

Non-bioengineered silk gland fibroin protein: Characterization for potential tissue engineering applications

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Non-bioengineered Silk Fibroin Protein 3D Scaffolds for Potential Biotechnological and Tissue Engineering Applications. <i>Macromolecular Bioscience</i> , 2008, 8, 807-818.	4.1	130
2	Natural protective glue protein, sericin bioengineered by silkworms: Potential for biomedical and biotechnological applications. <i>Progress in Polymer Science</i> , 2008, 33, 998-1012.	24.7	316
3	Silk fibroin/gelatin multilayered films as a model system for controlled drug release. <i>European Journal of Pharmaceutical Sciences</i> , 2009, 37, 160-171.	4.0	105
4	Cell proliferation and migration in silk fibroin 3D scaffolds. <i>Biomaterials</i> , 2009, 30, 2956-2965.	11.4	490
5	Non-bioengineered silk gland fibroin micromolded matrices to study cell-surface interactions. <i>Biomedical Microdevices</i> , 2009, 11, 467-476.	2.8	16
6	Silk fibroin/polyacrylamide semi-interpenetrating network hydrogels for controlled drug release. <i>Biomaterials</i> , 2009, 30, 2826-2836.	11.4	273
7	Calcium alginate beads embedded in silk fibroin as 3D dual drug releasing scaffolds. <i>Biomaterials</i> , 2009, 30, 5170-5177.	11.4	64
8	Osteogenic and adipogenic differentiation of rat bone marrow cells on non-mulberry and mulberry silk gland fibroin 3D scaffolds. <i>Biomaterials</i> , 2009, 30, 5019-5030.	11.4	115
9	Non-mulberry silk gland fibroin protein 3-D scaffold for enhanced differentiation of human mesenchymal stem cells into osteocytes. <i>Acta Biomaterialia</i> , 2009, 5, 2579-2590.	8.3	48
10	Novel silk sericin/gelatin 3-D scaffolds and 2-D films: Fabrication and characterization for potential tissue engineering applications. <i>Acta Biomaterialia</i> , 2009, 5, 3007-3020.	8.3	186
11	Self-assembled silk sericin/poloxamer nanoparticles as nanocarriers of hydrophobic and hydrophilic drugs for targeted delivery. <i>Nanotechnology</i> , 2009, 20, 355101.	2.6	121
12	Biospinning by silkworms: Silk fiber matrices for tissue engineering applications. <i>Acta Biomaterialia</i> , 2010, 6, 360-371.	8.3	71
13	Implication of Silk Film RGD Availability and Surface Roughness on Cytoskeletal Organization and Proliferation of Primary Rat Bone Marrow Cells. <i>Tissue Engineering - Part A</i> , 2010, 16, 2391-2403.	3.1	48
14	Morphology and tensile properties of silk fibers produced by uncommon Saturniidae. <i>International Journal of Biological Macromolecules</i> , 2010, 46, 419-424.	7.5	24
15	Silk Fibroin/Sodium Carboxymethylcellulose Blended Films for Biotechnological Applications. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2011, 22, 519-539.	3.5	24
16	Enhancement of hydrophobicity and tensile strength of muga silk fiber by radiofrequency Ar plasma discharge. <i>Applied Surface Science</i> , 2011, 258, 126-135.	6.1	29
17	Preparation, characterization and in vitro study of biocompatible fibroin hydrogel. <i>African Journal of Biotechnology</i> , 2011, 10, 7878-7892.	0.6	18
18	Effect of initial cell seeding density on 3D-engineered silk fibroin scaffolds for articular cartilage tissue engineering. <i>Biomaterials</i> , 2011, 32, 8927-8937.	11.4	101

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19	Engineered silk fibroin protein 3D matrices for in vitro tumor model. <i>Biomaterials</i> , 2011, 32, 2149-2159.	11.4	126
20	Unique natural protein hollow nanofiber membranes produced by weaver ants for medical applications. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1726-1733.	3.3	15
21	Improved human tenocyte proliferation and differentiation <i>in vitro</i> by optimized silk degumming. <i>Biomedical Materials (Bristol)</i> , 2011, 6, 035010.	3.3	19
