

Martin L Dunn

List of Publications by Year in descending order

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189
papers

19,351
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12303

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11288

136
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191
all docs

191
docs citations

191
times ranked

13644
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultrastrong adhesion of graphene membranes. <i>Nature Nanotechnology</i> , 2011, 6, 543-546.	15.6	904
2	Multimaterial 4D Printing with Tailorable Shape Memory Polymers. <i>Scientific Reports</i> , 2016, 6, 31110.	1.6	751
3	Thermomechanics of shape memory polymers: Uniaxial experiments and constitutive modeling. <i>International Journal of Plasticity</i> , 2006, 22, 279-313.	4.1	650
4	Advances in 4D Printing: Materials and Applications. <i>Advanced Functional Materials</i> , 2019, 29, 1805290.	7.8	633
5	Active materials by four-dimension printing. <i>Applied Physics Letters</i> , 2013, 103, 131901.	1.5	566
6	Active origami by 4D printing. <i>Smart Materials and Structures</i> , 2014, 23, 094007.	1.8	510
7	Micromechanics predictions of the effective electroelastic moduli of piezoelectric composites. <i>International Journal of Solids and Structures</i> , 1993, 30, 161-175.	1.3	501
8	The role of van der Waals forces in adhesion of micromachined surfaces. <i>Nature Materials</i> , 2005, 4, 629-634.	13.3	501
9	Surface-stress-induced phase transformation in metal nanowires. <i>Nature Materials</i> , 2003, 2, 656-660.	13.3	477
10	Direct 4D printing via active composite materials. <i>Science Advances</i> , 2017, 3, e1602890.	4.7	455
11	Sequential Self-Folding Structures by 3D Printed Digital Shape Memory Polymers. <i>Scientific Reports</i> , 2015, 5, 13616.	1.6	391
12	Shape memory polymer nanocomposites. <i>Acta Materialia</i> , 2002, 50, 5115-5126.	3.8	388
13	Strain effects on the thermal conductivity of nanostructures. <i>Physical Review B</i> , 2010, 81, .	1.1	375
14	Carbon Fiber Reinforced Thermoset Composite with Near 100% Recyclability. <i>Advanced Functional Materials</i> , 2016, 26, 6098-6106.	7.8	349
15	Recyclable 3D printing of vitrimer epoxy. <i>Materials Horizons</i> , 2017, 4, 598-607.	6.4	339
16	Micromechanics of Magnetoelastoelectric Composite Materials: Average Fields and Effective Behavior. <i>Journal of Intelligent Material Systems and Structures</i> , 1998, 9, 404-416.	1.4	328
17	Atomistic simulation of the structure and elastic properties of gold nanowires. <i>Journal of the Mechanics and Physics of Solids</i> , 2004, 52, 1935-1962.	2.3	300
18	Bending Rigidity and Gaussian Bending Stiffness of Single-Layered Graphene. <i>Nano Letters</i> , 2013, 13, 26-30.	4.5	299

