H. Jerry Qi

List of Publications by Year
in descending order

176 papers	18,147 citations	11651 70 h-index	13379 130 g-index
180 all docs	180 docs citations	180 times ranked	11397 citing authors

#	Article	IF	Citations
1	Recent progress in shape memory polymer: New behavior, enabling materials, and mechanistic understanding. Progress in Polymer Science, 2015, 49-50, 79-120.	24.7	1,057
2	Heatâ€•or Waterâ€Driven Malleability in a Highly Recyclable Covalent Network Polymer. Advanced Materials, 2014, 26, 3938-3942.	21.0	636
3	Advances in 4D Printing: Materials and Applications. Advanced Functional Materials, 2019, 29, 1805290.	14.9	633
4	Active materials by four-dimension printing. Applied Physics Letters, 2013, 103, 131901.	3.3	566
5	Active origami by 4D printing. Smart Materials and Structures, 2014, 23, 094007.	3.5	510
6	Repairable Woven Carbon Fiber Composites with Full Recyclability Enabled by Malleable Polyimine Networks. Advanced Materials, 2016, 28, 2904-2909.	21.0	455
7	Direct 4D printing via active composite materials. Science Advances, 2017, 3, e1602890.	10.3	455
8	Sequential Self-Folding Structures by 3D Printed Digital Shape Memory Polymers. Scientific Reports, 2015, 5, 13616.	3.3	391
9	3D Printing of Highly Stretchable, Shape-Memory, and Self-Healing Elastomer toward Novel 4D Printing. ACS Applied Materials & Interfaces, 2018, 10, 7381-7388.	8.0	382
10	Magnetic Shape Memory Polymers with Integrated Multifunctional Shape Manipulation. Advanced Materials, 2020, 32, e1906657.	21.0	367
11	Finite deformation thermo-mechanical behavior of thermally induced shape memory polymers. Journal of the Mechanics and Physics of Solids, 2008, 56, 1730-1751.	4.8	357
12	Carbon Fiber Reinforced Thermoset Composite with Near 100% Recyclability. Advanced Functional Materials, 2016, 26, 6098-6106.	14.9	349
13	Recyclable 3D printing of vitrimer epoxy. Materials Horizons, 2017, 4, 598-607.	12.2	339
14	Grayscale digital light processing 3D printing for highly functionally graded materials. Science Advances, 2019, 5, eaav5790.	10.3	298
15	Multi-shape active composites by 3D printing of digital shape memory polymers. Scientific Reports, 2016, 6, 24224.	3.3	267
16	Vitrimer Elastomerâ€Based Jigsaw Puzzleâ€Like Healable Triboelectric Nanogenerator for Selfâ€Powered Wearable Electronics. Advanced Materials, 2018, 30, e1705918.	21.0	265
17	3D Printed Reversible Shape Changing Components with Stimuli Responsive Materials. Scientific Reports, 2016, 6, 24761.	3.3	253
18	Shape Memory Polymers for Body Motion Energy Harvesting and Selfâ€Powered Mechanosensing. Advanced Materials, 2018, 30, 1705195.	21.0	249

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19	Digital light processing 3D printing of conductive complex structures. Additive Manufacturing, 2017, 18, 74-83.	3.0	225
20	3D printed reversible shape changing soft actuators assisted by liquid crystal elastomers. Soft Matter, 2017, 13, 5558-5568.	2.7	223
21	Bioinspired Hydrogel Interferometer for Adaptive Coloration and Chemical Sensing. Advanced Materials, 2018, 30, e1800468.	21.0	209
22	Reduced time as a unified parameter determining fixity and free recovery of shape memory polymers. Nature Communications, 2014, 5, 3066.	12.8	193
23	Origami by frontal photopolymerization. Science Advances, 2017, 3, e1602326.	10.3	193
24	Controlled Sequential Shape Changing Components by 3D Printing of Shape Memory Polymer Multimaterials. Procedia IUTAM, 2015, 12, 193-203.	1.2	187
25	Nanoscale Morphology and Indentation of Individual Nacre Tablets from the Gastropod Mollusc Trochus Niloticus. Journal of Materials Research, 2005, 20, 2400-2419.	2.6	185
26	Mechanisms of multi-shape memory effects and associated energy release in shape memory polymers. Soft Matter, 2012, 8, 5687.	2.7	185
