

# Kaushik Bhattacharya

## List of Publications by Year in descending order

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175  
papers

7,992  
citations

47006

47  
h-index

54911

84  
g-index

186  
all docs

186  
docs citations

186  
times ranked

5420  
citing authors

#	ARTICLE	IF	CITATIONS
1	Imposing equilibrium on experimental 3-D stress fields using Hodge decomposition and FFT-based optimization. <i>Mechanics of Materials</i> , 2022, 164, 104109.	3.2	1
2	A learning-based multiscale method and its application to inelastic impact problems. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 158, 104668.	4.8	23
3	Multiscale modeling of materials: Computing, data science, uncertainty and goal-oriented optimization. <i>Mechanics of Materials</i> , 2022, 165, 104156.	3.2	20
4	DIC Challenge 2.0: Developing Images and Guidelines for Evaluating Accuracy and Resolution of 2D Analyses. <i>Experimental Mechanics</i> , 2022, 62, 639-654.	2.0	34
5	Spectral quadrature for the first principles study of crystal defects: Application to magnesium. <i>Journal of Computational Physics</i> , 2022, 456, 111035.	3.8	4
6	Optimal design of responsive structures. <i>Structural and Multidisciplinary Optimization</i> , 2022, 65, 1.	3.5	3
7	Fracture Diods: Directional Asymmetry of Fracture Toughness. <i>Physical Review Letters</i> , 2021, 126, 025503.	7.8	14
8	Collective behavior in the kinetics and equilibrium of solid-state photoreaction. <i>Extreme Mechanics Letters</i> , 2021, 43, 101160.	4.1	5
9	Photochemical-induced phase transitions in photoactive semicrystalline polymers. <i>Physical Review E</i> , 2021, 103, 033003.	2.1	4
10	Actuation of cylindrical nematic elastomer balloons. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	17
11	Understanding the morphotropic phase boundary of perovskite solid solutions as a frustrated state. <i>Physical Review B</i> , 2021, 103, .	3.2	3
12	Fast Adaptive Mesh Augmented Lagrangian Digital Image Correlation. <i>Experimental Mechanics</i> , 2021, 61, 719-735.	2.0	10
13	Probing the in-plane liquid-like behavior of liquid crystal elastomers. <i>Science Advances</i> , 2021, 7, .	10.3	23
14	Hierarchical multiscale quantification of material uncertainty. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 153, 104492.	4.8	10
15	Accelerated computational micromechanics and its application to polydomain liquid crystal elastomers. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 153, 104470.	4.8	20
16	Machine-learned prediction of the electronic fields in a crystal. <i>Mechanics of Materials</i> , 2021, 163, 104070.	3.2	7
17	Simple deformation measures for discrete elastic rods and ribbons. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2021, 477, .	2.1	2
18	Photomechanical coupling in photoactive nematic elastomers. <i>Journal of the Mechanics and Physics of Solids</i> , 2020, 144, 104115.	4.8	31

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19	Bounds on precipitate hardening of line and surface defects in solids. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1.	1.4	1
20	Large scale ab-initio simulations of dislocations. Journal of Computational Physics, 2020, 407, 109249.	3.8	10
21	A nonlinear beam model of photomotile structures. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 9762-9770.	7.1	60
22	Influence of thermomechanical loads on the energetics of precipitation in magnesium aluminum alloys. Acta Materialia, 2020, 193, 28-39.	7.9	4
23	Guiding and Trapping Cracks With Compliant Inclusions for Enhancing Toughness of Brittle Composite Materials. Journal of Applied Mechanics, Transactions ASME, 2020, 87, .	2.2	11
24	Optimization of Bone Scaffold Porosity Distributions. Scientific Reports, 2019, 9, 9170.	3.3	51
25	Obreimoff revisited: Controlled heterogeneous fracture through the splitting of mica. Mechanics of Materials, 2019, 136, 103088.	3.2	3
26	Combining Image Compression with Digital Image Correlation. Experimental Mechanics, 2019, 59, 629-642.	2.0	16
27	Phase-field study of crack nucleation and propagation in elastic-perfectly plastic bodies. Computer Methods in Applied Mechanics and Engineering, 2019, 353, 44-65.	6.6	20
28	Photovoltaic effect in multi-domain ferroelectric perovskite oxides. Journal of Applied Physics, 2019, 125, .	2.5	15
29	Metamaterials with engineered failure load and stiffness. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 23960-23965.	7.1	18
30	Optimal design of a model energy conversion device. Structural and Multidisciplinary Optimization, 2019, 59, 389-401.	3.5	4
31	Augmented Lagrangian Digital Image Correlation. Experimental Mechanics, 2019, 59, 187-205.	2.0	44
32	A macroscopic strain-space model of anisotropic, cyclic plasticity with hardening. International Journal of Mechanical Sciences, 2018, 149, 365-372.	6.7	3
33	Optimizing microstructure for toughness: the model problem of peeling. Structural and Multidisciplinary Optimization, 2018, 58, 1067-1080.	3.5	7
34	Proliferation of twinning in hexagonal close-packed metals: Application to magnesium. Journal of the Mechanics and Physics of Solids, 2018, 112, 368-384.	4.8	27
35	Actuation of Thin Nematic Elastomer Sheets with Controlled Heterogeneity. Archive for Rational Mechanics and Analysis, 2018, 227, 149-214.	2.4	15
36	Patterning nonisometric origami in nematic elastomer sheets. Soft Matter, 2018, 14, 3127-3134.	2.7	39