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19	The Strength of Gold Nanowires. <i>Nano Letters</i> , 2004, 4, 2431-2436.	4.5	280
20	Multi-shape active composites by 3D printing of digital shape memory polymers. <i>Scientific Reports</i> , 2016, 6, 24224.	1.6	267
21	Thermomechanics of shape memory polymer nanocomposites. <i>Mechanics of Materials</i> , 2004, 36, 929-940.	1.7	266
22	The effects of crack face boundary conditions on the fracture mechanics of piezoelectric solids. <i>Engineering Fracture Mechanics</i> , 1994, 48, 25-39.	2.0	257
23	3D Printed Reversible Shape Changing Components with Stimuli Responsive Materials. <i>Scientific Reports</i> , 2016, 6, 24761.	1.6	253
24	Reprocessable thermosets for sustainable three-dimensional printing. <i>Nature Communications</i> , 2018, 9, 1831.	5.8	249
25	Atomistic simulations of the yielding of gold nanowires. <i>Acta Materialia</i> , 2006, 54, 643-653.	3.8	242
26	Yield Strength Asymmetry in Metal Nanowires. <i>Nano Letters</i> , 2004, 4, 1863-1867.	4.5	207
27	Fracture initiation at sharp notches: Correlation using critical stress intensities. <i>International Journal of Solids and Structures</i> , 1997, 34, 3873-3883.	1.3	198
28	Design of Piezoelectric Energy Harvesting Systems: A Topology Optimization Approach Based on Multilayer Plates and Shells. <i>Journal of Intelligent Material Systems and Structures</i> , 2009, 20, 1923-1939.	1.4	187
29	Controlled Sequential Shape Changing Components by 3D Printing of Shape Memory Polymer Multimaterials. <i>Procedia IUTAM</i> , 2015, 12, 193-203.	1.2	187
30	Photo-origami—Bending and folding polymers with light. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	183
31	Reprocessing and recycling of thermosetting polymers based on bond exchange reactions. <i>RSC Advances</i> , 2014, 4, 10108-10117.	1.7	182
32	Fabrication of SiCN MEMS by photopolymerization of pre-ceramic polymer. <i>Sensors and Actuators A: Physical</i> , 2002, 95, 120-134.	2.0	172
33	Electromechanical Properties of Porous Piezoelectric Ceramics. <i>Journal of the American Ceramic Society</i> , 1993, 76, 1697-1706.	1.9	171
34	Electroelastic Green's functions for transversely isotropic piezoelectric media and their application to the solution of inclusion and inhomogeneity problems. <i>International Journal of Engineering Science</i> , 1994, 32, 119-131.	2.7	169
35	Anisotropic coupled-field inclusion and inhomogeneity problems. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1998, 77, 1341-1350.	0.8	159
36	Solvent Assisted Pressure-Free Surface Welding and Reprocessing of Malleable Epoxy Polymers. <i>Macromolecules</i> , 2016, 49, 5527-5537.	2.2	158

#	ARTICLE	IF	CITATIONS
37	Surface stress driven reorientation of gold nanowires. <i>Physical Review B</i> , 2004, 70, .	1.1	151
38	Inclusions and inhomogeneities in transversely isotropic piezoelectric solids. <i>International Journal of Solids and Structures</i> , 1997, 34, 3571-3582.	1.3	143
39	Fabrication of SiCN ceramic MEMS using injectable polymer-precursor technique. <i>Sensors and Actuators A: Physical</i> , 2001, 89, 64-70.	2.0	143
40	Photomechanics of light-activated polymers. <i>Journal of the Mechanics and Physics of Solids</i> , 2009, 57, 1103-1121.	2.3	138
41	Micromechanics of coupled electroelastic composites: Effective thermal expansion and pyroelectric coefficients. <i>Journal of Applied Physics</i> , 1993, 73, 5131-5140.	1.1	135
42	Stress generation in silicon particles during lithium insertion. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	128
43	Two-way reversible shape memory effects in a free-standing polymer composite. <i>Smart Materials and Structures</i> , 2011, 20, 065010.	1.8	128
44	Influence of stoichiometry on the glass transition and bond exchange reactions in epoxy thermoset polymers. <i>RSC Advances</i> , 2014, 4, 48682-48690.	1.7	128
45	Green's functions for transversely isotropic piezoelectric solids. <i>International Journal of Solids and Structures</i> , 1996, 33, 4571-4581.	1.3	125
46	Numerical modeling of electrochemical-mechanical interactions in lithium polymer batteries. <i>Computers and Structures</i> , 2009, 87, 1567-1579.	2.4	120
47	Internal stress storage in shape memory polymer nanocomposites. <i>Applied Physics Letters</i> , 2004, 85, 290-292.	1.5	119
48	Adhesion mechanics of graphene membranes. <i>Solid State Communications</i> , 2012, 152, 1359-1364.	0.9	119
49	Fracture initiation at sharp notches under mode I, mode II, and mild mixed mode loading. <i>International Journal of Fracture</i> , 1997, 84, 367-381.	1.1	116
50	4D rods: 3D structures via programmable 1D composite rods. <i>Materials and Design</i> , 2018, 137, 256-265.	3.3	110
51	Interfacial welding of dynamic covalent network polymers. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 94, 1-17.	2.3	107
52	Thermomechanical recovery couplings of shape memory polymers in flexure. <i>Smart Materials and Structures</i> , 2003, 12, 947-954.	1.8	106
53	Design of bimorph piezo-composite actuators with functionally graded microstructure. <i>Sensors and Actuators A: Physical</i> , 2003, 107, 248-260.	2.0	104
54	The mechanical robustness of atomic-layer- and molecular-layer-deposited coatings on polymer substrates. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	100