27	Photo-origamiâ€”Bending and folding polymers with light. Applied Physics Letters, 2012, 100, .	3.3	183
28	A 3D finite deformation constitutive model for amorphous shape memory polymers: A multi-branch modeling approach for nonequilibrium relaxation processes. Mechanics of Materials, 2011, 43, 853-869.	3.2	182
29	Reprocessing and recycling of thermosetting polymers based on bond exchange reactions. RSC Advances, 2014, 4, 10108-10117.	3.6	182
30	Griffith Criterion for Brittle Fracture in Graphene. Nano Letters, 2015, 15, 1918-1924.	9.1	180
31	Long Liquid Crystal Elastomer Fibers with Large Reversible Actuation Strains for Smart Textiles and Artificial Muscles. ACS Applied Materials & Interfaces, 2019, 11, 19514-19521.	8.0	168
32	Recycling of Epoxy Thermoset and Composites via Good Solvent Assisted and Small Molecules Participated Exchange Reactions. ACS Sustainable Chemistry and Engineering, 2018, 6, 9189-9197.	6.7	161
33	Solvent Assisted Pressure-Free Surface Welding and Reprocessing of Malleable Epoxy Polymers. Macromolecules, 2016, 49, 5527-5537.	4.8	158
34	3D Printing of Auxetic Metamaterials with Digitally Reprogrammable Shape. ACS Applied Materials & Interfaces, 2019, 11, 22768-22776.	8.0	157
35	Direct Ink Write (DIW) 3D Printed Cellulose Nanocrystal Aerogel Structures. Scientific Reports, 2017, 7, 8018.	3.3	155
36	Three-Dimensional-Printed Multistable Mechanical Metamaterials With a Deterministic Deformation Sequence. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	2.2	150

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37	Fabrication of tough epoxy with shape memory effects by UV-assisted direct-ink write printing. Soft Matter, 2018, 14, 1879-1886.	2.7	150
38	Novel ink for ambient condition printing of liquid crystal elastomers for 4D printing. Smart Materials and Structures, 2018, 27, 125011.	3.5	149
39	Highâ€Speed 3D Printing of Highâ€Performance Thermosetting Polymers via Twoâ€Stage Curing. Macromolecular Rapid Communications, 2018, 39, e1700809.	3.9	146
40	Photomechanics of light-activated polymers. Journal of the Mechanics and Physics of Solids, 2009, 57, 1103-1121.	4.8	138
41	Durometer Hardness and the Stress-Strain Behavior of Elastomeric Materials. Rubber Chemistry and Technology, 2003, 76, 419-435.	1.2	132
42	Two-way reversible shape memory effects in a free-standing polymer composite. Smart Materials and Structures, 2011, 20, 065010.	3.5	128
43	Influence of stoichiometry on the glass transition and bond exchange reactions in epoxy thermoset polymers. RSC Advances, 2014, 4, 48682-48690.	3.6	128
44	Evolution of material properties during free radical photopolymerization. Journal of the Mechanics and Physics of Solids, 2018, 112, 25-49.	4.8	124
45	Desolvation Induced Origami of Photocurable Polymers by Digit Light Processing. Macromolecular Rapid Communications, 2017, 38, 1600625.	3.9	116
46	Magnetoâ€Mechanical Metamaterials with Widely Tunable Mechanical Properties and Acoustic Bandgaps. Advanced Functional Materials, 2021, 31, 2005319.	14.9	115
47	Porous polymeric materials by 3D printing of photocurable resin. Materials Horizons, 2017, 4, 442-449.	12.2	114
48	Programmable, Patternâ€Memorizing Polymer Surface. Advanced Materials, 2011, 23, 3669-3673.	21.0	110
49	4D rods: 3D structures via programmable 1D composite rods. Materials and Design, 2018, 137, 256-265.	7.0	110
50	Interfacial welding of dynamic covalent network polymers. Journal of the Mechanics and Physics of Solids, 2016, 94, 1-17.	4.8	107
51	Hydrophilic/Hydrophobic Composite Shape-Shifting Structures. ACS Applied Materials & Interfaces, 2018, 10, 19932-19939.	8.0	101
52	Printing Hydrogels and Elastomers in Arbitrary Sequence with Strong Adhesion. Advanced Functional Materials, 2019, 29, 1901721.	14.9	101