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37	Impact induced depolarization of ferroelectric materials. Journal of the Mechanics and Physics of Solids, 2018, 115, 142-166.	4.8	7
38	Effect of Cohesive Zone Size on Peeling of Heterogeneous Adhesive Tape. Journal of Applied Mechanics, Transactions ASME, 2018, 85, .	2.2	12
39	Stress fluctuation, crack renucleation and toughening in layered materials. Journal of the Mechanics and Physics of Solids, 2018, 120, 68-78.	4.8	30
40	Spectrum-splitting approach for Fermi-operator expansion in all-electron Kohn-Sham DFT calculations. Physical Review B, 2017, 95, .	3.2	11
41	Microstructure-enabled control of wrinkling in nematic elastomer sheets. Journal of the Mechanics and Physics of Solids, 2017, 102, 125-150.	4.8	37
42	The relation between a microscopic threshold-force model and macroscopic models of adhesion. Acta Mechanica Sinica/Lixue Xuebao, 2017, 33, 508-515.	3.4	2
43	Electroclinic effect in chiral smectic- $A$ liquid crystal elastomers. Physical Review E, 2017, 96, 032701.	2.1	3
44	The Measurement and Interpretation of Transformation Temperatures in Nitinol. Shape Memory and Superelasticity, 2017, 3, 485-498.	2.2	31
45	Effective behavior of an interface propagating through a periodic elastic medium. Interfaces and Free Boundaries, 2016, 18, 91-113.	0.8	8
46	Dynamic behavior of nano-voids in magnesium under hydrostatic tensile stress. Modelling and Simulation in Materials Science and Engineering, 2016, 24, 065003.	2.0	24
47	Homogenization and Path Independence of the J-Integral in Heterogeneous Materials. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	9
48	A sublinear-scaling approach to density-functional-theory analysis of crystal defects. Journal of the Mechanics and Physics of Solids, 2016, 95, 530-556.	4.8	21
49	Length scales and pinning of interfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150167.	3.4	8
50	A micromechanics-inspired constitutive model for shape-memory alloys that accounts for initiation and saturation of phase transformation. Journal of the Mechanics and Physics of Solids, 2016, 97, 197-224.	4.8	26
51	Programming complex shapes in thin nematic elastomer and glass sheets. Physical Review E, 2016, 94, 010701.	2.1	43
52	Exceptional Resilience of Small-Scale $Au_{30}Cu_{25}Zn_{45}$ under Cyclic Stress-Induced Phase Transformation. Nano Letters, 2016, 16, 7621-7625.	9.1	34
53	Plates with Incompatible Prestrain. Archive for Rational Mechanics and Analysis, 2016, 221, 143-181.	2.4	39
54	A Variational Framework for Spectral Approximations of Kohn-Sham Density Functional Theory. Archive for Rational Mechanics and Analysis, 2016, 221, 1035-1075.	2.4	6

