

Natural and genetically engineered proteins for tissue e

Progress in Polymer Science

37, 1-17

DOI: [10.1016/j.progpolymsci.2011.07.003](https://doi.org/10.1016/j.progpolymsci.2011.07.003)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Structural disorder and dynamics of elastin. This paper is one of a selection of papers published in this special issue entitled "Canadian Society of Biochemistry, Molecular & Cellular Biology 52nd Annual Meeting" Protein Folding: Principles and Diseases and has undergone the Journal's usual peer review process. <i>Biochemistry and Cell Biology</i> , 2010, 88, 239-250.	0.9	142
2	Novel gelatin-PHEMA porous scaffolds for tissue engineering applications. <i>Soft Matter</i> , 2012, 8, 9589.	1.2	82
3	Interactions of cells with silk surfaces. <i>Journal of Materials Chemistry</i> , 2012, 22, 14330.	6.7	74
4	Emerging Technologies for Assembly of Microscale Hydrogels. <i>Advanced Healthcare Materials</i> , 2012, 1, 149-158.	3.9	83
5	Polypeptoids: a model system to study the effect of monomer sequence on polymer properties and self-assembly. <i>Soft Matter</i> , 2013, 9, 8400.	1.2	126
6	Bionanocomposites from lignocellulosic resources: Properties, applications and future trends for their use in the biomedical field. <i>Progress in Polymer Science</i> , 2013, 38, 1415-1441.	11.8	224
7	Protein-polymer hybrids: Conducting ATRP from a genetically encoded cleavable ATRP initiator. <i>European Polymer Journal</i> , 2013, 49, 2919-2924.	2.6	25
8	Bio-orthogonal and combinatorial approaches for the design of binding growth factors. <i>Biomaterials</i> , 2013, 34, 7565-7574.	5.7	24
9	Mineralized self-assembled peptides on 3D laser-made scaffolds: a new route toward scaffold hard tissue engineering. <i>Biofabrication</i> , 2013, 5, 045002.	3.7	44
10	Nanostructured poly(l-lactide) matrix as novel platform for drug delivery. <i>International Journal of Pharmaceutics</i> , 2013, 448, 175-188.	2.6	19
11	De novo bone formation on macro/microporous silk and silk/nano-sized calcium phosphate scaffolds. <i>Journal of Bioactive and Compatible Polymers</i> , 2013, 28, 439-452.	0.8	29
12	Assessments of injectable alginate particle-embedded fibrin hydrogels for soft tissue reconstruction. <i>Biomedical Materials (Bristol)</i> , 2013, 8, 014105.	1.7	33
13	Isolation and characterization of biofunctional keratin particles extracted from wool wastes. <i>Powder Technology</i> , 2013, 246, 356-362.	2.1	80
14	The Expanding World of Tissue Engineering: The Building Blocks and New Applications of Tissue Engineered Constructs. <i>IEEE Reviews in Biomedical Engineering</i> , 2013, 6, 47-62.	13.1	77
15	Phase transition-induced elasticity of $\alpha$ -helical bioelastomeric fibres and networks. <i>Chemical Society Reviews</i> , 2013, 42, 1973-1995.	18.7	56
16	Naturally and synthetic smart composite biomaterials for tissue regeneration. <i>Advanced Drug Delivery Reviews</i> , 2013, 65, 471-496.	6.6	308
18	Interactions between cells or proteins and surfaces exhibiting extreme wettabilities. <i>Soft Matter</i> , 2013, 9, 2985.	1.2	143
19	Smart heparin-based bioconjugates synthesized by a combination of ATRP and click chemistry. <i>Polymer Chemistry</i> , 2013, 4, 2800.	1.9	24

