Biman B Mandal

List of Publications by Year
in descending order

159 papers	9,098 citations	36203 51 h-index	48187 88 g-index
162 all docs	162 docs citations	162 times ranked	9296 citing authors

#	Article	IF	Citations
1	Fabrication of Small-Diameter Tubular Grafts for Vascular Tissue Engineering Applications Using Mulberry and Non-mulberry Silk Proteins. Methods in Molecular Biology, 2022, 2375, 125-139.	0.4	2
2	Mimicking Native Heart Tissue Physiology and Pathology in Silk Fibroin Constructs through a Perfusionâ€Based Dynamic Mechanical Stimulation Microdevice. Advanced Healthcare Materials, 2022, 11, e2101678.	3.9	6
3	Silk-based phyto-hydrogel formulation expedites key events of wound healing in full-thickness skin defect model. International Journal of Biological Macromolecules, 2022, 203, 623-637.	3.6	16
4	3-(2-Hydroxyphenyl)imidazo[5, 1-a]isoquinoline as Cu(II) sensor, its Cu(II) complex for selective detection of CNâˆ’ ion and biological compatibility. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 427, 113795.	2.0	14
5	Mimicking Native Liver Lobule Microarchitecture In Vitro with Parenchymal and Non-parenchymal Cells Using 3D Bioprinting for Drug Toxicity and Drug Screening Applications. ACS Applied Materials & Interfaces, 2022, 14, 10167-10186.	4.0	38
6	Mesoporous Silk-Bioactive Glass Nanocomposites as Drug Eluting Multifunctional Conformal Coatings for Improving Osseointegration and Bactericidal Properties of Metal Implants. ACS Applied Materials & Interfaces, 2022, 14, 14961-14980.	4.0	19
7	Application of 2,4,5â€tris(2â€pyridyl)imidazole as â€˜turnâ€offâ€™ fluorescence sensor for Cu(II) and Hg(II) ions and <i>in vitro</i> cell imaging. Luminescence, 2022, 37, 883-891.	1.5	6
8	A probe with hydrazinecarbothioamide and 1,8-naphthalimide groups for â€œturn-onâ€•fluorescence detection of Hg2+ and Ag+ ions and live-cell imaging studies. Inorganica Chimica Acta, 2022, 535, 120876.	1.2	15
9	<scp>3D</scp> bioprinting of <scp>photoâ€crosslinkable</scp> silk methacrylate (<scp>SilMA</scp>)â€polyethylene glycol diacrylate (<scp>PEGDA</scp>) bioink for cartilage tissue engineering. Journal of Biomedical Materials Research - Part A, 2022, 110, 884-898.	2.1	39
10	Silkâ€Based Bioengineered Diaphyseal Cortical Bone Unit Enclosing an Implantable Bone Marrow toward Atrophic Nonunion Grafting. Advanced Healthcare Materials, 2022, 11, e2102031.	3.9	11
11	Surface Modification of Decellularized Natural Cellulose Scaffolds with Organosilanes for Bone Tissue Regeneration. ACS Biomaterials Science and Engineering, 2022, 8, 2000-2015.	2.6	10
12	Silk Fibroin Based Formulations as Potential Hemostatic Agents. ACS Biomaterials Science and Engineering, 2022, 8, 2654-2663.	2.6	11
13	3D Bioprinted Silkâ€Based In Vitro Osteochondral Model for Osteoarthritis Therapeutics. Advanced Healthcare Materials, 2022, 11, .	3.9	9
14	A Heartâ€Breast Cancerâ€onâ€aâ€Chip Platform for Disease Modeling and Monitoring of Cardiotoxicity Induced by Cancer Chemotherapy. Small, 2021, 17, e2004258.	5.2	57
15	Organâ€onâ€aâ€Chip: A Heartâ€Breast Cancerâ€onâ€aâ€Chip Platform for Disease Modeling and Monitoring of Cardiotoxicity Induced by Cancer Chemotherapy (Small 15/2021). Small, 2021, 17, 2170070.	5.2	0
16	Synthesis of NNN Chiral Ruthenium Complexes and Their Cytotoxicity Studies. Inorganic Chemistry, 2021, 60, 7422-7432.	1.9	16
17	Mimicking Physiologically Relevant Hepatocyte Zonation Using Immunomodulatory Silk Liver Extracellular Matrix Scaffolds toward a Bioartificial Liver Platform. ACS Applied Materials & Interfaces, 2021, 13, 24401-24421.	4.0	22
