

# H. Jerry Qi

## List of Publications by Citations

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171  
papers

12,427  
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60  
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g-index

180  
ext. papers

15,066  
ext. citations

7.1  
avg, IF

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L-index

#	Paper	IF	Citations
171	Recent progress in shape memory polymer: New behavior, enabling materials, and mechanistic understanding. <i>Progress in Polymer Science</i> , <b>2015</b> , 49-50, 79-120	29.6	821
170	Active materials by four-dimension printing. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 131901	3.4	445
169	Heat- or water-driven malleability in a highly recyclable covalent network polymer. <i>Advanced Materials</i> , <b>2014</b> , 26, 3938-42	24	443
168	Active origami by 4D printing. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 094007	3.4	408
167	Advances in 4D Printing: Materials and Applications. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1805290	15.6	354
166	Direct 4D printing via active composite materials. <i>Science Advances</i> , <b>2017</b> , 3, e1602890	14.3	328
165	Sequential Self-Folding Structures by 3D Printed Digital Shape Memory Polymers. <i>Scientific Reports</i> , <b>2015</b> , 5, 13616	4.9	308
164	Finite deformation thermo-mechanical behavior of thermally induced shape memory polymers. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2008</b> , 56, 1730-1751	5	304
163	Repairable Woven Carbon Fiber Composites with Full Recyclability Enabled by Malleable Polyimine Networks. <i>Advanced Materials</i> , <b>2016</b> , 28, 2904-9	24	303
162	3D Printing of Highly Stretchable, Shape-Memory, and Self-Healing Elastomer toward Novel 4D Printing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 7381-7388	9.5	270
161	Recyclable 3D printing of vitrimer epoxy. <i>Materials Horizons</i> , <b>2017</b> , 4, 598-607	14.4	226
160	Carbon Fiber Reinforced Thermoset Composite with Near 100% Recyclability. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 6098-6106	15.6	218
159	Multi-shape active composites by 3D printing of digital shape memory polymers. <i>Scientific Reports</i> , <b>2016</b> , 6, 24224	4.9	201
158	3D Printed Reversible Shape Changing Components with Stimuli Responsive Materials. <i>Scientific Reports</i> , <b>2016</b> , 6, 24761	4.9	197
157	Shape Memory Polymers for Body Motion Energy Harvesting and Self-Powered Mechanosensing. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705195	24	194
156	Vitrimer Elastomer-Based Jigsaw Puzzle-Like Healable Triboelectric Nanogenerator for Self-Powered Wearable Electronics. <i>Advanced Materials</i> , <b>2018</b> , 30, e1705918	24	173
155	Magnetic Shape Memory Polymers with Integrated Multifunctional Shape Manipulation. <i>Advanced Materials</i> , <b>2020</b> , 32, e1906657	24	170