#	ARTICLE	IF	CITATIONS
20	Synthesis of well-defined poly(2-(dimethylamino)ethyl methacrylate) under mild conditions and its co-polymers with cholesterol and PEG using Fe(0)/Cu(ii) based SARA ATRP. <i>Polymer Chemistry</i> , 2013, 4, 3088.	1.9	67
21	Elastin-based silver-binding proteins with antibacterial capabilities. <i>Nanomedicine</i> , 2013, 8, 567-575.	1.7	22
22	Accessing biology's toolbox for the mesoscale biofabrication of soft matter. <i>Soft Matter</i> , 2013, 9, 6019.	1.2	30
23	Biological applications of peptides nanotubes: An overview. <i>Peptides</i> , 2013, 39, 47-54.	1.2	59
24	Unleashing the potential of supercritical fluids for polymer processing in tissue engineering and regenerative medicine. <i>Journal of Supercritical Fluids</i> , 2013, 79, 177-185.	1.6	48
25	Production of 3D scaffolds applied to tissue engineering using chitosan swelling as a porogenic agent. <i>Journal of Applied Polymer Science</i> , 2013, 129, 614-625.	1.3	22
26	Biomaterials and Stem Cell Therapies for Injuries Associated to Skeletal Muscular Tissues. , 2013, , .		7
28	Protein-based materials in load-bearing tissue-engineering applications. <i>Regenerative Medicine</i> , 2014, 9, 687-701.	0.8	24
29	Functional polypeptide and hybrid materials: Precision synthesis via $\alpha$ -amino acid N-carboxyanhydride polymerization and emerging biomedical applications. <i>Progress in Polymer Science</i> , 2014, 39, 330-364.	11.8	310
30	Vibrational spectroscopy for probing molecular-level interactions in organic films mimicking biointerfaces. <i>Advances in Colloid and Interface Science</i> , 2014, 207, 199-215.	7.0	35
31	Designing ECM-mimetic materials using protein engineering. <i>Acta Biomaterialia</i> , 2014, 10, 1751-1760.	4.1	87
32	Preparation and characterization of in-situ crosslinked pectin-gelatin hydrogels. <i>Carbohydrate Polymers</i> , 2014, 106, 312-318.	5.1	77
33	Mass transfer aspects of 3D cell cultures in tissue engineering. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014, 9, 318-329.	0.8	14
34	Hyaluronan microgel as a potential carrier for protein sustained delivery by tailoring the crosslink network. <i>Materials Science and Engineering C</i> , 2014, 36, 301-308.	3.8	24
35	Photosensitive and Biomimetic Core-Shell Nanofibrous Scaffolds as Wound Dressing. <i>Photochemistry and Photobiology</i> , 2014, 90, 673-681.	1.3	43
36	Natural polymer biomaterials: advanced applications. , 2014, , 32-70.		22
37	Generation of biofunctional and biodegradable electrospun nanofibers composed of poly(l-lactic acid) and wool isoelectric precipitate. <i>Textile Research Journal</i> , 2014, 84, 355-367.	1.1	5
38	Incorporating the BMP-2 peptide in genetically-engineered biomaterials accelerates osteogenic differentiation. <i>Biomaterials Science</i> , 2014, 2, 1110-1119.	2.6	36

#	ARTICLE	IF	CITATIONS
39	The bioactivity of composite Fmoc-RGDS-collagen gels. <i>Biomaterials Science</i> , 2014, 2, 1222-1229.	2.6	43
40	Precision Sequence Control in Bioinspired Peptoid Polymers. <i>ACS Symposium Series</i> , 2014, , 35-53.	0.5	1
41	Oxidatively Responsive Chain Extension to Entangle Engineered Protein Hydrogels. <i>Macromolecules</i> , 2014, 47, 791-799.	2.2	46
42	Introducing a combinatorial DNA-toolbox platform constituting defined protein-based biohybrid-materials. <i>Biomaterials</i> , 2014, 35, 8767-8779.	5.7	32
43	Biomimetic Production of Silk-Like Recombinant Squid Sucker Ring Teeth Proteins. <i>Biomacromolecules</i> , 2014, 15, 3278-3289.	2.6	49
44	Collagenâ€”A biomaterial for delivery of growth factors and tissue regeneration. <i>Russian Journal of General Chemistry</i> , 2014, 84, 368-378.	0.3	9
45	Modulating Materials by Orthogonally Oriented Î²â€”Strands: Composites of Amyloid and Silk Fibroin Fibrils. <i>Advanced Materials</i> , 2014, 26, 4569-4574.	11.1	119
46	Protein-based materials: from sources to innovative sustainable materials for biomedical applications. <i>Journal of Materials Chemistry B</i> , 2014, 2, 3715.	2.9	146
47	Drug-eluting scaffolds for bone and cartilage regeneration. <i>Drug Discovery Today</i> , 2014, 19, 714-724.	3.2	20
48	The Potential of Cellulose Nanocrystals in Tissue Engineering Strategies. <i>Biomacromolecules</i> , 2014, 15, 2327-2346.	2.6	417
49	- Scaffold Vascularization. , 2014, , 192-241.		2
50	Conclusions and Future Outlook. , 2014, , 307-309.		0
51	Specific Adsorption via Peptide Tags: Oriented Grafting and Release of Growth Factors for Tissue Engineering. <i>Biomacromolecules</i> , 2015, 16, 3445-3454.	2.6	11
52	Design and Construction of Artificial Extracellular Matrix (aECM) Proteins from <i>Escherichia coli</i> for Skin Tissue Engineering. <i>Journal of Visualized Experiments</i> , 2015, , e52845.	0.2	3
53	Identification of Multiple Dityrosine Bonds in Materials Composed of the <i>Drosophila</i> Protein Ultrabithorax. <i>Advanced Functional Materials</i> , 2015, 25, 5988-5998.	7.8	7
54	Materials composed of the <i>Drosophila</i> Hox protein Ultrabithorax are biocompatible and nonimmunogenic. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 1546-1553.	2.1	6
55	Instructive Conductive 3D Silk Foamâ€”Based Bone Tissue Scaffolds Enable Electrical Stimulation of Stem Cells for Enhanced Osteogenic Differentiation. <i>Macromolecular Bioscience</i> , 2015, 15, 1490-1496.	2.1	46
56	Selfâ€”Assembled Proteins and Peptides as Scaffolds for Tissue Regeneration. <i>Advanced Healthcare Materials</i> , 2015, 4, 2557-2586.	3.9	114