18	Bioactive three-dimensional silk composite in vitro tumoroid model for high throughput screening of anticancer drugs. Journal of Colloid and Interface Science, 2021, 589, 438-452.	5.0	12

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19	Unconventional and Facile Fabrication of Chemically Reactive Silk Fibroin Sponges for Environmental Remediation. ACS Applied Materials & Interfaces, 2021, 13, 24258-24271.	4.0	14
20	Tissueâ€Engineered Vascular Grafts: Emerging Trends and Technologies. Advanced Functional Materials, 2021, 31, 2100027.	7.8	54
21	3D printing of annulus fibrosus anatomical equivalents recapitulating angle-ply architecture for intervertebral disc replacement. Applied Materials Today, 2021, 23, 101031.	2.3	13
22	Overcoming the Dependence on Animal Models for Osteoarthritis Therapeutics â€" The Promises and Prospects of In Vitro Models. Advanced Healthcare Materials, 2021, 10, e2100961.	3.9	27
23	Functionalized Silk Vascular Grafts with Decellularized Human Wharton's Jelly Improves Remodeling via Immunomodulation in Rabbit Jugular Vein. Advanced Healthcare Materials, 2021, 10, e2100750.	3.9	7
24	A coumarin based visual and fluorometric probe for selective detection of Al(III), Cr(III) and Fe(III) ions through â€œturn-onâ€•response and its biological application. Journal of Photochemistry and Photobiology A: Chemistry, 2021, 417, 113340.	2.0	31
25	Silk biomaterials for vascular tissue engineering applications. Acta Biomaterialia, 2021, 134, 79-106.	4.1	27
26	CCL2 loaded microparticles promote acute patency in silk-based vascular grafts implanted in rat aortae. Acta Biomaterialia, 2021, 135, 126-138.	4.1	4
27	State-of-the-art strategies and future interventions in bone and cartilage repair for personalized regenerative therapy. , 2021, , 203-248.		1
28	Engineering Microsphere-Loaded Non-mulberry Silk-Based 3D Bioprinted Vascularized Cardiac Patches with Oxygen-Releasing and Immunomodulatory Potential. ACS Applied Materials & Interfaces, 2021, 13, 50744-50759.	4.0	39
29	Harnessing Multifaceted Next-Generation Technologies for Improved Skin Wound Healing. ACS Applied Bio Materials, 2021, 4, 7738-7763.	2.3	12
30	A three-dimensional printed silk-based biomimetic tri-layered meniscus for potential patient-specific implantation. Biofabrication, 2020, 12, 015003.	3.7	49
31	Silk-based encapsulation materials to enhance pancreatic cell functions. , 2020, , 329-337.		5
32	Chondroprotective and osteogenic effects of silk-based bioinks in developing 3D bioprinted osteochondral interface. Bioprinting, 2020, 17, e00067.	2.9	44
33	Glucoseâ€"methanolâ€based fedâ€batch fermentation for the production of recombinant human interferon gamma (rhIFNâ€Î³) and evaluation of its antitumor potential. Biotechnology and Applied Biochemistry, 2020, 67, 973-982.	1.4	0
34	Silk biomaterials in wound healing and skin regeneration therapeutics: From bench to bedside. Acta Biomaterialia, 2020, 103, 24-51.	4.1	183
35	Functional DNA Based Hydrogels: Development, Properties and Biological Applications. ACS Biomaterials Science and Engineering, 2020, 6, 6021-6035.	2.6	61
36	Drug Delivery of Anticancer Drugs from Injectable 3D Porous Silk Scaffold for Prevention of Gastric Cancer Growth and Recurrence. ACS Biomaterials Science and Engineering, 2020, 6, 6195-6206.	2.6	15

