L. Catherine Brinson

List of Publications by Year
in descending order

169 papers	17,411 citations	20759 60 h-index	14156 128 g-index
174 all docs	174 docs citations	174 times ranked	17122 citing authors

#	Article	IF	Citations
1	Functionalized graphene sheets for polymer nanocomposites. Nature Nanotechnology, 2008, 3, 327-331.	15.6	3,206
2	Amino-Functionalized Carbon Nanotubes for Binding to Polymers and Biological Systems. Chemistry of Materials, 2005, 17, 1290-1295.	3.2	934
3	Electrically Conductive â€œAlkylatedâ€•Graphene Paper via Chemical Reduction of Amineâ€Functionalized Graphene Oxide Paper. Advanced Materials, 2010, 22, 892-896.	11.1	568
4	Highâ€Nanofillerâ€Content Graphene Oxideâ€“Polymer Nanocomposites via Vacuumâ€Assisted Selfâ€Assembly. Advanced Functional Materials, 2010, 20, 3322-3329.	7.8	489
5	Fiber waviness in nanotube-reinforced polymer compositesâ€”I: Modulus predictions using effective nanotube properties. Composites Science and Technology, 2003, 63, 1689-1703.	3.8	438
6	Tuning the Mechanical Properties of Graphene Oxide Paper and Its Associated Polymer Nanocomposites by Controlling Cooperative Intersheet Hydrogen Bonding. ACS Nano, 2012, 6, 2008-2019.	7.3	409
7	Shape memory alloys, Part I: General properties and modeling of single crystals. Mechanics of Materials, 2006, 38, 391-429.	1.7	404
8	Polymer Engineering Science and Viscoelasticity. , 2008, , .		361
9	Reinforcement mechanisms in MWCNT-filled polycarbonate. Composites Science and Technology, 2006, 66, 1162-1173.	3.8	307
10	Shape memory alloys, Part II: Modeling of polycrystals. Mechanics of Materials, 2006, 38, 430-462.	1.7	303
11	Bioâ€Inspired Borate Crossâ€Linking in Ultraâ€Stiff Graphene Oxide Thin Films. Advanced Materials, 2011, 23, 3842-3846.	11.1	293
12	Effects of nanotube waviness on the modulus of nanotube-reinforced polymers. Applied Physics Letters, 2002, 80, 4647-4649.	1.5	282
13	Polymerâˆ’Graphite Nanocomposites:â€‰ Effective Dispersion and Major Property Enhancement via Solid-State Shear Pulverization. Macromolecules, 2008, 41, 1905-1908.	2.2	273
14	Functionalized SWNT/polymer nanocomposites for dramatic property improvement. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2269-2279.	2.4	255
15	Simulation of interphase percolation and gradients in polymer nanocomposites. Composites Science and Technology, 2009, 69, 491-499.	3.8	255
16	Computational microstructure characterization and reconstruction: Review of the state-of-the-art techniques. Progress in Materials Science, 2018, 95, 1-41.	16.0	252
17	Direct Observation of Polymer Sheathing in Carbon Nanotubeâˆ’Polycarbonate Composites. Nano Letters, 2003, 3, 1593-1597.	4.5	251
18	Finite element analysis of the behavior of shape memory alloys and their applications. International Journal of Solids and Structures, 1993, 30, 3261-3280.	1.3	247

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19	A three-dimensional phenomenological model for martensite reorientation in shape memory alloys. Journal of the Mechanics and Physics of Solids, 2007, 55, 2491-2511.	2.3	229
20	Polymer nanocomposites: A small part of the story. Jom, 2007, 59, 53-60.	0.9	229
21	Graphitic nanofillers in PMMA nanocompositesâ€"An investigation of particle size and dispersion and their influence on nanocomposite properties. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 2097-2112.	2.4	228
22	Effect of Cross-Link Density on Interphase Creation in Polymer Nanocomposites. Macromolecules, 2008, 41, 6752-6756.	2.2	219
23	Fiber waviness in nanotube-reinforced polymer compositesâ€"II: modeling via numerical approximation of the dilute strain concentration tensor. Composites Science and Technology, 2003, 63, 1705-1722.	3.8	210
24	Reinforcing efficiency of nanoparticles: A simple comparison for polymer nanocomposites. Composites Science and Technology, 2008, 68, 1502-1512.	3.8	202
25	A bioactive titanium foam scaffold for bone repair. Acta Biomaterialia, 2005, 1, 523-533.	4.1	175
