Jian-Wu Dai

List of Publications by Year
in descending order

197 papers	9,400 citations	28272 55 h-index	56717 83 g-index
207 all docs	207 docs citations	207 times ranked	10225 citing authors

#	Article	IF	Citations
1	The inÂvitro and inÂvivo toxicity of graphene quantum dots. Biomaterials, 2014, 35, 5041-5048.	11.4	437
2	Enhanced Proliferation and Osteogenic Differentiation of Mesenchymal Stem Cells on Graphene Oxide-Incorporated Electrospun Poly(lactic-co-glycolic acid) Nanofibrous Mats. ACS Applied Materials & Interfaces, 2015, 7, 6331-6339.	8.0	285
3	Transplantation of bone marrow mesenchymal stem cells on collagen scaffolds for the functional regeneration of injured rat uterus. Biomaterials, 2014, 35, 4888-4900.	11.4	182
4	Homogeneous osteogenesis and bone regeneration by demineralized bone matrix loading with collagen-targeting bone morphogenetic protein-2. Biomaterials, 2007, 28, 1027-1035.	11.4	163
5	Allogeneic cell therapy using umbilical cord MSCs on collagen scaffolds for patients with recurrent uterine adhesion: a phase I clinical trial. Stem Cell Research and Therapy, 2018, 9, 192.	5.5	157
6	Transplantation of human mesenchymal stem cells loaded on collagen scaffolds for the treatment of traumatic brain injury in rats. Biomaterials, 2013, 34, 5937-5946.	11.4	138
7	Regeneration of uterine horns in rats by collagen scaffolds loaded with collagen-binding human basic fibroblast growth factor. Biomaterials, 2011, 32, 8172-8181.	11.4	131
8	Myocardialâ€Infarctionâ€Responsive Smart Hydrogels Targeting Matrix Metalloproteinase for Onâ€Demand Growth Factor Delivery. Advanced Materials, 2019, 31, e1902900.	21.0	128
9	Clinical Study of NeuroRegen Scaffold Combined with Human Mesenchymal Stem Cells for the Repair of Chronic Complete Spinal Cord Injury. Cell Transplantation, 2017, 26, 891-900.	2.5	127
10	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Brain-Derived Neurotrophic Factor Improve the Recovery of Spinal Cord Injury in Rats. Tissue Engineering - Part A, 2009, 15, 2927-2935.	3.1	126
11	The promotion of neural regeneration in an extreme rat spinal cord injury model using a collagen scaffold containing a collagen binding neuroprotective protein and an EGFR neutralizing antibody. Biomaterials, 2010, 31, 9212-9220.	11.4	123
12	The use of laminin modified linear ordered collagen scaffolds loaded with laminin-binding ciliary neurotrophic factor for sciatic nerve regeneration in rats. Biomaterials, 2011, 32, 3939-3948.	11.4	123
13	The linear-ordered collagen scaffold-BDNF complex significantly promotes functional recovery after completely transected spinal cord injury in canine. Biomaterials, 2015, 41, 89-96.	11.4	123
14	3D bioprinted neural tissue constructs for spinal cord injury repair. Biomaterials, 2021, 272, 120771.	11.4	121
15	A collagen microchannel scaffold carrying paclitaxel-liposomes induces neuronal differentiation of neural stem cells through Wnt/Î²-catenin signaling for spinal cord injury repair. Biomaterials, 2018, 183, 114-127.	11.4	118
16	Significant Improvement of Acute Complete Spinal Cord Injury Patients Diagnosed by a Combined Criteria Implanted with NeuroRegen Scaffolds and Mesenchymal Stem Cells. Cell Transplantation, 2018, 27, 907-915.	2.5	118
17	A modified collagen scaffold facilitates endogenous neurogenesis for acute spinal cord injury repair. Acta Biomaterialia, 2017, 51, 304-316.	8.3	117
18	The effect of collagen-binding NGF-Î² on the promotion of sciatic nerve regeneration in a rat sciatic nerve crush injury model. Biomaterials, 2009, 30, 4649-4656.	11.4	116

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19	Collagen-Targeting Vascular Endothelial Growth Factor Improves Cardiac Performance After Myocardial Infarction. Circulation, 2009, 119, 1776-1784.	1.6	115