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55	Constitutive Modeling of Shape Memory Effects in Semicrystalline Polymers With Stretch Induced Crystallization. Journal of Engineering Materials and Technology, Transactions of the ASME, 2010, 132, .	0.8	96
56	The effective thermal conductivity of composites with coated reinforcement and the application to imperfect interfaces. Journal of Applied Physics, 1993, 73, 1711-1722.	1.1	95
57	Modeling the mechanics of covalently adaptable polymer networks with temperature-dependent bond exchange reactions. Soft Matter, 2013, 9, 4083.	1.2	93
58	Adhesion, Stiffness, and Instability in Atomically Thin MoS ₂ Bubbles. Nano Letters, 2017, 17, 5329-5334.	4.5	92
59	Design of phononic materials/structures for surface wave devices using topology optimization. Structural and Multidisciplinary Optimization, 2007, 34, 111-121.	1.7	91
60	Thermomechanical behavior of shape memory elastomeric composites. Journal of the Mechanics and Physics of Solids, 2012, 60, 67-83.	2.3	91
61	Mechanics of Adhered, Pressurized Graphene Blisters. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	87
62	Machine-learning based design of active composite structures for 4D printing. Smart Materials and Structures, 2019, 28, 065005.	1.8	87
63	Photomechanics of mono- and polydomain liquid crystal elastomer films. Journal of Applied Physics, 2007, 102, .	1.1	86
64	Elastic moduli, strength, and fracture initiation at sharp notches in etched single crystal silicon microstructures. Journal of Applied Physics, 1999, 85, 3519-3534.	1.1	85
65	Thermo-mechanical properties of alumina films created using the atomic layer deposition technique. Sensors and Actuators A: Physical, 2010, 164, 58-67.	2.0	83
66	Stress intensities at interface corners in anisotropic bimaterials. Engineering Fracture Mechanics, 1999, 62, 555-576.	2.0	80
67	Isogeometric collocation methods for Cosserat rods and rod structures. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 100-122.	3.4	75
68	Level Set Topology Optimization of Printed Active Composites. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	1.7	74
69	Poisson's ratio of porous and microcracked solids: Theory and application to oxide superconductors. Journal of Materials Research, 1995, 10, 2715-2722.	1.2	71
70	Processing and characterization of silicon carbon-nitride ceramics: application of electrical properties towards MEMS thermal actuators. Sensors and Actuators A: Physical, 2003, 103, 171-181.	2.0	70
71	Graphene Blisters with Switchable Shapes Controlled by Pressure and Adhesion. Nano Letters, 2013, 13, 6216-6221.	4.5	70
72	Mechanics of soft active materials with phase evolution. International Journal of Plasticity, 2010, 26, 603-616.	4.1	69