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57	<i>Bombyx mori</i> Silk Fibers: An Outstanding Family of Materials. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 1171-1198.	1.7	89
58	Biodegradable Polymeric Films and Membranes Processing and Forming for Tissue Engineering. <i>Macromolecular Materials and Engineering</i> , 2015, 300, 858-877.	1.7	41
59	Exploring the Properties of Genetically Engineered Silk- <i>Elastin</i> -Like Protein Films. <i>Macromolecular Bioscience</i> , 2015, 15, 1698-1709.	2.1	22
60	Isolation and Characterization of Nano-Hydroxyapatite from Salmon Fish Bone. <i>Materials</i> , 2015, 8, 5426-5439.	1.3	92
61	Processing, performance, and applications of plant and animal protein-based blends and their biocomposites. , 2015, , 201-235.		6
62	Nanocellulosic Materials in Tissue Engineering Applications. , 0, , .		4
63	Structural ensembles reveal intrinsic disorder for the multi-stimuli responsive bio-mimetic protein Rec1-resilin. <i>Scientific Reports</i> , 2015, 5, 10896.	1.6	34
64	Chelating Surfaces for Native State Proteins Patterning: The Human Serum Albumin Case. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 23353-23363.	4.0	9
65	Effects of different crosslinking methods on the properties of collagen-calcium phosphate composite materials. <i>International Journal of Biological Macromolecules</i> , 2015, 74, 397-403.	3.6	73
66	Improving the protein activity and stability under acidic conditions via site-specific conjugation of a pH-responsive polyelectrolyte. <i>Journal of Materials Chemistry B</i> , 2015, 3, 498-504.	2.9	22
67	Nanofibrous Heparin and Heparin-Mimicking Multilayers as Highly Effective Endothelialization and Antithrombogenic Coatings. <i>Biomacromolecules</i> , 2015, 16, 992-1001.	2.6	74
68	Genetically modified proteins: functional improvement and chimeragenesis. <i>Bioengineered</i> , 2015, 6, 262-274.	1.4	13
69	Biomimetic self-assembly of recombinant marine snail egg capsule proteins into structural coiled-coil units. <i>Journal of Materials Chemistry B</i> , 2015, 3, 2671-2684.	2.9	11
70	Protein Tectons in Synthetic Biology. <i>Risk Engineering</i> , 2015, , 139-154.	0.7	0
71	Co(acac) <sub>2</sub> mediated controlled radical copolymerization of vinyl acetate and methyl acrylate initiated by benzoyl peroxide. <i>Macromolecular Research</i> , 2015, 23, 139-144.	1.0	6
72	Silk fibroin aerogels: potential scaffolds for tissue engineering applications. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 035002.	1.7	64
73	Silk as a potential candidate for bone tissue engineering. <i>Journal of Controlled Release</i> , 2015, 215, 112-128.	4.8	135
74	Integrative Utilization of Microenvironments, Biomaterials and Computational Techniques for Advanced Tissue Engineering. <i>Journal of Biotechnology</i> , 2015, 212, 71-89.	1.9	45

