Xin Chen

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Enhancement of the Mechanical Properties of Poly(lactic acid)/Epoxidized Soybean Oil Blends by the Addition of 3-Aminophenylboronic Acid. *ACS Omega*, **2022**, 7, 17841-17848	3.9	
161	Application of an ultrasound semi-quantitative assessment in the degradation of silk fibroin scaffolds in vivo. *BioMedical Engineering OnLine*, **2021**, 20, 48	4.1	
160	Crystallization, Mechanical, and Antimicrobial Properties of Diallyl Cyanuric Derivative-Grafted Polypropylene. *ACS Omega*, **2021**, 6, 12794-12800	3.9	1
159	Poly(vinyl alcohol) Hydrogels with Integrated Toughness, Conductivity, and Freezing Tolerance Based on Ionic Liquid/Water Binary Solvent Systems. *ACS Applied Materials & Interfaces*, **2021**, 13, 29008-29020	9.5	12
158	Silk microfibrous mats with long-lasting antimicrobial function. *Journal of Materials Science and Technology*, **2021**, 63, 203-209	9.1	6
157	Silk-based hybrid microfibrous mats as guided bone regeneration membranes. *Journal of Materials Chemistry B*, **2021**, 9, 2025-2032	7.3	12
156	Silk-based pressure/temperature sensing bimodal ionotronic skin with stimulus discriminability and low temperature workability. *Chemical Engineering Journal*, **2021**, 422, 130091	14.7	12
155	Water-Resistant Zein-Based Adhesives. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 7668-7679	8.3	15
154	Intelligent Silk Fibroin Ionotronic Skin for Temperature Sensing. *Advanced Materials Technologies*, **2020**, 5, 2000430	6.8	23
153	Colorless Silk/Copper Sulfide Hybrid Fiber and Fabric with Spontaneous Heating Property under Sunlight. *Biomacromolecules*, **2020**, 21, 1596-1603	6.9	10
152	Direct Observation of Native Silk Fibroin Conformation in Silk Gland of Silkworm. *ACS Biomaterials Science and Engineering*, **2020**, 6, 1874-1879	5.5	9
151	Artificial ligament made from silk protein/Laponite hybrid fibers. *Acta Biomaterialia*, **2020**, 106, 102-113	10.8	22
150	Physically Cross-Linked Silk Fibroin-Based Tough Hydrogel Electrolyte with Exceptional Water Retention and Freezing Tolerance. *ACS Applied Materials & Interfaces*, **2020**, 12, 25353-25362	9.5	24
149	Effect of stress on the molecular structure and mechanical properties of supercontracted spider dragline silks. *Journal of Materials Chemistry B*, **2020**, 8, 168-176	7.3	6
148	Preparation and characterization of antibacterial poly(lactic acid) nanocomposites with N-halamine modified silica. *International Journal of Biological Macromolecules*, **2020**, 155, 1468-1477	7.9	16
147	Structural Changes in Spider Dragline Silk after Repeated Supercontraction-Stretching Processes. *Biomacromolecules*, **2020**, 21, 5306-5314	6.9	3
146	Preparing 3D-printable silk fibroin hydrogels with robustness by a two-step crosslinking method.. *RSC Advances*, **2020**, 10, 27225-27234	3.7	7

145	Synthesis of novel multi-hydroxyl -halamine precursors based on barbituric acid and their applications in antibacterial poly(ethylene terephthalate) (PET) materials. *Journal of Materials Chemistry B*, **2020**, 8, 8695-8701	7.3	9
144	Understanding Secondary Structures of Silk Materials via Micro- and Nano-Infrared Spectroscopies. *ACS Biomaterials Science and Engineering*, **2019**, 5, 3161-3183	5.5	25
143	The regenerated silk fibroin hydrogel with designed architecture bioprinted by its microhydrogel. *Journal of Materials Chemistry B*, **2019**, 7, 4328-4337	7.3	21
142	Dual-loaded, long-term sustained drug releasing and thixotropic hydrogel for localized chemotherapy of cancer. *Biomaterials Science*, **2019**, 7, 2975-2985	7.4	15
141	Facile Dissolution of Zein Using a Common Solvent Dimethyl Sulfoxide. *Langmuir*, **2019**, 35, 6640-6649	4	9