20	Transplantation of UC-MSCs on collagen scaffold activates follicles in dormant ovaries of POF patients with long history of infertility. Science China Life Sciences, 2018, 61, 1554-1565.	4.9	114
21	Moldable Hyaluronan Hydrogel Enabled by Dynamic Metalâ€“Bisphosphonate Coordination Chemistry for Wound Healing. Advanced Healthcare Materials, 2018, 7, 1700973.	7.6	110
22	Cetuximab modified collagen scaffold directs neurogenesis of injury-activated endogenous neural stem cells for acute spinal cord injury repair. Biomaterials, 2017, 137, 73-86.	11.4	106
23	Promotion of neuronal differentiation of neural progenitor cells by using EGFR antibody functionalized collagen scaffolds for spinal cord injury repair. Biomaterials, 2013, 34, 5107-5116.	11.4	104
24	Stem-cell-capturing collagen scaffold promotes cardiac tissue regeneration. Biomaterials, 2011, 32, 2508-2515.	11.4	102
25	Umbilical cord-derived mesenchymal stem cells on scaffolds facilitate collagen degradation via upregulation of MMP-9 in rat uterine scars. Stem Cell Research and Therapy, 2017, 8, 84.	5.5	101
26	Transplantation of adipose-derived stem cells combined with collagen scaffolds restores ovarian function in a rat model of premature ovarian insufficiency. Human Reproduction, 2016, 31, 1075-1086.	0.9	100
27	Mammalian target of rapamycin (mTOR) is involved in the neuronal differentiation of neural progenitors induced by insulin. Molecular and Cellular Neurosciences, 2008, 39, 118-124.	2.2	97
28	One-year clinical study of NeuroRegen scaffold implantation following scar resection in complete chronic spinal cord injury patients. Science China Life Sciences, 2016, 59, 647-655.	4.9	90
29	Nogo-66 Promotes the Differentiation of Neural Progenitors into Astroglial Lineage Cells through mTOR-STAT3 Pathway. PLoS ONE, 2008, 3, e1856.	2.5	89
30	BMSCs-laden gelatin/sodium alginate/carboxymethyl chitosan hydrogel for 3D bioprinting. RSC Advances, 2016, 6, 108423-108430.	3.6	84
31	Scaffold-facilitated locomotor improvement post complete spinal cord injury: Motor axon regeneration versus endogenous neuronal relay formation. Biomaterials, 2019, 197, 20-31.	11.4	82
32	Small molecules combined with collagen hydrogel direct neurogenesis and migration of neural stem cells after spinal cord injury. Biomaterials, 2021, 269, 120479.	11.4	82
33	Radially Aligned Electrospun Fibers with Continuous Gradient of SDF1Î± for the Guidance of Neural Stem Cells. Small, 2016, 12, 5009-5018.	10.0	81
34	A novel hydrogel-based treatment for complete transection spinal cord injury repair is driven by microglia/macrophages repopulation. Biomaterials, 2020, 237, 119830.	11.4	77
35	Functionalized Collagen Scaffold Neutralizing the Myelin-Inhibitory Molecules Promoted Neurites Outgrowth in Vitro and Facilitated Spinal Cord Regeneration in Vivo. ACS Applied Materials & Interfaces, 2015, 7, 13960-13971.	8.0	76
36	Collagen scaffolds modified with CNTF and bFGF promote facial nerve regeneration in minipigs. Biomaterials, 2014, 35, 7819-7827.	11.4	74

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37	Novel nerve guidance material prepared from bovine aponeurosis. Journal of Biomedical Materials Research - Part A, 2006, 79A, 591-598.	4.0	73
38	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Neurotrophin-3 Promote Axonal Regeneration and Partial Functional Recovery after Complete Spinal Cord Transection. Journal of Neurotrauma, 2010, 27, 1671-1683.	3.4	73
39	A DAMP-scavenging, IL-10-releasing hydrogel promotes neural regeneration and motor function recovery after spinal cord injury. Biomaterials, 2022, 280, 121279.	11.4	73
40	Functional Multichannel Poly(Propylene Fumarate)â€Collagen Scaffold with Collagenâ€Binding Neurotrophic Factor 3 Promotes Neural Regeneration After Transected Spinal Cord Injury. Advanced Healthcare Materials, 2018, 7, e1800315.	7.6	71