22	Bioengineered natural textile fibres. , 2012, , 291-313.		0
23	Disposable Amperometric A-fetoprotein Immunosensor Based on the Biocompatible Silk Protein Membranes-Modified Indium Tin Oxide Electrodes. <i>Analytical Letters</i> , 2012, 45, 735-745.	1.8	2
24	Radio-frequency Ar plasma treatment on muga silk fiber: correlation between physicochemical and surface morphology. <i>Journal of Theoretical and Applied Physics</i> , 2012, 6, 39.	1.4	10
25	A novel method for the production and evaluation of hernia repair mesh in an in vitro environment. <i>Tissue Engineering and Regenerative Medicine</i> , 2012, 9, 116-127.	3.7	2
26	Silk protein fibroin from <i>Antheraea mylitta</i> for cardiac tissue engineering. <i>Biomaterials</i> , 2012, 33, 2673-2680.	11.4	210
27	Nonmulberry silk biopolymers. <i>Biopolymers</i> , 2012, 97, 455-467.	2.4	174
28	Tailoring Silk-Based Matrices for Tissue Regeneration. <i>ACS Symposium Series</i> , 2013, , 281-299.	0.5	1
29	Biomimetic Materials and Scaffolds for Myocardial Tissue Regeneration. <i>Macromolecular Bioscience</i> , 2013, 13, 984-1019.	4.1	81
30	Silk hydrogels from non-mulberry and mulberry silkworm cocoons processed with ionic liquids. <i>Acta Biomaterialia</i> , 2013, 9, 8972-8982.	8.3	79
31	In vitro characterization and ex vivo surgical evaluation of human hair keratin films in ocular surface reconstruction after sterilization processing. <i>Journal of Materials Science: Materials in Medicine</i> , 2013, 24, 221-230.	3.6	30
32	Fabrication and characterization of regenerated silk scaffolds reinforced with natural silk fibers for bone tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2013, 101A, 2392-2404.	4.0	77
33	Preparation and characterization of silk fibroin/chitosan composite sponges for tissue engineering. <i>Journal of Molecular Liquids</i> , 2013, 178, 5-14.	4.9	116
34	Engineered 3D Silk-Based Metastasis Models: Interactions Between Human Breast Adenocarcinoma, Mesenchymal Stem Cells and Osteoblast-Like Cells. <i>Advanced Functional Materials</i> , 2013, 23, 5249-5260.	14.9	43
35	An Emerging Functional Natural Silk Biomaterial from the only Domesticated Non-mulberry Silkworm <i>Samia ricini</i> . <i>Macromolecular Bioscience</i> , 2013, 13, 1020-1035.	4.1	31
36	Bio-inspired fabrication of fibroin cryogels from the muga silkworm <i>Antheraea assamensis</i> for liver tissue engineering. <i>Biomedical Materials (Bristol)</i> , 2013, 8, 055003.	3.3	39

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37	Silk for cardiac tissue engineering. , 2014, , 429-455.		4
38	Mineralization and Biocompatibility of <i>Antheraea pernyi</i> (<i>A. pernyi</i>) Silk Sericin Film for Potential Bone Tissue Engineering. <i>Bio-Medical Materials and Engineering</i> , 2014, 24, 815-824.	0.6	18
39	Silk proteins for biomedical applications: Bioengineering perspectives. <i>Progress in Polymer Science</i> , 2014, 39, 251-267.	24.7	364
40	Directing osteogenesis of stem cells with hydroxyapatite precipitated electrospun eriâ€“tasar silk fibroin nanofibrous scaffold. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2014, 25, 1440-1457.	3.5	19
41	Development and characterization of cactusâ€“dextrinâ€“ recombinant human epidermal growth factor based silk scaffold for wound dressing applications. <i>Journal of Industrial Textiles</i> , 2014, 43, 565-576.	2.4	8
42	Scaffolds: A Novel Carrier and Potential Wound Healer. <i>Critical Reviews in Therapeutic Drug Carrier Systems</i> , 2015, 32, 277-321.	2.2	38
43	Target Specific Delivery of Anticancer Drug in Silk Fibroin Based 3D Distribution Model of Boneâ€“Breast Cancer Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 2269-2279.	8.0	66