53	Magnetic Multimaterial Printing for Multimodal Shape Transformation with Tunable Properties and Shiftable Mechanical Behaviors. ACS Applied Materials & Interfaces, 2021, 13, 12639-12648.	8.0	101
54	Advanced Shape Memory Technology to Reshape Product Design, Manufacturing and Recycling. Polymers, 2014, 6, 2287-2308.	4.5	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, .	1.4	96
56	Direct Ink Write 3D Printed Cellulose Nanofiber Aerogel Structures with Highly Deformable, Shape Recoverable, and Functionalizable Properties. ACS Sustainable Chemistry and Engineering, 2018, 6, 2011-2022.	6.7	95
57	Mechanical loading regulates human MSC differentiation in a multi-layer hydrogel for osteochondral tissue engineering. Acta Biomaterialia, 2015, 21, 142-153.	8.3	94
58	Mechanics of shape distortion of DLP 3D printed structures during UV post-curing. Soft Matter, 2019, 15, 6151-6159.	2.7	94
59	Modeling the mechanics of covalently adaptable polymer networks with temperature-dependent bond exchange reactions. Soft Matter, 2013, 9, 4083.	2.7	93
60	Evolutionary Algorithmâ€Guided Voxelâ€Encoding Printing of Functional Hardâ€Magnetic Soft Active Materials. Advanced Intelligent Systems, 2020, 2, 2000060.	6.1	93
61	3Dâ€Printed Anisotropic Polymer Materials for Functional Applications. Advanced Materials, 2022, 34, e2102877.	21.0	92
62	Prediction of temperature-dependent free recovery behaviors of amorphous shape memory polymers. Soft Matter, 2012, 8, 11098.	2.7	91
63	Thermomechanical behavior of shape memory elastomeric composites. Journal of the Mechanics and Physics of Solids, 2012, 60, 67-83.	4.8	91
64	Magnetic Dynamic Polymers for Modular Assembling and Reconfigurable Morphing Architectures. Advanced Materials, 2021, 33, e2102113.	21.0	88
65	Machine-learning based design of active composite structures for 4D printing. Smart Materials and Structures, 2019, 28, 065005.	3.5	87
66	The m4 3D printer: A multi-material multi-method additive manufacturing platform for future 3D printed structures. Additive Manufacturing, 2019, 29, 100819.	3.0	79
67	Fabricating hydrogels to mimic biological tissues of complex shapes and high fatigue resistance. Matter, 2021, 4, 1935-1946.	10.0	78
68	Effects of thermal rates on the thermomechanical behaviors of amorphous shape memory polymers. Mechanics of Time-Dependent Materials, 2010, 14, 219-241.	4.4	75
69	Level Set Topology Optimization of Printed Active Composites. Journal of Mechanical Design, Transactions of the ASME, 2015, 137, .	2.9	74
70	Highly Compressible and Sensitive Pressure Sensor under Large Strain Based on 3D Porous Reduced Graphene Oxide Fiber Fabrics in Wide Compression Strains. ACS Applied Materials & Interfaces, 2019, 11, 37051-37059.	8.0	74
71	Recyclable thermosetting polymers for digital light processing 3D printing. Materials and Design, 2021, 197, 109189.	7.0	74
72	Actuator Designs using Environmentally Responsive Hydrogels. Journal of Intelligent Material Systems and Structures, 2008, 19, 597-607.	2.5	73

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73	Reversible shape change structures by grayscale pattern 4D printing. Multifunctional Materials, 2018, 1, 015002.	3.7	73
74	Integrating digital light processing with direct ink writing for hybrid 3D printing of functional structures and devices. Additive Manufacturing, 2021, 40, 101911.	3.0	73
75	Programmable Deployment of Tensegrity Structures by Stimulus-Responsive Polymers. Scientific Reports, 2017, 7, 3511.	3.3	72
76	A molecular dynamics study of bond exchange reactions in covalent adaptable networks. Soft Matter, 2015, 11, 6305-6317.	2.7	71
77	A thermomechanical constitutive model for an epoxy based shape memory polymer and its parameter identifications. Mechanics of Time-Dependent Materials, 2014, 18, 453-474.	4.4	70
78	Mechanics of soft active materials with phase evolution. International Journal of Plasticity, 2010, 26, 603-616.	8.8	69