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73	van der Waals adhesion of graphene membranes. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	69
74	Mechanisms of triple-shape polymeric composites due to dual thermal transitions. <i>Soft Matter</i> , 2013, 9, 2212.	1.2	69
75	Application of microforging to SiCN MEMS fabrication. <i>Sensors and Actuators A: Physical</i> , 2002, 95, 143-151.	2.0	66
76	Switchable phononic wave filtering, guiding, harvesting, and actuating in polarization-patterned piezoelectric solids. <i>Applied Physics Letters</i> , 2010, 96, .	1.5	66
77	A design optimization methodology for Li+ batteries. <i>Journal of Power Sources</i> , 2014, 253, 239-250.	4.0	64
78	Effects of grain shape anisotropy, porosity, and microcracks on the elastic and dielectric constants of polycrystalline piezoelectric ceramics. <i>Journal of Applied Physics</i> , 1995, 78, 1533-1541.	1.1	63
79	Deformation and structural stability of layered plate microstructures subjected to thermal loading. <i>Journal of Microelectromechanical Systems</i> , 2002, 11, 372-384.	1.7	63
80	Digital manufacture of shape changing components. <i>Extreme Mechanics Letters</i> , 2015, 4, 9-17.	2.0	62
81	Microstructure Study of Electrochemically Driven Li _x Si. <i>Advanced Energy Materials</i> , 2011, 1, 1199-1204.	10.2	61
82	Large-scale parallel topology optimization using a dual-primal substructuring solver. <i>Structural and Multidisciplinary Optimization</i> , 2008, 36, 329-345.	1.7	60
83	Thermomechanical behavior of a two-way shape memory composite actuator. <i>Smart Materials and Structures</i> , 2013, 22, 055009.	1.8	60
84	Application of bimaterial interface corner failure mechanics to silicon/glass anodic bonds. <i>Journal of the Mechanics and Physics of Solids</i> , 2002, 50, 405-433.	2.3	59
85	Rough surface adhesion in the presence of capillary condensation. <i>Applied Physics Letters</i> , 2007, 90, 163104.	1.5	59
86	Variational bounds for the effective moduli of heterogeneous piezoelectric solids. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001, 81, 903-926.	0.8	58
87	Elastic constants of textured short-fiber composites. <i>Journal of the Mechanics and Physics of Solids</i> , 1996, 44, 1509-1541.	2.3	57
88	Fracture initiation at three-dimensional bimaterial interface corners. <i>Journal of the Mechanics and Physics of Solids</i> , 2001, 49, 609-634.	2.3	57
89	Micro and Macro Deformation of Single Crystal NiTi. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2002, 124, 238-245.	0.8	57
90	Large Arrays and Properties of 3-Terminal Graphene Nanoelectromechanical Switches. <i>Advanced Materials</i> , 2014, 26, 1571-1576.	11.1	55

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91	Thermal cure effects on electromechanical properties of conductive wires by direct ink write for 4D printing and soft machines. <i>Smart Materials and Structures</i> , 2017, 26, 045008.	1.8	55
92	The status, barriers, challenges, and future in design for 4D printing. <i>Materials and Design</i> , 2021, 212, 110193.	3.3	55
93	Multiscale design optimization of lithium ion batteries using adjoint sensitivity analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2012, 92, 475-494.	1.5	52
94	On approximating guided waves in plates with thin anisotropic coatings by means of effective boundary conditions. <i>Journal of the Acoustical Society of America</i> , 2000, 108, 924.	0.5	50
95	A finite deformation thermomechanical constitutive model for triple shape polymeric composites based on dual thermal transitions. <i>International Journal of Solids and Structures</i> , 2014, 51, 2777-2790.	1.3	50
96	Effects of electrode particle morphology on stress generation in silicon during lithium insertion. <i>Journal of Power Sources</i> , 2011, 196, 9672-9681.	4.0	49
97	A photoviscoplastic model for photoactivated covalent adaptive networks. <i>Journal of the Mechanics and Physics of Solids</i> , 2014, 70, 84-103.	2.3	48
98	3D printed active origami with complicated folding patterns. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , 2017, 4, 281-289.	2.7	48
99	Initiation toughness of silicon/glass anodic bonds. <i>Acta Materialia</i> , 2000, 48, 735-744.	3.8	46
100	Photomechanics of blanket and patterned liquid crystal elastomer films. <i>Mechanics of Materials</i> , 2009, 41, 1083-1089.	1.7	46
101	Isogeometric shape optimization of nonlinear, curved 3D beams and beam structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 345, 26-51.	3.4	46
102	Tetragonal Phase Transformation in Gold Nanowires. <i>Journal of Engineering Materials and Technology</i> , <i>Transactions of the ASME</i> , 2005, 127, 417-422.	0.8	44
103	A Microstructural Hyperelastic Model of Pulmonary Arteries Under Normo- and Hypertensive Conditions. <i>Annals of Biomedical Engineering</i> , 2005, 33, 1042-1052.	1.3	43
104	Capillary adhesion model for contacting micromachined surfaces. <i>Scripta Materialia</i> , 2008, 59, 916-920.	2.6	43
105	Piezoelectric constants for ZnO calculated using classical polarizable core-shell potentials. <i>Nanotechnology</i> , 2010, 21, 445707.	1.3	43
106	Thermodynamics and mechanics of photochemically reacting polymers. <i>Journal of the Mechanics and Physics of Solids</i> , 2013, 61, 2212-2239.	2.3	42
107	Thermomechanical properties of aluminum alkoxide (alucone) films created using molecular layer deposition. <i>Acta Materialia</i> , 2009, 57, 5083-5092.	3.8	41
108	Observation of Pull-In Instability in Graphene Membranes under Interfacial Forces. <i>Nano Letters</i> , 2013, 13, 2309-2313.	4.5	40