26	Evolution of Order During Vacuum-Assisted Self-Assembly of Graphene Oxide Paper and Associated Polymer Nanocomposites. ACS Nano, 2011, 5, 6601-6609.	7.3	172
27	Three-dimensional constitutive model for shape memory alloys based on microplane model. Journal of the Mechanics and Physics of Solids, 2002, 50, 1051-1077.	2.3	157
28	Effects of dispersion and interfacial modification on the macroscale properties of TiO2 polymerâ€"matrix nanocomposites. Composites Science and Technology, 2009, 69, 1880-1886.	3.8	156
29	A Multivariant model for single crystal shape memory alloy behavior. Journal of the Mechanics and Physics of Solids, 1998, 46, 1379-1409.	2.3	154
30	Viscoelastic interphases in polymerâ€"matrix composites: theoretical models and finite-element analysis. Composites Science and Technology, 2001, 61, 731-748.	3.8	151
31	Phase diagram based description of the hysteresis behavior of shape memory alloys. Acta Materialia, 1998, 46, 3649-3665.	3.8	143
32	Microstructural Materials Design Via Deep Adversarial Learning Methodology. Journal of Mechanical Design, Transactions of the ASME, 2018, 140, .	1.7	142
33	Effects of physical aging on long term creep of polymers and polymer matrix composites. International Journal of Solids and Structures, 1995, 32, 827-846.	1.3	138
34	Effect of Interfacial Energetics on Dispersion and Glass Transition Temperature in Polymer Nanocomposites. Macromolecules, 2013, 46, 2833-2841.	2.2	135
35	Mechanical Properties of Thin Glassy Polymer Films Filled with Spherical Polymer-Grafted Nanoparticles. Nano Letters, 2012, 12, 3909-3914.	4.5	131
36	Comparison of micromechanics methods for effective properties of multiphase viscoelastic composites. Composite Structures, 1998, 41, 353-367.	3.1	128

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37	Additive-free hydrogelation of graphene oxide by ultrasonication. Carbon, 2012, 50, 3399-3406.	5.4	125
38	Mechanics considerations for microporous titanium as an orthopedic implant material. Journal of Biomedical Materials Research Part B, 2004, 69A, 601-610.	3.0	123
39	New directions in mechanics. Mechanics of Materials, 2005, 37, 231-259.	1.7	118
40	Temperature-induced phase transformation in a shape memory alloy: Phase diagram based kinetics approach. Journal of the Mechanics and Physics of Solids, 1997, 45, 949-988.	2.3	115
41	Polymer Engineering Science and Viscoelasticity. , 2015, , .		114
42	Effect of particle agglomeration and interphase on the glass transition temperature of polymer nanocomposites. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 740-748.	2.4	113
43	A Transfer Learning Approach for Microstructure Reconstruction and Structure-property Predictions. Scientific Reports, 2018, 8, 13461.	1.6	113
44	A multivariant micromechanical model for SMAs Part 1. Crystallographic issues for single crystal model. International Journal of Plasticity, 2000, 16, 1345-1369.	4.1	110
45	Numerical modeling of pore size and distribution in foamed titanium. Mechanics of Materials, 2006, 38, 933-944.	1.7	107
46	Micromechanical quantification of elastic, twinning, and slip strain partitioning exhibited by polycrystalline, monoclinic nickelâ€“titanium during large uniaxial deformations measured via in-situ neutron diffraction. Journal of the Mechanics and Physics of Solids, 2013, 61, 2302-2330.	2.3	105
47	Sacrificial Bonds in Stacked-Cup Carbon Nanofibers: Biomimetic Toughening Mechanisms for Composite Systems. ACS Nano, 2010, 4, 4256-4264.	7.3	97
48	Characterization of Local Elastic Modulus in Confined Polymer Films via AFM Indentation. Macromolecular Rapid Communications, 2015, 36, 391-397.	2.0	97
49	Physical aging in polymers and polymer composites: An analysis and method for time-aging time superposition. Polymer Engineering and Science, 1997, 37, 31-44.	1.5	92
50	Finite element modeling of porous titanium. International Journal of Solids and Structures, 2007, 44, 320-335.	1.3	90