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37	Photo-Electro Active Nanocomposite Silk Hydrogel for Spatiotemporal Controlled Release of Chemotherapeutics: An In Vivo Approach toward Suppressing Solid Tumor Growth. ACS Applied Materials & Interfaces, 2020, 12, 27905-27916.	4.0	38
38	Myocardial Tissue Engineering: Nonmulberry Silk Based Ink for Fabricating Mechanically Robust Cardiac Patches and Endothelialized Myocardiumâ€onâ€aâ€Chip Application (Adv. Funct. Mater. 12/2020). Advanced Functional Materials, 2020, 30, 2070079.	7.8	2
39	In Vitro Culture of Human Corneal Endothelium on Non-Mulberry Silk Fibroin Films for Tissue Regeneration. Translational Vision Science and Technology, 2020, 9, 12.	1.1	16
40	Naked-eye detection of Pd2+ ion using a highly selective fluorescent heterocyclic probe by â€œturn-offâ€• response and in-vitro live cell imaging. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 394, 112441.	2.0	17
41	Bioresorbable silk grafts for small diameter vascular tissue engineering applications: In vitro and in vivo functional analysis. Acta Biomaterialia, 2020, 105, 146-158.	4.1	64
42	Pyridyl substitution control dynamics and shape dependence of fluorescent aggregates. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 392, 112405.	2.0	0
43	Nonmulberry Silk Based Ink for Fabricating Mechanically Robust Cardiac Patches and Endothelialized Myocardiumâ€onâ€aâ€Chip Application. Advanced Functional Materials, 2020, 30, 1907436.	7.8	42
44	Tissue-derived decellularized extracellular matrices toward cartilage repair and regeneration. Methods in Cell Biology, 2020, 157, 185-221.	0.5	15
45	Extracellular Vesicles Enhance the Remodeling of Cell-Free Silk Vascular Scaffolds in Rat Aortae. ACS Applied Materials & Interfaces, 2020, 12, 26955-26965.	4.0	27
46	Silkworm Silk Scaffolds Functionalized with Recombinant Spider Silk Containing a Fibronectin Motif Promotes Healing of Full-Thickness Burn Wounds. ACS Biomaterials Science and Engineering, 2019, 5, 4634-4645.	2.6	17
47	The inhibitory effect of silk sericin against ultraviolet-induced melanogenesis and its potential use in cosmeceutics as an anti-hyperpigmentation compound. Photochemical and Photobiological Sciences, 2019, 18, 2497-2508.	1.6	29
48	Nanoparticle-Based Hybrid Scaffolds for Deciphering the Role of Multimodal Cues in Cardiac Tissue Engineering. ACS Nano, 2019, 13, 12525-12539.	7.3	101
49	3D Printed Cartilageâ€Like Tissue Constructs with Spatially Controlled Mechanical Properties. Advanced Functional Materials, 2019, 29, 1906330.	7.8	66
50	3D Bioprinting Using Cross-Linker-Free Silkâ€"Gelatin Bioink for Cartilage Tissue Engineering. ACS Applied Materials & Interfaces, 2019, 11, 33684-33696.	4.0	177
51	Silk: A Promising Biomaterial Opening New Vistas Towards Affordable Healthcare Solutions. Journal of the Indian Institute of Science, 2019, 99, 445-487.	0.9	54
52	Silk Fibroin Scaffold-Based 3D Co-Culture Model for Modulation of Chondrogenesis without Hypertrophy via Reciprocal Cross-talk and Paracrine Signaling. ACS Biomaterials Science and Engineering, 2019, 5, 5240-5254.	2.6	12
53	Insight into Silk-Based Biomaterials: From Physicochemical Attributes to Recent Biomedical Applications. ACS Applied Bio Materials, 2019, 2, 5460-5491.	2.3	93
54	Fiber-Reinforced Silk Composite for Enhanced Urokinase Production Using High-Density Perfusion Culture and Bioactive Molecule Supplementation. ACS Biomaterials Science and Engineering, 2019, 5, 6137-6151.	2.6	6

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55	Silkworm Silk Matrices Coated with Functionalized Spider Silk Accelerate Healing of Diabetic Wounds. ACS Biomaterials Science and Engineering, 2019, 5, 3537-3548.	2.6	23
