

Di Chen

List of Publications by Year in descending order

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Version: 2024-02-01

51
papers

3,393
citations

257450

24
h-index

206112

48
g-index

53
all docs

53
docs citations

53
times ranked

3358
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in skin collagen: functionality and non-medical applications. Journal of Leather Science and Engineering, 2021, 3, .	6.0	20
2	An Innovative Solvent-Responsive Coiling-Expanding Stent. Advanced Materials, 2021, 33, e2101005.	21.0	33
3	Spidroin-Based Biomaterials in Tissue Engineering: General Approaches and Potential Stem Cell Therapies. Stem Cells International, 2021, 2021, 1-16.	2.5	9
4	Achieving coalesced breathability, mechanical and shape memory properties of collagen fibrous matrix through complexing with chromium (III). Materials and Design, 2020, 186, 108206.	7.0	9
5	A Spider-Capture-Silk-Like Fiber with Extremely High-Volume Directional Water Collection. Advanced Functional Materials, 2020, 30, 2002437.	14.9	65
6	Collagen incorporation into waterborne polyurethane improves breathability, mechanical property, and self-healing ability. Composites Part A: Applied Science and Manufacturing, 2020, 133, 105854.	7.6	33
7	Mechanically Robust, Responsive Composite Membrane for a Thermoregulating Textile. ACS Omega, 2020, 5, 3899-3907.	3.5	12
8	Isocyanate Modified GO Shape-Memory Polyurethane Composite. Polymers, 2020, 12, 118.	4.5	12
9	Tea-polyphenol treated skin collagen owns coalesced adaptive-hydration, tensile strength and shape-memory property. International Journal of Biological Macromolecules, 2020, 158, 1-8.	7.5	12
10	Microscopy of Shape Memory Polymers, Polymer Blends, and Composites. Advanced Structured Materials, 2020, , 95-127.	0.5	0
11	Smart behavior of collagen skin: water-sensitive shape memory. Materials Today: Proceedings, 2019, 16, 1415-1422.	1.8	3
12	A titin inspired stress-memory polymer acts as a muscle. Materials Chemistry Frontiers, 2019, 3, 2463-2471.	5.9	5
13	Artificial spider silk is smart like natural one: having humidity-sensitive shape memory with superior recovery stress. Materials Chemistry Frontiers, 2019, 3, 2472-2482.	5.9	34
14	Fibers Made of Recombinant Spidroins-A Brief Review. AATCC Journal of Research, 2019, 6, 37-40.	0.6	11
15	Cellulose/Chitosan Composite Multifilament Fibers with Two-Switch Shape Memory Performance. ACS Sustainable Chemistry and Engineering, 2019, 7, 6981-6990.	6.7	62
16	A skin inspired bio-smart composite with water responsive shape memory ability. Materials Chemistry Frontiers, 2019, 3, 1128-1138.	5.9	28
17	A Single Polymer Artificial Muscle Having Dual-Mode Contractibility, Temperature Sensibility, and Trainability through Enthalpy Change. Advanced Materials Technologies, 2019, 4, 1900017.	5.8	9
18	Stimuli-responsive polymers in coating and laminating for functional textile. , 2019, , 155-173.		8

