

Xin Chen

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162
papers

8,012
citations

50
h-index

83
g-index

169
ext. papers

9,086
ext. citations

6.3
avg, IF

6.32
L-index

#	Paper	IF	Citations
162	A review on polymeric hydrogel membranes for wound dressing applications: PVA-based hydrogel dressings. <i>Journal of Advanced Research</i> , 2017 , 8, 217-233	13	763
161	Crosslinked poly(vinyl alcohol) hydrogels for wound dressing applications: A review of remarkably blended polymers. <i>Arabian Journal of Chemistry</i> , 2015 , 8, 1-14	5.9	380
160	Conformation transition kinetics of regenerated Bombyx mori silk fibroin membrane monitored by time-resolved FTIR spectroscopy. <i>Biophysical Chemistry</i> , 2001 , 89, 25-34	3.5	240
159	Synchrotron FTIR microspectroscopy of single natural silk fibers. <i>Biomacromolecules</i> , 2011 , 12, 3344-9	6.9	204
158	Doxorubicin-loaded magnetic silk fibroin nanoparticles for targeted therapy of multidrug-resistant cancer. <i>Advanced Materials</i> , 2014 , 26, 7393-8	24	181
157	Silk Fibers Extruded Artificially from Aqueous Solutions of Regenerated Bombyx mori Silk Fibroin are Tougher than their Natural Counterparts. <i>Advanced Materials</i> , 2009 , 21, 366-370	24	160
156	Regenerated Bombyx silk solutions studied with rheometry and FTIR. <i>Polymer</i> , 2001 , 42, 09969-09974	3.9	156
155	Conformation transition kinetics of Bombyx mori silk protein. <i>Proteins: Structure, Function and Bioinformatics</i> , 2007 , 68, 223-31	4.2	154
154	Green synthesis of silk fibroin-silver nanoparticle composites with effective antibacterial and biofilm-disrupting properties. <i>Biomacromolecules</i> , 2013 , 14, 4483-8	6.9	131
153	The preparation of regenerated silk fibroin microspheres. <i>Soft Matter</i> , 2007 , 3, 910-915	3.6	129
152	Enhancing Mechanical Properties of Silk Fibroin Hydrogel through Restricting the Growth of Sheet Domains. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 17489-17498	9.5	127
151	Electrical behavior of a natural polyelectrolyte hydrogel: chitosan/carboxymethylcellulose hydrogel. <i>Biomacromolecules</i> , 2008 , 9, 1208-13	6.9	125
150	Effect of metallic ions on silk formation in the Mulberry silkworm, Bombyx mori. <i>Journal of Physical Chemistry B</i> , 2005 , 109, 16937-45	3.4	122
149	Soy protein-based polyethylenimine hydrogel and its high selectivity for copper ion removal in wastewater treatment. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 4163-4171	13	113
148	Rheological characterization of nephila spidroin solution. <i>Biomacromolecules</i> , 2002 , 3, 644-8	6.9	109
147	Directed Growth of Silk Nanofibrils on Graphene and Their Hybrid Nanocomposites.. <i>ACS Macro Letters</i> , 2014 , 3, 146-152	6.6	106
146	Wet-spinning of regenerated silk fiber from aqueous silk fibroin solution: discussion of spinning parameters. <i>Biomacromolecules</i> , 2010 , 11, 1-5	6.9	106