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109	Combined Level-Set-XFEM-Density Topology Optimization of Four-Dimensional Printed Structures Undergoing Large Deformation. Journal of Mechanical Design, Transactions of the ASME, 2019, 141, .	1.7	40
110	Shape forming by thermal expansion mismatch and shape memory locking in polymer/elastomer laminates. Smart Materials and Structures, 2017, 26, 105027.	1.8	39
111	Optimal design and manufacture of variable stiffness laminated continuous fiber reinforced composites. Scientific Reports, 2020, 10, 16507.	1.6	39
112	Photo-induced deformation of active polymer films: Single spot irradiation. International Journal of Solids and Structures, 2011, 48, 2089-2101.	1.3	38
113	The effect of nanoparticles on rough surface adhesion. Journal of Applied Physics, 2006, 99, 104304.	1.1	36
114	Viscoelectroelastic behavior of heterogeneous piezoelectric solids. Journal of Applied Physics, 2001, 89, 2893-2903.	1.1	33
115	Fracture initiation at sharp notches in single crystal silicon. Journal of Applied Physics, 1998, 83, 3574-3582.	1.1	32
116	Thermoelectroelastic moduli of textured piezoelectric polycrystals: Exact solutions and bounds for film textures. Journal of Applied Physics, 1999, 86, 4626-4634.	1.1	32
117	Geometric and material nonlinearity during the deformation of micron-scale thin-film bilayers subject to thermal loading. Journal of the Mechanics and Physics of Solids, 2004, 52, 2101-2126.	2.3	32
118	Creep of thin film Au on bimaterial Au/Si microcantilevers. Acta Materialia, 2004, 52, 2133-2146.	3.8	32
119	Recycling of vitrimer blends with tunable thermomechanical properties. RSC Advances, 2019, 9, 5431-5437.	1.7	31
120	On ultrasonic guided waves in a thin anisotropic layer lying between two isotropic layers. Journal of the Acoustical Society of America, 2000, 108, 2005-2011.	0.5	30
121	An isogeometric collocation method for frictionless contact of Cosserat rods. Computer Methods in Applied Mechanics and Engineering, 2017, 321, 361-382.	3.4	30
122	Simultaneous Digital Design and Additive Manufacture of Structures and Materials. Scientific Reports, 2018, 8, 15560.	1.6	29
123	Fluorescent tags to visualize defects in Al ₂ O ₃ thin films grown using atomic layer deposition. Thin Solid Films, 2009, 517, 6794-6797.	0.8	28
124	Thermomechanics of printed anisotropic shape memory elastomeric composites. International Journal of Solids and Structures, 2016, 102-103, 186-199.	1.3	28
125	Optimal Design and Manufacture of Active Rod Structures with Spatially Variable Materials. 3D Printing and Additive Manufacturing, 2016, 3, 204-215.	1.4	27
126	3D printing of continuous fiber-reinforced thermoset composites. Additive Manufacturing, 2021, 40, 101921.	1.7	27