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75	Zinc-containing bioactive glasses for bone regeneration, dental and orthopedic applications. <i>Biomedical Glasses</i> , 2015, 1, .	2.4	43
76	Biophysical and biological characterisation of collagen/resilin-like protein composite fibres. <i>Biomedical Materials (Bristol)</i> , 2015, 10, 065005.	1.7	14
77	Substrate-Independent Robust and Heparin-Mimetic Hydrogel Thin Film Coating via Combined LbL Self-Assembly and Mussel-Inspired Post-Cross-linking. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 26050-26062.	4.0	81
78	In vitro and in vivo assessments of a 3-(3,4-dihydroxyphenyl)-2-propenoic acid bioconjugated gelatin-based injectable hydrogel for biomedical applications. <i>Journal of Materials Chemistry B</i> , 2015, 3, 1230-1244.	2.9	30
79	Biological materials and molecular biomimetics “ filling up the empty soft materials space for tissue engineering applications. <i>Journal of Materials Chemistry B</i> , 2015, 3, 13-24.	2.9	49
80	Self-reinforcement and protein sustained delivery of hyaluronan hydrogel by tailoring a dually cross-linked network. <i>Materials Science and Engineering C</i> , 2015, 46, 316-324.	3.8	10
81	Synthetic Biology. <i>Risk Engineering</i> , 2015, , .	0.7	2
82	Chitosan“hyaluronic acid polyelectrolyte complex scaffold crosslinked with genipin for immobilization and controlled release of BMP-2. <i>Carbohydrate Polymers</i> , 2015, 115, 160-169.	5.1	130
83	Soft tissue engineering and microbial infections. , 2016, , 1-29.		5
84	New Aspects in the Formulation of Drugs Based on Three Case Studies. <i>Molecules</i> , 2016, 21, 577.	1.7	2
85	Direct introduction of R-SO <sub>2</sub> F moieties into proteins and protein-polymer conjugation using SuFEx chemistry. <i>Polymer</i> , 2016, 99, 7-12.	1.8	35
86	Enzyme Mimics: Advances and Applications. <i>Chemistry - A European Journal</i> , 2016, 22, 8404-8430.	1.7	253
87	BMP“ delivered via sucrose acetate isobutyrate (SAIB) improves bone repair in a rat open fracture model. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1168-1176.	1.2	8
88	Water“Soluble Fluorescent Probes for Selective Recognition of Lysine and Its Application in an Object Carry“and“Release System. <i>Chemistry - an Asian Journal</i> , 2016, 11, 58-63.	1.7	23
89	Synthesis and characterization of biodegradable lysine-based waterborne polyurethane for soft tissue engineering applications. <i>Biomaterials Science</i> , 2016, 4, 1682-1690.	2.6	43
90	Rationally Designed Redox-Sensitive Protein Hydrogels with Tunable Mechanical Properties. <i>Biomacromolecules</i> , 2016, 17, 3508-3515.	2.6	34
91	Nanofibrillar hydrogel scaffolds from recombinant protein“based polymers with integrin“and proteoglycan“binding domains. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 3082-3092.	2.1	15
92	Extracellular matrix bioscaffolds in tissue remodeling and morphogenesis. <i>Developmental Dynamics</i> , 2016, 245, 351-360.	0.8	157

#	ARTICLE	IF	CITATIONS
93	Protein Engineering Strategies for Modular, Responsive, and Spatially Organized Biomaterials. , 2016, , 287-314.		1
94	Synthesis and characterization of a dually crosslinked heparin-conjugated HA hydrogel for BMP-2 sustained delivery. International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 928-937.	1.8	2
95	Recombinant protein blends: silk beyond natural design. Current Opinion in Biotechnology, 2016, 39, 1-7.	3.3	49
96	Human VE-Cadherin Fusion Protein as an Artificial Extracellular Matrix Enhancing the Proliferation and Differentiation Functions of Endothelial Cell. Biomacromolecules, 2016, 17, 756-766.	2.6	22
97	Recent advances of biomaterials in biotherapy. International Journal of Energy Production and Management, 2016, 3, 99-105.	1.9	49
98	Resilin-PEG Hybrid Hydrogels Yield Degradable Elastomeric Scaffolds with Heterogeneous Microstructure. Biomacromolecules, 2016, 17, 128-140.	2.6	42
99	Novel electrospun poly(glycerol sebacate)â€“zein fiber mats as candidate materials for cardiac tissue engineering. European Polymer Journal, 2016, 75, 504-513.	2.6	46
100	Silk protein-based hydrogels: Promising advanced materials for biomedical applications. Acta Biomaterialia, 2016, 31, 17-32.	4.1	373
101	Strategies and Molecular Design Criteria for 3D Printable Hydrogels. Chemical Reviews, 2016, 116, 1496-1539.	23.0	580
102	<i>50th Anniversary Perspective</i>: Polymeric Biomaterials: Diverse Functions Enabled by Advances in Macromolecular Chemistry. Macromolecules, 2017, 50, 483-502.	2.2	55
103	Developing and physicochemical evaluation of cross-linked electrospun gelatinâ€“glycerol nanofibrous membranes for medical applications. Journal of Molecular Structure, 2017, 1135, 222-227.	1.8	38
104	In vitro cytotoxicity evaluation of nano-carbon particles with different sp <sup>2</sup> /sp <sup>3</sup> ratios. Materials Science and Engineering C, 2017, 75, 854-862.	3.8	6
105	Biomacromolecule based nanoscaffolds for cell therapy. Journal of Drug Delivery Science and Technology, 2017, 37, 61-66.	1.4	20
106	Rational Design and Hierarchical Assembly of a Genetically Engineered Resilinâ€“Silk Copolymer Results in Stiff Hydrogels. ACS Biomaterials Science and Engineering, 2017, 3, 1576-1585.	2.6	29
107	Comparison of thermal properties of fish collagen and bovine collagen in the temperature range 298â€“670 K. Materials Science and Engineering C, 2017, 80, 468-471.	3.8	70
108	Comparative Study of Surface Chemical Composition and Oxide Layer Modification upon Oxygen Plasma Cleaning and Piranha Etching on a Novel Low Elastic Modulus Ti25Nb21Hf Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 3770-3776.	1.1	10
109	Osteoinductive recombinant silk fusion proteins for bone regeneration. Acta Biomaterialia, 2017, 49, 127-139.	4.1	42
110	Gradient and Patterned Protein Films Stabilized via Nanoimprint Lithography for Engineered Interactions with Cells. ACS Applied Materials & Interfaces, 2017, 9, 42-46.	4.0	15