145	Modulating materials by orthogonally oriented β -strands: composites of amyloid and silk fibroin fibrils. <i>Advanced Materials</i> , 2014 , 26, 4569-74	24	103
144	The natural silk spinning process. A nucleation-dependent aggregation mechanism?. <i>FEBS Journal</i> , 2001 , 268, 6600-6		102
143	Optical spectroscopy to investigate the structure of regenerated Bombyx mori silk fibroin in solution. <i>Biomacromolecules</i> , 2004 , 5, 773-9	6.9	99
142	Understanding the Mechanical Properties of Antheraea Pernyi Silk From Primary Structure to Condensed Structure of the Protein. <i>Advanced Functional Materials</i> , 2011 , 21, 729-737	15.6	94
141	Toughness of Spider Silk at High and Low Temperatures. <i>Advanced Materials</i> , 2005 , 17, 84-88	24	93
140	pH sensitivity and ion sensitivity of hydrogels based on complex-forming chitosan/silk fibroin interpenetrating polymer network. <i>Journal of Applied Polymer Science</i> , 1997 , 65, 2257-2262	2.9	92
139	Effect of pH and copper(II) on the conformation transitions of silk fibroin based on EPR, NMR, and Raman spectroscopy. <i>Biochemistry</i> , 2004 , 43, 11932-41	3.2	92
138	Enhancing the Gelation and Bioactivity of Injectable Silk Fibroin Hydrogel with Laponite Nanoplatelets. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 9619-28	9.5	90
137	Facile fabrication of CuO mesoporous nanosheet cluster array electrodes with super lithium-storage properties. <i>Journal of Materials Chemistry</i> , 2012 , 22, 13637		90
136	Two distinct beta-sheet fibrils from silk protein. <i>Chemical Communications</i> , 2009 , 7506-8	5.8	84
135	Conformation transition in silk protein films monitored by time-resolved Fourier transform infrared spectroscopy: effect of potassium ions on Nephila spidroin films. <i>Biochemistry</i> , 2002 , 41, 14944-50	3.2	83
134	Conformation transition of silk fibroin induced by blending chitosan. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1997 , 35, 2293-2296	2.6	82
133	Electrospinning of reconstituted silk fiber from aqueous silk fibroin solution. <i>Materials Science and Engineering C</i> , 2009 , 29, 2270-2274	8.3	73
132	Investigation of rheological properties and conformation of silk fibroin in the solution of AmimCl. <i>Biomacromolecules</i> , 2012 , 13, 1875-81	6.9	72
131	Insight into the structure of single Antheraea pernyi silkworm fibers using synchrotron FTIR microspectroscopy. <i>Biomacromolecules</i> , 2013 , 14, 1885-92	6.9	71
130	Chitosan-based electroactive hydrogel. <i>Polymer</i> , 2008 , 49, 5520-5525	3.9	71
129	Preparation and characterization of HY zeolite-filled chitosan membranes for pervaporation separation. <i>Journal of Applied Polymer Science</i> , 2001 , 79, 1144-1149	2.9	69
128	Biocompatibility of Poly(epsilon-caprolactone) scaffold modified by chitosan--the fibroblasts proliferation in vitro. <i>Journal of Biomaterials Applications</i> , 2005 , 19, 323-39	2.9	67

127	Study on biodegradable polymer materials based on poly(lactic acid). I. Chain extending of low molecular weight poly(lactic acid) with methylenediphenyl diisocyanate. <i>Journal of Applied Polymer Science</i> , 1999 , 74, 2546-2551	2.9	65
126	Protein adsorption and separation with chitosan-based amphoteric membranes. <i>Polymer</i> , 2009 , 50, 12573-1263	3.6	64
125	Separation properties of alcohol-water mixture through silicalite-I-filled silicone rubber membranes by pervaporation. <i>Journal of Applied Polymer Science</i> , 1998 , 67, 629-636	2.9	63
124	Strong Collagen Hydrogels by Oxidized Dextran Modification. <i>ACS Sustainable Chemistry and Engineering</i> , 2014 , 2, 1318-1324	8.3	62
123	The spinning processes for spider silk. <i>Soft Matter</i> , 2006 , 2, 448-451	3.6	62
122	Graphene/silk fibroin based carbon nanocomposites for high performance supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 773-781	13	61
121	Macroporous chitosan/carboxymethylcellulose blend membranes and their application for lysozyme adsorption. <i>Journal of Applied Polymer Science</i> , 2005 , 96, 1267-1274	2.9	61
120	Paclitaxel-loaded silk fibroin nanospheres. <i>Journal of Biomedical Materials Research - Part A</i> , 2012 , 100, 203-10	5.4	60
119	β-turn formation during the conformation transition in silk fibroin. <i>Soft Matter</i> , 2009 , 5, 2777	3.6	60
118	Preparation and characterization of transparent silk fibroin/cellulose blend films. <i>Polymer</i> , 2013 , 54, 5035-5042	3.9	57
117	Silk fibroin modified porous poly(epsilon-caprolactone) scaffold for human fibroblast culture in vitro. <i>Journal of Materials Science: Materials in Medicine</i> , 2004 , 15, 671-7	4.5	56
116	Robust Protein Hydrogels from Silkworm Silk. <i>ACS Sustainable Chemistry and Engineering</i> , 2016 , 4, 1500-1506	8.5	53
115	Protein biomineralized nanoporous inorganic mesocrystals with tunable hierarchical nanostructures. <i>Journal of the American Chemical Society</i> , 2014 , 136, 15781-6	16.4	53
114	Copper in the silk formation process of Bombyx mori silkworm. <i>FEBS Letters</i> , 2003 , 554, 337-41	3.8	52
113	Tough protein-carbon nanotube hybrid fibers comparable to natural spider silks. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 3940-3947	7.3	50
112	Thixotropic silk nanofibril-based hydrogel with extracellular matrix-like structure. <i>Biomaterials Science</i> , 2014 , 2, 1338-1342	7.4	49
111	Plant Protein-Directed Synthesis of Luminescent Gold Nanocluster Hybrids for Tumor Imaging. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 83-90	9.5	49
110	FTIR imaging, a useful method for studying the compatibility of silk fibroin-based polymer blends. <i>Polymer Chemistry</i> , 2013 , 4, 5401	4.9	48