154	Grayscale digital light processing 3D printing for highly functionally graded materials. <i>Science Advances</i> , <b>2019</b> , 5, eaav5790	14.3	169
153	Photo-origami Bending and folding polymers with light. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 161908	3.4	169
152	Reduced time as a unified parameter determining fixity and free recovery of shape memory polymers. <i>Nature Communications</i> , <b>2014</b> , 5, 3066	17.4	166
151	Mechanisms of multi-shape memory effects and associated energy release in shape memory polymers. <i>Soft Matter</i> , <b>2012</b> , 8, 5687	3.6	160
150	Nanoscale Morphology and Indentation of Individual Nacre Tablets from the Gastropod Mollusc <i>Trochus Niloticus</i> . <i>Journal of Materials Research</i> , <b>2005</b> , 20, 2400-2419	2.5	159
149	A 3D finite deformation constitutive model for amorphous shape memory polymers: A multi-branch modeling approach for nonequilibrium relaxation processes. <i>Mechanics of Materials</i> , <b>2011</b> , 43, 853-869	3.3	157
148	3D printed reversible shape changing soft actuators assisted by liquid crystal elastomers. <i>Soft Matter</i> , <b>2017</b> , 13, 5558-5568	3.6	156
147	Controlled Sequential Shape Changing Components by 3D Printing of Shape Memory Polymer Multimaterials. <i>Procedia IUTAM</i> , <b>2015</b> , 12, 193-203		155
146	Digital light processing 3D printing of conductive complex structures. <i>Additive Manufacturing</i> , <b>2017</b> , 18, 74-83	6.1	152
145	Bioinspired Hydrogel Interferometer for Adaptive Coloration and Chemical Sensing. <i>Advanced Materials</i> , <b>2018</b> , 30, e1800468	24	149
144	Origami by frontal photopolymerization. <i>Science Advances</i> , <b>2017</b> , 3, e1602326	14.3	143
143	Reprocessing and recycling of thermosetting polymers based on bond exchange reactions. <i>RSC Advances</i> , <b>2014</b> , 4, 10108-10117	3.7	138
142	Griffith criterion for brittle fracture in graphene. <i>Nano Letters</i> , <b>2015</b> , 15, 1918-24	11.5	136
141	Photomechanics of light-activated polymers. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2009</b> , 57, 1103-1121	5	123
140	Solvent Assisted Pressure-Free Surface Welding and Reprocessing of Malleable Epoxy Polymers. <i>Macromolecules</i> , <b>2016</b> , 49, 5527-5537	5.5	112
139	Two-way reversible shape memory effects in a free-standing polymer composite. <i>Smart Materials and Structures</i> , <b>2011</b> , 20, 065010	3.4	111
138	Direct Ink Write (DIW) 3D Printed Cellulose Nanocrystal Aerogel Structures. <i>Scientific Reports</i> , <b>2017</b> , 7, 8018	4.9	110
137	Programmable, pattern-memorizing polymer surface. <i>Advanced Materials</i> , <b>2011</b> , 23, 3669-73	24	98

136	Three-Dimensional-Printed Multistable Mechanical Metamaterials With a Deterministic Deformation Sequence. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2017</b> , 84,	2.7	97
135	Novel ink for ambient condition printing of liquid crystal elastomers for 4D printing. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 125011	3.4	95
134	Recycling of Epoxy Thermoset and Composites via Good Solvent Assisted and Small Molecules Participated Exchange Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 9189-9197	8.3	94
133	Durometer Hardness and the Stress-Strain Behavior of Elastomeric Materials. <i>Rubber Chemistry and Technology</i> , <b>2003</b> , 76, 419-435	1.7	93
132	Long Liquid Crystal Elastomer Fibers with Large Reversible Actuation Strains for Smart Textiles and Artificial Muscles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 19514-19521	9.5	92
131	High-Speed 3D Printing of High-Performance Thermosetting Polymers via Two-Stage Curing. <i>Macromolecular Rapid Communications</i> , <b>2018</b> , 39, e1700809	4.8	92
130	Influence of stoichiometry on the glass transition and bond exchange reactions in epoxy thermoset polymers. <i>RSC Advances</i> , <b>2014</b> , 4, 48682-48690	3.7	89
129	Desolvation Induced Origami of Photocurable Polymers by Digit Light Processing. <i>Macromolecular Rapid Communications</i> , <b>2017</b> , 38, 1600625	4.8	87
128	3D Printing of Auxetic Metamaterials with Digitally Reprogrammable Shape. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 22768-22776	9.5	87
127	Fabrication of tough epoxy with shape memory effects by UV-assisted direct-ink write printing. <i>Soft Matter</i> , <b>2018</b> , 14, 1879-1886	3.6	86
126	Interfacial welding of dynamic covalent network polymers. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2016</b> , 94, 1-17	5	81
125	Modeling the mechanics of covalently adaptable polymer networks with temperature-dependent bond exchange reactions. <i>Soft Matter</i> , <b>2013</b> , 9, 4083	3.6	81
124	Mechanical loading regulates human MSC differentiation in a multi-layer hydrogel for osteochondral tissue engineering. <i>Acta Biomaterialia</i> , <b>2015</b> , 21, 142-53	10.8	80
123	Evolution of material properties during free radical photopolymerization. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2018</b> , 112, 25-49	5	79
122	Porous polymeric materials by 3D printing of photocurable resin. <i>Materials Horizons</i> , <b>2017</b> , 4, 442-449	14.4	78
121	Prediction of temperature-dependent free recovery behaviors of amorphous shape memory polymers. <i>Soft Matter</i> , <b>2012</b> , 8, 11098	3.6	78
120	Constitutive Modeling of Shape Memory Effects in Semicrystalline Polymers With Stretch Induced Crystallization. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , <b>2010</b> , 132,	1.8	76
119	Advanced Shape Memory Technology to Reshape Product Design, Manufacturing and Recycling. <i>Polymers</i> , <b>2014</b> , 6, 2287-2308	4.5	74