41	Vascularization and cellularization of collagen scaffolds incorporated with two different collagen-targeting human basic fibroblast growth factors. Journal of Biomedical Materials Research - Part A, 2007, 82A, 630-636.	4.0	69
42	Induction of rat facial nerve regeneration by functional collagen scaffolds. Biomaterials, 2013, 34, 1302-1310.	11.4	67
43	Transplantation of collagen scaffold with autologous bone marrow mononuclear cells promotes functional endometrium reconstruction via downregulating Î”Np63 expression in Ashermanâ€™s syndrome. Science China Life Sciences, 2017, 60, 404-416.	4.9	67
44	Regeneration of full-thickness abdominal wall defects in rats using collagen scaffolds loaded with collagen-binding basic fibroblast growth factor. Biomaterials, 2011, 32, 753-759.	11.4	64
45	A three-dimensional collagen scaffold cell culture system for screening anti-glioma therapeutics. Oncotarget, 2016, 7, 56904-56914.	1.8	64
46	Human placenta-derived mesenchymal stem cells loaded on linear ordered collagen scaffold improves functional recovery after completely transected spinal cord injury in canine. Science China Life Sciences, 2018, 61, 2-13.	4.9	64
47	MiR-125b orchestrates cell proliferation, differentiation and migration in neural stem/progenitor cells by targeting Nestin. BMC Neuroscience, 2012, 13, 116.	1.9	63
48	A functional scaffold to promote the migration and neuronal differentiation of neural stem/progenitor cells for spinal cord injury repair. Biomaterials, 2020, 243, 119941.	11.4	63
49	Acceleration of diabetic wound healing by collagen-binding vascular endothelial growth factor in diabetic rat model. Diabetes Research and Clinical Practice, 2010, 90, 66-72.	2.8	62
50	Paracrine factors from mesenchymal stem cells attenuate epithelial injury and lung fibrosis. Molecular Medicine Reports, 2015, 11, 2831-2837.	2.4	61
51	Functionalized collagen scaffold implantation and cAMP administration collectively facilitate spinal cord regeneration. Acta Biomaterialia, 2016, 30, 233-245.	8.3	61
52	Transplantation of hUC-MSCs seeded collagen scaffolds reduces scar formation and promotes functional recovery in canines with chronic spinal cord injury. Scientific Reports, 2017, 7, 43559.	3.3	61
53	LncRNA Neat1 mediates miR-124-induced activation of Wnt/Î²-catenin signaling in spinal cord neural progenitor cells. Stem Cell Research and Therapy, 2019, 10, 400.	5.5	60
54	The Three-Dimensional Collagen Scaffold Improves the Stemness of Rat Bone Marrow Mesenchymal Stem Cells. Journal of Genetics and Genomics, 2012, 39, 633-641.	3.9	59

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55	Controlled release of collagen-binding SDF-1Î± from the collagen scaffold promoted tendon regeneration in a rat Achilles tendon defect model. Biomaterials, 2018, 162, 22-33.	11.4	59
56	Bladder Regeneration by Collagen Scaffolds With Collagen Binding Human Basic Fibroblast Growth Factor. Journal of Urology, 2010, 183, 2432-2439.	0.4	58
57	The importance of three-dimensional scaffold structure on stemness maintenance of mouse embryonic stem cells. Biomaterials, 2014, 35, 7724-7733.	11.4	58
58	Ultrasmall Graphene Oxide Supported Gold Nanoparticles as Adjuvants Improve Humoral and Cellular Immunity in Mice. Advanced Functional Materials, 2014, 24, 6963-6971.	14.9	58
59	Training Neural Stem Cells on Functional Collagen Scaffolds for Severe Spinal Cord Injury Repair. Advanced Functional Materials, 2016, 26, 5835-5847.	14.9	58
60	Acceleration of chondrogenic differentiation of human mesenchymal stem cells by sustained growth factor release in 3D graphene oxide incorporated hydrogels. Acta Biomaterialia, 2020, 105, 44-55.	8.3	58
