7804-9	11.5	124
125	Three-dimensional manipulation of single cells using surface acoustic waves. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 1522-7	11.5	318
124	A Basis for Rapid Clearance of Circulating Ring-Stage Malaria Parasites by the Spiroindolone KAE609. *Journal of Infectious Diseases*, **2016**, 213, 100-4	7	25
123	Patient-specific blood rheology in sickle-cell anaemia. *Interface Focus*, **2016**, 6, 20150065	3.9	42
122	Exposure of Stored Packed Erythrocytes to Nitric Oxide Prevents Transfusion-associated Pulmonary Hypertension. *Anesthesiology*, **2016**, 125, 952-963	4.3	9
121	Cellular normoxic biophysical markers of hydroxyurea treatment in sickle cell disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 9527-32	11.5	30
120	Microstructural and Mechanical-Property Manipulation through Rapid Dendrite Growth and Undercooling in an Fe-based Multinary Alloy. *Scientific Reports*, **2016**, 6, 31684	4.9	20
119	Fracture, fatigue, and creep of nanotwinned metals. *MRS Bulletin*, **2016**, 41, 298-304	3.2	42
118	Single-cell evaluation of red blood cell bio-mechanical and nano-structural alterations upon chemically induced oxidative stress. *Scientific Reports*, **2015**, 5, 9768	4.9	59
117	Acoustic separation of circulating tumor cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 4970-5	11.5	497
116	Reprint of: Connections between single-cell biomechanics and human disease states: gastrointestinal cancer and malaria. *Acta Biomaterialia*, **2015**, 23 Suppl, S3-15	10.8	34

115	Cyclic deformation leads to defect healing and strengthening of small-volume metal crystals. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 13502-7	11.5	33
114	De Novo Generated Human Red Blood Cells in Humanized Mice Support Plasmodium falciparum Infection. *PLoS ONE*, **2015**, 10, e0129825	3.7	19
113	Comparative Effect of Rapid Dendrite Growth and Element Addition on Microhardness Enhancement of Fe-Based Alloys. *Crystal Growth and Design*, **2015**, 15, 5661-5664	3.5	7
112	Kinetics of sickle cell biorheology and implications for painful vasoocclusive crisis. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 1422-7	11.5	70
111	Fracture mode control: a bio-inspired strategy to combat catastrophic damage. *Scientific Reports*, **2015**, 5, 8011	4.9	13
110	Analysis of size-dependent slip transfer and inter-twin flow stress in a nanotwinned fcc metal. *Acta Materialia*, **2014**, 67, 409-417	8.4	22
109	Computational biorheology of human blood flow in health and disease. *Annals of Biomedical Engineering*, **2014**, 42, 368-87	4.7	60
108	Cell separation using tilted-angle standing surface acoustic waves. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 12992-7	11.5	309
107	Strengthening at nanoscaled coherent twin boundary in f.c.c. metals. *Philosophical Magazine*, **2014**, 94, 1249-1262	1.6	15
106	Small molecule targeting malaria merozoite surface protein-1 (MSP-1) prevents host invasion of divergent plasmodial species. *Journal of Infectious Diseases*, **2014**, 210, 1616-26	7	27
105	Probing red blood cell mechanics, rheology and dynamics with a two-component multi-scale model. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2014**, 372,	3	54
104	Cold spray coating: review of material systems and future perspectives. *Surface Engineering*, **2014**, 30, 369-395	2.6	386
103	Two-Component Dissipative Particle Dynamics Model of Red Blood Cells. *Biophysical Journal*, **2014**, 106, 573a	2.9	2
102	In vivo splenic clearance correlates with in vitro deformability of red blood cells from Plasmodium yoelii-infected mice. *Infection and Immunity*, **2014**, 82, 2532-41	3.7	30
101	High-resolution three-dimensional imaging of red blood cells parasitized by Plasmodium falciparum and in situ hemozoin crystals using optical diffraction tomography. *Journal of Biomedical Optics*, **2014**, 19, 011005	3.5	169