79	Mechanisms of triple-shape polymeric composites due to dual thermal transitions. Soft Matter, 2013, 9, 2212.	2.7	69
80	Dissolution of epoxy thermosets via mild alcoholysis: the mechanism and kinetics study. RSC Advances, 2018, 8, 1493-1502.	3.6	68
81	Dynamic Photomaskâ€Assisted Direct Ink Writing Multimaterial for Multilevel Triboelectric Nanogenerator. Advanced Functional Materials, 2019, 29, 1903568.	14.9	65
82	3D printed cellulose nanocrystal composites through digital light processing. Cellulose, 2019, 26, 3973-3985.	4.9	65
83	Recent advances in additive manufacturing of active mechanical metamaterials. Current Opinion in Solid State and Materials Science, 2020, 24, 100869.	11.5	65
84	Design for 4D printing: A voxel-based modeling and simulation of smart materials. Materials and Design, 2019, 175, 107798.	7.0	63
85	Digital manufacture of shape changing components. Extreme Mechanics Letters, 2015, 4, 9-17.	4.1	62
86	Thermomechanically Triggered Twoâ€Stage Pattern Switching of 2D Lattices for Adaptive Structures. Advanced Functional Materials, 2018, 28, 1705727.	14.9	58
87	3D printing of complex origami assemblages for reconfigurable structures. Soft Matter, 2018, 14, 8051-8059.	2.7	58
88	Design for 4D printing: Modeling and computation of smart materials distributions. Materials and Design, 2019, 181, 108074.	7.0	58
89	Temperature memory effect in amorphous shape memory polymers. Soft Matter, 2014, 10, 9423-9432.	2.7	57
90	Photo-induced bending in a light-activated polymer laminated composite. Soft Matter, 2015, 11, 2673-2682.	2.7	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. Smart Materials and Structures, 2017, 26, 045008.	3.5	55
92	The status, barriers, challenges, and future in design for 4D printing. Materials and Design, 2021, 212, 110193.	7.0	55
93	Development and evaluation of microdevices for studying anisotropic biaxial cyclic stretch on cells. Biomedical Microdevices, 2008, 10, 869-882.	2.8	51
94	Design considerations for shape memory polymer composites with magnetic particles. Journal of Composite Materials, 2013, 47, 51-63.	2.4	51
95	A finite deformation thermomechanical constitutive model for triple shape polymeric composites based on dual thermal transitions. International Journal of Solids and Structures, 2014, 51, 2777-2790.	2.7	50
96	Influence of structural relaxation on thermomechanical and shape memory performances of amorphous polymers. Polymer, 2017, 109, 216-228.	3.8	50
97	Rapid Volatilization Induced Mechanically Robust Shape-Morphing Structures toward 4D Printing. ACS Applied Materials & Interfaces, 2020, 12, 17979-17987.	8.0	50
98	Recent Advances in Stimuliâ€Responsive Shapeâ€Morphing Hydrogels. Advanced Functional Materials, 2022, 32, .	14.9	49
99	A photoviscoplastic model for photoactivated covalent adaptive networks. Journal of the Mechanics and Physics of Solids, 2014, 70, 84-103.	4.8	48
100	3D printed active origami with complicated folding patterns. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 281-289.	4.9	48
101	Flexible, Reconfigurable, and Self-Healing TPU/Vitrimer Polymer Blend with Copolymerization Triggered by Bond Exchange Reaction. ACS Applied Materials & Interfaces, 2020, 12, 8740-8750.	8.0	47
102	Machine Learningâ€Evolutionary Algorithm Enabled Design for 4Dâ€Printed Active Composite Structures. Advanced Functional Materials, 2022, 32, 2109805.	14.9	47
103	A viscoelastic model for hydrothermally activated malleable covalent network polymer and its application in shape memory analysis. Journal of the Mechanics and Physics of Solids, 2019, 127, 239-265.	4.8	45
104	Molecular dynamics studying on welding behavior in thermosetting polymers due to bond exchange reactions. RSC Advances, 2016, 6, 22476-22487.	3.6	44