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111	Recent advances in cell-laden 3D bioprinting: materials, technologies and applications. <i>Journal of 3D Printing in Medicine</i> , 2017, 1, 245-268.	1.0	8
112	Laser processing of protein films as a method for accomplishment of cell patterning at the microscale. <i>Biofabrication</i> , 2017, 9, 045004.	3.7	6
113	Advanced Biotechnologies Toward Engineering a Cell Home for Stem Cell Accommodation. <i>Advanced Materials Technologies</i> , 2017, 2, 1700022.	3.0	9
114	Integrated Modeling and Experimental Approaches to Control Silica Modification of Design Silk-Based Biomaterials. <i>ACS Biomaterials Science and Engineering</i> , 2017, 3, 2877-2888.	2.6	14
115	An in-Depth Analysis of the Swelling, Mechanical, Electrical, and Drug Release Properties of Agarose-Gelatin Co-Hydrogels. <i>Polymer-Plastics Technology and Engineering</i> , 2017, 56, 667-677.	1.9	3
116	Silk-based biomaterials functionalized with fibronectin type II promotes cell adhesion. <i>Acta Biomaterialia</i> , 2017, 47, 50-59.	4.1	27
117	Protein-based inverse opals: A novel support for enzyme immobilization. <i>Enzyme and Microbial Technology</i> , 2017, 96, 42-46.	1.6	11
118	Effect of Wool Keratin on Mechanical and Morphological Characteristics of Polycaprolactone Suture Fibre. <i>Journal of Textile Engineering</i> , 2017, 63, 1-4.	0.5	5
119	Protected Laser Evaporation/Ablation and Deposition of Organic/Biological Materials: Thin Films Deposition for Nano- biomedical Applications. , 2017, , .		1
120	Silk Materials Functionalized via Genetic Engineering for Biomedical Applications. <i>Materials</i> , 2017, 10, 1417.	1.3	26
121	Functional Skin Substitutes – The Intersection of Tissue Engineering and Biomaterials. <i>Frontiers in Nanobiomedical Research</i> , 2017, , 231-269.	0.1	1
122	Biopolymers for gene delivery applications. , 2017, , 289-323.		1
123	Lipase-catalyzed synthesis of chiral poly(ester amide)s with an alternating sequence of hydroxy acid and aspartate units. <i>Polymer Chemistry</i> , 2018, 9, 1412-1420.	1.9	9
124	Compressive and flexural properties of novel polylactic acid/hydroxyapatite/yttria-stabilized zirconia hybrid nanocomposite scaffold. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2018, 67, 229-238.	1.8	15
125	Using minimalist self-assembling peptides as hierarchical scaffolds to stabilise growth factors and promote stem cell integration in the injured brain. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, e1571-e1579.	1.3	44
126	Design, Fabrication, and Function of Silk-Based Nanomaterials. <i>Advanced Functional Materials</i> , 2018, 28, 1805305.	7.8	120
127	Advances in Protein-Based Materials: From Origin to Novel Biomaterials. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1078, 161-210.	0.8	30
128	Stability improvement of human collagen $\alpha 1(I)$ chain using insulin as a fusion partner. <i>Chinese Journal of Chemical Engineering</i> , 2018, 26, 2607-2614.	1.7	6