100	Human natural killer cells control Plasmodium falciparum infection by eliminating infected red blood cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 1479-84	11.5	56
99	Quantitative Biomechanics of Healthy and Diseased Human Red Blood Cells using Dielectrophoresis in a Microfluidic System. *Extreme Mechanics Letters*, **2014**, 1, 35-41	3.9	64
98	Prediction of the Constitutive Equation for Uniaxial Creep of a Power-Law Material through Instrumented Microindentation Testing and Modeling. *Materials Transactions*, **2014**, 55, 275-284	1.3	23

97	Quantification of Anti-Sickling Effect of Aes-103 in Sickle Cell Disease Using an in Vitro Microfluidic Assay. *Blood*, **2014**, 124, 2699-2699	2.2	2
96	Electric impedance microflow cytometry for characterization of cell disease states. *Lab on A Chip*, **2013**, 13, 3903-3909	7.2	67
95	Real-time, high-resolution study of nanocrystallization and fatigue cracking in a cyclically strained metallic glass. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19725-30	11.5	55
94	Grain size gradient length scale in ballistic properties optimization of functionally graded nanocrystalline steel plates. *Scripta Materialia*, **2013**, 69, 773-776	5.6	10
93	Dynamic deformability of Plasmodium falciparum-infected erythrocytes exposed to artesunate in vitro. *Integrative Biology (United Kingdom)*, **2013**, 5, 414-22	3.7	43
92	Low-temperature creep of SnPb and SnAgCu solder alloys and reliability prediction in electronic packaging modules. *Scripta Materialia*, **2013**, 68, 607-610	5.6	37
91	Cytoadherence of erythrocytes invaded by Plasmodium falciparum: quantitative contact-probing of a human malaria receptor. *Acta Biomaterialia*, **2013**, 9, 6349-59	10.8	25
90	Size-dependent deformation in nanograins and nanotwins. *Applied Physics Letters*, **2013**, 102, 091904	3.4	7
89	Probing circulating tumor cells in microfluidics. *Lab on A Chip*, **2013**, 13, 602-9	7.2	145
88	Orientation and size-dependent mechanical modulation within individual secondary osteons in cortical bone tissue. *Journal of the Royal Society Interface*, **2013**, 10, 20120953	4.1	27
87	Validity Range of Micropipette Radius in Using Hemispherical Cap Model. *Applied Mechanics and Materials*, **2013**, 419, 587-592	0.3	
86	Lipid bilayer and cytoskeletal interactions in a red blood cell. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 13356-61	11.5	123
85	Probing the cytoadherence of malaria infected red blood cells under flow. *PLoS ONE*, **2013**, 8, e64763	3.7	28
84	Repeated frictional sliding properties of copper containing nanoscale twins. *Scripta Materialia*, **2012**, 66, 849-853	5.6	15
83	Host cell deformability is linked to transmission in the human malaria parasite Plasmodium falciparum. *Cellular Microbiology*, **2012**, 14, 983-93	3.9	80
82	External Qi of Yan Xin Qigong induces cell death and gene expression alterations promoting apoptosis and inhibiting proliferation, migration and glucose metabolism in small-cell lung cancer cells. *Molecular and Cellular Biochemistry*, **2012**, 363, 245-55	4.2	10
81	Continuum modeling of a neuronal cell under blast loading. *Acta Biomaterialia*, **2012**, 8, 3360-71	10.8	28
80	Multiscale modelling of hematologic disorders. *Modeling, Simulation and Applications*, **2012**, 289-331	1.1	0

79	Bio-inspired interfacial strengthening strategy through geometrically interlocking designs. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 15, 70-7	4.1	45
78	Optical measurement of biomechanical properties of individual erythrocytes from a sickle cell patient. *Acta Biomaterialia*, **2012**, 8, 4130-8	10.8	87
77	Ballistic performance of nanocrystalline and nanotwinned ultrafine crystal steel. *Acta Materialia*, **2012**, 60, 1353-1367	8.4	51
76	Revisiting the intra-granular dislocation extension model for flow stress in nanocrystalline metals. *Philosophical Magazine Letters*, **2012**, 92, 111-121	1	4