118	Thermomechanical behavior of shape memory elastomeric composites. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2012</b> , 60, 67-83	5	72
117	4D rods: 3D structures via programmable 1D composite rods. <i>Materials and Design</i> , <b>2018</b> , 137, 256-265	8.1	71
116	Printing Hydrogels and Elastomers in Arbitrary Sequence with Strong Adhesion. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1901721	15.6	67
115	Hydrophilic/Hydrophobic Composite Shape-Shifting Structures. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 19932-19939	9.5	66
114	Actuator Designs using Environmentally Responsive Hydrogels. <i>Journal of Intelligent Material Systems and Structures</i> , <b>2008</b> , 19, 597-607	2.3	66
113	Effects of thermal rates on the thermomechanical behaviors of amorphous shape memory polymers. <i>Mechanics of Time-Dependent Materials</i> , <b>2010</b> , 14, 219-241	1.2	65
112	Direct Ink Write 3D Printed Cellulose Nanofiber Aerogel Structures with Highly Deformable, Shape Recoverable, and Functionalizable Properties. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 2011-2022	8.3	63
111	Mechanisms of triple-shape polymeric composites due to dual thermal transitions. <i>Soft Matter</i> , <b>2013</b> , 9, 2212	3.6	58
110	Level Set Topology Optimization of Printed Active Composites. <i>Journal of Mechanical Design, Transactions of the ASME</i> , <b>2015</b> , 137,	3	58
109	Mechanics of soft active materials with phase evolution. <i>International Journal of Plasticity</i> , <b>2010</b> , 26, 603-666	6.6	58
108	A thermomechanical constitutive model for an epoxy based shape memory polymer and its parameter identifications. <i>Mechanics of Time-Dependent Materials</i> , <b>2014</b> , 18, 453-474	1.2	57
107	Programmable Deployment of Tensegrity Structures by Stimulus-Responsive Polymers. <i>Scientific Reports</i> , <b>2017</b> , 7, 3511	4.9	53
106	Digital manufacture of shape changing components. <i>Extreme Mechanics Letters</i> , <b>2015</b> , 4, 9-17	3.9	52
105	Temperature memory effect in amorphous shape memory polymers. <i>Soft Matter</i> , <b>2014</b> , 10, 9423-32	3.6	51
104	Development and evaluation of microdevices for studying anisotropic biaxial cyclic stretch on cells. <i>Biomedical Microdevices</i> , <b>2008</b> , 10, 869-882	3.7	50
103	A molecular dynamics study of bond exchange reactions in covalent adaptable networks. <i>Soft Matter</i> , <b>2015</b> , 11, 6305-17	3.6	49
102	Reversible shape change structures by grayscale pattern 4D printing. <i>Multifunctional Materials</i> , <b>2018</b> , 1, 015002	5.2	49
101	Highly Compressible and Sensitive Pressure Sensor under Large Strain Based on 3D Porous Reduced Graphene Oxide Fiber Fabrics in Wide Compression Strains. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 37051-37059	9.5	46