109	The effect of water on the conformation transition of Bombyx mori silk fibroin. <i>Vibrational Spectroscopy</i> , 2009 , 51, 105-109	2.1	47
108	An antimicrobial film by embedding in situ synthesized silver nanoparticles in soy protein isolate. <i>Materials Letters</i> , 2013 , 95, 142-144	3.3	46
107	Synthesis and characterization of multiblock copolymers based on spider dragline silk proteins. <i>Biomacromolecules</i> , 2006 , 7, 2415-9	6.9	46
106	Insights into Silk Formation Process: Correlation of Mechanical Properties and Structural Evolution during Artificial Spinning of Silk Fibers. <i>ACS Biomaterials Science and Engineering</i> , 2016 , 2, 1992-2000	5.5	46
105	Design of injectable agar-based composite hydrogel for multi-mode tumor therapy. <i>Carbohydrate Polymers</i> , 2018 , 180, 112-121	10.3	44
104	Natural electroactive hydrogel from soy protein isolation. <i>Biomacromolecules</i> , 2010 , 11, 3638-43	6.9	43
103	Thermal and crystalline behaviour of silk fibroin/nylon 66 blend films. <i>Polymer</i> , 2004 , 45, 7705-7710	3.9	43
102	Robust soy protein films obtained by slight chemical modification of polypeptide chains. <i>Polymer Chemistry</i> , 2013 , 4, 5425	4.9	42
101	Injectable thixotropic hydrogel comprising regenerated silk fibroin and hydroxypropylcellulose. <i>Soft Matter</i> , 2012 , 8, 2875	3.6	42
100	Separation of alcohol-water mixture by pervaporation through a novel natural polymer blend membrane-chitosan/silk fibroin blend membrane. <i>Journal of Applied Polymer Science</i> , 1999 , 73, 975-980	2.9	41
99	Exploration of the tight structural-mechanical relationship in mulberry and non-mulberry silkworm silks. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 4337-4347	7.3	39
98	Intelligent Janus nanoparticles for intracellular real-time monitoring of dual drug release. <i>Nanoscale</i> , 2016 , 8, 6754-60	7.7	38
97	Self-assembly of a peptide amphiphile based on hydrolysed Bombyx mori silk fibroin. <i>Chemical Communications</i> , 2011 , 47, 10296-8	5.8	38
96	Ultrafast and reversible thermochromism of a conjugated polymer material based on the assembly of peptide amphiphiles. <i>Chemical Science</i> , 2014 , 5, 4189-4195	9.4	36
95	Hematite nanostructures synthesized by a silk fibroin-assisted hydrothermal method. <i>Journal of Materials Chemistry B</i> , 2013 , 1, 213-220	7.3	35
94	Formation kinetics and fractal characteristics of regenerated silk fibroin alginate developed from nanofibrillar network. <i>Soft Matter</i> , 2010 , 6, 1217	3.6	35
93	Preparation and characterization of chitosan/Cu(II) affinity membrane for urea adsorption. <i>Journal of Applied Polymer Science</i> , 2003 , 90, 1108-1112	2.9	34
92	The preparation of high performance silk fiber/fibroin composite. <i>Polymer</i> , 2010 , 51, 4843-4849	3.9	32