75	Pf155/RESA protein influences the dynamic microcirculatory behavior of ring-stage Plasmodium falciparum infected red blood cells. *Scientific Reports*, **2012**, 2, 614	4.9	50
74	Prediction of the Constitutive Equation for Uniaxial Creep of a Power-Law Material through Microindentation Testing and Modeling. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2012**, 76, 597-606	0.4	
73	Modeling grain size dependent optimal twin spacing for achieving ultimate high strength and related high ductility in nanotwinned metals. *Acta Materialia*, **2011**, 59, 5544-5557	8.4	159
72	A unified mechanistic model for size-dependent deformation in nanocrystalline and nanotwinned metals. *Acta Materialia*, **2011**, 59, 6861-6868	8.4	63
71	Deformation, structural changes and damage evolution in nanotwinned copper under repeated frictional contact sliding. *Acta Materialia*, **2011**, 59, 7311-7324	8.4	35
70	Combined simulation and experimental study of large deformation of red blood cells in microfluidic systems. *Annals of Biomedical Engineering*, **2011**, 39, 1041-50	4.7	74
69	Fracture toughness and fatigue crack growth characteristics of nanotwinned copper. *Acta Materialia*, **2011**, 59, 2437-2446	8.4	143
68	A microfabricated deformability-based flow cytometer with application to malaria. *Lab on A Chip*, **2011**, 11, 1065-73	7.2	187
67	Size-dependent heterogeneity benefits the mechanical performance of bone. *Journal of the Mechanics and Physics of Solids*, **2011**, 59, 64-74	5	40
66	Biophysics of malarial parasite exit from infected erythrocytes. *PLoS ONE*, **2011**, 6, e20869	3.7	65
65	Shape and Biomechanical Characteristics of Human Red Blood Cells in Health and Disease. *MRS Bulletin*, **2010**, 35, 382-388	3.2	302
64	PSEUDO-STEADY INDENTATION CREEP. *International Journal of Modern Physics B*, **2010**, 24, 227-237	1.1	5
63	Protection mechanisms of the iron-plated armor of a deep-sea hydrothermal vent gastropod. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 987-92	11.5	160
62	Creep characterization of power-law materials through pseudo-steady indentation tests and numerical simulations. *Journal of Physics: Conference Series*, **2010**, 240, 012064	0.3	

61	A modified model for deformation via partial dislocations and stacking faults at the nanoscale. *Scripta Materialia*, **2010**, 62, 361-364	5.6	20
60	A new method for evaluating the plastic properties of materials through instrumented frictional sliding tests. *Acta Materialia*, **2010**, 58, 6385-6392	8.4	23
59	Effect of dilatation on the elasto-plastic response of bulk metallic glasses under indentation. *Materials Research Society Symposia Proceedings*, **2009**, 1224, 1		
58	Size dependence of rate-controlling deformation mechanisms in nanotwinned copper. *Scripta Materialia*, **2009**, 60, 1062-1066	5.6	79
57	Stress relaxation and the structure size-dependence of plastic deformation in nanotwinned copper. *Acta Materialia*, **2009**, 57, 5165-5173	8.4	127
56	Structural stability of polymer matrix composite panels in fire. *Marine Structures*, **2009**, 22, 354-372	3.8	12
55	Steady-state frictional sliding contact on surfaces of plastically graded materials. *Acta Materialia*, **2009**, 57, 511-524	8.4	40
54	Computational Modeling of the Micropipette Aspiration of Malaria Infected Erythrocytes. *IFMBE Proceedings*, **2009**, 1788-1791	0.2	2
53	Some Practical Issues of Curvature and Thermal Stress in Realistic Multilevel Metal Interconnect Structures. *Journal of Electronic Materials*, **2008**, 37, 777-791	1.9	3
52	Analysis on Pseudo-Steady Indentation Creep. *Acta Mechanica Solida Sinica*, **2008**, 21, 283-288	2	20
51	Effects of mechanical properties and surface friction on elasto-plastic sliding contact. *Mechanics of Materials*, **2008**, 40, 206-219	3.3	69