140	Morphology and Properties of a New Biodegradable Material Prepared from Zein and Poly(butylene adipate-terephthalate) by Reactive Blending. *ACS Omega*, **2019**, 4, 5609-5616	3.9	11
139	Pea Protein/Gold Nanocluster/Indocyanine Green Ternary Hybrid for Near-Infrared Fluorescence/Computed Tomography Dual-Modal Imaging and Synergistic Photodynamic/Photothermal Therapy. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4799-4807	5.5	16
138	Concentration-dependent conformation transition of regenerated silk fibroin induced by graphene oxide nanosheets incorporation. *Journal of Polymer Science, Part B: Polymer Physics*, **2019**, 57, 1506-1515	2.6	1
137	Cryogenic toughness of natural silk and a proposed structure–function relationship. *Materials Chemistry Frontiers*, **2019**, 3, 2507-2513	7.8	11
136	Chondrocytes cultured in silk-based biomaterials maintain function and cell morphology. *International Journal of Artificial Organs*, **2019**, 42, 31-41	1.9	3
135	Application of far-infrared spectroscopy to the structural identification of protein materials. *Physical Chemistry Chemical Physics*, **2018**, 20, 11643-11648	3.6	6
134	Understanding the Mechanical Properties and Structure Transition of Antheraea pernyi Silk Fiber Induced by Its Contraction. *Biomacromolecules*, **2018**, 19, 1999-2006	6.9	18
133	Size-controllable dual drug-loaded silk fibroin nanospheres through a facile formation process. *Journal of Materials Chemistry B*, **2018**, 6, 1179-1186	7.3	17
132	The Silk Textile Embedded in Silk Fibroin Composite: Preparation and Properties. *Chinese Journal of Polymer Science (English Edition)*, **2018**, 36, 1043-1046	3.5	3
131	Silk Fibroin Acts as a Self-Emulsifier to Prepare Hierarchically Porous Silk Fibroin Scaffolds through Emulsion-Ice Dual Templates. *ACS Omega*, **2018**, 3, 3396-3405	3.9	8
130	Design of injectable agar-based composite hydrogel for multi-mode tumor therapy. *Carbohydrate Polymers*, **2018**, 180, 112-121	10.3	44
129	Plant Protein-Directed Synthesis of Luminescent Gold Nanocluster Hybrids for Tumor Imaging. *ACS Applied Materials & Interfaces*, **2018**, 10, 83-90	9.5	49
128	Environmentally responsive composite films fabricated using silk nanofibrils and silver nanowires. *Journal of Materials Chemistry C*, **2018**, 6, 12940-12947	7.1	10

127	Bandgap Engineered Polypyrrole-Polydopamine Hybrid with Intrinsic Raman and Photoacoustic Imaging Contrasts. *Nano Letters*, **2018**, 18, 7485-7493	11.5	22
126	Influence of photoinitiator concentration and irradiation time on the crosslinking performance of visible-light activated pullulan-HEMA hydrogels. *International Journal of Biological Macromolecules*, **2018**, 120, 1884-1892	7.9	12
125	Fabrication of Air-Stable and Conductive Silk Fibroin Gels. *ACS Applied Materials & Interfaces*, **2018**, 10, 38466-38475	9.5	29
124	A Robust, Resilient, and Multi-Functional Soy Protein-Based Hydrogel. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 13730-13738	8.3	13
123	Influence of degree of substitution and folic acid coinitiator on pullulan-HEMA hydrogel properties crosslinked under visible-light initiating system. *International Journal of Biological Macromolecules*, **2018**, 116, 1175-1185	7.9	13
122	Soy protein-based polyethylenimine hydrogel and its high selectivity for copper ion removal in wastewater treatment. *Journal of Materials Chemistry A*, **2017**, 5, 4163-4171	13	113
121	A Recycling-Free Nanocatalyst System: The Stabilization of In Situ-Reduced Noble Metal Nanoparticles on Silicone Nanofilaments via a Mussel-Inspired Approach. *ACS Catalysis*, **2017**, 7, 2412-2418	13.1	16
120	A review on polymeric hydrogel membranes for wound dressing applications: PVA-based hydrogel dressings. *Journal of Advanced Research*, **2017**, 8, 217-233	13	763