44	Nano-composite of silk fibroinâ€“chitosan/Nano ZrO ₂ for tissue engineering applications: Fabrication and morphology. <i>International Journal of Biological Macromolecules</i> , 2015, 76, 292-302.	7.5	68
45	Fabrication and characterization of silk fibroin/chitosan/Nano Î³-alumina composite scaffolds for tissue engineering applications. <i>RSC Advances</i> , 2015, 5, 27558-27570.	3.6	27
46	Non-mulberry silk fibroin grafted PCL nanofibrous scaffold: Promising ECM for bone tissue engineering. <i>European Polymer Journal</i> , 2015, 71, 490-509.	5.4	64
47	Optimization of nanofibrous silk fibroin scaffold as a delivery system for bone marrow adherent cells: <i>in vitro</i> and <i>in vivo</i> studies. <i>Biotechnology and Applied Biochemistry</i> , 2015, 62, 785-794.	3.1	48
48	<i>In vitro</i> and <i>in vivo</i> evaluations of threeâ€“dimensional hydroxyapatite/silk fibroin nanocomposite scaffolds. <i>Biotechnology and Applied Biochemistry</i> , 2015, 62, 441-450.	3.1	45
49	Nanofibrous nonmulberry silk/PVA scaffold for osteoinduction and osseointegration. <i>Biopolymers</i> , 2015, 103, 271-284.	2.4	40
51	Silk-microfluidics for advanced biotechnological applications: A progressive review. <i>Biotechnology Advances</i> , 2016, 34, 845-858.	11.7	55
52	Investigating the potential of combined growth factors delivery, from non-mulberry silk fibroin grafted poly(Îµ-caprolactone)/hydroxyapatite nanofibrous scaffold, in bone tissue engineering. <i>Applied Materials Today</i> , 2016, 5, 52-67.	4.3	43
53	Reloadable Silk-Hydrogel Hybrid Scaffolds for Sustained and Targeted Delivery of Molecules. <i>Molecular Pharmaceutics</i> , 2016, 13, 4066-4081.	4.6	24
54	Mimicking Form and Function of Native Small Diameter Vascular Conduits Using Mulberry and Non-mulberry Patterned Silk Films. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 15874-15888.	8.0	78
55	Impact of BSA and casein on chemical modification of muga silk fiber. <i>Journal of the Textile Institute</i> , 2016, 107, 346-354.	1.9	6

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56	Gentamicin sulfate-loaded porous natural rubber films for wound dressing. <i>International Journal of Biological Macromolecules</i> , 2016, 85, 634-644.	7.5	81
57	Non-mulberry silk fibroin grafted poly(ϵ -caprolactone) nanofibrous scaffolds mineralized by electrodeposition: an optimal delivery system for growth factors to enhance bone regeneration. <i>RSC Advances</i> , 2016, 6, 26835-26855.	3.6	18
58	Potential of inherent RGD containing silk fibroin-poly(ϵ -caprolactone) nanofibrous matrix for bone tissue engineering. <i>Cell and Tissue Research</i> , 2016, 363, 525-540.	2.9	44
59	In vitro two-dimensional and three-dimensional tenocyte culture for tendon tissue engineering. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016, 10, E216-E226.	2.7	20
60	Silk scaffolds in bone tissue engineering: An overview. <i>Acta Biomaterialia</i> , 2017, 63, 1-17.	8.3	236
61	Silk-Silk Interactions between Silkworm Fibroin and Recombinant Spider Silk Fusion Proteins Enable the Construction of Bioactive Materials. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 31634-31644.	8.0	35
63	Chitosan-coated <i>Antheraea mylitta</i> silk fibroin nonwoven composite films for wound dressing. <i>Journal of Applied Polymer Science</i> , 2017, 134, .	2.6	12
64	Silk fibroin/hydroxyapatite composites for bone tissue engineering. <i>Biotechnology Advances</i> , 2018, 36, 68-91.	11.7	320
65	Novel fluoridated silk fibroin/ TiO ₂ nanocomposite scaffolds for bone tissue engineering. <i>Materials Science and Engineering C</i> , 2018, 82, 265-276.	7.3	34