100	Machine-learning based design of active composite structures for 4D printing. <i>Smart Materials and Structures</i> , <b>2019</b> , 28, 065005	3.4	46
99	Photo-induced bending in a light-activated polymer laminated composite. <i>Soft Matter</i> , <b>2015</b> , 11, 2673-823.6	3.6	46
98	Mechanics of shape distortion of DLP 3D printed structures during UV post-curing. <i>Soft Matter</i> , <b>2019</b> , 15, 6151-6159	3.6	46
97	Evolutionary Algorithm-Guided Voxel-Encoding Printing of Functional Hard-Magnetic Soft Active Materials. <i>Advanced Intelligent Systems</i> , <b>2020</b> , 2, 2000060	6	45
96	Design considerations for shape memory polymer composites with magnetic particles. <i>Journal of Composite Materials</i> , <b>2013</b> , 47, 51-63	2.7	44
95	Dissolution of epoxy thermosets mild alcoholysis: the mechanism and kinetics study.. <i>RSC Advances</i> , <b>2018</b> , 8, 1493-1502	3.7	43
94	Magnetic Multimaterial Printing for Multimodal Shape Transformation with Tunable Properties and Shiftable Mechanical Behaviors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12639-12648	9.5	43
93	Dynamic Photomask-Assisted Direct Ink Writing Multimaterial for Multilevel Triboelectric Nanogenerator. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1903568	15.6	42
92	3D printed cellulose nanocrystal composites through digital light processing. <i>Cellulose</i> , <b>2019</b> , 26, 3973-3985	3.5	41
91	Thermomechanically Triggered Two-Stage Pattern Switching of 2D Lattices for Adaptive Structures. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705727	15.6	41
90	Magneto-Mechanical Metamaterials with Widely Tunable Mechanical Properties and Acoustic Bandgaps. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2005319	15.6	41
89	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> , <b>2017</b> , 26, 045008	3.4	39
88	Design for 4D printing: A voxel-based modeling and simulation of smart materials. <i>Materials and Design</i> , <b>2019</b> , 175, 107798	8.1	38
87	The m4 3D printer: A multi-material multi-method additive manufacturing platform for future 3D printed structures. <i>Additive Manufacturing</i> , <b>2019</b> , 29, 100819	6.1	38
86	A finite deformation thermomechanical constitutive model for triple shape polymeric composites based on dual thermal transitions. <i>International Journal of Solids and Structures</i> , <b>2014</b> , 51, 2777-2790	3.1	38
85	A photoviscoplastic model for photoactivated covalent adaptive networks. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2014</b> , 70, 84-103	5	38
84	Thermodynamics and mechanics of photochemically reacting polymers. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2013</b> , 61, 2212-2239	5	36
83	3D printing of complex origami assemblages for reconfigurable structures. <i>Soft Matter</i> , <b>2018</b> , 14, 8051-8059	3.6	36

82	In vivo measurement of proximal pulmonary artery elastic modulus in the neonatal calf model of pulmonary hypertension: development and ex vivo validation. <i>Journal of Applied Physiology</i> , <b>2010</b> , 108, 968-75	3.7	35
81	Influence of structural relaxation on thermomechanical and shape memory performances of amorphous polymers. <i>Polymer</i> , <b>2017</b> , 109, 216-228	3.9	34
80	Molecular dynamics studying on welding behavior in thermosetting polymers due to bond exchange reactions. <i>RSC Advances</i> , <b>2016</b> , 6, 22476-22487	3.7	34
79	Time and Temperature Dependent Recovery of Epoxy-Based Shape Memory Polymers. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , <b>2011</b> , 133,	1.8	34
78	3D printed active origami with complicated folding patterns. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , <b>2017</b> , 4, 281-289	3.8	33
77	Photo-induced deformation of active polymer films: Single spot irradiation. <i>International Journal of Solids and Structures</i> , <b>2011</b> , 48, 2089-2101	3.1	33
76	Design for 4D printing: Modeling and computation of smart materials distributions. <i>Materials and Design</i> , <b>2019</b> , 181, 108074	8.1	31
75	Rapid Volatilization Induced Mechanically Robust Shape-Morphing Structures toward 4D Printing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 17979-17987	9.5	29
74	Viscoelastic multistable architected materials with temperature-dependent snapping sequence. <i>Soft Matter</i> , <b>2018</b> , 14, 2492-2499	3.6	29
73	A microstructurally driven model for pulmonary artery tissue. <i>Journal of Biomechanical Engineering</i> , <b>2011</b> , 133, 051002	2.1	29
72	Thermoviscoplastic behaviors of anisotropic shape memory elastomeric composites for cold programmed non-affine shape change. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2015</b> , 85, 219-244	5	27
71	A viscoelastic model for hydrothermally activated malleable covalent network polymer and its application in shape memory analysis. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2019</b> , 127, 239-265	5	26
70	Highly stretchable and conductive fibers enabled by liquid metal dip-coating. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 035019	3.4	26
69	Magnetic Dynamic Polymers for Modular Assembling and Reconfigurable Morphing Architectures. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102113	24	26
68	Shape forming by thermal expansion mismatch and shape memory locking in polymer/elastomer laminates. <i>Smart Materials and Structures</i> , <b>2017</b> , 26, 105027	3.4	25
67	Cellulose nanocrystals support material for 3D printing complexly shaped structures via multi-materials-multi-methods printing. <i>Additive Manufacturing</i> , <b>2019</b> , 28, 14-22	6.1	24
66	Cyclic behaviors of amorphous shape memory polymers. <i>Soft Matter</i> , <b>2016</b> , 12, 3234-45	3.6	24
65	Three-Dimensionally Printed Mechanical Metamaterials With Thermally Tunable Auxetic Behavior. <i>Physical Review Applied</i> , <b>2019</b> , 11,	4.3	23