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129	Development of a novel keratin dressing which accelerates full-thickness skin wound healing in diabetic mice: In vitro and in vivo studies. <i>Journal of Biomaterials Applications</i> , 2018, 33, 527-540.	1.2	22
130	Electrospun bioresorbable tissue repair scaffolds: From laboratory to clinic. , 2018, , .		2
131	Next generation protein-polymer conjugates. <i>AIChE Journal</i> , 2018, 64, 3230-3245.	1.8	64
132	3D bioprinting of functional tissue models for personalized drug screening and in vitro disease modeling. <i>Advanced Drug Delivery Reviews</i> , 2018, 132, 235-251.	6.6	297
133	Chitosan-grafted-poly(methacrylic acid)/graphene oxide nanocomposite as a pH-responsive de novo cancer chemotherapy nanosystem. <i>International Journal of Biological Macromolecules</i> , 2018, 118, 1871-1879.	3.6	70
134	Novel hemostatic biomolecules based on elastin-like polypeptides and the self-assembling peptide RADA-16. <i>BMC Biotechnology</i> , 2018, 18, 12.	1.7	14
135	Skin in vitro models to study dermal white adipose tissue role in skin healing. , 2018, , 327-352.		0
136	Self-Assembling Amyloid Sequences as Scaffolds for Material Design: A Case Study of Building Blocks Inspired From the Adenovirus Fiber Protein. <i>Macromolecular Symposia</i> , 2019, 386, 1900005.	0.4	2
137	Electrically conductive biomaterials based on natural polysaccharides: Challenges and applications in tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2019, 141, 636-662.	3.6	63
138	Bacterial flagella as an osteogenic differentiation nano-promoter. <i>Nanoscale Horizons</i> , 2019, 4, 1286-1292.	4.1	6
139	Fabrication of Biopolymer-Based Organs and Tissues Using 3D Bioprinting. , 2019, , 43-62.		7
140	Protein-Engineered Functional Materials. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801374.	3.9	48
142	Structural Properties of Protein and Their Role in Polymer Nanocomposites. , 2019, , 217-232.		1
143	Rheology of Dispersions of High-Aspect-Ratio Nanofibers Assembled from Elastin-Like Double-Hydrophobic Polypeptides. <i>International Journal of Molecular Sciences</i> , 2019, 20, 6262.	1.8	7
144	A salt-based method to adapt stiffness and biodegradability of porous collagen scaffolds. <i>RSC Advances</i> , 2019, 9, 36742-36750.	1.7	0
145	Three-Dimensional Osteosarcoma Models for Advancing Drug Discovery and Development. <i>Advanced Therapeutics</i> , 2019, 2, 1800108.	1.6	16
146	Therapeutic Protein PEPylation: The Helix of Nonfouling Synthetic Polypeptides Minimizes Antidrug Antibody Generation. <i>ACS Central Science</i> , 2019, 5, 229-236.	5.3	61
147	Tailoring degradation rates of silk fibroin scaffolds for tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2019, 107, 104-113.	2.1	62

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148	General Principle for Fabricating Natural Globular Protein-Based Double-Network Hydrogels with Integrated Highly Mechanical Properties and Surface Adhesion on Solid Surfaces. <i>Chemistry of Materials</i> , 2019, 31, 179-189.	3.2	102
149	Functional Graphenic Materials, Graphene Oxide, and Graphene as Scaffolds for Bone Regeneration. <i>Regenerative Engineering and Translational Medicine</i> , 2019, 5, 190-209.	1.6	33
150	Adjuvant drug-assisted bone healing: Part I – Modulation of inflammation. <i>Clinical Hemorheology and Microcirculation</i> , 2020, 73, 381-408.	0.9	13
151	Natural polypeptides-based electrically conductive biomaterials for tissue engineering. <i>International Journal of Biological Macromolecules</i> , 2020, 147, 706-733.	3.6	28
152	Electric field effects on proteins – Novel perspectives on food and potential health implications. <i>Food Research International</i> , 2020, 137, 109709.	2.9	30
153	One-Shot Synthesis of Peptide Amphiphiles with Applications in Directed Graphenic Assembly. <i>Biomacromolecules</i> , 2020, 21, 3878-3886.	2.6	6
154	Nanofiber matrices of protein mimetic bioactive peptides for biomedical applications. , 2020, , 199-217.		2
155	Protein and peptide nanofiber matrices for the regenerative medicine. , 2020, , 327-350.		0
156	Elastin-like Proteins to Support Peripheral Nerve Regeneration in Guidance Conduits. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4209-4220.	2.6	16
157	Adjuvant Drug-Assisted Bone Healing: Advances and Challenges in Drug Delivery Approaches. <i>Pharmaceutics</i> , 2020, 12, 428.	2.0	26
158	A comparative study of materials assembled from recombinant K31 and K81 and extracted human hair keratins. <i>Biomedical Materials (Bristol)</i> , 2020, 15, 065006.	1.7	2
159	Nature-derived materials for the fabrication of functional biodevices. <i>Materials Today Bio</i> , 2020, 7, 100065.	2.6	68
160	Polymer- and Hybrid-Based Biomaterials for Interstitial, Connective, Vascular, Nerve, Visceral and Musculoskeletal Tissue Engineering. <i>Polymers</i> , 2020, 12, 620.	2.0	62
161	Fundamentals on biopolymers and global demand. , 2020, , 3-34.		9
162	The Significance and Utilisation of Biomimetic and Bioinspired Strategies in the Field of Biomedical Material Engineering: The Case of Calcium Phosphatâ€”Protein Template Constructs. <i>Materials</i> , 2020, 13, 327.	1.3	11
163	Proteins and Peptides as Important Modifiers of the Polymer Scaffolds for Tissue Engineering Applicationsâ€”A Review. <i>Polymers</i> , 2020, 12, 844.	2.0	116
164	A molecular dynamics investigation on transporting mechanism of glucose through a cyclic peptide nanotube. <i>Journal of Biomolecular Structure and Dynamics</i> , 2021, 39, 2230-2241.	2.0	3
165	A biomimetic bi-layered tissue engineering scaffolds for osteochondral defects repair. <i>Science China Technological Sciences</i> , 2021, 64, 793-805.	2.0	11