61	Urethral tissue regeneration using collagen scaffold modified with collagen binding VEGF in a beagle model. Biomaterials, 2015, 69, 45-55.	11.4	57
62	Erk1/2 promotes proliferation and inhibits neuronal differentiation of neural stem cells. Neuroscience Letters, 2009, 461, 252-257.	2.1	56
63	A Dual Functional Scaffold Tethered with EGFR Antibody Promotes Neural Stem Cell Retention and Neuronal Differentiation for Spinal Cord Injury Repair. Advanced Healthcare Materials, 2017, 6, 1601279.	7.6	56
64	Bridging the gap with functional collagen scaffolds: tuning endogenous neural stem cells for severe spinal cord injury repair. Biomaterials Science, 2018, 6, 265-271.	5.4	56
65	Promotion of peripheral nerve growth by collagen scaffolds loaded with collagenâ€targeting human nerve growth factorâ€². Journal of Biomedical Materials Research - Part A, 2007, 83A, 1054-1061.	4.0	55
66	Cetuximab and Taxol co-modified collagen scaffolds show combination effects for the repair of acute spinal cord injury. Biomaterials Science, 2018, 6, 1723-1734.	5.4	55
67	Biocompatible Injectable Magnetic Hydrogel Formed by Dynamic Coordination Network. ACS Applied Materials & Interfaces, 2019, 11, 46233-46240.	8.0	54
68	Demineralized Bone Matrix Scaffolds Modified by CBD-SDF-1Î± Promote Bone Regeneration via Recruiting Endogenous Stem Cells. ACS Applied Materials & Interfaces, 2016, 8, 27511-27522.	8.0	51
69	Efect of longitudinally oriented collagen conduit combined with nerve growth factor on nerve regeneration after dog sciatic nerve injury. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 2131-2139.	3.4	51
70	Rapid and Efficient Conversion of Human Fibroblasts into Functional Neurons by Small Molecules. Stem Cell Reports, 2019, 13, 862-876.	4.8	51
71	Effect of Intramyocardial Grafting Collagen Scaffold With Mesenchymal Stromal Cells in Patients With Chronic Ischemic Heart Disease. JAMA Network Open, 2020, 3, e2016236.	5.9	51
72	Aligned collagen scaffold combination with human spinal cord-derived neural stem cells to improve spinal cord injury repair. Biomaterials Science, 2020, 8, 5145-5156.	5.4	51

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73	Taxol-modified collagen scaffold implantation promotes functional recovery after long-distance spinal cord complete transection in canines. Biomaterials Science, 2018, 6, 1099-1108.	5.4	50
74	Collagen scaffold combined with human umbilical cordâ€derived mesenchymal stem cells promote functional recovery after scar resection in rats with chronic spinal cord injury. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1154-e1163.	2.7	50
75	Collagen scaffolds modified with collagen-binding bFGF promotes the neural regeneration in a rat hemisected spinal cord injury model. Science China Life Sciences, 2014, 57, 232-240.	4.9	49
76	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Basic Fibroblast Growth Factor Facilitate Recovery of Sciatic Nerve Injury in Rats. Tissue Engineering - Part A, 2014, 20, 1253-1262.	3.1	47
77	Deciphering the endometrial niche of human thin endometrium at single-cell resolution. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	47
78	Improvement of Sciatic Nerve Regeneration Using Laminin-Binding Human NGF-Î². PLoS ONE, 2009, 4, e6180.	2.5	46
79	Single ultrasmall Mn2+-doped NaNdF4 nanocrystals as multimodal nanoprobes for magnetic resonance and second near-infrared fluorescence imaging. Nano Research, 2018, 11, 1069-1081.	10.4	45
80	NSCs Migration Promoted and Drug Delivered Exosomesâ€Collagen Scaffold via a Bioâ€Specific Peptide for Oneâ€Step Spinal Cord Injury Repair. Advanced Healthcare Materials, 2021, 10, e2001896.	7.6	45
81	Electrospun Collagen Fibers with Spatial Patterning of SDF1Î± for the Guidance of Neural Stem Cells. Advanced Healthcare Materials, 2015, 4, 1869-1876.	7.6	44