91	Correlation between structural and dynamic mechanical transitions of regenerated silk fibroin. <i>Polymer</i> , 2010 , 51, 6278-6283	3.9	32
90	Further investigation on potassium-induced conformation transition of Nephila spidroin film with two-dimensional infrared correlation spectroscopy. <i>Biomacromolecules</i> , 2005 , 6, 302-8	6.9	32
89	Synthesis of hierarchical three-dimensional copper oxide nanostructures through a biomineralization-inspired approach. <i>Nanoscale</i> , 2013 , 5, 7991-7	7.7	31
88	Crystallization of calcium carbonate on chitosan substrates in the presence of regenerated silk fibroin. <i>Langmuir</i> , 2011 , 27, 2804-10	4	31
87	Synthesis and Solid-State Secondary Structure Investigation of Silk Proteinlike Multiblock Polymers. <i>Macromolecules</i> , 2003 , 36, 7508-7512	5.5	30
86	Fabrication of Air-Stable and Conductive Silk Fibroin Gels. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 38466-38475	9.5	29
85	Structure and properties of various hybrids fabricated by silk nanofibrils and nanohydroxyapatite. <i>Nanoscale</i> , 2016 , 8, 20096-20102	7.7	28
84	Synergistic interactions during thermosensitive chitosan-glycerophosphate hydrogel formation. <i>RSC Advances</i> , 2011 , 1, 282	3.7	28
83	Conformation transition of Bombyx mori silk protein monitored by time-dependent fourier transform infrared (FT-IR) spectroscopy: effect of organic solvent. <i>Applied Spectroscopy</i> , 2012 , 66, 696-9	3.1	28
82	Radiologic and histologic characterization of silk fibroin as scaffold coating for rabbit tracheal defect repair. <i>Otolaryngology - Head and Neck Surgery</i> , 2008 , 139, 256-61	5.5	28
81	Floxuridine-loaded silk fibroin nanospheres. <i>RSC Advances</i> , 2014 , 4, 18171-18177	3.7	27
80	Conformation transition kinetics and spinnability of regenerated silk fibroin with glycol, glycerol and polyethylene glycol. <i>Materials Letters</i> , 2012 , 81, 13-15	3.3	27
79	Facile fabrication of the porous three-dimensional regenerated silk fibroin scaffolds. <i>Materials Science and Engineering C</i> , 2013 , 33, 3522-9	8.3	27
78	Biomimetic synthesis of silica with chitosan-mediated morphology. <i>Small</i> , 2008 , 4, 755-8	11	27
77	X-ray photoelectron spectroscopic and Raman analysis of silk fibroin-Cu(II) films. <i>Biopolymers</i> , 2006 , 82, 144-51	2.2	27
76	A hierarchical adsorption material by incorporating mesoporous carbon into macroporous chitosan membranes. <i>Journal of Materials Chemistry</i> , 2012 , 22, 11908		26
75	Immobilization of glucose oxidase with the blend of regenerated silk fibroin and poly(vinyl alcohol) and its application to a 1,1-dimethylferrocene-mediated glucose sensor. <i>Applied Biochemistry and Biotechnology</i> , 1997 , 62, 105-17	3.2	26
74	Templating effect of silk fibers in the oriented deposition of aragonite. <i>Chemical Communications</i> , 2008 , 5511-3	5.8	26