119	A facile fabrication of silk/MoS hybrids for Photothermal therapy. *Materials Science and Engineering C*, **2017**, 79, 123-129	8.3	23
118	Enhancing Mechanical Properties of Silk Fibroin Hydrogel through Restricting the Growth of β-Sheet Domains. *ACS Applied Materials & Interfaces*, **2017**, 9, 17489-17498	9.5	127
117	Efficacy of silk fibroin-nano silver against biofilms in a rabbit model of sinusitis. *International Journal of Nanomedicine*, **2017**, 12, 2933-2939	7.3	9
116	Precise correlation of macroscopic mechanical properties and microscopic structures of animal silks-using Antheraea pernyi silkworm silk as an example. *Journal of Materials Chemistry B*, **2017**, 5, 6042-6048	7.3	16
115	Exploration of the nature of a unique natural polymer-based thermosensitive hydrogel. *Soft Matter*, **2016**, 12, 492-9	3.6	10
114	One-step synthesis of soy protein/graphene nanocomposites and their application in photothermal therapy. *Materials Science and Engineering C*, **2016**, 68, 798-804	8.3	16
113	Structure and properties of various hybrids fabricated by silk nanofibrils and nanohydroxyapatite. *Nanoscale*, **2016**, 8, 20096-20102	7.7	28
112	Sol-Gel Transition of Regenerated Silk Fibroins in Ionic Liquid/Water Mixtures. *ACS Biomaterials Science and Engineering*, **2016**, 2, 12-18	5.5	20
111	Enhancing the Gelation and Bioactivity of Injectable Silk Fibroin Hydrogel with Laponite Nanoplatelets. *ACS Applied Materials & Interfaces*, **2016**, 8, 9619-28	9.5	90
110	Intelligent Janus nanoparticles for intracellular real-time monitoring of dual drug release. *Nanoscale*, **2016**, 8, 6754-60	7.7	38

109	Robust Protein Hydrogels from Silkworm Silk. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1500-1506	8.5	53
108	Exploration of the tight structural-mechanical relationship in mulberry and non-mulberry silkworm silks. *Journal of Materials Chemistry B*, **2016**, 4, 4337-4347	7.3	39
107	Formation of different gold nanostructures by silk nanofibrils. *Materials Science and Engineering C*, **2016**, 64, 376-382	8.3	12
106	Soy protein-directed one-pot synthesis of gold nanomaterials and their functional conductive devices. *Journal of Materials Chemistry B*, **2016**, 4, 3643-3650	7.3	21
105	Tamoxifen-loaded silk fibroin electrospun fibers. *Materials Letters*, **2016**, 178, 31-34	3.3	17
104	Multi-responsive polyethylene-polyamine/gelatin hydrogel induced by non-covalent interactions. *RSC Advances*, **2016**, 6, 48661-48665	3.7	5
103	Insights into Silk Formation Process: Correlation of Mechanical Properties and Structural Evolution during Artificial Spinning of Silk Fibers. *ACS Biomaterials Science and Engineering*, **2016**, 2, 1992-2000	5.5	46
102	Selective chemical modification of soy protein for a tough and applicable plant protein-based material. *Journal of Materials Chemistry B*, **2015**, 3, 5241-5248	7.3	17
101	Tough protein-carbon nanotube hybrid fibers comparable to natural spider silks. *Journal of Materials Chemistry B*, **2015**, 3, 3940-3947	7.3	50
100	Determination of phase behaviour in all protein blend materials with multivariate FTIR imaging technique. *Journal of Materials Chemistry B*, **2015**, 3, 834-839	7.3	14
99	Graphene/silk fibroin based carbon nanocomposites for high performance supercapacitors. *Journal of Materials Chemistry A*, **2015**, 3, 773-781	13	61
98	Crosslinked poly(vinyl alcohol) hydrogels for wound dressing applications: A review of remarkably blended polymers. *Arabian Journal of Chemistry*, **2015**, 8, 1-14	5.9	380
97	Directed Growth of Silk Nanofibrils on Graphene and Their Hybrid Nanocomposites.. *ACS Macro Letters*, **2014**, 3, 146-152	6.6	106