82	Modified VEGF targets the ischemic myocardium and promotes functional recovery after myocardial infarction. Journal of Controlled Release, 2015, 213, 27-35.	9.9	44
83	Improved neovascularization and wound repair by targeting human basic fibroblast growth factor (bFGF) to fibrin. Journal of Molecular Medicine, 2008, 86, 1127-1138.	3.9	42
84	Extrahepatic bile duct regeneration in pigs using collagen scaffolds loaded with human collagen-binding bFGF. Biomaterials, 2012, 33, 4298-4308.	11.4	42
85	Glycolysis-dependent histone deacetylase 4 degradation regulates inflammatory cytokine production. Molecular Biology of the Cell, 2014, 25, 3300-3307.	2.1	42
86	A collagen-binding EGFR single-chain Fv antibody fragment for the targeted cancer therapy. Journal of Controlled Release, 2015, 209, 101-109.	9.9	42
87	Promotion of neurological recovery in rat spinal cord injury by mesenchymal stem cells loaded on nerveâ€guided collagen scaffold through increasing alternatively activated macrophage polarization. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1725-e1736.	2.7	41
88	Adhesive, Stretchable, and Spatiotemporal Delivery Fibrous Hydrogels Harness Endogenous Neural Stem/Progenitor Cells for Spinal Cord Injury Repair. ACS Nano, 2022, 16, 1986-1998.	14.6	40
89	Intranasal nerve growth factor attenuates tau phosphorylation in brain after traumatic brain injury in rats. Journal of the Neurological Sciences, 2014, 345, 48-55.	0.6	39
90	Transdermal Vascular Endothelial Growth Factor Delivery with Surface Engineered Gold Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 5173-5180.	8.0	39

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91	The promotion of cerebral ischemia recovery in rats by laminin-binding BDNF. Biomaterials, 2011, 32, 5077-5085.	11.4	38
92	Functional collagen conduits combined with human mesenchymal stem cells promote regeneration after sciatic nerve transection in dogs. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 1285-1296.	2.7	38
93	Collagen-binding basic fibroblast growth factor improves functional remodeling of scarred endometrium in uterine infertile women: a pilot study. Science China Life Sciences, 2019, 62, 1617-1629.	4.9	38
94	Metal-organic framework-based hydrogel with structurally dynamic properties as a stimuli-responsive localized drug delivery system for cancer therapy. Acta Biomaterialia, 2022, 145, 43-51.	8.3	38
95	Controlled Release of Collagen-Binding SDF-1Î± Improves Cardiac Function after Myocardial Infarction by Recruiting Endogenous Stem Cells. Scientific Reports, 2016, 6, 26683.	3.3	37
96	Advances in Biomaterialâ€Based Spinal Cord Injury Repair. Advanced Functional Materials, 2022, 32, 2110628.	14.9	37
97	Single cell derived spheres of umbilical cord mesenchymal stem cells enhance cell stemness properties, survival ability and therapeutic potential on liver failure. Biomaterials, 2020, 227, 119573.	11.4	36
98	The miR-7 Identified from Collagen Biomaterial-Based Three-Dimensional Cultured Cells Regulates Neural Stem Cell Differentiation. Stem Cells and Development, 2014, 23, 393-405.	2.1	35
99	The neuronal differentiation microenvironment is essential for spinal cord injury repair. Organogenesis, 2017, 13, 63-70.	1.2	35
100	Crosslinked Three-Dimensional Demineralized Bone Matrix for the Adipose-Derived Stromal Cell Proliferation and Differentiation. Tissue Engineering - Part A, 2009, 15, 13-21.	3.1	34
101	A collagen-binding EGFR antibody fragment targeting tumors with a collagen-rich extracellular matrix. Scientific Reports, 2016, 6, 18205.	3.3	33
102	Graphene Oxide Incorporated PLGA Nanofibrous Scaffold for Solid Phase Gene Delivery into Mesenchymal Stem Cells. Journal of Nanoscience and Nanotechnology, 2018, 18, 2286-2293.	0.9	33