73	Understanding Secondary Structures of Silk Materials via Micro- and Nano-Infrared Spectroscopies. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 3161-3183	5.5	25
72	Physically Cross-Linked Silk Fibroin-Based Tough Hydrogel Electrolyte with Exceptional Water Retention and Freezing Tolerance. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 25353-25362	9.5	24
71	A facile fabrication of silk/MoS hybrids for Photothermal therapy. <i>Materials Science and Engineering C</i> , 2017 , 79, 123-129	8.3	23
70	Intelligent Silk Fibroin Ionotronic Skin for Temperature Sensing. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000430	6.8	23
69	Structural determination of protein-based polymer blends with a promising tool: combination of FTIR and STXM spectroscopic imaging. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 7741-8	3.6	23
68	A pilot study of macrophage responses to silk fibroin particles. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 1511-7	5.4	23
67	Artificial ligament made from silk protein/Laponite hybrid fibers. <i>Acta Biomaterialia</i> , 2020 , 106, 102-113	10.8	22
66	Fabrication of an alternative regenerated silk fibroin nanofiber and carbonated hydroxyapatite multilayered composite via layer-by-layer. <i>Journal of Materials Science</i> , 2013 , 48, 150-155	4.3	22
65	Silk fibroin immobilization on poly(ethylene terephthalate) films: comparison of two surface modification methods and their effect on mesenchymal stem cells culture. <i>Materials Science and Engineering C</i> , 2013 , 33, 1409-16	8.3	22
64	Bandgap Engineered Polypyrrole-Polydopamine Hybrid with Intrinsic Raman and Photoacoustic Imaging Contrasts. <i>Nano Letters</i> , 2018 , 18, 7485-7493	11.5	22
63	The regenerated silk fibroin hydrogel with designed architecture bioprinted by its microhydrogel. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 4328-4337	7.3	21
62	Protein adsorption and separation on amphoteric chitosan/carboxymethylcellulose membranes. <i>Journal of Biomedical Materials Research - Part A</i> , 2008 , 86, 694-700	5.4	21
61	Biocompatibility of poly (3-hydroxybutyrate-co-3-hydroxyhexanoate) modified by silk fibroin. <i>Journal of Materials Science: Materials in Medicine</i> , 2006 , 17, 749-58	4.5	21
60	Soy protein-directed one-pot synthesis of gold nanomaterials and their functional conductive devices. <i>Journal of Materials Chemistry B</i> , 2016 , 4, 3643-3650	7.3	21
59	Sol-Gel Transition of Regenerated Silk Fibroins in Ionic Liquid/Water Mixtures. <i>ACS Biomaterials Science and Engineering</i> , 2016 , 2, 12-18	5.5	20
58	Wet-spinning of regenerated silk fiber from aqueous silk fibroin solutions: Influence of calcium ion addition in spinning dope on the performance of regenerated silk fiber. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2014 , 32, 29-34	3.5	20
57	Kinetics of thermally-induced conformational transitions in soybean protein films. <i>Polymer</i> , 2010 , 51, 2410-2416	3.9	19
56	Understanding the Mechanical Properties and Structure Transition of <i>Antheraea pernyi</i> Silk Fiber Induced by Its Contraction. <i>Biomacromolecules</i> , 2018 , 19, 1999-2006	6.9	18