96	Protein biomineralized nanoporous inorganic mesocrystals with tunable hierarchical nanostructures. *Journal of the American Chemical Society*, **2014**, 136, 15781-6	16.4	53
95	Structural determination of protein-based polymer blends with a promising tool: combination of FTIR and STXM spectroscopic imaging. *Physical Chemistry Chemical Physics*, **2014**, 16, 7741-8	3.6	23
94	Thixotropic silk nanofibril-based hydrogel with extracellular matrix-like structure. *Biomaterials Science*, **2014**, 2, 1338-1342	7.4	49
93	Floxuridine-loaded silk fibroin nanospheres. *RSC Advances*, **2014**, 4, 18171-18177	3.7	27
92	Strong Collagen Hydrogels by Oxidized Dextran Modification. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1318-1324	8.3	62

91	Ultrafast and reversible thermochromism of a conjugated polymer material based on the assembly of peptide amphiphiles. *Chemical Science*, **2014**, 5, 4189-4195	9.4	36
90	Modulating materials by orthogonally oriented β-strands: composites of amyloid and silk fibroin fibrils. *Advanced Materials*, **2014**, 26, 4569-74	24	103
89	Doxorubicin-loaded magnetic silk fibroin nanoparticles for targeted therapy of multidrug-resistant cancer. *Advanced Materials*, **2014**, 26, 7393-8	24	181
88	Construction of a functional silk-based biomaterial complex with immortalized chondrocytes in vivo. *Journal of Biomedical Materials Research - Part A*, **2014**, 102, 1071-8	5.4	7
87	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. *Chinese Journal of Polymer Science (English Edition)*, **2014**, 32, 29-34	3.5	20
86	Doxorubicin-Loaded Silk Fibroin Nanospheres. *Acta Chimica Sinica*, **2014**, 72, 1164	3.3	3
85	Synthesis of hierarchical three-dimensional copper oxide nanostructures through a biomineralization-inspired approach. *Nanoscale*, **2013**, 5, 7991-7	7.7	31
84	Facile fabrication of the porous three-dimensional regenerated silk fibroin scaffolds. *Materials Science and Engineering C*, **2013**, 33, 3522-9	8.3	27
83	Insight into the structure of single Antheraea pernyi silkworm fibers using synchrotron FTIR microspectroscopy. *Biomacromolecules*, **2013**, 14, 1885-92	6.9	71
82	Hematite nanostructures synthesized by a silk fibroin-assisted hydrothermal method. *Journal of Materials Chemistry B*, **2013**, 1, 213-220	7.3	35
81	Characterization and assembly investigation of a dodecapeptide hydrolyzed from the crystalline domain of Bombyx mori silk fibroin. *Polymer Chemistry*, **2013**, 4, 3005	4.9	8
80	Robust soy protein films obtained by slight chemical modification of polypeptide chains. *Polymer Chemistry*, **2013**, 4, 5425	4.9	42
79	Fabrication of an alternative regenerated silk fibroin nanofiber and carbonated hydroxyapatite multilayered composite via layer-by-layer. *Journal of Materials Science*, **2013**, 48, 150-155	4.3	22
78	An antimicrobial film by embedding in situ synthesized silver nanoparticles in soy protein isolate. *Materials Letters*, **2013**, 95, 142-144	3.3	46
77	Silk fibroin immobilization on poly(ethylene terephthalate) films: comparison of two surface modification methods and their effect on mesenchymal stem cells culture. *Materials Science and Engineering C*, **2013**, 33, 1409-16	8.3	22
76	Preparation and characterization of transparent silk fibroin/cellulose blend films. *Polymer*, **2013**, 54, 5035-5042	3.9	57
75	FTIR imaging, a useful method for studying the compatibility of silk fibroin-based polymer blends. *Polymer Chemistry*, **2013**, 4, 5401	4.9	48
74	Green synthesis of silk fibroin-silver nanoparticle composites with effective antibacterial and biofilm-disrupting properties. *Biomacromolecules*, **2013**, 14, 4483-8	6.9	131

73	A pilot study of macrophage responses to silk fibroin particles. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 1511-7	5.4	23