103	Different functional bio-scaffolds share similar neurological mechanism to promote locomotor recovery of canines with complete spinal cord injury. Biomaterials, 2019, 214, 119230.	11.4	32
104	MicroRNA-449c-5p inhibits osteogenic differentiation of human VICs through Smad4-mediated pathway. Scientific Reports, 2017, 7, 8740.	3.3	31
105	Long-term clinical observation of patients with acute and chronic complete spinal cord injury after transplantation of NeuroRegen scaffold. Science China Life Sciences, 2022, 65, 909-926.	4.9	31
106	Singleâ€cell analysis reveals dynamic changes of neural cells in developing human spinal cord. EMBO Reports, 2021, 22, e52728.	4.5	31
107	Bone marrowâ€derived mesenchymal stem cells in threeâ€dimensional culture promote neuronal regeneration by neurotrophic protection and immunomodulation. Journal of Biomedical Materials Research - Part A, 2016, 104, 1759-1769.	4.0	30
108	NeuroRegen Scaffolds Combined with Autologous Bone Marrow Mononuclear Cells for the Repair of Acute Complete Spinal Cord Injury: A 3-Year Clinical Study. Cell Transplantation, 2020, 29, 096368972095063.	2.5	30

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109	Single-molecule level binding force between collagen and collagen binding domain-growth factor conjugates. Biomaterials, 2013, 34, 6139-6146.	11.4	28
110	Increased vascularization promotes functional recovery in the transected spinal cord rats by implanted vascular endothelial growth factorâ€targeting collagen scaffold. Journal of Orthopaedic Research, 2018, 36, 1024-1034.	2.3	27
111	Î”Np63Î±-induced DUSP4/GSK3Î²/SNAI1 pathway in epithelial cells drives endometrial fibrosis. Cell Death and Disease, 2020, 11, 449.	6.3	27
112	Biomimetic collagen biomaterial induces in situ lung regeneration by forming functional alveolar. Biomaterials, 2020, 236, 119825.	11.4	27
113	Lung endothelial cell-targeted peptide-guided bFGF promotes the regeneration after radiation induced lung injury. Biomaterials, 2018, 184, 10-19.	11.4	26
114	Comparison of subacute and chronic scar tissues after complete spinal cord transection. Experimental Neurology, 2018, 306, 132-137.	4.1	26
115	Bladder regeneration in a canine model using a bladder acellular matrix loaded with a collagen-binding bFGF. Biomaterials Science, 2017, 5, 2427-2436.	5.4	26
116	The interplay of T1- and T2-relaxation on T1-weighted MRI of hMSCs induced by Gd-DOTA-peptides. Biomaterials, 2014, 35, 4168-4174.	11.4	25
117	Acceleration of wound healing in acute full-thickness skin wounds using a collagen-binding peptide with an affinity for MSCs. Burns and Trauma, 2014, 2, 181.	0.7	25
118	Collagen/Heparin Biâ€Affinity Multilayer Modified Collagen Scaffolds for Controlled bFGF Release to Improve Angiogenesis In Vivo. Macromolecular Bioscience, 2018, 18, e1800086.	4.1	25
119	Comparison of Regenerative Effects of Transplanting Three-Dimensional Longitudinal Scaffold Loaded-Human Mesenchymal Stem Cells and Human Neural Stem Cells on Spinal Cord Completely Transected Rats. ACS Biomaterials Science and Engineering, 2020, 6, 1671-1680.	5.2	25
120	Use of Natural Neural Scaffolds Consisting of Engineered Vascular Endothelial Growth Factor Immobilized on Ordered Collagen Fibers Filled in a Collagen Tube for Peripheral Nerve Regeneration in Rats. International Journal of Molecular Sciences, 2014, 15, 18593-18609.	4.1	24
121	Single-cell RNA sequencing reveals Nestin+ active neural stem cells outside the central canal after spinal cord injury. Science China Life Sciences, 2022, 65, 295-308.	4.9	24
122	Long-term stability, high strength, and 3D printable alginate hydrogel for cartilage tissue engineering application. Biomedical Materials (Bristol), 2021, 16, 064102.	3.3	24