51	Multiresolution analysis for material design. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 5053-5076.	3.4	85
52	Queen Elizabeth's image repair discourse: Insensitive royal or compassionate queen?. Public Relations Review, 1999, 25, 145-156.	1.9	82
53	A multivariant micromechanical model for SMAs Part 2. Polycrystal model. International Journal of Plasticity, 2000, 16, 1371-1390.	4.1	82
54	Effect of an interphase region on debonding of a CNT reinforced polymer composite. Composites Science and Technology, 2010, 70, 2207-2215.	3.8	82

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55	Finite element simulation of a self-healing shape memory alloy composite. Mechanics of Materials, 2006, 38, 525-537.	1.7	81
56	Effects of Pore Morphology and Bone Ingrowth on Mechanical Properties of Microporous Titanium as an Orthopaedic Implant Material. Materials Transactions, 2004, 45, 1124-1131.	0.4	79
57	Computational modeling of porous shape memory alloys. International Journal of Solids and Structures, 2008, 45, 5613-5626.	1.3	74
58	A Hybrid Numerical-Analytical Method for Modeling the Viscoelastic Properties of Polymer Nanocomposites. Journal of Applied Mechanics, Transactions ASME, 2006, 73, 758-768.	1.1	71
59	Multi-scale reinforcement of CFRPs using carbon nanofibers. Composites Science and Technology, 2011, 71, 79-86.	3.8	65
60	Mimicking mussel adhesion to improve interfacial properties in composites. Composites Science and Technology, 2008, 68, 2042-2048.	3.8	64
61	A new model to simulate the elastic properties of mineralized collagen fibril. Biomechanics and Modeling in Mechanobiology, 2011, 10, 147-160.	1.4	64
62	Stalking the Materials Genome: A Dataâ€Ðriven Approach to the Virtual Design of Nanostructured Polymers. Advanced Functional Materials, 2013, 23, 5746-5752.	7.8	63
63	Interfacial and Substrate Effects on Local Elastic Properties of Polymers Using Coupled Experiments and Modeling of Nanoindentation. Advanced Engineering Materials, 2011, 13, 400-404.	1.6	61
64	Chronic aspartame affects T-maze performance, brain cholinergic receptors and Na+,K+-ATPase in rats. Pharmacology Biochemistry and Behavior, 2004, 78, 121-127.	1.3	59
65	Metalized polyamide heterostructure as a moisture-responsive actuator for multimodal adaptive personal heat management. Science Advances, 2021, 7, eabj7906.	4.7	59
66	Explicit finite element implementation of an improved three dimensional constitutive model for shape memory alloys. Computer Methods in Applied Mechanics and Engineering, 2013, 257, 17-35.	3.4	56
67	Youngâ€™s modulus evolution and texture-based elasticâ€“inelastic strain partitioning during large uniaxial deformations of monoclinic nickelâ€“titanium. Acta Materialia, 2013, 61, 1944-1956.	3.8	54
68	Finite Element Analysis of Multiphase Viscoelastic Solids. Journal of Applied Mechanics, Transactions ASME, 1992, 59, 730-737.	1.1	52
69	Curved-fiber pull-out model for nanocomposites. Part 1: Bonded stage formulation. Mechanics of Materials, 2009, 41, 279-292.	1.7	50
70	Multi-modal magnetic resonance elastography for noninvasive assessment of ovarian tissue rigidity in vivo. Acta Biomaterialia, 2015, 13, 295-300.	4.1	49
71	Perspective: NanoMine: A material genome approach for polymer nanocomposites analysis and design. APL Materials, 2016, 4, .	2.2	49
72	Bone-Shaped Nanomaterials for Nanocomposite Applications. Nano Letters, 2003, 3, 1135-1139.	4.5	48

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73	Nanoscale structure and local mechanical properties of fiber-reinforced composites containing MWCNT-grafted hybrid glass fibers. Composites Science and Technology, 2012, 72, 1705-1710.	3.8	48
74	Toward the development of a quantitative tool for predicting dispersion of nanocomposites under non-equilibrium processing conditions. Journal of Materials Science, 2016, 51, 4238-4249.	1.7	47