105	In vivo measurement of proximal pulmonary artery elastic modulus in the neonatal calf model of pulmonary hypertension: development and ex vivo validation. Journal of Applied Physiology, 2010, 108, 968-975.	2.5	42
106	Thermodynamics and mechanics of photochemcially reacting polymers. Journal of the Mechanics and Physics of Solids, 2013, 61, 2212-2239.	4.8	42
107	3D Printing and Chemical Dealloying of a Hierarchically Micro- and Nanoporous Catalyst for Wastewater Purification. ACS Applied Materials & Interfaces, 2021, 13, 48709-48719.	8.0	40
108	Shape forming by thermal expansion mismatch and shape memory locking in polymer/elastomer laminates. Smart Materials and Structures, 2017, 26, 105027.	3.5	39

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109	Extraction of Biolubricant via Chemical Recycling of Thermosetting Polymers. ACS Sustainable Chemistry and Engineering, 2019, 7, 6880-6888.	6.7	39
110	Photo-induced deformation of active polymer films: Single spot irradiation. International Journal of Solids and Structures, 2011, 48, 2089-2101.	2.7	38
111	Highly stretchable and conductive fibers enabled by liquid metal dip-coating. Smart Materials and Structures, 2018, 27, 035019.	3.5	37
112	Viscoelastic multistable architected materials with temperature-dependent snapping sequence. Soft Matter, 2018, 14, 2492-2499.	2.7	37
113	Three-Dimensionally Printed Mechanical Metamaterials With Thermally Tunable Auxetic Behavior. Physical Review Applied, 2019, 11, .	3.8	37
114	Time and Temperature Dependent Recovery of Epoxy-Based Shape Memory Polymers. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011, 133, .	1.4	36
115	Thermoviscoplastic behaviors of anisotropic shape memory elastomeric composites for cold programmed non-affine shape change. Journal of the Mechanics and Physics of Solids, 2015, 85, 219-244.	4.8	36
116	Cellulose nanocrystals support material for 3D printing complexly shaped structures via multi-materials-multi-methods printing. Additive Manufacturing, 2019, 28, 14-22.	3.0	36
117	A Microstructurally Driven Model for Pulmonary Artery Tissue. Journal of Biomechanical Engineering, 2011, 133, 051002.	1.3	32
118	Cyclic behaviors of amorphous shape memory polymers. Soft Matter, 2016, 12, 3234-3245.	2.7	32
119	3D printed two-dimensional periodic structures with tailored in-plane dynamic responses and fracture behaviors. Composites Science and Technology, 2018, 159, 189-198.	7.8	32
120	Reaction-Diffusion Model for Thermosetting Polymer Dissolution through Exchange Reactions Assisted by Small-Molecule Solvents. Macromolecules, 2019, 52, 3636-3645.	4.8	32
121	An ontology-based framework to formalize and represent 4D printing knowledge in design. Computers in Industry, 2021, 126, 103374.	9.9	32
122	Mechanically programmed shape change in laminated elastomeric composites. Soft Matter, 2015, 11, 5754-5764.	2.7	31
123	Recycling of vitrimer blends with tunable thermomechanical properties. RSC Advances, 2019, 9, 5431-5437.	3.6	31
124	Recycling Waste Circuit Board Efficiently and Environmentally Friendly through Small-Molecule Assisted Dissolution. Scientific Reports, 2019, 9, 17902.	3.3	31
125	Shapeâ€Memory Balloon Structures by Pneumatic Multiâ€material 4D Printing. Advanced Functional Materials, 2021, 31, 2010872.	14.9	30
126	4D Printing of Glass Fiber-Regulated Shape Shifting Structures with High Stiffness. ACS Applied Materials & Interfaces, 2021, 13, 12797-12804.	8.0	28

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127	A Computational Model for Surface Welding in Covalent Adaptable Networks Using Finite-Element Analysis. Journal of Applied Mechanics, Transactions ASME, 2016, 83, .	2.2	26
128	Design for the reduction of volume shrinkage-induced distortion in digital light processing 3D printing. Extreme Mechanics Letters, 2021, 48, 101403.	4.1	25