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167	Latest developments in wastewater treatment and biopolymer production by microalgae. Journal of Environmental Chemical Engineering, 2021, 9, 104926.	3.3	72
168	Ohmic heating as a new tool for protein scaffold engineering. Materials Science and Engineering C, 2021, 120, 111784.	3.8	5
169	Impact of morphology and collagen-functionalization on the redox equilibria of nanoceria for cancer therapies. Materials Science and Engineering C, 2021, 120, 111663.	3.8	4
170	Engineering conductive protein films through nanoscale self-assembly and gold nanoparticles doping. Nanoscale, 2021, 13, 6772-6779.	2.8	10
171	Polysaccharides of Biomedical Importance from Genetically Modified Microorganisms. , 2021, , 1-27.		0
172	Synthesis and Assembly of Recombinant Collagen. Methods in Molecular Biology, 2021, 2347, 83-96.	0.4	1
173	Proteinaceous Hydrogels for Bioengineering Advanced 3D Tumor Models. Advanced Science, 2021, 8, 2003129.	5.6	41
174	Chitosan hydrogel/silk fibroin/Mg(OH) <sub>2</sub> nanobiocomposite as a novel scaffold with antimicrobial activity and improved mechanical properties. Scientific Reports, 2021, 11, 650.	1.6	90
175	Investigation of the biological activity, mechanical properties and wound healing application of a novel scaffold based on lignin-agarose hydrogel and silk fibroin embedded zinc chromite nanoparticles. RSC Advances, 2021, 11, 17914-17923.	1.7	68
176	Genetic Engineering Approaches for High-End Application of Biopolymers: Advances and Future Prospects. , 2021, , 619-630.		0
177	Porosity Pattern of 3D Chitosan/Bioactive Glass Tissue Engineering Scaffolds Prepared for Bone Regeneration. Open Dentistry Journal, 2021, 15, 41-56.	0.2	4
178	Silk-Based Materials for Hard Tissue Engineering. Materials, 2021, 14, 674.	1.3	30
179	Immune Checkpoint Inhibitor-Based Strategies for Synergistic Cancer Therapy. Advanced Healthcare Materials, 2021, 10, e2002104.	3.9	47
180	Recent advances in 3D bioprinting of musculoskeletal tissues. Biofabrication, 2021, 13, 022001.	3.7	47
181	Integrating biomaterials and food biopolymers for cultured meat production. Acta Biomaterialia, 2021, 124, 108-129.	4.1	58
182	Surface Chemistry, Crystal Structure, Size and Topography Role in the Albumin Adsorption Process on TiO <sub>2</sub> Anatase Crystallographic Faces and Its 3D-Nanocrystal: A Molecular Dynamics Study. Coatings, 2021, 11, 420.	1.2	9
183	Integrating Biomaterials and Genome Editing Approaches to Advance Biomedical Science. Annual Review of Biomedical Engineering, 2021, 23, 493-516.	5.7	4
184	Thermo-Viscoelastic Response of Protein-Based Hydrogels. Bioengineering, 2021, 8, 73.	1.6	1