50	Mechanics of indentation of plastically graded materials□: Experiments on nanocrystalline alloys with grain size gradients. *Journal of the Mechanics and Physics of Solids*, **2008**, 56, 172-183	5	62
49	Mechanics of indentation of plastically graded materials□ Analysis. *Journal of the Mechanics and Physics of Solids*, **2008**, 56, 157-171	5	72
48	Three-dimensional model of strength and ductility of polycrystalline copper containing nanoscale twins. *Acta Materialia*, **2008**, 56, 4647-4657	8.4	62
47	A precise correcting method for the study of the superhard material using nanoindentation tests. *Journal of Materials Research*, **2007**, 22, 1255-1264	2.5	28
46	The frictional sliding response of elasto-plastic materials in contact with a conical indenter. *International Journal of Solids and Structures*, **2007**, 44, 1970-1989	3.1	56
45	Indentation across size scales and disciplines: Recent developments in experimentation and modeling. *Acta Materialia*, **2007**, 55, 4015-4039	8.4	348
44	Toward a quantitative understanding of mechanical behavior of nanocrystalline metals. *Acta Materialia*, **2007**, 55, 4041-4065	8.4	859

43	Nanoscale heterogeneity promotes energy dissipation in bone. *Nature Materials*, **2007**, 6, 454-62	27	324
42	Cytoskeletal dynamics of human erythrocyte. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 4937-42	11.5	204
41	Effect of plasmodial RESA protein on deformability of human red blood cells harboring Plasmodium falciparum. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 9213-7	11.5	161
40	Strain rate sensitivity of Cu with nanoscale twins. *Scripta Materialia*, **2006**, 55, 319-322	5.6	111
39	Size Effects on Deformation and Fracture of Nanostructured Metals. *Nanostructure Science and Technology*, **2006**, 27-77	0.9	1
38	Creep Characterization of Aluminum-Magnesium Solid-Solution Alloy through Self-Similar Microindentation. *Materials Transactions*, **2006**, 47, 2006-2014	1.3	15
37	Strength, strain-rate sensitivity and ductility of copper with nanoscale twins. *Acta Materialia*, **2006**, 54, 5421-5432	8.4	403
36	Experimental and computational study on the load-jump tests of Al–Mg solid-solution alloy using instrumented indentation technique. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2006**, 423, 24-27	5.3	3
35	Molecularly based analysis of deformation of spectrin network and human erythrocyte. *Materials Science and Engineering C*, **2006**, 26, 1232-1244	8.3	157
34	Spectrin-level modeling of the cytoskeleton and optical tweezers stretching of the erythrocyte. *Biophysical Journal*, **2005**, 88, 3707-19	2.9	327
33	Detecting the Transition of Creep Rate-Controlling Process in Al-Mg Solid-Solution Alloy through Instrumented Indentation. *Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals*, **2005**, 69, 348-355	0.4	4
32	Nano-sized twins induce high rate sensitivity of flow stress in pure copper. *Acta Materialia*, **2005**, 53, 2169-2179	8.4	540
31	Connections between single-cell biomechanics and human disease states: gastrointestinal cancer and malaria. *Acta Biomaterialia*, **2005**, 1, 15-30	10.8	619
30	Continuous force-displacement relationships for the human red blood cell at different erythrocytic developmental stages of Plasmodium falciparum malaria parasite. *Materials Research Society Symposia Proceedings*, **2004**, 844, 1		1
29	Large deformation of living cells using laser traps. *Acta Materialia*, **2004**, 52, 1837-1845	8.4	136
28	Nonlinear elastic and viscoelastic deformation of the human red blood cell with optical tweezers. *Mcb Mechanics and Chemistry of Biosystems*, **2004**, 1, 169-80		76
27	Experimental and computational creep characterization of Al–Mg solid-solution alloy through instrumented indentation. *Philosophical Magazine*, **2003**, 83, 3959-3976	1.6	43
26	Large Deformation of Biological Cells by Optical Tweezers **2003**, 357		1