72	Conformation transition kinetics and spinnability of regenerated silk fibroin with glycol, glycerol and polyethylene glycol. *Materials Letters*, **2012**, 81, 13-15	3.3	27
71	Paclitaxel-loaded silk fibroin nanospheres. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 203-10	5.4	60
70	Investigation on thermally-induced conformation transition of soy protein film with variable-temperature FTIR spectroscopy. *Journal of Applied Polymer Science*, **2012**, 124, 2838-2845	2.9	9
69	Injectable thixotropic hydrogel comprising regenerated silk fibroin and hydroxypropylcellulose. *Soft Matter*, **2012**, 8, 2875	3.6	42
68	A hierarchical adsorption material by incorporating mesoporous carbon into macroporous chitosan membranes. *Journal of Materials Chemistry*, **2012**, 22, 11908		26
67	Facile fabrication of CuO mesoporous nanosheet cluster array electrodes with super lithium-storage properties. *Journal of Materials Chemistry*, **2012**, 22, 13637		90
66	Quasi one-dimensional assembly of gold nanoparticles templated by a pH-sensitive peptide amphiphile from silk fibroin. *RSC Advances*, **2012**, 2, 5599	3.7	7
65	Chitosan-based membrane chromatography for protein adsorption and separation. *Materials Science and Engineering C*, **2012**, 32, 1669-73	8.3	16
64	Investigation of rheological properties and conformation of silk fibroin in the solution of AmimCl. *Biomacromolecules*, **2012**, 13, 1875-81	6.9	72
63	Conformation transition of Bombyx mori silk protein monitored by time-dependent fourier transform infrared (FT-IR) spectroscopy: effect of organic solvent. *Applied Spectroscopy*, **2012**, 66, 696-9	3.1	28
62	PREPARATION AND ANTIMICROBIAL PROPERTIES OF PVA/TANNIN BLEND FILMS. *Acta Polymerica Sinica*, **2012**, 012, 125-130		2
61	Crystallization of calcium carbonate on chitosan substrates in the presence of regenerated silk fibroin. *Langmuir*, **2011**, 27, 2804-10	4	31
60	Understanding the Mechanical Properties of Antheraea Pernyi Silk□from Primary Structure to Condensed Structure of the Protein. *Advanced Functional Materials*, **2011**, 21, 729-737	15.6	94
59	Self-assembly of a peptide amphiphile based on hydrolysed Bombyx mori silk fibroin. *Chemical Communications*, **2011**, 47, 10296-8	5.8	38
58	Synergistic interactions during thermosensitive chitosan-□glycerophosphate hydrogel formation. *RSC Advances*, **2011**, 1, 282	3.7	28
57	Synchrotron FTIR microspectroscopy of single natural silk fibers. *Biomacromolecules*, **2011**, 12, 3344-9	6.9	204
56	Natural electroactive hydrogel from soy protein isolation. *Biomacromolecules*, **2010**, 11, 3638-43	6.9	43

55	Wet-spinning of regenerated silk fiber from aqueous silk fibroin solution: discussion of spinning parameters. *Biomacromolecules*, **2010**, 11, 1-5	6.9	106
54	Formation kinetics and fractal characteristics of regenerated silk fibroin alcogel developed from nanofibrillar network. *Soft Matter*, **2010**, 6, 1217	3.6	35
53	Morphology and mechanical properties of soy protein scaffolds made by directional freezing. *Journal of Applied Polymer Science*, **2010**, 118, n/a-n/a	2.9	5
52	Kinetics of thermally-induced conformational transitions in soybean protein films. *Polymer*, **2010**, 51, 2410-2416	3.9	19
51	The preparation of high performance silk fiber/fibroin composite. *Polymer*, **2010**, 51, 4843-4849	3.9	32
50	Correlation between structural and dynamic mechanical transitions of regenerated silk fibroin. *Polymer*, **2010**, 51, 6278-6283	3.9	32
49	PREPARATION OF HIGH MOLECULAR WEIGHT SOY PROTEIN AQUEOUS SOLUTION AND SEPARATION OF ITS MAIN COMPONENTS. *Acta Polymerica Sinica*, **2010**, 010, 250-254		6