#	ARTICLE	IF	CITATIONS
185	Protein Hydrogels: The Swiss Army Knife for Enhanced Mechanical and Bioactive Properties of Biomaterials. <i>Nanomaterials</i> , 2021, 11, 1656.	1.9	27
186	3D printing to innovate biopolymer materials for demanding applications: A review. <i>Materials Today Chemistry</i> , 2021, 20, 100459.	1.7	58
187	EFFECT OF EMULSION SBR PREPARED BY ASYMMETRIC REVERSIBLE ADDITION-FRAGMENTATION TRANSFER AGENT ON PROPERTIES OF SILICA-FILLED COMPOUNDS. <i>Rubber Chemistry and Technology</i> , 2021, 94, 735-758.	0.6	2
188	Additive Manufacturing of Biopolymers for Tissue Engineering and Regenerative Medicine: An Overview, Potential Applications, Advancements, and Trends. <i>International Journal of Polymer Science</i> , 2021, 2021, 1-20.	1.2	70
189	Freeze-printing of pectin/alginate scaffolds with high resolution, overhang structures and interconnected porous network. <i>Additive Manufacturing</i> , 2021, 46, 102120.	1.7	7
190	Structure of Collagen. <i>Methods in Molecular Biology</i> , 2021, 2347, 17-25.	0.4	15
191	Extraction of Hydroxyapatite from Bovine and Human Cortical Bone by Thermal Decomposition and Effect of Gamma Radiation: A Comparative Study. <i>International Journal of Complementary &amp; Alternative Medicine</i> , 2017, 8, .	0.1	13
192	Chiral self-assembly of peptides: Toward the design of supramolecular polymers with enhanced chemical and biological functions. <i>Progress in Polymer Science</i> , 2021, 123, 101469.	11.8	39
193	Biomimetic Materials: Smart Polymer Surfaces for Tissue Engineering. , 0, , 932-946.		0
194	Proteinâ€™Polymeric Materials Interaction: Mineralized Tissues Reconstruction. , 0, , 6808-6830.		0
195	Biomedical Applications of Recombinant Proteins and Derived Polypeptides. , 2016, , 183-212.		0
196	Biomimetic Materials: Smart Polymer Surfaces for Tissue Engineering. , 2017, , 214-228.		0
197	Green Chemistry Principles In Advancing Hierarchical Functionalization of Polymer-Based Nanomedicines. <i>ACS Symposium Series</i> , 2020, , 135-157.	0.5	0
198	Natural polymeric biomaterials for tissue engineering. , 2022, , 75-110.		0
199	The Induced Pluripotent Stem Cells in Articular Cartilage Regeneration and Disease Modelling: Are We Ready for Their Clinical Use?. <i>Cells</i> , 2022, 11, 529.	1.8	17
200	Polysaccharides of Biomedical Importance from Genetically Modified Microorganisms. , 2022, , 649-674.		0
201	Bioprinting of Biomimetic Tissue Models for Disease Modeling and Drug Screening. , 2022, , 33-70.		2
202	Graphene Oxideâ€™Protein-Based Scaffolds for Tissue Engineering: Recent Advances and Applications. <i>Polymers</i> , 2022, 14, 1032.	2.0	28

#	ARTICLE	IF	CITATIONS
204	Engineering High Strength and Super Toughness of Unfolded Structural Proteins and their Extraordinary Anti Adhesion Performance for Abdominal Hernia Repair. <i>Advanced Materials</i> , 2022, 34, e2200842.	11.1	24
205	DNA Functionalized Spider Silk Nanohydrogels for Specific Cell Attachment and Patterning. <i>ACS Nano</i> , 2022, 16, 7626-7635.	7.3	8
206	Eco-Sustainable Silk Fibroin/Pomegranate Peel Extract Film as an Innovative Green Material for Skin Repair. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6805.	1.8	1
207	Review of Polymeric Biomimetic Small-Diameter Vascular Grafts to Tackle Intimal Hyperplasia. <i>ACS Omega</i> , 2022, 7, 22125-22148.	1.6	12
208	Advancement in "Garbage In Biomaterials Out (GIBO)" concept to develop biomaterials from agricultural waste for tissue engineering and biomedical applications. <i>Journal of Environmental Health Science &amp; Engineering</i> , 2022, 20, 1015-1033.	1.4	10
209	Angiogenic Potential of Co-Cultured Human Umbilical Vein Endothelial Cells and Adipose Stromal Cells in Customizable 3D Engineered Collagen Sheets. <i>Journal of Functional Biomaterials</i> , 2022, 13, 107.	1.8	1
210	Genetically Engineered Viral Vectors and Organic Based Non Viral Nanocarriers for Drug Delivery Applications. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	19
211	Emerging affinity ligands and support materials for the enrichment of monoclonal antibodies. <i>TrAC - Trends in Analytical Chemistry</i> , 2022, 157, 116744.	5.8	5
212	Nonmulberry silk fibroin-based biomaterials: Impact on cell behavior regulation and tissue regeneration. <i>Acta Biomaterialia</i> , 2022, 153, 68-84.	4.1	19
213	Gene-activated titanium implants for gene delivery to enhance osseointegration. , 2022, 143, 213176.		4
214	Recombinant protein-based injectable materials for biomedical applications. <i>Advanced Drug Delivery Reviews</i> , 2023, 193, 114673.	6.6	9
215	Convergence of Biofabrication Technologies and Cell Therapies for Wound Healing. <i>Pharmaceutics</i> , 2022, 14, 2749.	2.0	0
216	Advanced surface engineering of titanium materials for biomedical applications: From static modification to dynamic responsive regulation. <i>Bioactive Materials</i> , 2023, 27, 15-57.	8.6	12
217	Interfacial Click Chemistry Enabled Strong Adhesion toward Ultra Durable Crack Based Flexible Strain Sensors. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	9
221	Different Techniques of Genetic Engineering Used for the Development of Novel Biomaterials. <i>Engineering Materials</i> , 2023, , 43-72.	0.3	0
226	Silk fibroin nanofibers and their blends for skin tissue engineering applications. , 2024, , 445-476.		0