56	Emerging and innovative approaches for wound healing and skin regeneration: Current status and advances. Biomaterials, 2019, 216, 119267.	5.7	323
57	Decellularized Caprine Conchal Cartilage toward Repair and Regeneration of Damaged Cartilage. ACS Applied Bio Materials, 2019, 2, 2037-2049.	2.3	10
58	Inhibitory role of silk cocoon extract against elastase, hyaluronidase and UV radiation-induced matrix metalloproteinase expression in human dermal fibroblasts and keratinocytes. Photochemical and Photobiological Sciences, 2019, 18, 1259-1274.	1.6	17
59	3D Printing/Bioprinting Based Tailoring of <i>in Vitro</i> Tissue Models: Recent Advances and Challenges. ACS Applied Bio Materials, 2019, 2, 1385-1405.	2.3	52
60	Comprehensive Review on Silk at Nanoscale for Regenerative Medicine and Allied Applications. ACS Biomaterials Science and Engineering, 2019, 5, 2054-2078.	2.6	51
61	Rational Chemical Engineering in Natural Protein Derived Functional Interface. ACS Sustainable Chemistry and Engineering, 2019, 7, 7502-7509.	3.2	9
62	Injectable Carbon Nanotube Impregnated Silk Based Multifunctional Hydrogel for Localized Targeted and On-Demand Anticancer Drug Delivery. ACS Biomaterials Science and Engineering, 2019, 5, 2365-2381.	2.6	57
63	Synergistic Effects of Silicon/Zinc Doped Brushite and Silk Scaffolding in Augmenting the Osteogenic and Angiogenic Potential of Composite Biomimetic Bone Grafts. ACS Biomaterials Science and Engineering, 2019, 5, 1462-1475.	2.6	22
64	3D Printed Tissues: 3D Printed Cartilageâ€Like Tissue Constructs with Spatially Controlled Mechanical Properties (Adv. Funct. Mater. 51/2019). Advanced Functional Materials, 2019, 29, 1970350.	7.8	3
65	Exploring Gelation and Physicochemical Behavior of in Situ Bioresponsive Silk Hydrogels for Disc Degeneration Therapy. ACS Biomaterials Science and Engineering, 2019, 5, 870-886.	2.6	36
66	Surface Patterning and Innate Physicochemical Attributes of Silk Films Concomitantly Govern Vascular Cell Dynamics. ACS Biomaterials Science and Engineering, 2019, 5, 933-949.	2.6	23
67	Design, Synthesis, Characterization, and Antiproliferative Activity of Organoplatinum Compounds Bearing a 1,2,3-Triazole Ring. ACS Omega, 2019, 4, 835-841.	1.6	53
68	Carbon Nanotubes and Their Polymer Nanocomposites. , 2019, , 145-175.		15
69	Silk sericin induced pro-oxidative stress leads to apoptosis in human cancer cells. Food and Chemical Toxicology, 2019, 123, 275-287.	1.8	45
70	Magnetic Actuator Device Assisted Modulation of Cellular Behavior and Tuning of Drug Release on Silk Platform. ACS Biomaterials Science and Engineering, 2019, 5, 92-105.	2.6	27
71	PVP - CMC hydrogel: An excellent bioinspired and biocompatible scaffold for osseointegration. Materials Science and Engineering C, 2019, 95, 440-449.	3.8	29
72	3D functional scaffolds for skin tissue engineering. , 2018, , 345-365.		36

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73	Multifunctional Cell Instructive Silkâ€Bioactive Glass Composite Reinforced Scaffolds Toward Osteoinductive, Proangiogenic, and Resorbable Bone Grafts. Advanced Healthcare Materials, 2018, 7, e1701418.	3.9	49
74	Silk-based multilayered angle-ply annulus fibrosus construct to recapitulate form and function of the intervertebral disc. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 477-482.	3.3	63