55	A kinetic model for thermal degradation in polymers with specific application to proteins. <i>Polymer</i> , 2009 , 50, 1814-1818	3.9	18
54	Near-infrared characterization on the secondary structure of regenerated Bombyx mori silk fibroin. <i>Applied Spectroscopy</i> , 2006 , 60, 1438-41	3.1	18
53	Selective chemical modification of soy protein for a tough and applicable plant protein-based material. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 5241-5248	7.3	17
52	Size-controllable dual drug-loaded silk fibroin nanospheres through a facile formation process. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 1179-1186	7.3	17
51	Tamoxifen-loaded silk fibroin electrospun fibers. <i>Materials Letters</i> , 2016 , 178, 31-34	3.3	17
50	A Recycling-Free Nanocatalyst System: The Stabilization of In Situ-Reduced Noble Metal Nanoparticles on Silicone Nanofilaments via a Mussel-Inspired Approach. <i>ACS Catalysis</i> , 2017 , 7, 2412-2418	13.1	16
49	One-step synthesis of soy protein/graphene nanocomposites and their application in photothermal therapy. <i>Materials Science and Engineering C</i> , 2016 , 68, 798-804	8.3	16
48	Pea Protein/Gold Nanocluster/Indocyanine Green Ternary Hybrid for Near-Infrared Fluorescence/Computed Tomography Dual-Modal Imaging and Synergistic Photodynamic/Photothermal Therapy. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 4799-4807	5.5	16
47	Precise correlation of macroscopic mechanical properties and microscopic structures of animal silks-using <i>Antheraea pernyi</i> silkworm silk as an example. <i>Journal of Materials Chemistry B</i> , 2017 , 5, 6042-6048	7.3	16
46	Chitosan-based membrane chromatography for protein adsorption and separation. <i>Materials Science and Engineering C</i> , 2012 , 32, 1669-73	8.3	16
45	Preparation and characterization of antibacterial poly(lactic acid) nanocomposites with N-halamine modified silica. <i>International Journal of Biological Macromolecules</i> , 2020 , 155, 1468-1477	7.9	16
44	Dual-loaded, long-term sustained drug releasing and thixotropic hydrogel for localized chemotherapy of cancer. <i>Biomaterials Science</i> , 2019 , 7, 2975-2985	7.4	15
43	Water-Resistant Zein-Based Adhesives. <i>ACS Sustainable Chemistry and Engineering</i> , 2020 , 8, 7668-7679	8.3	15
42	Determination of phase behaviour in all protein blend materials with multivariate FTIR imaging technique. <i>Journal of Materials Chemistry B</i> , 2015 , 3, 834-839	7.3	14
41	A Robust, Resilient, and Multi-Functional Soy Protein-Based Hydrogel. <i>ACS Sustainable Chemistry and Engineering</i> , 2018 , 6, 13730-13738	8.3	13
40	Influence of degree of substitution and folic acid coinitiator on pullulan-HEMA hydrogel properties crosslinked under visible-light initiating system. <i>International Journal of Biological Macromolecules</i> , 2018 , 116, 1175-1185	7.9	13
39	Poly(vinyl alcohol) Hydrogels with Integrated Toughness, Conductivity, and Freezing Tolerance Based on Ionic Liquid/Water Binary Solvent Systems. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 29008-29020	9.5	12
38	Formation of different gold nanostructures by silk nanofibrils. <i>Materials Science and Engineering C</i> , 2016 , 64, 376-382	8.3	12

37	Silk-based hybrid microfibrinous mats as guided bone regeneration membranes. <i>Journal of Materials Chemistry B</i> , 2021 , 9, 2025-2032	7.3	12
36	Influence of photoinitiator concentration and irradiation time on the crosslinking performance of visible-light activated pullulan-HEMA hydrogels. <i>International Journal of Biological Macromolecules</i> , 2018 , 120, 1884-1892	7.9	12
35	Silk-based pressure/temperature sensing bimodal ionotronic skin with stimulus discriminability and low temperature workability. <i>Chemical Engineering Journal</i> , 2021 , 422, 130091	14.7	12
34	Morphology and Properties of a New Biodegradable Material Prepared from Zein and Poly(butylene adipate-terephthalate) by Reactive Blending. <i>ACS Omega</i> , 2019 , 4, 5609-5616	3.9	11
33	Cryogenic toughness of natural silk and a proposed structure-function relationship. <i>Materials Chemistry Frontiers</i> , 2019 , 3, 2507-2513	7.8	11
32	Exploration of the nature of a unique natural polymer-based thermosensitive hydrogel. <i>Soft Matter</i> , 2016 , 12, 492-9	3.6	10
31	Colorless Silk/Copper Sulfide Hybrid Fiber and Fabric with Spontaneous Heating Property under Sunlight. <i>Biomacromolecules</i> , 2020 , 21, 1596-1603	6.9	10
30	Environmentally responsive composite films fabricated using silk nanofibrils and silver nanowires. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 12940-12947	7.1	10
29	Facile Dissolution of Zein Using a Common Solvent Dimethyl Sulfoxide. <i>Langmuir</i> , 2019 , 35, 6640-6649	4	9
28	Direct Observation of Native Silk Fibroin Conformation in Silk Gland of Silkworm. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 1874-1879	5.5	9
27	Efficacy of silk fibroin-nano silver against biofilms in a rabbit model of sinusitis. <i>International Journal of Nanomedicine</i> , 2017 , 12, 2933-2939	7.3	9
26	Investigation on thermally-induced conformation transition of soy protein film with variable-temperature FTIR spectroscopy. <i>Journal of Applied Polymer Science</i> , 2012 , 124, 2838-2845	2.9	9
25	Microspheres of calcium carbonate composite regulated by sodium polyacrylates with various ways. <i>Journal of Applied Polymer Science</i> , 2009 , 114, 3686-3692	2.9	9
24	Synthesis of novel multi-hydroxyl -halamine precursors based on barbituric acid and their applications in antibacterial poly(ethylene terephthalate) (PET) materials. <i>Journal of Materials Chemistry B</i> , 2020 , 8, 8695-8701	7.3	9
23	Silk Fibroin Acts as a Self-Emulsifier to Prepare Hierarchically Porous Silk Fibroin Scaffolds through Emulsion-Ice Dual Templates. <i>ACS Omega</i> , 2018 , 3, 3396-3405	3.9	8
22	Characterization and assembly investigation of a dodecapeptide hydrolyzed from the crystalline domain of Bombyx mori silk fibroin. <i>Polymer Chemistry</i> , 2013 , 4, 3005	4.9	8
21	Construction of a functional silk-based biomaterial complex with immortalized chondrocytes in vivo. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 1071-8	5.4	7
20	Quasi one-dimensional assembly of gold nanoparticles templated by a pH-sensitive peptide amphiphile from silk fibroin. <i>RSC Advances</i> , 2012 , 2, 5599	3.7	7