64	Mechanically programmed shape change in laminated elastomeric composites. <i>Soft Matter</i> , <b>2015</b> , 11, 5754-64	3.6	23
63	3D printed two-dimensional periodic structures with tailored in-plane dynamic responses and fracture behaviors. <i>Composites Science and Technology</i> , <b>2018</b> , 159, 189-198	8.6	23
62	Fabricating hydrogels to mimic biological tissues of complex shapes and high fatigue resistance. <i>Matter</i> , <b>2021</b> , 4, 1935-1946	12.7	23
61	Recyclable thermosetting polymers for digital light processing 3D printing. <i>Materials and Design</i> , <b>2021</b> , 197, 109189	8.1	23
60	Extraction of Biolubricant via Chemical Recycling of Thermosetting Polymers. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 6880-6888	8.3	22
59	Effects of stretch induced softening to the free recovery behavior of shape memory polymer composites. <i>Polymer</i> , <b>2014</b> , 55, 5938-5947	3.9	22
58	Integrating digital light processing with direct ink writing for hybrid 3D printing of functional structures and devices. <i>Additive Manufacturing</i> , <b>2021</b> , 40, 101911	6.1	21
57	A Computational Model for Surface Welding in Covalent Adaptable Networks Using Finite-Element Analysis. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2016</b> , 83,	2.7	21
56	Flexible, Reconfigurable, and Self-Healing TPU/Vitrimer Polymer Blend with Copolymerization Triggered by Bond Exchange Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 8740-8750	9.5	19
55	Impact of residual stretch and remodeling on collagen engagement in healthy and pulmonary hypertensive calf pulmonary arteries at physiological pressures. <i>Annals of Biomedical Engineering</i> , <b>2012</b> , 40, 1419-33	4.7	19
54	3D-Printed Anisotropic Polymer Materials for Functional Applications. <i>Advanced Materials</i> , <b>2021</b> , e2102877	3.7	19
53	Recent advances in additive manufacturing of active mechanical metamaterials. <i>Current Opinion in Solid State and Materials Science</i> , <b>2020</b> , 24, 100869	12	19
52	A computational biomimetic study of cell crawling. <i>Biomechanics and Modeling in Mechanobiology</i> , <b>2010</b> , 9, 573-81	3.8	18
51	Improved testing system for thermomechanical experiments on polymers using uniaxial compression equipment. <i>Polymer Testing</i> , <b>2010</b> , 29, 503-512	4.5	16
50	Effects of oxygen on interfacial strength of incremental forming of materials by photopolymerization. <i>Extreme Mechanics Letters</i> , <b>2016</b> , 9, 108-118	3.9	16
49	Reaction-Diffusion Model for Thermosetting Polymer Dissolution through Exchange Reactions Assisted by Small-Molecule Solvents. <i>Macromolecules</i> , <b>2019</b> , 52, 3636-3645	5.5	15
48	A finite deformation theory of desolvation and swelling in partially photo-cross-linked polymer networks for 3D/4D printing applications. <i>Soft Matter</i> , <b>2019</b> , 15, 1005-1016	3.6	14
47	Recycling of vitrimer blends with tunable thermomechanical properties.. <i>RSC Advances</i> , <b>2019</b> , 9, 5431-5437	3.7	14

