Jinrong Yao

List of Publications by Citations

72 papers	1,674 citations	23 h-index	37 g-index
75 ext. papers	2,000 ext. citations	6 avg, IF	4.85 L-index

#	Paper	IF	Citations
72	The preparation of regenerated silk fibroin microspheres. *Soft Matter*, **2007**, 3, 910-915	3.6	129
71	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
70	Protein adsorption and separation with chitosan-based amphoteric membranes. *Polymer*, **2009**, 50, 1257-1263	3.9	64
69	Strong Collagen Hydrogels by Oxidized Dextran Modification. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 1318-1324	8.3	62
68	Robust Protein Hydrogels from Silkworm Silk. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 1500-1506	8.3	53
67	Tough protein-carbon nanotube hybrid fibers comparable to natural spider silks. *Journal of Materials Chemistry B*, **2015**, 3, 3940-3947	7.3	50
66	Plant Protein-Directed Synthesis of Luminescent Gold Nanocluster Hybrids for Tumor Imaging. *ACS Applied Materials & Interfaces*, **2018**, 10, 83-90	9.5	49
65	The robust hydrogel hierarchically assembled from a pH sensitive peptide amphiphile based on silk fibroin. *Biomacromolecules*, **2013**, 14, 2733-8	6.9	48
64	An antimicrobial film by embedding in situ synthesized silver nanoparticles in soy protein isolate. *Materials Letters*, **2013**, 95, 142-144	3.3	46
63	Synthesis and characterization of multiblock copolymers based on spider dragline silk proteins. *Biomacromolecules*, **2006**, 7, 2415-9	6.9	46
62	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
61	Robust soy protein films obtained by slight chemical modification of polypeptide chains. *Polymer Chemistry*, **2013**, 4, 5425	4.9	42
60	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
59	Self-assembly of a peptide amphiphile based on hydrolysed Bombyx mori silk fibroin. *Chemical Communications*, **2011**, 47, 10296-8	5.8	38
58	Hydroxyapatite/regenerated silk fibroin scaffold-enhanced osteoinductivity and osteoconductivity of bone marrow-derived mesenchymal stromal cells. *Biotechnology Letters*, **2013**, 35, 657-61	3	35
57	The preparation of high performance silk fiber/fibroin composite. *Polymer*, **2010**, 51, 4843-4849	3.9	32
56	Correlation between structural and dynamic mechanical transitions of regenerated silk fibroin. *Polymer*, **2010**, 51, 6278-6283	3.9	32

55	Crystallization of calcium carbonate on chitosan substrates in the presence of regenerated silk fibroin. *Langmuir*, **2011**, 27, 2804-10	4	31
54	Synthesis and Solid-State Secondary Structure Investigation of Silk-Proteinlike Multiblock Polymers. *Macromolecules*, **2003**, 36, 7508-7512	5.5	30
53	Silver sulfadiazine-immobilized celluloses as biocompatible polymeric biocides. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 398-410	2	29
52	Polymerization of lactides and lactones, 12. Synthesis of poly[(glycolic acid)-alt-(L-glutamic acid)] and poly{(lactic acid)-co-[(glycolic acid)-alt-(L-glutamic acid)]}. *Macromolecular Chemistry and Physics* , **2000**, 201, 2371-2376	2.6	29
51	Facile fabrication of the porous three-dimensional regenerated silk fibroin scaffolds. *Materials Science and Engineering C*, **2013**, 33, 3522-9	8.3	27
50	Enhancement of osseointegration of polyethylene terephthalate artificial ligament by coating of silk fibroin and depositing of hydroxyapatite. *International Journal of Nanomedicine*, **2014**, 9, 4569-80	7.3	24
49	A facile fabrication of silk/MoS hybrids for Photothermal therapy. *Materials Science and Engineering C*, **2017**, 79, 123-129	8.3	23
48	Intelligent Silk Fibroin Ionotronic Skin for Temperature Sensing. *Advanced Materials Technologies*, **2020**, 5, 2000430	6.8	23
47	Artificial ligament made from silk protein/Laponite hybrid fibers. *Acta Biomaterialia*, **2020**, 106, 102-113	10.8	22
46	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
45	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
44	Protein adsorption and separation on amphoteric chitosan/carboxymethylcellulose membranes. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 694-700	5.4	21
43	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
42	Kinetics of thermally-induced conformational transitions in soybean protein films. *Polymer*, **2010**, 51, 2410-2416	3.9	19
41	Preparation of 3D fibroin/chitosan blend porous scaffold for tissue engineering via a simplified method. *Macromolecular Bioscience*, **2011**, 11, 419-26	5.5	18
40	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
39	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
38	Enhanced Fibroblast Cellular Ligamentization Process to Polyethylene Terepthalate Artificial Ligament by Silk Fibroin Coating. *Artificial Organs*, **2016**, 40, 385-93	2.6	17