75	Physical Aging of Single Wall Carbon Nanotube Polymer Nanocomposites: Effect of Functionalization of the Nanotube on the Enthalpy Relaxation. Macromolecules, 2010, 43, 4247-4252.	2.2	46
76	Titanium with aligned, elongated pores for orthopedic tissue engineering applications. Journal of Biomedical Materials Research - Part A, 2008, 84A, 402-412.	2.1	44
77	Identifying interphase properties in polymer nanocomposites using adaptive optimization. Composites Science and Technology, 2018, 162, 146-155.	3.8	43
78	Preparation and characterization of multiwalled carbon nanotube dispersions in polypropylene: Melt mixing versus solidâ€state shear pulverization. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 1426-1436.	2.4	41
79	Curved-fiber pull-out model for nanocomposites. Part 2: Interfacial debonding and sliding. Mechanics of Materials, 2009, 41, 293-307.	1.7	41
80	Utilizing real and statistically reconstructed microstructures for the viscoelastic modeling of polymer nanocomposites. Composites Science and Technology, 2012, 72, 1725-1732.	3.8	40
81	Influences of granular constraints and surface effects on the heterogeneity of elastic, superelastic, and plastic responses of polycrystalline shape memory alloys. Journal of the Mechanics and Physics of Solids, 2017, 102, 46-66.	2.3	38
82	Phase diagram kinetics for shape memory alloys: a robust finite element implementation. Smart Materials and Structures, 2007, 16, 2102-2115.	1.8	37
83	In situ, 3D characterization of the deformation mechanics of a superelastic NiTi shape memory alloy single crystal under multiscale constraint. Acta Materialia, 2018, 144, 748-757.	3.8	37
84	A numerical investigation of the effect of boundary conditions and representative volume element size for porous titanium. Journal of Mechanics of Materials and Structures, 2006, 1, 1179-1204.	0.4	36
85	Local and global strains and strain ratios in shape memory alloys using digital imagecorrelation. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 568, 134-142.	2.6	36
86	Best practices and recommendations for accurate nanomechanical characterization of heterogeneous polymer systems with atomic force microscopy. Progress in Polymer Science, 2021, 119, 101420.	11.8	36
87	Thermorheologically complex behavior of multi-phase viscoelastic materials. Journal of the Mechanics and Physics of Solids, 1991, 39, 859-880.	2.3	35
88	A Simplified Multivariant SMA Model Based on Invariant Plane Nature of Martensitic Transformation. Journal of Intelligent Material Systems and Structures, 2002, 13, 795-810.	1.4	35
89	Evolution of load transfer between hydroxyapatite and collagen during creep deformation of bone. Acta Biomaterialia, 2012, 8, 253-261.	4.1	35
90	NanoMine schema: An extensible data representation for polymer nanocomposites. APL Materials, 2018, 6, .	2.2	35

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91	Exfoliation and Reassembly of Cobalt Oxide Nanosheets into a Reversible Lithiumâ€ion Battery Cathode. Small, 2012, 8, 1110-1116.	5.2	34
92	Measurement of the critical aspect ratio and interfacial shear strength in MWNT/polymer composites. Composites Science and Technology, 2010, 70, 599-605.	3.8	33
93	In Situ Neutron Diffraction Studies of Large Monotonic Deformations of Superelastic Nitinol. Shape Memory and Superelasticity, 2015, 1, 252-267.	1.1	33
94	Mining structureâ€“property relationships in polymer nanocomposites using data driven finite element analysis and multi-task convolutional neural networks. Molecular Systems Design and Engineering, 2020, 5, 962-975.	1.7	33
95	Effect of microstructural configurations on the mechanical responses of porous titanium: A numerical design of experiment analysis for orthopedic applications. Mechanics of Materials, 2008, 40, 708-720.	1.7	31
96	Mechanical response of linear viscoelastic composite laminates incorporating non-isothermal physical aging effects. Composites Science and Technology, 1999, 59, 1411-1427.	3.8	30