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127	A Computational Model for Surface Welding in Covalent Adaptable Networks Using Finite-Element Analysis. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016, 83, .	1.1	26
128	Thermal cycling response of layered gold/polysilicon MEMS structures. <i>Mechanics of Materials</i> , 2004, 36, 45-55.	1.7	25
129	Nonlinear Multi-Scale Modelling, Simulation and Validation of 3D Knitted Textiles. <i>Applied Composite Materials</i> , 2018, 25, 797-810.	1.3	25
130	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , 2020, 16, 1668-1677.	1.2	24
131	Analysis of Piezoelectric Energy Harvesting Systems with Non-linear Circuits Using the Harmonic Balance Method. <i>Journal of Intelligent Material Systems and Structures</i> , 2010, 21, 1383-1396.	1.4	23
132	Influences of processing conditions on mechanical properties of recycled epoxy-epoxyanhydride vitrimers. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49246.	1.3	23
133	Elastic properties of a unidirectional SiCf/Ti composite: Acoustic-resonance measurements and micromechanics predictions. <i>Journal of Applied Physics</i> , 2000, 87, 2769-2774.	1.1	21
134	Design of patterned multilayer films with eigenstrains by topology optimization. <i>International Journal of Solids and Structures</i> , 2006, 43, 1832-1853.	1.3	20
135	Isogeometric collocation for nonlinear dynamic analysis of Cosserat rods with frictional contact. <i>Nonlinear Dynamics</i> , 2018, 91, 1213-1227.	2.7	20
136	Title is missing!. <i>International Journal of Fracture</i> , 2001, 110, 101-121.	1.1	19
137	Predicting corner crack fatigue propagation from cold worked holes. <i>Engineering Fracture Mechanics</i> , 2009, 76, 2074-2090.	2.0	19
138	Chemomechanics of dual-stage reprocessable thermosets. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 126, 168-186.	2.3	19
139	Application of A Microstructural Constitutive Model of the Pulmonary Artery to Patient-Specific Studies: Validation and Effect of Orthotropy. <i>Journal of Biomechanical Engineering</i> , 2007, 129, 193-201.	0.6	18
140	Elastic Memory Composite Microbuckling Mechanics: Closed-Form Model with Empirical Correlation. , 2007, , .		18
141	Suppression of inelastic deformation of nanocoated thin film microstructures. <i>Journal of Applied Physics</i> , 2004, 95, 8216-8225.	1.1	17
142	A Theoretical Framework for the Analysis of Thermoelastoelectric Heterogeneous Media with Applications. <i>Journal of Intelligent Material Systems and Structures</i> , 1995, 6, 255-265.	1.4	16
143	Variational bounds for the effective moduli of heterogeneous piezoelectric solids. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001, 81, 903-926.	0.8	16
144	Optimal synthesis of tunable elastic wave-guides. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008, 198, 292-301.	3.4	16

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145	Light-induced stress relief to improve flaw tolerance in network polymers. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	16
146	Fully isogeometric modeling and analysis of nonlinear 3D beams with spatially varying geometric and material parameters. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 342, 95-115.	3.4	16
147	Multiscale optimal design and fabrication of laminated composites. <i>Composite Structures</i> , 2019, 228, 111366.	3.1	16
148	Nanostructured silicon electrodes for solid-state 3-d rechargeable lithium batteries. <i>Sensors and Actuators A: Physical</i> , 2011, 167, 139-145.	2.0	15
149	Estimation of the orientation distribution of short-fiber composites using ultrasonic velocities. <i>Journal of the Acoustical Society of America</i> , 1996, 99, 283-291.	0.5	13
150	Thermomechanical response of bare and Al ₂ O ₃ -nanocoated Au/Si bilayer beams for microelectromechanical systems. <i>Journal of Materials Research</i> , 2003, 18, 1575-1587.	1.2	13
151	Micromechanically-based acoustic characterization of the fiber orientation distribution function of morphologically textured short-fiber composites: prediction of thermomechanical and physical properties. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2000, 285, 56-61.	2.6	11
152	Acoustic-phonon dispersion in nanowires. <i>Journal of Applied Physics</i> , 2005, 97, 074313.	1.1	11
153	Channel cracks in atomic-layer and molecular-layer deposited multilayer thin film coatings. <i>Journal of Applied Physics</i> , 2014, 115, .	1.1	11
154	Thermal expansion of morphologically textured short-fiber composites. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1999, 30, 203-212.	1.1	10
155	Adhesion mechanics of graphene on textured substrates. <i>International Journal of Solids and Structures</i> , 2016, 97-98, 56-74.	1.3	10
156	Optimal Soft Composites for Under-Actuated Soft Robots. <i>Advanced Materials Technologies</i> , 2021, 6, 2100361.	3.0	10
157	Viscoelastic damping of particle and fiber reinforced composite materials. <i>Journal of the Acoustical Society of America</i> , 1995, 98, 3360-3374.	0.5	9
158	Growth of Silicon Carbide Nanoparticles Using Tetraethylorthosilicate for Microelectromechanical Systems. <i>Electrochemical and Solid-State Letters</i> , 2007, 10, H27.	2.2	9
159	Thermal expansion of textured polycrystalline aggregates. <i>Journal of Applied Physics</i> , 1995, 78, 1583-1588.	1.1	7
160	<title>Thermally induced change in deformation of multimorph MEMS structures</title>. , 2001, , .		7
161	<title>Vertical electrostatic actuator with extended digital range via tailored topology</title>. , 2002, 4700, 147.		6
162	Design of interfaces to promote the bonding strength between dissimilar materials. <i>Journal of Manufacturing Processes</i> , 2022, 76, 786-795.	2.8	6