129	Effects of oxygen on interfacial strength of incremental forming of materials by photopolymerization. Extreme Mechanics Letters, 2016, 9, 108-118.	4.1	24
130	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. Soft Matter, 2020, 16, 1668-1677.	2.7	24
131	Enabling direct ink write edible 3D printing of food purees with cellulose nanocrystals. Journal of Food Engineering, 2022, 330, 111086.	5.2	24
132	A reactionâ€“diffusion model for grayscale digital light processing 3D printing. Extreme Mechanics Letters, 2022, 53, 101714.	4.1	24
133	Effects of stretch induced softening to the free recovery behavior of shape memory polymer composites. Polymer, 2014, 55, 5938-5947.	3.8	23
134	Surface modification of fused filament fabrication (FFF) 3D printed substrates by inkjet printing polyimide for printed electronics. Additive Manufacturing, 2020, 36, 101544.	3.0	23
135	Influences of processing conditions on mechanical properties of recycled epoxyâ€anhydride vitrimers. Journal of Applied Polymer Science, 2020, 137, 49246.	2.6	23
136	Multiâ€Color 3D Printing via Singleâ€Vat Grayscale Digital Light Processing. Advanced Functional Materials, 2022, 32, .	14.9	22
137	A computational biomimetic study of cell crawling. Biomechanics and Modeling in Mechanobiology, 2010, 9, 573-581.	2.8	21
138	Impact of Residual Stretch and Remodeling on Collagen Engagement in Healthy and Pulmonary Hypertensive Calf Pulmonary Arteries at Physiological Pressures. Annals of Biomedical Engineering, 2012, 40, 1419-1433.	2.5	20
139	A finite deformation theory of desolvation and swelling in partially photo-cross-linked polymer networks for 3D/4D printing applications. Soft Matter, 2019, 15, 1005-1016.	2.7	19
140	Modeling the dissolution of thermosetting polymers and composites via solvent assisted exchange reactions. Composites Part B: Engineering, 2020, 200, 108363.	12.0	19
141	Utilizing computer vision and artificial intelligence algorithms to predict and design the mechanical compression response of direct ink write 3D printed foam replacement structures. Additive Manufacturing, 2021, 41, 101950.	3.0	19
142	Shape-programmable and healable materials and devices using thermo- and photo-responsive vitrimer. Multifunctional Materials, 2020, 3, 045001.	3.7	19
143	Thermomechanical behaviors of polyether ether ketone (PEEK) with stretch-induced anisotropy. Journal of the Mechanics and Physics of Solids, 2021, 148, 104271.	4.8	18
144	The 3D printing and modeling of functionally graded Kelvin foams for controlling crushing performance. Extreme Mechanics Letters, 2021, 46, 101323.	4.1	18

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145	Intense pulsed light sintering of thick conductive wires on elastomeric dark substrate for hybrid 3D printing applications. Smart Materials and Structures, 2018, 27, 115007.	3.5	17
146	Materials, design, and fabrication of shape programmable polymers. Multifunctional Materials, 2020, 3, 032002.	3.7	17
147	Improved testing system for thermomechanical experiments on polymers using uniaxial compression equipment. Polymer Testing, 2010, 29, 503-512.	4.8	16
148	Light-induced stress relief to improve flaw tolerance in network polymers. Journal of Applied Physics, 2010, 107, .	2.5	16
149	Stability and Surface Topography Evolution in Nanoimprinted Polymer Patterns under a Thermal Gradient. Macromolecules, 2010, 43, 8191-8201.	4.8	16
150	Effects of oxygen on light activation in covalent adaptable network polymers. Soft Matter, 2015, 11, 6134-6144.	2.7	16
151	Analysis of shape-memory polymer composites with embedded microvascular system for fast thermal response. Journal of Composite Materials, 2015, 49, 1881-1893.	2.4	15
152	Electromagnetic Pulse Powered by a Triboelectric Nanogenerator with Applications in Accurate Selfâ€Powered Sensing and Security. Advanced Materials Technologies, 2020, 5, 2000368.	5.8	15