97	A numerical investigation of porous titanium as orthopedic implant material. Mechanics of Materials, 2011, 43, 420-430.	1.7	30
98	Stiffness Gradients in Glassy Polymer Model Nanocomposites: Comparisons of Quantitative Characterization by Fluorescence Spectroscopy and Atomic Force Microscopy. Macromolecules, 2017, 50, 5447-5458.	2.2	30
99	The variant selection criteria in single-crystal CuAlNi shape memory alloys. Smart Materials and Structures, 2000, 9, 571-581.	1.8	28
100	Bridged crack models for the toughness of composites reinforced with curved nanotubes. Journal of the Mechanics and Physics of Solids, 2011, 59, 1938-1952.	2.3	28
101	Determination of Mechanical Properties of Polymer Interphase Using Combined Atomic Force Microscope (AFM) Experiments and Finite Element Simulations. Macromolecules, 2018, 51, 8229-8240.	2.2	28
102	A Deep Adversarial Learning Methodology for Designing Microstructural Material Systems. , 2018, , .		27
103	Simulations of tensile failure in glassy polymers: effect of cross-link density. Modelling and Simulation in Materials Science and Engineering, 2010, 18, 055005.	0.8	26
104	Microstructure reconstruction and structural equation modeling for computational design of nanodielectrics. Integrating Materials and Manufacturing Innovation, 2015, 4, 209-234.	1.2	26
105	Microstructure and mechanical properties of as-cast quasibinary NiTiâ€“Nb eutectic alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 627, 360-368.	2.6	26
106	Understanding competing mechanisms for glass transition changes in filled elastomers. Composites Science and Technology, 2016, 127, 88-94.	3.8	25
107	Neutron diffraction studies and multivariant simulations of shape memory alloys: Empirical texture developmentâ€“mechanical response relations of martensitic nickelâ€“titanium. Acta Materialia, 2011, 59, 2841-2849.	3.8	24
108	Computational analysis of particle reinforced viscoelastic polymer nanocomposites â€“ statistical study of representative volume element. Journal of the Mechanics and Physics of Solids, 2018, 114, 55-74.	2.3	24

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109	Polymer Nanocomposite Data: Curation, Frameworks, Access, and Potential for Discovery and Design. ACS Macro Letters, 2020, 9, 1086-1094.	2.3	24
110	Micro and Macromechanical Investigations of CuAlNi Single Crystal and CuAlMnZn Polycrystalline Shape Memory Alloys. Journal of Intelligent Material Systems and Structures, 2002, 13, 761-772.	1.4	23
111	Use of electrical resistance testing to redefine the transformation kinetics and phase diagram for shape-memory alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2006, 37, 579-587.	1.1	23
112	Measuring interphase stiffening effects in styrene-based polymeric thin films. Polymer, 2015, 75, 161-167.	1.8	23
113	Characterization and modeling of three-dimensional self-healing shape memory alloy-reinforced metal-matrix composites. Mechanics of Materials, 2016, 103, 1-10.	1.7	22
114	Measurement of elastic constants of monoclinic nickel-titanium and validation of first principles calculations. Applied Physics Letters, 2013, 102, .	1.5	21
115	A continuous test data method to determine a reference curve and shift rate for isothermal physical aging. Polymer Engineering and Science, 1999, 39, 211-235.	1.5	20
116	Internal strain gradients quantified in bone under load using high-energy X-ray scattering. Journal of Biomechanics, 2011, 44, 291-296.	0.9	19
117	Mechanical properties of hardâ€“soft block copolymers calculated from coarseâ€grained molecular dynamics models. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 1552-1566.	2.4	19
118	Effect of machined feature size relative to the microstructural size on the superelastic performance in polycrystalline NiTi shape memory alloys. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 706, 227-235.	2.6	18
119	Predicting the breakdown strength and lifetime of nanocomposites using a multi-scale modeling approach. Journal of Applied Physics, 2017, 122, 065101.	1.1	18