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163	One-Dimensional Composite Micromechanics. International Journal of Mechanical Engineering Education, 1998, 26, 38-50.	0.6	4
164	Design of Nanostructured Phononic Materials. , 2005, , .		4
165	Thermal cycling creep of short fiber metal matrix composites. Scripta Metallurgica Et Materialia, 1992, 27, 1349-1354.	1.0	3
166	Experimental Study of the Fracture Toughness of a Ceramic/Ceramic-Matrix Composite Sandwich Structure. Journal of the American Ceramic Society, 1995, 78, 1633-1639.	1.9	3
167	Comments on a recent infinitesimal-deformation approach to martensite crystallography. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2002, 33, 203-203.	1.1	3
168	Modeling of thermal cycling creep damage of short fiber metal matrix composites. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1994, 176, 349-355.	2.6	2
169	Thermomechanics of the Shape Memory Effect in Polymers. Materials Research Society Symposia Proceedings, 2004, 855, 135.	0.1	2
170	Thermomechanical indentation of shape memory polymers. , 2007, , .		2
171	Adhesion of arbitrary-shaped thin-film microstructures. Microelectronics Reliability, 2007, 47, 2014-2024.	0.9	2
172	Optimal Design of Piezoelectric Energy Harvesters Based on Multilayer Plates and Shells. , 2008, , .		2
173	Photomechanics of Light-Activated Shape Memory Polymers. , 2008, , .		2
174	Patterned bilayer plate microstructures subjected to thermal loading: Deformation and stresses. International Journal of Solids and Structures, 2009, 46, 125-134.	1.3	2
175	Van der Waals and Capillary Adhesion of Polycrystalline Silicon Micromachined Surfaces. Nanoscience and Technology, 2012, , 363-393.	1.5	2
176	Van der Waals and Capillary Adhesion of Microelectromechanical Systems. , 2006, , .		2
177	Elastic Properties of Particle-Occlusion Composites: Measurements and Modeling. Journal of Engineering Materials and Technology, Transactions of the ASME, 1995, 117, 402-407.	0.8	1
178	Suppression of Stress Relaxation in MEMS Multilayer Film Microstructures by Use of ALD Nanocoatings. , 2002, , 179.		1
179	Die Cracking at Solder (In60-Pb40) Joints on Brittle (GaAs) Chips: Fracture Correlation Using Critical Bimaterial Interface Corner Stress Intensities. Journal of Electronic Packaging, Transactions of the ASME, 2003, 125, 369-377.	1.2	1
180	Constitutive model for photo-mechanical behaviors of photo-induced shape memory polymers. Proceedings of SPIE, 2009, , .	0.8	1

#	ARTICLE	IF	CITATIONS
181	Acoustic Characterization of Morphologically Textured Short-Fiber Composites: Estimation of Physical and Mechanical Properties. , 1998, , 359-364.		1
182	Thermomechanical Behavior and Modeling Approaches. , 2010, , 65-90.		1
183	Electroelastic moduli of piezoelectric polycrystals with bulk and film textures. , 2001, 4333, 83.		0
184	Guided Acoustic Phonon Modes in Layered Anisotropic Nanowires. , 2003, , 83.		0
185	Stability and Structural Transition of Gold Nanowires under Their Own Surface Stresses. Materials Research Society Symposia Proceedings, 2004, 854, U5.7.1.	0.1	0
186	12.3: Defect Visualization of Atomic Layer Deposition Enabled Polymer Barriers Using Fluorescent Tags. Digest of Technical Papers SID International Symposium, 2008, 39, 143.	0.1	0
187	Thermo- and Electromechanics of Thin-Film Microstructures. , 2004, , 1039-1081.		0
188	Thermo- and Electromechanics of Thin-Film Microstructures. , 2004, , 1039-1081.		0
189	Thermo- and Electromechanical Behavior of Thin-Film Micro and Nanostructures. , 2007, , 1703-1748.		0