123	Maintenance of the self-renewal properties of neural progenitor cells cultured in three-dimensional collagen scaffolds by the REDD1-mTOR signal pathway. Biomaterials, 2013, 34, 1921-1928.	11.4	23
124	Accelerated Postero-Lateral Spinal Fusion by Collagen Scaffolds Modified with Engineered Collagen-Binding Human Bone Morphogenetic Protein-2 in Rats. PLoS ONE, 2014, 9, e98480.	2.5	23
125	Collagen scaffolds combined with collagenâ€binding ciliary neurotrophic factor facilitate facial nerve repair in miniâ€pigs. Journal of Biomedical Materials Research - Part A, 2015, 103, 1669-1676.	4.0	23
126	The miR-20-Rest-Wnt signaling axis regulates neural progenitor cell differentiation. Scientific Reports, 2016, 6, 23300.	3.3	23

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127	Therapeutic Effects of Human Umbilical Cordâ€“Derived Mesenchymal Stem Cells on Canine Radiation-Induced Lung Injury. International Journal of Radiation Oncology Biology Physics, 2018, 102, 407-416.	0.8	23
128	Aligned Scaffolds with Biomolecular Gradients for Regenerative Medicine. Polymers, 2019, 11, 341.	4.5	23
129	Direct Neuronal Differentiation of Neural Stem Cells for Spinal Cord Injury Repair. Stem Cells, 2021, 39, 1025-1032.	3.2	23
130	Regulation of human mesenchymal stem cells differentiation into chondrocytes in extracellular matrix-based hydrogel scaffolds. Colloids and Surfaces B: Biointerfaces, 2014, 114, 316-323.	5.0	22
131	Effects of three-dimensional collagen scaffolds on the expression profiles and biological functions of glioma cells. International Journal of Oncology, 2018, 52, 1787-1800.	3.3	22
132	Vascular endothelial growth factor activates neural stem cells through epidermal growth factor receptor signal after spinal cord injury. CNS Neuroscience and Therapeutics, 2019, 25, 375-385.	3.9	22
133	Injectable collagen scaffold promotes swine myocardial infarction recovery by long-term local retention of transplanted human umbilical cord mesenchymal stem cells. Science China Life Sciences, 2021, 64, 269-281.	4.9	22
134	Defective autophagy contributes to endometrial epithelial-mesenchymal transition in intrauterine adhesions. Autophagy, 2022, 18, 2427-2442.	9.1	22
135	The boneâ€derived collagen containing mineralized matrix for the loading of collagenâ€binding bone morphogenetic proteinâ€2. Journal of Biomedical Materials Research - Part A, 2009, 88A, 725-734.	4.0	21
136	Single step synthesis of amine-functionalized mesoporous magnetite nanoparticles and their application for copper ions removal from aqueous solution. Journal of Colloid and Interface Science, 2016, 481, 220-228.	9.4	21
137	Facile-synthesized ultrasmall CuS nanocrystals as drug nanocarriers for highly effective chemoâ€“photothermal combination therapy of cancer. RSC Advances, 2016, 6, 20949-20960.	3.6	21
138	Substrate-independent immunomodulatory characteristics of mesenchymal stem cells in three-dimensional culture. PLoS ONE, 2018, 13, e0206811.	2.5	21
139	Heparan sulfate proteoglycan promotes fibroblast growth factor-2 function for ischemic heart repair. Biomaterials Science, 2019, 7, 5438-5450.	5.4	21
140	Biomineralization improves the thermostability of foot-and-mouth disease virus-like particles and the protective immune response induced. Nanoscale, 2019, 11, 22748-22761.	5.6	21
141	Complete canine spinal cord transection model: a large animal model for the translational research of spinal cord regeneration. Science China Life Sciences, 2018, 61, 115-117.	4.9	20
142	Epidermal growth factor receptor-extracellular-regulated kinase blockade upregulates TRIM32 signaling cascade and promotes neurogenesis after spinal cord injury. Stem Cells, 2020, 38, 118-133.	3.2	19
143	Effect of collagen scaffold with adipose-derived stromal vascular fraction cells on diabetic wound healing: A study in a diabetic porcine model. Tissue Engineering and Regenerative Medicine, 2013, 10, 192-199.	3.7	18