120	The materials tetrahedron has a â€œdigital twinâ€• MRS Bulletin, 2022, 47, 379-388.	1.7	17
121	Junction-Controlled Elasticity of Single-Walled Carbon Nanotube Dispersions in Acrylic Copolymer Gels and Solutions. Macromolecules, 2008, 41, 4340-4346.	2.2	16
122	AFM-based Dynamic Scanning Indentation (DSI) Method for Fast, High-resolution Spatial Mapping of Local Viscoelastic Properties in Soft Materials. Macromolecules, 2018, 51, 8964-8978.	2.2	16
123	Hierarchical Structure and Properties of Graphene Oxide Papers. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	15
124	Thermomechanical properties and deformation of coarse-grained models of hard-soft block copolymers. Physical Review E, 2013, 88, 022602.	0.8	15
125	Temperature effects on the nanoindentation characterization of stiffness gradients in confined polymers. Soft Matter, 2019, 15, 359-370.	1.2	15
126	Deconvolution of Stress Interaction Effects from Atomic Force Spectroscopy Data across Polymerâ^'Particle Interfaces. Macromolecules, 2019, 52, 8940-8955.	2.2	15

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127	Data centric nanocomposites design via mixed-variable Bayesian optimization. Molecular Systems Design and Engineering, 2020, 5, 1376-1390.	1.7	15
128	Investigating the effect of surface modification on the dispersion process of polymer nanocomposites. Nanocomposites, 2020, 6, 111-124.	2.2	15
129	Model for high-strain-rate deformation of uraniumâ€“niobium alloys. Journal of Applied Physics, 2003, 93, 9644-9654.	1.1	14
130	Recovering Nonisothermal Physical Aging Shift Factors Via Continuous Test Data: Theory and Experimental Results. Journal of Engineering Materials and Technology, Transactions of the ASME, 1997, 119, 233-241.	0.8	13
131	Finite Element Analysis of Adaptive-Stiffening and Shape-Control SMA Hybrid Composites. Journal of Engineering Materials and Technology, Transactions of the ASME, 2006, 128, 285.	0.8	13
132	Modeling mechanical aging shift factors in glassy polymers during nonisothermal physical aging. I. Experiments and KAHRâ€a_{te} model prediction. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 340-352.	2.4	13
133	Neutron diffraction studies and multivariant simulations of shape memory alloys: Concurrent verification of texture development and mechanical response predictions. Acta Materialia, 2011, 59, 5924-5937.	3.8	13
134	NiTi with 3D-interconnected microchannels produced by liquid phase sintering and electrochemical dissolution of steel tubes. Journal of Materials Processing Technology, 2014, 214, 1895-1899.	3.1	13
135	Plastic and transformation interactions of pores in shape memory alloy plates. Smart Materials and Structures, 2014, 23, 104008.	1.8	11
136	Models for nanoindentation of compliant films on stiff substrates. Journal of Materials Research, 2015, 30, 1747-1760.	1.2	11
137	NanoMine: A Knowledge Graph for Nanocomposite Materials Science. Lecture Notes in Computer Science, 2020, , 144-159.	1.0	11
138	Effect of high-energy X-ray irradiation on creep mechanisms in bone and dentin. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 21, 17-31.	1.5	10
139	Influence of Structure and Microstructure on Deformation Localization and Crack Growth in NiTi Shape Memory Alloys. Shape Memory and Superelasticity, 2018, 4, 285-293.	1.1	10
140	Comparison of Three-Dimensional Shape Memory Alloy Constitutive Models: Finite Element Analysis of Actuation and Superelastic Responses of a Shape Memory Alloy Tube. , 2013, , .		9
141	A numerical study of the coupling of elastic and transformation fields in pore arrays in shape memory alloy plates to advance porous structure design and optimization. Smart Materials and Structures, 2013, 22, 094009.	1.8	9
142	Rethinking interphase representations for modeling viscoelastic properties for polymer nanocomposites. Materialia, 2019, 6, 100277.	1.3	9