75	Potential of silk sericin based nanofibrous mats for wound dressing applications. Materials Science and Engineering C, 2018, 90, 420-432.	3.8	97
76	Silk fibroin as a platform for dual sensing of vitamin B12 using photoluminescence and electrical techniques. Biosensors and Bioelectronics, 2018, 112, 18-22.	5.3	24
77	A novel reverse micellar purification strategy for histidine tagged human interferon gamma (hIFN-Î³) protein from Pichia pastoris. International Journal of Biological Macromolecules, 2018, 107, 2512-2524.	3.6	24
78	Functionalized <scp>PVA</scp> â€"silk blended nanofibrous mats promote diabetic wound healing via regulation of extracellular matrix and tissue remodelling. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1559-e1570.	1.3	85
79	Coordination-Driven Self-Assembly of Ionic Irregular Hexagonal Metallamacrocycles via an Organometallic Clip and Their Cytotoxicity Potency. Inorganic Chemistry, 2018, 57, 3615-3625.	1.9	27
80	Functional hepatocyte clusters on bioactive blend silk matrices towards generating bioartificial liver constructs. Acta Biomaterialia, 2018, 67, 167-182.	4.1	56
81	Potential Nanomedicine Applications of Multifunctional Carbon Nanoparticles Developed Using Green Technology. ACS Sustainable Chemistry and Engineering, 2018, 6, 1235-1245.	3.2	20
82	Simultaneous and controlled release of two different bioactive small molecules from nature inspired single material. Journal of Materials Chemistry B, 2018, 6, 7692-7702.	2.9	8
83	Protective Activity of Silk Sericin against UV Radiation-Induced Skin Damage by Downregulating Oxidative Stress. ACS Applied Bio Materials, 2018, 1, 2120-2132.	2.3	35
84	Immunomodulatory injectable silk hydrogels maintaining functional islets and promoting anti-inflammatory M2 macrophage polarization. Biomaterials, 2018, 187, 1-17.	5.7	82
85	In Situ Forming Injectable Silk Fibroin Hydrogel Promotes Skin Regeneration in Full Thickness Burn Wounds. Advanced Healthcare Materials, 2018, 7, e1801092.	3.9	156
86	Therapeutically Effective Controlled Release Formulation of Pirfenidone from Nontoxic Biocompatible Carboxymethyl Pullulan-Poly(vinyl alcohol) Interpenetrating Polymer Networks. ACS Omega, 2018, 3, 11993-12009.	1.6	25
87	In vitro and in vivo evaluation of pirfenidone loaded acrylamide grafted pullulan-poly(vinyl alcohol) interpenetrating polymer networks. Carbohydrate Polymers, 2018, 202, 288-298.	5.1	11
88	Recombinant Spider Silk Functionalized Silkworm Silk Matrices as Potential Bioactive Wound Dressings and Skin Grafts. ACS Applied Materials & Interfaces, 2018, 10, 23560-23572.	4.0	64
89	Hierarchically structured seamless silk scaffolds for osteochondral interface tissue engineering. Journal of Materials Chemistry B, 2018, 6, 5671-5688.	2.9	34
90	Fluorogenic naked-eye sensing and live-cell imaging of cyanide by a hydrazine-functionalized CAU-10 metalâ€"organic framework. CrystEngComm, 2018, 20, 4194-4201.	1.3	29

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91	Alkali metal-ion assisted Michael addition reaction in controlled tailoring of topography in a superhydrophobic polymeric monolith. Journal of Materials Chemistry A, 2018, 6, 17019-17031.	5.2	14
92	Injectable hydrogels: a new paradigm for osteochondral tissue engineering. Journal of Materials Chemistry B, 2018, 6, 5499-5529.	2.9	78
93	Self-Assembly of a [1 + 1] Ionic Hexagonal Macrocycle and Its Antiproliferative Activity. Frontiers in Chemistry, 2018, 6, 87.	1.8	8
94	Modulation of extracellular matrix by annulus fibrosus cells on tailored silk based angle-ply intervertebral disc construct. Materials and Design, 2018, 158, 74-87.	3.3	11