#	ARTICLE	IF	CITATIONS
19	Tailor-made spider-eggcase-silk spheres for efficient lysosomal drug delivery. RSC Advances, 2018, 8, 9394-9401.	3.6	10
20	Designing of advanced smart medical stocking using stress-memory polymeric filaments for pressure control and massaging. Materials Science and Engineering C, 2018, 91, 263-273.	7.3	18
21	Collagen skin, a water-sensitive shape memory material. Journal of Materials Chemistry B, 2018, 6, 5144-5152.	5.8	28
22	Shape Memory-Enhanced Electrical Self-Healing of Stretchable Electrodes. Applied Sciences (Switzerland), 2018, 8, 392.	2.5	13
23	Bioinspired Fabrication of Polyurethane/Regenerated Silk Fibroin Composite Fibres with Tubuliform Silk-Like Flat Stress-Strain Behaviour. Polymers, 2018, 10, 333.	4.5	19
24	In-Situ Incorporation of Alkyl-Grafted Silica into Waterborne Polyurethane with High Solid Content for Enhanced Physical Properties of Coatings. Polymers, 2018, 10, 514.	4.5	22
25	Modular Assembly of a Conserved Repetitive Sequence in the Spider Eggcase Silk: From Gene to Fiber. ACS Biomaterials Science and Engineering, 2018, 4, 2748-2757.	5.2	15
26	Mechanically strong shape memory polyurethane for water vapour permeable membranes. Polymer International, 2018, 67, 1386-1392.	3.1	12
27	Stress-memory polymeric filaments for advanced compression therapy. Journal of Materials Chemistry B, 2017, 5, 1905-1916.	5.8	37
28	Self-adaptive water vapor permeability and its hydrogen bonding switches of bio-inspired polymer thin films. Materials Chemistry Frontiers, 2017, 1, 2027-2030.	5.9	22
29	Is biopolymer hair a multi-responsive smart material?. Polymer Chemistry, 2017, 8, 283-294.	3.9	38
30	Stress memory materials and their fundamental platform. Journal of Materials Chemistry A, 2017, 5, 503-511.	10.3	19
31	Polyurethane: A Shape Memory Polymer (SMP). , 2017, , .		19
32	Design of a Smart Nerve Conduit Based on a Shape-Memory Polymer. Advanced Materials Technologies, 2016, 1, 1600015.	5.8	31
33	A smart orthopedic compression device based on a polymeric stress memory actuator. Materials and Design, 2016, 97, 222-229.	7.0	27
34	Constituent analysis of stress memory in semicrystalline polyurethane. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 941-947.	2.1	9
35	Stress memory polymers. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 893-898.	2.1	24
36	Memory chromic polyurethane with tetraphenylethylene. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 104-110.	2.1	42

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37	Hydrogen-Bonding Interactions in Hard Segments of Shape Memory Polyurethane: Toluene Diisocyanates and 1,6-Hexamethylene Diisocyanate. A Theoretical and Comparative Study. <i>Journal of Physical Chemistry A</i> , 2014, 118, 12241-12255.	2.5	33
38	Spider Silk: A Smart Biopolymer with Water Switchable Shape Memory Effects -Unraveling the Mystery of Supercontraction. <i>Research Journal of Textile and Apparel</i> , 2013, 17, 1-9.	1.1	16
39	Healable thermoset polymer composite embedded with stimuli-responsive fibres. <i>Journal of the Royal Society Interface</i> , 2012, 9, 3279-3287.	3.4	95
40	Recent advances in shape-memory polymers: Structure, mechanism, functionality, modeling and applications. <i>Progress in Polymer Science</i> , 2012, 37, 1720-1763.	24.7	1,058
41	A review of stimuli-responsive polymers for smart textile applications. <i>Smart Materials and Structures</i> , 2012, 21, 053001.	3.5	467
42	Rapidly switchable water-sensitive shape-memory cellulose/elastomer nano-composites. <i>Soft Matter</i> , 2012, 8, 2509.	2.7	192
43	Fourier transform infrared study of supramolecular polyurethane networks containing pyridine moieties for shape memory materials. <i>Polymer International</i> , 2010, 59, 529-538.	3.1	33
44	The influence of heat treatment on the properties of shape memory fibers. II. Tensile properties, dimensional stability, recovery force relaxation, and thermomechanical cyclic properties. <i>Journal of Applied Polymer Science</i> , 2009, 111, 1156-1164.	2.6	24
45	Novel moisture-sensitive shape memory polyurethanes containing pyridine moieties. <i>Polymer</i> , 2009, 50, 4424-4428.	3.8	135
46	A temperature-regulating fiber made of PEG-based smart copolymer. <i>Solar Energy Materials and Solar Cells</i> , 2008, 92, 1245-1252.	6.2	60
47	Electrospun polyurethane nanofibres having shape memory effect. <i>Materials Letters</i> , 2008, 62, 2074-2076.	2.6	93
48	Morphology, phase separation, thermal and mechanical property differences of shape memory fibres prepared by different spinning methods. <i>Smart Materials and Structures</i> , 2007, 16, 1192-1197.	3.5	88
49	Effect of cationic group content on shape memory effect in segmented polyurethane cationomer. <i>Journal of Applied Polymer Science</i> , 2007, 103, 545-556.	2.6	55
50	Smart polymer fibers with shape memory effect. <i>Smart Materials and Structures</i> , 2006, 15, 1547-1554.	3.5	159
51	Development of shape memory polyurethane fiber with complete shape recoverability. <i>Smart Materials and Structures</i> , 2006, 15, 1385-1394.	3.5	108