46	Recycling Waste Circuit Board Efficiently and Environmentally Friendly through Small-Molecule Assisted Dissolution. <i>Scientific Reports</i> , <b>2019</b> , 9, 17902	4.9	14
45	Materials, design, and fabrication of shape programmable polymers. <i>Multifunctional Materials</i> , <b>2020</b> , 3, 032002	5.2	13
44	Light-induced stress relief to improve flaw tolerance in network polymers. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 053519	2.5	13
43	Stability and Surface Topography Evolution in Nanoimprinted Polymer Patterns under a Thermal Gradient. <i>Macromolecules</i> , <b>2010</b> , 43, 8191-8201	5.5	13
42	Intense pulsed light sintering of thick conductive wires on elastomeric dark substrate for hybrid 3D printing applications. <i>Smart Materials and Structures</i> , <b>2018</b> , 27, 115007	3.4	13
41	Temperature dependent evolution of wrinkled single-crystal silicon ribbons on shape memory polymers. <i>Soft Matter</i> , <b>2017</b> , 13, 7625-7632	3.6	12
40	Effects of oxygen on light activation in covalent adaptable network polymers. <i>Soft Matter</i> , <b>2015</b> , 11, 6134-44	3.6	12
39	Analysis of shape-memory polymer composites with embedded microvascular system for fast thermal response. <i>Journal of Composite Materials</i> , <b>2015</b> , 49, 1881-1893	2.7	12
38	Influence of treating parameters on thermomechanical properties of recycled epoxy-acid vitrimers. <i>Soft Matter</i> , <b>2020</b> , 16, 1668-1677	3.6	12
37	An ontology-based framework to formalize and represent 4D printing knowledge in design. <i>Computers in Industry</i> , <b>2021</b> , 126, 103374	11.6	12
36	Shape-Memory Balloon Structures by Pneumatic Multi-material 4D Printing. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2010872	15.6	11
35	Influences of processing conditions on mechanical properties of recycled epoxy-anhydride vitrimers. <i>Journal of Applied Polymer Science</i> , <b>2020</b> , 137, 49246	2.9	10
34	Non-proportional multiaxial ratchetting of ultrahigh molecular weight polyethylene polymer: Experiments and constitutive model. <i>Mechanics of Materials</i> , <b>2017</b> , 112, 76-87	3.3	9
33	Surface modification of fused filament fabrication (FFF) 3D printed substrates by inkjet printing polyimide for printed electronics. <i>Additive Manufacturing</i> , <b>2020</b> , 36, 101544	6.1	9
32	4D Printing of Glass Fiber-Regulated Shape Shifting Structures with High Stiffness. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 12797-12804	9.5	9
31	Self-adaptive flexible valve as passive flow regulator. <i>Extreme Mechanics Letters</i> , <b>2020</b> , 39, 100824	3.9	8
30	Electromagnetic Pulse Powered by a Triboelectric Nanogenerator with Applications in Accurate Self-Powered Sensing and Security. <i>Advanced Materials Technologies</i> , <b>2020</b> , 5, 2000368	6.8	8
29	Green and Sustainable Layered Chitin-Vitrimer Composite with Enhanced Modulus, Reprocessability, and Smart Actuator Function. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2020</b> , 8, 15168-15178	8.3	8

28	Constitutive Modeling of the Stress-Stretch Behavior of Two-Dimensional Triangulated Macromolecular Networks Containing Folded Domains. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2008</b> , 75,	2.7	7
27	3D Printing and Chemical Dealloying of a Hierarchically Micro- and Nanoporous Catalyst for Wastewater Purification. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 48709-48719	9.5	7
26	Machine Learning-Evolutionary Algorithm Enabled Design for 4D-Printed Active Composite Structures. <i>Advanced Functional Materials</i> , 2109805	15.6	6
25	Modeling the dissolution of thermosetting polymers and composites via solvent assisted exchange reactions. <i>Composites Part B: Engineering</i> , <b>2020</b> , 200, 108363	10	6
24	Utilizing computer vision and artificial intelligence algorithms to predict and design the mechanical compression response of direct ink write 3D printed foam replacement structures. <i>Additive Manufacturing</i> , <b>2021</b> , 41, 101950	6.1	6
23	A micro-structure based constitutive model for anisotropic stress-strain behaviors of artery tissues. <i>International Journal of Solids and Structures</i> , <b>2018</b> , 139-140, 55-64	3.1	5
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