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55	Effective Behavior of Nematic Elastomer Membranes. Archive for Rational Mechanics and Analysis, 2015, 218, 863-905.	2.4	25
56	The Influence of the R-Phase on the Superelastic Behavior of NiTi. Shape Memory and Superelasticity, 2015, 1, 153-161.	2.2	95
57	Collective behavior of viscoelastic asperities as a model for static and kinetic friction. Journal of the Mechanics and Physics of Solids, 2015, 76, 144-161.	4.8	19
58	Adhesion of heterogeneous thin films II: Adhesive heterogeneity. Journal of the Mechanics and Physics of Solids, 2015, 83, 88-103.	4.8	48
59	A model coupling plasticity and phase transformation with application to dynamic shear deformation of iron. Mechanics of Materials, 2015, 80, 255-263.	3.2	10
60	Computational analysis of liquid crystalline elastomer membranes: Changing Gaussian curvature without stretch energy. International Journal of Solids and Structures, 2014, 51, 144-153.	2.7	31
61	Multiscale instabilities in soft heterogeneous dielectric elastomers. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130618.	2.1	43
62	Effective toughness of heterogeneous media. Journal of the Mechanics and Physics of Solids, 2014, 71, 15-32.	4.8	151
63	Transformation strains and temperatures of a nickel-titanium-hafnium high temperature shape memory alloy. Acta Materialia, 2014, 76, 40-53.	7.9	96
64	Wavelet analysis of microscale strains. Acta Materialia, 2014, 76, 118-126.	7.9	0
65	A Phase Field Approach for Martensitic Transformations and Crystal Plasticity. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 383-384.	0.2	3
66	A phase-field approach for the modeling of nematic liquid crystal elastomers. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 577-578.	0.2	5
67	Linear Scaling DFT for defects in metals. , 2014, , 265-272.		1
68	Applications of Wavelets in the Representation and Prediction of Transformation in Shape-Memory Polycrystals. , 2014, , 527-534.		0
69	Fibrous composites of piezoelectric and piezomagnetic phases. Mechanics of Materials, 2013, 60, 159-170.	3.2	28
70	Adhesion of heterogeneous thin films II: Elastic heterogeneity. Journal of the Mechanics and Physics of Solids, 2013, 61, 838-851.	4.8	71
71	Parallel edge cracks due to a phase transformation. International Journal of Solids and Structures, 2013, 50, 1550-1561.	2.7	3
72	Interplay of martensitic phase transformation and plastic slip in polycrystals. Acta Materialia, 2013, 61, 4384-4397.	7.9	61

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73	Coarse-graining Kohn-Sham Density Functional Theory. Journal of the Mechanics and Physics of Solids, 2013, 61, 38-60.	4.8	46
74	Toughening and Asymmetry in Peeling of Heterogeneous Adhesives. Physical Review Letters, 2012, 108, 196101.	7.8	95
75	Effect of doping on polarization profiles and switching in semiconducting ferroelectric thin films. Journal of Applied Physics, 2012, 111, 084105.	2.5	12
76	Stability of MultiComponent Biological Membranes. SIAM Journal on Applied Mathematics, 2012, 72, 489-511.	1.8	22
77	Evolution of polarization and space charges in semiconducting ferroelectrics. Journal of Applied Physics, 2012, 111, 034109.	2.5	19
78	Snap-through actuation of thick-wall electroactive balloons. International Journal of Non-Linear Mechanics, 2012, 47, 206-209.	2.6	121
79	Dielectric elastomer composites. Journal of the Mechanics and Physics of Solids, 2012, 60, 181-198.	4.8	93
80	Elasticity of polydomain liquid crystal elastomers. Journal of the Mechanics and Physics of Solids, 2012, 60, 573-590.	4.8	72
81	Existence of Surface Waves and Band Gaps in Periodic Heterogeneous Half-spaces. Journal of Elasticity, 2012, 107, 65-79.	1.9	10
82	A mesh-free convex approximation scheme for Kohn-Sham density functional theory. Journal of Computational Physics, 2011, 230, 5226-5238.	3.8	27
83	Gaussian curvature from flat elastica sheets. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 1121-1140.	2.1	137
84	A Boundary Element Method Coupled to Phase Field to Compute Ferroelectric Domains in Complex Geometries. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2011, , 277-286.	0.2	0
85	Stress-Induced Phase Transformations in Shape-Memory Polycrystals. Archive for Rational Mechanics and Analysis, 2010, 196, 715-751.	2.4	14
86	A Sharp Interface Model for the Propagation of Martensitic Phase Boundaries. Archive for Rational Mechanics and Analysis, 2010, 197, 599-617.	2.4	6
87	Phase transformation and hysteresis behavior in $\text{Cs}_{1-x}\text{Rb}_x\text{H}_2\text{PO}_4$ . Solid State Ionics, 2010, 181, 173-179.	2.7	24
88	Non-periodic finite-element formulation of Kohn-Sham density functional theory. Journal of the Mechanics and Physics of Solids, 2010, 58, 256-280.	4.8	101
89	Disclination-mediated thermo-optical response in nematic glass sheets. Physical Review E, 2010, 81, 060701.	2.1	100
90	Optimization of magnetoelectricity in piezoelectric-magnetostrictive bilayers. Smart Materials and Structures, 2010, 19, 125010.	3.5	22