48	Silk Fibers Extruded Artificially from Aqueous Solutions of Regenerated Bombyx mori Silk Fibroin are Tougher than their Natural Counterparts. *Advanced Materials*, **2009**, 21, 366-370	24	160
47	Microspheres of calcium carbonate composite regulated by sodium polyacrylates with various ways. *Journal of Applied Polymer Science*, **2009**, 114, 3686-3692	2.9	9
46	Protein adsorption and separation with chitosan-based amphoteric membranes. *Polymer*, **2009**, 50, 1257-1263	3.9	64
45	Electrospinning of reconstituted silk fiber from aqueous silk fibroin solution. *Materials Science and Engineering C*, **2009**, 29, 2270-2274	8.3	73
44	The effect of water on the conformation transition of Bombyx mori silk fibroin. *Vibrational Spectroscopy*, **2009**, 51, 105-109	2.1	47
43	A kinetic model for thermal degradation in polymers with specific application to proteins. *Polymer*, **2009**, 50, 1814-1818	3.9	18
42	Two distinct beta-sheet fibrils from silk protein. *Chemical Communications*, **2009**, 7506-8	5.8	84
41	Turn formation during the conformation transition in silk fibroin. *Soft Matter*, **2009**, 5, 2777	3.6	60
40	CU(II)-INDUCED CONFORMATION TRANSITION OF REGENERATED SILK FIBROIN IN AQUEOUS SOLUTIONS. *Acta Polymerica Sinica*, **2009**, 009, 1056-1061		1
39	Electrical behavior of a natural polyelectrolyte hydrogel: chitosan/carboxymethylcellulose hydrogel. *Biomacromolecules*, **2008**, 9, 1208-13	6.9	125
38	Radiologic and histologic characterization of silk fibroin as scaffold coating for rabbit tracheal defect repair. *Otolaryngology - Head and Neck Surgery*, **2008**, 139, 256-61	5.5	28

37	Templating effect of silk fibers in the oriented deposition of aragonite. *Chemical Communications*, **2008**, 5511-3	5.8	26
36	Biomimetic synthesis of silica with chitosan-mediated morphology. *Small*, **2008**, 4, 755-8	11	27
35	Protein adsorption and separation on amphoteric chitosan/carboxymethylcellulose membranes. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 694-700	5.4	21
34	Chitosan-based electroactive hydrogel. *Polymer*, **2008**, 49, 5520-5525	3.9	71
33	The preparation of regenerated silk fibroin microspheres. *Soft Matter*, **2007**, 3, 910-915	3.6	129
32	Conformation transition kinetics of Bombyx mori silk protein. *Proteins: Structure, Function and Bioinformatics*, **2007**, 68, 223-31	4.2	154
31	X-ray photoelectron spectroscopic and Raman analysis of silk fibroin-Cu(II) films. *Biopolymers*, **2006**, 82, 144-51	2.2	27
30	The spinning processes for spider silk. *Soft Matter*, **2006**, 2, 448-451	3.6	62
29	Synthesis and characterization of multiblock copolymers based on spider dragline silk proteins. *Biomacromolecules*, **2006**, 7, 2415-9	6.9	46
28	Near-infrared characterization on the secondary structure of regenerated Bombyx mori silk fibroin. *Applied Spectroscopy*, **2006**, 60, 1438-41	3.1	18
27	Biocompatibility of poly (3-hydroxybutyrate-co-3-hydroxyhexanoate) modified by silk fibroin. *Journal of Materials Science: Materials in Medicine*, **2006**, 17, 749-58	4.5	21
26	Further investigation on potassium-induced conformation transition of Nephila spidroin film with two-dimensional infrared correlation spectroscopy. *Biomacromolecules*, **2005**, 6, 302-8	6.9	32
25	Effect of metallic ions on silk formation in the Mulberry silkworm, Bombyx mori. *Journal of Physical Chemistry B*, **2005**, 109, 16937-45	3.4	122
24	Macroporous chitosan/carboxymethylcellulose blend membranes and their application for lysozyme adsorption. *Journal of Applied Polymer Science*, **2005**, 96, 1267-1274	2.9	61
23	Toughness of Spider Silk at High and Low Temperatures. *Advanced Materials*, **2005**, 17, 84-88	24	93
22	Biocompatibility of Poly(epsilon-caprolactone) scaffold modified by chitosan--the fibroblasts proliferation in vitro. *Journal of Biomaterials Applications*, **2005**, 19, 323-39	2.9	67