19	The Al ³⁺ Sensitivity of Chitosan-Silk Fibroin Complex Membrane on Swelling and Its Application on Chemical Valve for the Separation of Isopropanol-Water Mixture. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 1997 , 34, 2451-2460	2.2	7
18	Preparing 3D-printable silk fibroin hydrogels with robustness by a two-step crosslinking method.. <i>RSC Advances</i> , 2020 , 10, 27225-27234	3.7	7
17	Application of far-infrared spectroscopy to the structural identification of protein materials. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 11643-11648	3.6	6
16	PREPARATION OF HIGH MOLECULAR WEIGHT SOY PROTEIN AQUEOUS SOLUTION AND SEPARATION OF ITS MAIN COMPONENTS. <i>Acta Polymerica Sinica</i> , 2010 , 010, 250-254		6
15	Effect of stress on the molecular structure and mechanical properties of supercontracted spider dragline silks. <i>Journal of Materials Chemistry B</i> , 2020 , 8, 168-176	7.3	6
14	Silk microfibrillar mats with long-lasting antimicrobial function. <i>Journal of Materials Science and Technology</i> , 2021 , 63, 203-209	9.1	6
13	A highly stretchable and anti-freezing silk-based conductive hydrogel for application as a self-adhesive and transparent ionotronic skin. <i>Journal of Materials Chemistry C</i> ,	7.1	6
12	Morphology and mechanical properties of soy protein scaffolds made by directional freezing. <i>Journal of Applied Polymer Science</i> , 2010 , 118, n/a-n/a	2.9	5
11	Multi-responsive polyethylene-polyamine/gelatin hydrogel induced by non-covalent interactions. <i>RSC Advances</i> , 2016 , 6, 48661-48665	3.7	5
10	The Silk Textile Embedded in Silk Fibroin Composite: Preparation and Properties. <i>Chinese Journal of Polymer Science (English Edition)</i> , 2018 , 36, 1043-1046	3.5	3
9	Doxorubicin-Loaded Silk Fibroin Nanospheres. <i>Acta Chimica Sinica</i> , 2014 , 72, 1164	3.3	3
8	Structural Changes in Spider Dragline Silk after Repeated Supercontraction-Stretching Processes. <i>Biomacromolecules</i> , 2020 , 21, 5306-5314	6.9	3
7	Chondrocytes cultured in silk-based biomaterials maintain function and cell morphology. <i>International Journal of Artificial Organs</i> , 2019 , 42, 31-41	1.9	3
6	PREPARATION AND ANTIMICROBIAL PROPERTIES OF PVA/TANNIN BLEND FILMS. <i>Acta Polymerica Sinica</i> , 2012 , 012, 125-130		2
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