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91	Competing failure mechanisms in thin films: Application to layer transfer. Journal of Applied Physics, 2009, 105, 073514.	2.5	6
92	Large Deformation of Nitinol Under Shear Dominant Loading. Experimental Mechanics, 2009, 49, 225-233.	2.0	24
93	Phase Shifting Full-Field Interferometric Methods for Determination of In-Plane Tensorial Stress. Experimental Mechanics, 2009, 49, 303-315.	2.0	12
94	A coarse-grained model of the myofibril: Overall dynamics and the evolution of sarcomere non-uniformities. Journal of the Mechanics and Physics of Solids, 2009, 57, 221-243.	4.8	18
95	Wave propagation in a sandwich structure. International Journal of Solids and Structures, 2009, 46, 3290-3300.	2.7	57
96	Transmission wavefront shearing interferometry for photoelastic materials. Applied Optics, 2009, 48, 2450.	2.1	7
97	Supersoft Elasticity in Polydomain Nematic Elastomers. Physical Review Letters, 2009, 103, 037802.	7.8	65
98	Characterization of soft stripe-domain deformations in $S_m-C$ and $S_m-C^*$ elastomers. Physical Review E, 2009, 79, 061705.	2.1	4
99	The Relaxation of Two-well Energies with Possibly Unequal Moduli. Archive for Rational Mechanics and Analysis, 2008, 187, 409-479.	2.4	22
100	A Continuum Theory of Deformable, Semiconducting Ferroelectrics. Archive for Rational Mechanics and Analysis, 2008, 189, 59-95.	2.4	48
101	On the Sachs bound in stress-induced phase transformations in polycrystalline scalar shape-memory alloys. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10569-10570.	0.2	1
102	Electrooptic Modulation in Thin Film Barium Titanate Plasmonic Interferometers. Nano Letters, 2008, 8, 4048-4052.	9.1	212
103	A micromechanics inspired constitutive model for shape-memory alloys: the one-dimensional case. Smart Materials and Structures, 2007, 16, S51-S62.	3.5	38
104	A micromechanics-inspired constitutive model for shape-memory alloys. Smart Materials and Structures, 2007, 16, 1751-1765.	3.5	46
105	Active tuning of photonic device characteristics during operation by ferroelectric domain switching. Journal of Applied Physics, 2007, 102, 064102.	2.5	13
106	Vacancy clustering and prismatic dislocation loop formation in aluminum. Physical Review B, 2007, 76, .	3.2	47
107	Anharmonic lattice statics analysis of $180^\circ$ and $90^\circ$ ferroelectric domain walls in $PbTiO_3$ . Philosophical Magazine, 2007, 87, 3997-4026.	1.6	12
108	Quasi-continuum orbital-free density-functional theory: A route to multi-million atom non-periodic DFT calculation. Journal of the Mechanics and Physics of Solids, 2007, 55, 697-718.	4.8	117