21	Silk fibroin modified porous poly(epsilon-caprolactone) scaffold for human fibroblast culture in vitro. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 671-7	4.5	56
20	Thermal and crystalline behaviour of silk fiborin/nylon 66 blend films. *Polymer*, **2004**, 45, 7705-7710	3.9	43

19	Effect of pH and copper(II) on the conformation transitions of silk fibroin based on EPR, NMR, and Raman spectroscopy. *Biochemistry*, **2004**, 43, 11932-41	3.2	92
18	Optical spectroscopy to investigate the structure of regenerated Bombyx mori silk fibroin in solution. *Biomacromolecules*, **2004**, 5, 773-9	6.9	99
17	Preparation and characterization of chitosan/Cu(II) affinity membrane for urea adsorption. *Journal of Applied Polymer Science*, **2003**, 90, 1108-1112	2.9	34
16	Synthesis and Solid-State Secondary Structure Investigation of Silk Proteinlike Multiblock Polymers. *Macromolecules*, **2003**, 36, 7508-7512	5.5	30
15	Copper in the silk formation process of Bombyx mori silkworm. *FEBS Letters*, **2003**, 554, 337-41	3.8	52
14	Conformation transition in silk protein films monitored by time-resolved Fourier transform infrared spectroscopy: effect of potassium ions on Nephila spidroin films. *Biochemistry*, **2002**, 41, 14944-50	3.2	83
13	Rheological characterization of nephila spidroin solution. *Biomacromolecules*, **2002**, 3, 644-8	6.9	109
12	Conformation transition kinetics of regenerated Bombyx mori silk fibroin membrane monitored by time-resolved FTIR spectroscopy. *Biophysical Chemistry*, **2001**, 89, 25-34	3.5	240
11	Regenerated Bombyx silk solutions studied with rheometry and FTIR. *Polymer*, **2001**, 42, 09969-09974	3.9	156
10	The natural silk spinning process. A nucleation-dependent aggregation mechanism?. *FEBS Journal*, **2001**, 268, 6600-6		102
9	Preparation and characterization of HY zeolite-filled chitosan membranes for pervaporation separation. *Journal of Applied Polymer Science*, **2001**, 79, 1144-1149	2.9	69
8	Separation of alcohol-water mixture by pervaporation through a novel natural polymer blend membrane-chitosan/silk fibroin blend membrane. *Journal of Applied Polymer Science*, **1999**, 73, 975-980	2.9	41
7	Study on biodegradable polymer materials based on poly(lactic acid). I. Chain extending of low molecular weight poly(lactic acid) with methylenediphenyl diisocyanate. *Journal of Applied Polymer Science*, **1999**, 74, 2546-2551	2.9	65
6	Separation properties of alcohol-water mixture through silicalite-I-filled silicone rubber membranes by pervaporation. *Journal of Applied Polymer Science*, **1998**, 67, 629-636	2.9	63
5	The Al3+ Sensitivity of Chitosan-Silk Fibroin Complex Membrane on Swelling and Its Application on Chemical Valve for the Separation of Isopropanol-Water Mixture. *Journal of Macromolecular Science - Pure and Applied Chemistry*, **1997**, 34, 2451-2460	2.2	7
4	Immobilization of glucose oxidase with the blend of regenerated silk fibroin and poly(vinyl alcohol) and its application to a 1,1Rdimethylferrocene-mediating glucose sensor. *Applied Biochemistry and Biotechnology*, **1997**, 62, 105-17	3.2	26
3	Conformation transition of silk fibroin induced by blending chitosan. *Journal of Polymer Science, Part B: Polymer Physics*, **1997**, 35, 2293-2296	2.6	82
2	pH sensitivity and ion sensitivity of hydrogels based on complex-forming chitosan/silk fibroin interpenetrating polymer network. *Journal of Applied Polymer Science*, **1997**, 65, 2257-2262	2.9	92

1	A highly stretchable and anti-freezing silk-based conductive hydrogel for application as a self-adhesive and transparent ionotronic skin. *Journal of Materials Chemistry C*,	7.1	6