37	Tamoxifen-loaded silk fibroin electrospun fibers. *Materials Letters*, **2016**, 178, 31-34	3.3	17
36	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
35	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
34	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
33	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
32	Water-Resistant Zein-Based Adhesives. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 7668-7679	8.3	15
31	Preparation and Characterization of Polymerizable Hindered Amine-Based Antimicrobial Fibrous Materials. *Industrial & Engineering Chemistry Research*, **2008**, 47, 5819-5824	3.9	15
30	A Robust, Resilient, and Multi-Functional Soy Protein-Based Hydrogel. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 13730-13738	8.3	13
29	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
28	Formation of different gold nanostructures by silk nanofibrils. *Materials Science and Engineering C*, **2016**, 64, 376-382	8.3	12
27	Silk-based hybrid microfibrous mats as guided bone regeneration membranes. *Journal of Materials Chemistry B*, **2021**, 9, 2025-2032	7.3	12
26	Silk-based pressure/temperature sensing bimodal ionotronic skin with stimulus discriminability and low temperature workability. *Chemical Engineering Journal*, **2021**, 422, 130091	14.7	12
25	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
24	Exploration of the nature of a unique natural polymer-based thermosensitive hydrogel. *Soft Matter*, **2016**, 12, 492-9	3.6	10
23	Colorless Silk/Copper Sulfide Hybrid Fiber and Fabric with Spontaneous Heating Property under Sunlight. *Biomacromolecules*, **2020**, 21, 1596-1603	6.9	10
22	Environmentally responsive composite films fabricated using silk nanofibrils and silver nanowires. *Journal of Materials Chemistry C*, **2018**, 6, 12940-12947	7.1	10
21	Facile Dissolution of Zein Using a Common Solvent Dimethyl Sulfoxide. *Langmuir*, **2019**, 35, 6640-6649	4	9
20	Direct Observation of Native Silk Fibroin Conformation in Silk Gland of Silkworm. *ACS Biomaterials Science and Engineering*, **2020**, 6, 1874-1879	5.5	9

19	Synthesis of poly (□benzyl-L-glutamate) with well-defined terminal structures and its block polypeptides with alanine, leucine and phenylalanine. *Polymer International*, **2012**, 61, 774-779	3.3	9
18	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
17	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
16	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
15	Amphiphilic polypeptides as a bifunctional template in the mineralization of calcium carbonate at the air/water interface. *Macromolecular Bioscience*, **2013**, 13, 650-9	5.5	8
14	Enhanced compatibility between poly(lactic acid) and poly (butylene adipate-co-terephthalate) by incorporation of N-halamine epoxy precursor. *International Journal of Biological Macromolecules*, **2020**, 165, 460-471	7.9	8
13	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
12	PREPARATION OF HIGH MOLECULAR WEIGHT SOY PROTEIN AQUEOUS SOLUTION AND SEPARATION OF ITS MAIN COMPONENTS. *Acta Polymerica Sinica*, **2010**, 010, 250-254		6
11	RECENT PROGRESS AND APPLICATION OF NON-BIOACTIVE PROTEINS IN MATERIAL FIELDS. *Acta Polymerica Sinica*, **2011**, 011, 12-23		6
10	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
9	Silk microfibrous mats with long-lasting antimicrobial function. *Journal of Materials Science and Technology*, **2021**, 63, 203-209	9.1	6
8	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
7	Fabrication of superhydrophobic surfaces via CaCO3 mineralization mediated by poly(glutamic acid). *Journal of Solid State Chemistry*, **2013**, 199, 338-343	3.3	4
6	IMPROVING THE MECHANICAL PROPERTIES OF SILK FIBER/FIBROIN COMPOSITES BY INTERFACIAL MODIFICATION. *Acta Polymerica Sinica*, **2011**, 011, 1329-1335		4
5	Polymerization of lactides and lactones 11. Ring-opening polymerization of □acetyl-□butyrolactone and copolymerization with □butyrolactone. *European Polymer Journal*, **2000**, 36, 2739-2741	5.2	3
4	Structural Changes in Spider Dragline Silk after Repeated Supercontraction-Stretching Processes. *Biomacromolecules*, **2020**, 21, 5306-5314	6.9	3
3	PREPARATION AND ANTIMICROBIAL PROPERTIES OF PVA/TANNIN BLEND FILMS. *Acta Polymerica Sinica*, **2012**, 012, 125-130		2
2	Crystallization, Mechanical, and Antimicrobial Properties of Diallyl Cyanuric Derivative-Grafted Polypropylene. *ACS Omega*, **2021**, 6, 12794-12800	3.9	1

1 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