144	circPTPN12/miR-21â€“5 p/âˆ†Np63Î± pathway contributes to human endometrial fibrosis. ELife, 2021, 10, .	6.0	18

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145	Acceleration of Healing of Traumatic Tympanic Membrane Perforation in Rats by Implanted Collagen Membrane Integrated with Collagen-Binding Basic Fibroblast Growth Factor. Tissue Engineering - Part A, 2017, 23, 20-29.	3.1	17
146	Collagen-binding VEGF targeting the cardiac extracellular matrix promotes recovery in porcine chronic myocardial infarction. Biomaterials Science, 2018, 6, 356-363.	5.4	17
147	Pre-Clinical Evaluation of CBD-NT3 Modified Collagen Scaffolds in Completely Spinal Cord Transected Non-Human Primates. Journal of Neurotrauma, 2019, 36, 2316-2324.	3.4	17
148	Dualâ€Cues Laden Scaffold Facilitates Neurovascular Regeneration and Motor Functional Recovery After Complete Spinal Cord Injury. Advanced Healthcare Materials, 2021, 10, e2100089.	7.6	17
149	Transplantation of adult spinal cord grafts into spinal cord transected rats improves their locomotor function. Science China Life Sciences, 2019, 62, 725-733.	4.9	16
150	Lineage tracing reveals the origin of Nestin-positive cells are heterogeneous and rarely from ependymal cells after spinal cord injury. Science China Life Sciences, 2022, 65, 757-769.	4.9	16
151	The inhibition effects of insulin on BMP2-induced muscle heterotopic ossification. Biomaterials, 2014, 35, 9322-9331.	11.4	15
152	Flexible conductive silk-PPy hydrogel toward wearable electronic strain sensors. Biomedical Materials (Bristol), 2022, 17, 024107.	3.3	15
153	Directed osteogenic differentiation of mesenchymal stem cell in three-dimensional biodegradable methylcellulose-based scaffolds. Colloids and Surfaces B: Biointerfaces, 2015, 135, 332-338.	5.0	14
154	An effective delivery vehicle of demineralized bone matrix incorporated with engineered collagen-binding human bone morphogenetic protein-2 to accelerate spinal fusion at low dose. Journal of Materials Science: Materials in Medicine, 2018, 29, 2.	3.6	14
155	Leukemia inhibitory factor promotes the regeneration of rat uterine horns with fullâ€thickness injury. Wound Repair and Regeneration, 2019, 27, 477-487.	3.0	14
156	Optimized, visible light-induced crosslinkable hybrid gelatin/hyaluronic acid scaffold promotes complete spinal cord injury repair. Biomedical Materials (Bristol), 2022, 17, 024104.	3.3	14
157	Keep warm and get success: The role of postischemic temperature in the mouse middle cerebral artery occlusion model. Brain Research Bulletin, 2014, 101, 12-17.	3.0	13
158	Functional biomaterial-based regenerative microenvironment for spinal cord injury repair. National Science Review, 2017, 4, 530-532.	9.5	13
159	Lower fluidity of supported lipid bilayers promotes neuronal differentiation of neural stem cells by enhancing focal adhesion formation. Biomaterials, 2018, 161, 106-116.	11.4	13
160	Transplantation of collagen sponge-based three-dimensional neural stem cells cultured in a RCCS facilitates locomotor functional recovery in spinal cord injury animals. Biomaterials Science, 2022, 10, 915-924.	5.4	13
161	Collagen-binding vascular endothelial growth factor attenuates CCl4-induced liver fibrosis in mice. Molecular Medicine Reports, 2016, 14, 4680-4686.	2.4	12
162	Binary scaffold facilitates in situ regeneration of axons and neurons for complete spinal cord injury repair. Biomaterials Science, 2021, 9, 2955-2971.	5.4	12

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164	Upregulation of Apol8 by Epothilone D facilitates the neuronal relay of transplanted NSCs in spinal cord injury. Stem Cell Research and Therapy, 2021, 12, 300.	5.5	12
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