95	Synthesis and characterization of a non-cytotoxic and biocompatible acrylamide grafted pullulan â€“ Application in pH responsive controlled drug delivery. International Journal of Biological Macromolecules, 2018, 120, 753-762.	3.6	15
96	Mimicking Hierarchical Complexity of the Osteochondral Interface Using Electrospun Silkâ€“Bioactive Glass Composites. ACS Applied Materials & Interfaces, 2017, 9, 8000-8013.	4.0	89
97	Antioxidant potential of mulberry and non-mulberry silk sericin and its implications in biomedicine. Free Radical Biology and Medicine, 2017, 108, 803-818.	1.3	96
98	Pyrazine based Pt(II) bisâ€alkynyl organometallic complexes: Synthesis, characterization, and cytotoxic effect on A549 human lung carcinoma cells. Applied Organometallic Chemistry, 2017, 31, e3824.	1.7	10
99	Localized Immunomodulatory Silk Macrocapsules for Islet-like Spheroid Formation and Sustained Insulin Production. ACS Biomaterials Science and Engineering, 2017, 3, 2443-2456.	2.6	27
100	Silkâ€“Silk Interactions between Silkworm Fibroin and Recombinant Spider Silk Fusion Proteins Enable the Construction of Bioactive Materials. ACS Applied Materials & Interfaces, 2017, 9, 31634-31644.	4.0	35
101	Stacked silk-cell monolayers as a biomimetic three dimensional construct for cardiac tissue reconstruction. Journal of Materials Chemistry B, 2017, 5, 6325-6338.	2.9	31
102	Tissue Engineered Skin and Wound Healing: Current Strategies and Future Directions. Current Pharmaceutical Design, 2017, 23, 3455-3482.	0.9	91
103	Strategic Formulation of Graphene Oxide Sheets for Flexible Monoliths and Robust Polymeric Coatings Embedded with Durable Bioinspired Wettability. ACS Applied Materials & Interfaces, 2017, 9, 42354-42365.	4.0	26
104	Role of non-mulberry silk fibroin in deposition and regulation of extracellular matrix towards accelerated wound healing. Acta Biomaterialia, 2017, 48, 157-174.	4.1	174
105	Aggregation induced enhanced and exclusively highly Stokes shifted emission from an excited state intramolecular proton transfer exhibiting molecule. Faraday Discussions, 2017, 196, 71-90.	1.6	28
106	Silk fiber reinforcement modulates <i>in vitro</i> chondrogenesis in 3D composite scaffolds. Biomedical Materials (Bristol), 2017, 12, 045012.	1.7	25
107	Opportunities and Challenges in Exploring Indian Non-Mulberry Silk for Biomedical Applications. Proceedings of the Indian National Science Academy Part A, Physical Sciences, 2017, 83, .	0.2	14
108	Fabrication and Mechanical Characterization of Hydrogel Infused Network Silk Scaffolds. International Journal of Molecular Sciences, 2016, 17, 1631.	1.8	15

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109	High performance bio-based hyperbranched polyurethane/carbon dot-silver nanocomposite: a rapid self-expandable stent. Biofabrication, 2016, 8, 045013.	3.7	54
110	Sustainable starch modified polyol based tough, biocompatible, hyperbranched polyurethane with a shape memory attribute. New Journal of Chemistry, 2016, 40, 5152-5163.	1.4	37
111	Silk-microfluidics for advanced biotechnological applications: A progressive review. Biotechnology Advances, 2016, 34, 845-858.	6.0	55
112	Potential of silk fibroin/chondrocyte constructs of muga silkworm Antheraea assamensis for cartilage tissue engineering. Journal of Materials Chemistry B, 2016, 4, 3670-3684.	2.9	58
113	Immuno-Informed 3D Silk Biomaterials for Tailoring Biological Responses. ACS Applied Materials & Interfaces, 2016, 8, 29310-29322.	4.0	34