153	Green and Sustainable Layered Chitinâ€“Vitrimer Composite with Enhanced Modulus, Reprocessability, and Smart Actuator Function. ACS Sustainable Chemistry and Engineering, 2020, 8, 15168-15178.	6.7	15
154	Ultrastrong intrinsic bonding for thermoset composites via bond exchange reactions. Composites Part B: Engineering, 2020, 194, 108054.	12.0	14
155	Ring Origami: Snapâ€Folding of Rings with Different Geometries. Advanced Intelligent Systems, 2021, 3, 2100107.	6.1	14
156	Non-proportional multiaxial ratchetting of ultrahigh molecular weight polyethylene polymer: Experiments and constitutive model. Mechanics of Materials, 2017, 112, 76-87.	3.2	14
157	Temperature dependent evolution of wrinkled single-crystal silicon ribbons on shape memory polymers. Soft Matter, 2017, 13, 7625-7632.	2.7	12
158	Self-adaptive flexible valve as passive flow regulator. Extreme Mechanics Letters, 2020, 39, 100824.	4.1	12
159	A micro-structure based constitutive model for anisotropic stressâ€“strain behaviors of artery tissues. International Journal of Solids and Structures, 2018, 139-140, 55-64.	2.7	10
160	Phase diagram and mechanics of snap-folding of ring origami by twisting. International Journal of Solids and Structures, 2022, 248, 111685.	2.7	10
161	A computational design approach for multi-material 4D printing based on interlocking blocks assembly. Additive Manufacturing, 2022, 58, 102993.	3.0	10
162	Modular 4D Printing Assisted by Dynamic Chemical Bonds. Matter, 2020, 2, 1080-1082.	10.0	9

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163	Indentation experiments and simulations of nonuniformly photocrosslinked polymers in 3D printed structures. Additive Manufacturing, 2020, 35, 101420.	3.0	8
164	Constitutive Modeling of the Stress-Stretch Behavior of Two-Dimensional Triangulated Macromolecular Networks Containing Folded Domains. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	2.2	7
165	Thermodynamics and thermal decomposition for shape memory effects with crystallization based on dissipation and logarithmic strain. Mechanics of Time-Dependent Materials, 2014, 18, 437-452.	4.4	6
166	Soft pneumatic actuators by digital light processing combined with injection-assisted post-curing. Applied Mathematics and Mechanics (English Edition), 2021, 42, 159-172.	3.6	6
167	A quasi-static model of wheelâ€“tissue interaction for surgical robotics. Medical Engineering and Physics, 2013, 35, 1368-1376.	1.7	5
168	Structured Interfaces for Improving the Tensile Strength and Toughness of Stiff/Highly Stretchable Polymer Hybrids. Advanced Materials Technologies, 2020, 5, 2000652.	5.8	4
169	Preface for the special issue of 4D printing. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 265-265.	4.9	3
170	Recyclable thermoset polymers: beyond self-healing. , 2022, , 483-511.		3
171	Preface: Forum on Novel Stimuli-Responsive Materials for 3D Printing. ACS Applied Materials & Interfaces, 2021, 13, 12637-12638.	8.0	1
172	A Practical Side-Channel Based Intrusion Detection System for Additive Manufacturing Systems. , 2021, , .		1
173	Reshaping sub-millimetre bubbles from spheres to tori. Soft Matter, 2022, 18, 4660-4666.	2.7	1
174	Special Issue on Time Dependent Behavior in Polymeric Composites and Their Matrices. Journal of Engineering Materials and Technology, Transactions of the ASME, 2006, 128, 477-477.	1.4	0
175	Forward: 6th international conference on mechanics ofÂtime-dependent materials, Monterey,ÂCA,ÂMarchÂ30â€“April 4, 2008. Mechanics of Time-Dependent Materials, 2009, 13, 117-120.	4.4	0
176	Reprogrammable Materials: Magnetic Dynamic Polymers for Modular Assembling and Reconfigurable Morphing Architectures (Adv. Mater. 30/2021). Advanced Materials, 2021, 33, 2170236.	21.0	0