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109	Computational analysis of martensitic thin films using subdivision surfaces. <i>International Journal for Numerical Methods in Engineering</i> , 2007, 72, 72-94.	2.8	6
110	A model for large electrostrictive actuation in ferroelectric single crystals. <i>International Journal of Solids and Structures</i> , 2007, 44, 2053-2065.	2.7	23
111	A real-space non-local phase-field model of ferroelectric domain patterns in complex geometries. <i>Acta Materialia</i> , 2007, 55, 1907-1917.	7.9	92
112	Stress-induced martensitic phase transformation in thin sheets of Nitinol. <i>Acta Materialia</i> , 2007, 55, 3593-3600.	7.9	171
113	An experimental investigation of crack initiation in thin sheets of nitinol. <i>Acta Materialia</i> , 2007, 55, 6322-6330.	7.9	116
114	Non-periodic finite-element formulation of orbital-free density functional theory. <i>Journal of the Mechanics and Physics of Solids</i> , 2007, 55, 669-696.	4.8	57
115	The effect of precipitates on the evolution of a martensitic phase boundary. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2007, 7, 1151207-1151208.	0.2	1
116	Investigation of Twin-Wall Structure at the Nanometer Scale Using Atomic Force Microscopy. , 2007, , 385-386.		0
117	The effect of biaxial texture on the effective electromechanical constants of polycrystalline barium titanate and lead titanate thin films. <i>Acta Materialia</i> , 2006, 54, 3657-3663.	7.9	27
118	Kinetics of phase transformations in the peridynamic formulation of continuum mechanics. <i>Journal of the Mechanics and Physics of Solids</i> , 2006, 54, 1811-1842.	4.8	119
119	A Theory of Anharmonic Lattice Statics for Analysis of Defective Crystals. <i>Journal of Elasticity</i> , 2006, 86, 41-83.	1.9	23
120	Mechanical Characterization of Released Thin Films by Contact Loading. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2006, 73, 730.	2.2	12
121	Graded ferroelectric capacitors with robust temperature characteristics. <i>Journal of Applied Physics</i> , 2006, 100, 114115.	2.5	35
122	Characterization of domain walls in BaTiO <sub>3</sub> using simultaneous atomic force and piezo response force microscopy. <i>Applied Physics Letters</i> , 2006, 88, 102907.	3.3	23
123	A computational model of ferroelectric domains. Part II: grain boundaries and defect pinning. <i>Acta Materialia</i> , 2005, 53, 199-209.	7.9	93
124	A computational model of ferroelectric domains. Part I: model formulation and domain switching. <i>Acta Materialia</i> , 2005, 53, 185-198.	7.9	277
125	Domain switching in polycrystalline ferroelectric ceramics. <i>Nature Materials</i> , 2005, 4, 776-781.	27.5	373
126	APPLIED PHYSICS: The Material Is the Machine. <i>Science</i> , 2005, 307, 53-54.	12.6	230



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127	Depletion Layers and Domain Walls in Semiconducting Ferroelectric Thin Films. <i>Physical Review Letters</i> , 2005, 95, 247603.	7.8	135
128	A model problem concerning recoverable strains of shape-memory polycrystals. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005, 461, 2797-2816.	2.1	46
129	Examples of nonlinear homogenization involving degenerate energies. I. Plane strain. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2005, 461, 3681-3703.	2.1	5
130	Effective motion of a curvature-sensitive interface through a heterogeneous medium. <i>Interfaces and Free Boundaries</i> , 2004, 6, 151-173.	0.8	14
131	Transformation yield surface of shape memory alloys. <i>European Physical Journal Special Topics</i> , 2004, 115, 155-162.	0.2	9
132	All-organic dielectric-percolative three-component composite materials with high electromechanical response. <i>Applied Physics Letters</i> , 2004, 84, 4391-4393.	3.3	198
133	Investigation of twin-wall structure at the nanometre scale using atomic force microscopy. <i>Nature Materials</i> , 2004, 3, 453-457.	27.5	109
134	Crystal symmetry and the reversibility of martensitic transformations. <i>Nature</i> , 2004, 428, 55-59.	27.8	297
135	Crystal Symmetry and the Reversibility of Martensitic Transformations.. <i>ChemInform</i> , 2004, 35, no.	0.0	0
136	Large electrostrictive actuation of barium titanate single crystals. <i>Journal of the Mechanics and Physics of Solids</i> , 2004, 52, 823-846.	4.8	115
137	Interaction of oxygen vacancies with domain walls and its impact on fatigue in ferroelectric thin films. , 2004, , .		7
138	Thin Films of Active Materials. , 2004, , 15-44.		0
139	A Continuum Theory of Multispecies Thin Solid Film Growth by Chemical Vapor Deposition. <i>Journal of Elasticity</i> , 2003, 73, 13-74.	1.9	7
140	Ferroelectric perovskites for electromechanical actuation. <i>Acta Materialia</i> , 2003, 51, 5941-5960.	7.9	120
141	Dynamics of strings made of phase-transforming materials. <i>Journal of the Mechanics and Physics of Solids</i> , 2003, 51, 393-424.	4.8	27
142	Homogenization of a Hamiltonâ€“Jacobi equation associated with the geometric motion of an interface. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 2003, 133, 773-805.	1.2	10
143	Modeling large strain electrostriction of ferroelectrics under combined electromechanical loads. , 2003, 5053, 368.		2
144	Mobility of twin and phase boundaries. <i>European Physical Journal Special Topics</i> , 2003, 112, 163-166.	0.2	7