66	Scaffold Development Using Biomaterials: A Review. <i>Materials Today: Proceedings</i> , 2018, 5, 12909-12919.	1.8	68
67	In Situ Forming Injectable Silk Fibroin Hydrogel Promotes Skin Regeneration in Full Thickness Burn Wounds. <i>Advanced Healthcare Materials</i> , 2018, 7, e1801092.	7.6	156
68	Tailoring the Interface of Biomaterials to Design Effective Scaffolds. <i>Journal of Functional Biomaterials</i> , 2018, 9, 50.	4.4	43
69	Recombinant Spider Silk Functionalized Silkworm Silk Matrices as Potential Bioactive Wound Dressings and Skin Grafts. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 23560-23572.	8.0	64
70	Unusual Dynamics of Alanine Residues in Polyalanine Regions with Staggered Packing Structure of <i>Samia cynthia ricini</i> Silk Fiber in Dry and Hydrated States Studied by ¹³ C Solid-State NMR and Molecular Dynamics Simulation. <i>Journal of Physical Chemistry B</i> , 2018, 122, 6511-6520.	2.6	8
71	Fabrication of hierarchically porous silk fibroin-bioactive glass composite scaffold via indirect 3D printing: Effect of particle size on physico-mechanical properties and in vitro cellular behavior. <i>Materials Science and Engineering C</i> , 2019, 103, 109688.	7.3	40
72	Injectable Carbon Nanotube Impregnated Silk Based Multifunctional Hydrogel for Localized Targeted and On-Demand Anticancer Drug Delivery. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2365-2381.	5.2	57
73	Water-Rinsed Nonmulberry Silk Film for Potential Tissue Engineering Applications. <i>ACS Omega</i> , 2019, 4, 3114-3121.	3.5	15
74	A collagen-coated sponge silk scaffold for functional meniscus regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2019, 13, 156-173.	2.7	34

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75	Silk biomaterials in wound healing and skin regeneration therapeutics: From bench to bedside. <i>Acta Biomaterialia</i> , 2020, 103, 24-51.	8.3	183
76	In vitro three-dimensional modeling for prostate cancer. , 2020, , 251-286.		0
77	Silk-Based Biomaterials for Cardiac Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000735.	7.6	35
78	Bioinspired super-tough and multifunctional soy protein-based material via a facile approach. <i>Chemical Engineering Journal</i> , 2021, 405, 126700.	12.7	14
79	Bioinspired Biomaterial Composite for All-Water-Based High-Performance Adhesives. <i>Advanced Science</i> , 2021, 8, e2004786.	11.2	54
80	Implantation of multiscale silk fibers on poly (lactic acid) fibrous membrane for biomedical applications. <i>Materials Today Chemistry</i> , 2021, 21, 100494.	3.5	6
81	Nonmulberry silk proteins: multipurpose ingredient in bio-functional assembly. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 062002.	3.3	32
82	Microwave induced construction of multiple networks for multifunctional soy protein-based materials. <i>Progress in Organic Coatings</i> , 2021, 158, 106390.	3.9	4
84	Tissue Engineering: New Paradigm of Biomedicine. <i>Biosciences, Biotechnology Research Asia</i> , 2019, 16, 521-532.	0.5	9
85	Biomaterial Scaffold Fabrication Techniques for Potential Tissue Engineering Applications. , 0, , .		78
87	Muga silk: Sustainable materials for emerging technology. , 2023, , 295-316.		0
89	Hydrophobic <i>Bombyx mori</i> Silk Fibroin: Routes to Functionalization with Alkyl Chains. <i>Macromolecular Chemistry and Physics</i> , 2023, 224, .	2.2	0
90	Wound Microenvironment Self-Adjusting Hydrogels with Thermo-Sensitivity for Promoting Diabetic Wound Healing. <i>Gels</i> , 2023, 9, 987.	4.5	0
91	Nonmulberry silk-based biomaterials: biomedical applications, current status, and future perspective. , 2024, , 55-87.		0
92	Silk for cardiac tissue engineering. , 2024, , 567-600.		0