114	Novel polyvinyl alcohol-bioglass 45S5 based composite nanofibrous membranes as bone scaffolds. Materials Science and Engineering C, 2016, 69, 1167-1174.	3.8	36
115	Silk fibroinâ€“carbon nanoparticle composite scaffolds: a cost effective supramolecular â€˜turn offâ€™ chemiresistor for nitroaromatic explosive vapours. Journal of Materials Chemistry C, 2016, 4, 8920-8929.	2.7	18
116	Potential of Agarose/Silk Fibroin Blended Hydrogel for in Vitro Cartilage Tissue Engineering. ACS Applied Materials & Interfaces, 2016, 8, 21236-21249.	4.0	193
117	Reloadable Silk-Hydrogel Hybrid Scaffolds for Sustained and Targeted Delivery of Molecules. Molecular Pharmaceutics, 2016, 13, 4066-4081.	2.3	24
118	Biomimetic, Osteoconductive Non-mulberry Silk Fiber Reinforced Tricomposite Scaffolds for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2016, 8, 30797-30810.	4.0	122
119	Cross-linked silk sericinâ€“gelatin 2D and 3D matrices for prospective tissue engineering applications. RSC Advances, 2016, 6, 105125-105136.	1.7	41
120	Relationships between physical properties and sequence in silkworm silks. Scientific Reports, 2016, 6, 27573.	1.6	140
121	Mimicking Form and Function of Native Small Diameter Vascular Conduits Using Mulberry and Non-mulberry Patterned Silk Films. ACS Applied Materials & Interfaces, 2016, 8, 15874-15888.	4.0	78
122	Aggregation induced enhanced emission of 2-(2â€²-hydroxyphenyl)benzimidazole. Photochemical and Photobiological Sciences, 2016, 15, 937-948.	1.6	22
123	Native honeybee silk membrane: a potential matrix for tissue engineering and regenerative medicine. RSC Advances, 2016, 6, 54394-54403.	1.7	9
124	A renewable resource based carbon dot decorated hydroxyapatite nanohybrid and its fabrication with waterborne hyperbranched polyurethane for bone tissue engineering. RSC Advances, 2016, 6, 26066-26076.	1.7	52
125	Electrospun polyvinyl alcohol-polyvinyl pyrrolidone nanofibrous membranes for interactive wound dressing application. Journal of Biomaterials Science, Polymer Edition, 2016, 27, 247-262.	1.9	33
126	An in situ prepared photo-luminescent transparent biocompatible hyperbranched epoxy/carbon dot nanocomposite. RSC Advances, 2015, 5, 74692-74704.	1.7	49

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127	High performance luminescent thermosetting waterborne hyperbranched polyurethane/carbon quantum dot nanocomposite with inÂvitro cytocompatibility. Composites Science and Technology, 2015, 118, 39-46.	3.8	69
128	Silk microfiber-reinforced silk hydrogel composites for functional cartilage tissue repair. Acta Biomaterialia, 2015, 11, 27-36.	4.1	220
129	Silk fibroinâ€"keratin based 3D scaffolds as a dermal substitute for skin tissue engineering. Integrative Biology (United Kingdom), 2015, 7, 53-63.	0.6	139
130	Tissue-Engineered Cartilage: The Crossroads of Biomaterials, Cells and Stimulating Factors. Macromolecular Bioscience, 2015, 15, 153-182.	2.1	81
131	Metal ion dependent â€œONâ€•intramolecular charge transfer (ICT) and â€œOFFâ€•normal switching of the fluorescence: Sensing of Zn2+ by ICT emission in living cells. Sensors and Actuators B: Chemical, 2014, 202, 1154-1163.	4.0	20
132	Laminar Silk Scaffolds for Aligned Tissue Fabrication. Macromolecular Bioscience, 2013, 13, 48-58.	2.1	51
133	Patterned Silk Film Scaffolds for Aligned Lamellar Bone Tissue Engineering. Macromolecular Bioscience, 2012, 12, 1671-1679.	2.1	29