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145	Thin films with many small cracks. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2002, 458, 823-840.	2.1	6
146	An Asymptotic Study of the Debonding of Thin Films. Archive for Rational Mechanics and Analysis, 2002, 161, 205-229.	2.4	14
147	On beams made of a phase-transforming material. International Journal of Solids and Structures, 2002, 39, 3907-3929.	2.7	20
148	Comments on the spontaneous strain and polarization of polycrystalline ferroelectric ceramics. , 2001, 4333, 80.		1
149	Electromechanical behavior of 90-degree domain motion in barium titanate single crystals. , 2001, , .		3
150	Domain patterns and macroscopic behaviour of ferroelectric materials. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 2021-2054.	0.6	170
151	Relaxation of some multi-well problems. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2001, 131, 279-320.	1.2	26
152	Modeling electromechanical properties of ionic polymers. , 2001, 4329, 292.		27
153	Relaxed constitutive relations for phase transforming materials. Journal of the Mechanics and Physics of Solids, 2000, 48, 1493-1517.	4.8	25
154	Kinetics of phase boundaries with edges and junctions in a three-dimensional multi-phase body. Journal of the Mechanics and Physics of Solids, 2000, 48, 2619-2641.	4.8	25
155	Large strain electrostrictive actuation in barium titanate. Applied Physics Letters, 2000, 77, 1698-1700.	3.3	130
156	Crystallographic Attributes of a Shape-Memory Alloy. Journal of Engineering Materials and Technology, Transactions of the ASME, 1999, 121, 93-97.	1.4	3
157	The mathematics of microstructure and the design of new materials. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 8332-8333.	7.1	5
158	A multispecies step-flow model of growth of compound thin films by MOCVD. Thin Solid Films, 1999, 357, 26-30.	1.8	2
159	A three-dimensional model of step flow mediated crystal growth under the combined influences of stress and diffusion. Thin Solid Films, 1999, 357, 35-39.	1.8	10
160	A theory of thin films of martensitic materials with applications to microactuators Dedicated to the memory of Juan Simo. Journal of the Mechanics and Physics of Solids, 1999, 47, 531-576.	4.8	212
161	Edge effects on the propagation of phase boundaries. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 273-275, 241-244.	5.6	4
162	Tents and tunnels on martensitic films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 273-275, 685-689.	5.6	42

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163	The Simply Laminated Microstructure in Martensitic Crystals that Undergo a Cubic-to-Orthorhombic Phase Transformation. <i>Archive for Rational Mechanics and Analysis</i> , 1999, 149, 123-154.	2.4	34
164	Some examples of nonlinear homogenization involving nearly degenerate energies. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 1999, 455, 567-583.	2.1	6
165	Phase boundary propagation in a heterogeneous body. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 1999, 455, 757-766.	2.1	27
166	Kinetics of phase boundaries with edges and junctions. <i>Journal of the Mechanics and Physics of Solids</i> , 1998, 46, 2323-2359.	4.8	55
167	The influence of texture on the shape-memory effect in polycrystals. <i>Acta Materialia</i> , 1998, 46, 5457-5473.	7.9	146
168	The Taylor Estimate of Recoverable Strains in Shape-Memory Polycrystals. , 1998, , 123-134.		0
169	Elastic Energy Minimization and the Recoverable Strains of Polycrystalline Shape-Memory Materials. <i>Archive for Rational Mechanics and Analysis</i> , 1997, 139, 99-180.	2.4	105
170	Symmetry, texture and the recoverable strain of shape-memory polycrystals. <i>Acta Materialia</i> , 1996, 44, 529-542.	7.9	197
171	Restrictions on microstructure. <i>Proceedings of the Royal Society of Edinburgh Section A: Mathematics</i> , 1994, 124, 843-878.	1.2	88
172	Comparison of the geometrically nonlinear and linear theories of martensitic transformation. <i>Continuum Mechanics and Thermodynamics</i> , 1993, 5, 205-242.	2.2	152
173	Self-accommodation in martensite. <i>Archive for Rational Mechanics and Analysis</i> , 1992, 120, 201-244.	2.4	135
174	Wedge-like microstructure in martensites. <i>Acta Metallurgica Et Materialia</i> , 1991, 39, 2431-2444.	1.8	151
175	Model Reduction And Neural Networks For Parametric PDEs. <i>SMAI Journal of Computational Mathematics</i> , 0, 7, 121-157.	0.0	89