25	Mechanics of the human red blood cell deformed by optical tweezers. *Journal of the Mechanics and Physics of Solids*, **2003**, 51, 2259-2280	5	567
24	Some critical experiments on the strain-rate sensitivity of nanocrystalline nickel. *Acta Materialia*, **2003**, 51, 5159-5172	8.4	471
23	Depth-sensing instrumented indentation with dual sharp indenters. *Acta Materialia*, **2003**, 51, 3713-3729	8.4	267
22	Computational and Experimental Characterization of Indentation Creep. *Materials Research Society Symposia Proceedings*, **2003**, 795, 481		1
21	Computational modeling of the forward and reverse problems in instrumented sharp indentation. *Acta Materialia*, **2001**, 49, 3899-3918	8.4	1049
20	Study of mechanical deformation in bulk metallic glass through instrumented indentation. *Acta Materialia*, **2001**, 49, 3781-3789	8.4	286
19	A micromechanics study on strain-localization-induced fracture initiation in bending using crystal plasticity models. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **2001**, 81, 1997-2020		66
18	A Simplified Method for Calculating the Crack-Tip Field of Functionally Graded Materials Using the Domain Integral. *Journal of Applied Mechanics, Transactions ASME*, **1999**, 66, 101-108	2.7	120
17	Structure and property changes in certain materials influenced by the external qi of qigong. *Materials Research Innovations*, **1999**, 2, 349-359	1.9	22
16	A study on failure prediction and design criteria for fiber composites under fire degradation. *Composites Part A: Applied Science and Manufacturing*, **1999**, 30, 123-131	8.4	53
15	Interface instability in the bulk processing of 2223 BSCCO powders. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1998**, 78, 857-877		1
14	Mechanism of intense shear failure in Ni3Al single crystals. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1997**, 75, 443-459		6
13	A micromechanical study of residual stresses in functionally graded materials. *Acta Materialia*, **1997**, 45, 3265-3276	8.4	68
12	On the critical conditions of kink band formation in fiber composites with ductile matrix. *Scripta Materialia*, **1996**, 34, 1771-1777	5.6	8
11	Micromechanics of Deformation and Fracture in Low Symmetry Layered Materials. *Materials Research Society Symposia Proceedings*, **1996**, 434, 141		2
10	Non-schmid effects on the behavior of polycrystals with applications to ni3al. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **1996**, 27, 81-99	2.3	12
9	Localized deformation modes and non-Schmid effects in crystalline solids. Part I. Critical conditions of localization. *Mechanics of Materials*, **1996**, 23, 71-102	3.3	37
8	Localized deformation modes and non-Schmid effects in crystalline solids. Part II. deformation patterns. *Mechanics of Materials*, **1996**, 23, 103-132	3.3	19

7	Deformation and fracture under compressive loading in lamellar TiAl microstructures. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1996**, 74, 569-591		29
6	Numerical simulations of plastic deformation and fracture effects in two phase □TiAl + □2-Ti3Al lamellar microstructures. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1995**, 71, 567-604		44
5	Numerical simulations of stress-strain behavior in two-phase □2 + □lamellar TiAl alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1995**, 192-193, 97-103	5.3	20
4	Coarse slip bands and the transition to macroscopic shear bands. *Scripta Metallurgica Et Materialia*, **1994**, 30, 791-796		6
3	Deformation and Failure Modes Under Compressive Loading in Lamellar TiAl. *Materials Research Society Symposia Proceedings*, **1994**, 364, 1029		1
2	Numerical Simulations of Tensile Deformation Behavior in Two Phase □2 + □Lamellar Tial Alloys. *Materials Research Society Symposia Proceedings*, **1994**, 364, 169		
1	Non-Schmid effects and localized plastic flow in intermetallic alloys. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **1993**, 170, 143-160	5.3	55