143	Dielectric spectroscopy analysis using viscoelasticity-inspired relaxation theory with finite element modeling. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 3776-3785.	1.8	8
144	ChemProps: A RESTful API enabled database for composite polymer name standardization. Journal of Cheminformatics, 2021, 13, 22.	2.8	7

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145	Comments to the paper â€œDifferential and integrated form consistency in 1-D phenomenological models for shape memory alloy constitutive behaviorâ€•by V.R. Buravalla and A. Khandelwal [Int. J. Solids and Struct. 44 (2007) 4369â€“4381]. International Journal of Solids and Structures, 2009, 46, 217-220.	1.3	6
146	Direct evidence of interfacial crystallization preventing weld formation during fused filament fabrication of poly(ether ether ketone). Additive Manufacturing, 2022, 51, 102604.	1.7	6
147	Distribution of rubber particles in the weld zone of fused filament fabricated acrylonitrile butadiene styrene and the impact on weld strength. Additive Manufacturing, 2021, 41, 101964.	1.7	5
148	Heterogeneity and inelasticity of deformation in a notched martensitic NiTi shape memory alloy specimen. Acta Materialia, 2020, 194, 49-59.	3.8	5
149	SMA texture and reorientation: simulations and neutron diffraction studies. , 2005, 5764, 715.		4
150	Fast evaluation of local elastic constants and its application to nanosized structures. Physical Review B, 2015, 91, .	1.1	4
151	<title>Temperature-induced deformation in shape memory alloys</title>. , 1995, , .		3
152	Planar aqueous electrode technique for polymer impedance spectroscopy. Polymer Engineering and Science, 2009, 49, 441-453.	1.5	3
153	Evolution of Phase Strains During Tensile Loading of Bovine Cortical Bone. Advanced Engineering Materials, 2013, 15, 238-249.	1.6	3
154	A combination optimisation method for the estimation of material parameters for viscoelastic solids. International Journal of Computing Science and Mathematics, 2014, 5, 325.	0.2	3
155	Open-source micro-tensile testers via additive manufacturing for the mechanical characterization of thin films and papers. PLoS ONE, 2018, 13, e0197999.	1.1	3
156	Tapered Polymer Whiskers to Enable Three-Dimensional Tactile Feature Extraction. Soft Robotics, 2021, 8, 44-58.	4.6	3
157	Micro and macromechanical observation of polycrystalline NiTi using inÂsitu optical microscopy. European Physical Journal Special Topics, 2003, 112, 655-658.	0.2	3
158	Title is missing!. Mechanics of Time-Dependent Materials, 2003, 7, 1-19.	2.3	2
159	Vanishing Cantilever Calibration Error with Magic Ratio Atomic Force Microscopy. Advanced Theory and Simulations, 2020, 3, 2000090.	1.3	2
160	<title>SMA single-crystal experiments and micromechanical modeling for complex thermomechanical loading</title>. , 2000, 3992, 516.		1
161	Finite element analysis of adaptive-stiffening and shape-control SMA hybrid composites. , 2005, , .		1
162	Comment on: A Correction to the Brinson's Evolution Kinetics for Shape Memory Alloys. Journal of Intelligent Material Systems and Structures, 2008, 19, 1113-1113.	1.4	1

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163	Light-Weight, Fast-Cycling, Shape-Memory Actuation Structures. , 2011, , .		1
164	Model and Simulation of an SMA Enhanced Lip Seal. Journal of Materials Engineering and Performance, 2011, 20, 570-578.	1.2	1
165	Environmental Fatigue of Pultruded Glass-Fiber-Reinforced Composites. , 1998, , 217-234.		1
166	Data-Driven Multiscale Science for Tire Compounding: Methods and Future Directions. Springer Series in Materials Science, 2021, , 281-312.	0.4	1
167	Aging During Elevated Temperature Stress Relaxation of IM7/K3B Composite. , 2000, , 141-159.		1
168	Special Issue on Characterization and Modeling of Polymeric Material Systems. Journal of Engineering Materials and Technology, Transactions of the ASME, 1997, 119, 197-197.	0.8	0
169	An Ontology for a Polymer Nanocomposite Community Data Resource. , 2017, , .		0