134	Intervertebral Disk Tissue Engineering Using Biphasic Silk Composite Scaffolds. Tissue Engineering - Part A, 2012, 18, 447-458.	1.6	84
135	A silk-based scaffold platform with tunable architecture for engineering critically-sized tissue constructs. Biomaterials, 2012, 33, 9214-9224.	5.7	114
136	Annulus fibrosus tissue engineering using lamellar silk scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, s24-s33.	1.3	48
137	High-strength silk protein scaffolds for bone repair. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7699-7704.	3.3	337
138	Nonmulberry silk biopolymers. Biopolymers, 2012, 97, 455-467.	1.2	174
139	Non-mulberry silk sericin/poly (vinyl alcohol) hydrogel matrices for potential biotechnological applications. International Journal of Biological Macromolecules, 2011, 49, 125-133.	3.6	68
140	Multilayered silk scaffolds for meniscus tissue engineering. Biomaterials, 2011, 32, 639-651.	5.7	181
141	Silk-Fibrin/Hyaluronic Acid Composite Gels for Nucleus Pulposus Tissue Regeneration. Tissue Engineering - Part A, 2011, 17, 2999-3009.	1.6	63
142	Stem Cell-Based Meniscus Tissue Engineering. Tissue Engineering - Part A, 2011, 17, 2749-2761.	1.6	50
143	Helicoidal multi-lamellar features of RGD-functionalized silk biomaterials for corneal tissue engineering. Biomaterials, 2010, 31, 8953-8963.	5.7	164
144	Biospinning by silkworms: Silk fiber matrices for tissue engineering applications. Acta Biomaterialia, 2010, 6, 360-371.	4.1	71

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145	Implication of Silk Film RGD Availability and Surface Roughness on Cytoskeletal Organization and Proliferation of Primary Rat Bone Marrow Cells. Tissue Engineering - Part A, 2010, 16, 2391-2403.	1.6	48
146	Silk fibroin/gelatin multilayered films as a model system for controlled drug release. European Journal of Pharmaceutical Sciences, 2009, 37, 160-171.	1.9	105
147	Cell proliferation and migration in silk fibroin 3D scaffolds. Biomaterials, 2009, 30, 2956-2965.	5.7	490
148	Non-bioengineered silk gland fibroin micromolded matrices to study cell-surface interactions. Biomedical Microdevices, 2009, 11, 467-476.	1.4	16
149	Silk fibroin/polyacrylamide semi-interpenetrating network hydrogels forÂcontrolled drug release. Biomaterials, 2009, 30, 2826-2836.	5.7	273
150	Calcium alginate beads embedded in silk fibroin as 3D dual drug releasing scaffolds. Biomaterials, 2009, 30, 5170-5177.	5.7	64
151	Silk gland sericin protein membranes: Fabrication and characterization for potential biotechnological applications. Journal of Biotechnology, 2009, 144, 321-329.	1.9	112
152	Osteogenic and adipogenic differentiation of rat bone marrow cells on non-mulberry and mulberry silk gland fibroin 3D scaffolds. Biomaterials, 2009, 30, 5019-5030.	5.7	115
153	Non-mulberry silk gland fibroin protein 3-D scaffold for enhanced differentiation of human mesenchymal stem cells into osteocytes. Acta Biomaterialia, 2009, 5, 2579-2590.	4.1	48
154	Novel silk sericin/gelatin 3-D scaffolds and 2-D films: Fabrication and characterization for potential tissue engineering applications. Acta Biomaterialia, 2009, 5, 3007-3020.	4.1	186
155	Self-assembled silk sericin/poloxamer nanoparticles as nanocarriers of hydrophobic and hydrophilic drugs for targeted delivery. Nanotechnology, 2009, 20, 355101.	1.3	121
156	Nonâ€Bioengineered Silk Fibroin Protein 3D Scaffolds for Potential Biotechnological and Tissue Engineering Applications. Macromolecular Bioscience, 2008, 8, 807-818.	2.1	130
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