

# Jianwu Dai

## List of Publications by Year in descending order

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109  
papers

5,407  
citations

50170

46  
h-index

95083

68  
g-index

110  
all docs

110  
docs citations

110  
times ranked

4890  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spinal cord decellularized matrix scaffold loaded with engineered basic fibroblast growth factor overexpressed human umbilical cord mesenchymal stromal cells promoted the recovery of spinal cord injury. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2023, 111, 51-61.	1.6	4
2	Long-term clinical observation of patients with acute and chronic complete spinal cord injury after transplantation of NeuroRegen scaffold. <i>Science China Life Sciences</i> , 2022, 65, 909-926.	2.3	31
3	A DAMP-scavenging, IL-10-releasing hydrogel promotes neural regeneration and motor function recovery after spinal cord injury. <i>Biomaterials</i> , 2022, 280, 121279.	5.7	73
4	Adhesive, Stretchable, and Spatiotemporal Delivery Fibrous Hydrogels Harness Endogenous Neural Stem/Progenitor Cells for Spinal Cord Injury Repair. <i>ACS Nano</i> , 2022, 16, 1986-1998.	7.3	40
5	Advances in Biomaterial-Based Spinal Cord Injury Repair. <i>Advanced Functional Materials</i> , 2022, 32, 2110628.	7.8	37
6	Application of biomaterials and tissue engineering in bladder regeneration. <i>Journal of Biomaterials Applications</i> , 2022, 36, 1484-1502.	1.2	4
7	Transplantation of collagen sponge-based three-dimensional neural stem cells cultured in a RCCS facilitates locomotor functional recovery in spinal cord injury animals. <i>Biomaterials Science</i> , 2022, 10, 915-924.	2.6	13
8	Bioinspired bimodal micro-nanofibrous scaffolds promote the tenogenic differentiation of tendon stem/progenitor cells for achilles tendon regeneration. <i>Biomaterials Science</i> , 2022, 10, 753-769.	2.6	5
9	Optimized, visible light-induced crosslinkable hybrid gelatin/hyaluronic acid scaffold promotes complete spinal cord injury repair. <i>Biomedical Materials (Bristol)</i> , 2022, 17, 024104.	1.7	14
10	The role of mechanosensitive Piezo1 channel in diseases. <i>Progress in Biophysics and Molecular Biology</i> , 2022, 172, 39-49.	1.4	10
11	Specific bFGF targeting of KIM-1 in ischemic kidneys protects against renal ischemia-reperfusion injury in rats. <i>International Journal of Energy Production and Management</i> , 2022, 9, .	1.9	4
12	Small molecules combined with collagen hydrogel direct neurogenesis and migration of neural stem cells after spinal cord injury. <i>Biomaterials</i> , 2021, 269, 120479.	5.7	82
13	Spatiotemporal dynamic changes, proliferation, and differentiation characteristics of Sox9-positive cells after severe complete transection spinal cord injury. <i>Experimental Neurology</i> , 2021, 337, 113556.	2.0	4
14	Binary scaffold facilitates <i>in situ</i> regeneration of axons and neurons for complete spinal cord injury repair. <i>Biomaterials Science</i> , 2021, 9, 2955-2971.	2.6	12
15	Scar tissue removal-activated endogenous neural stem cells aid Taxol-modified collagen scaffolds in repairing chronic long-distance transected spinal cord injury. <i>Biomaterials Science</i> , 2021, 9, 4778-4792.	2.6	12
16	NSCs Migration Promoted and Drug Delivered Exosomes Collagen Scaffold via a Bio-Specific Peptide for One-Step Spinal Cord Injury Repair. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001896.	3.9	45
17	Dual Cues Laden Scaffold Facilitates Neurovascular Regeneration and Motor Functional Recovery After Complete Spinal Cord Injury. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100089.	3.9	17
18	Epithelial Splicing Regulatory Protein 1 Is Overexpressed in Breast Cancer and Predicts Poor Prognosis for Breast Cancer Patients. <i>Medical Science Monitor</i> , 2021, 27, e931102.	0.5	10

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19	Upregulation of Apol8 by Epothilone D facilitates the neuronal relay of transplanted NSCs in spinal cord injury. <i>Stem Cell Research and Therapy</i> , 2021, 12, 300.	2.4	12
20	The Rotary Cell Culture System increases NTRK3 expression and promotes neuronal differentiation and migratory ability of neural stem cells cultured on collagen sponge. <i>Stem Cell Research and Therapy</i> , 2021, 12, 298.	2.4	12
21	High strength pure chitosan hydrogels via double crosslinking strategy. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 045048.	1.7	4
22	The Alterations and Potential Roles of MCMs in Breast Cancer. <i>Journal of Oncology</i> , 2021, 2021, 1-17.	0.6	11
23	Contralateral Axon Sprouting but Not Ipsilateral Regeneration Is Responsible for Spontaneous Locomotor Recovery Post Spinal Cord Hemisection. <i>Frontiers in Cellular Neuroscience</i> , 2021, 15, 730348.	1.8	3
24	Long-term stability, high strength, and 3D printable alginate hydrogel for cartilage tissue engineering application. <i>Biomedical Materials (Bristol)</i> , 2021, 16, 064102.	1.7	24
25	Urethral Tissue Reconstruction Using the Acellular Dermal Matrix Patch Modified with Collagen-Binding VEGF in Beagle Urethral Injury Models. <i>BioMed Research International</i> , 2021, 2021, 1-10.	0.9	10
26	Direct Neuronal Differentiation of Neural Stem Cells for Spinal Cord Injury Repair. <i>Stem Cells</i> , 2021, 39, 1025-1032.	1.4	23
27	Identification of LIG1 and LIG3 as prognostic biomarkers in breast cancer. <i>Open Medicine (Poland)</i> , 2021, 16, 1705-1717.	0.6	2
28	Epidermal growth factor receptor-extracellular-regulated kinase blockade upregulates TRIM32 signaling cascade and promotes neurogenesis after spinal cord injury. <i>Stem Cells</i> , 2020, 38, 118-133.	1.4	19
29	Transmembrane protein 16A/anoctamin 1 inhibitor T16A <sub>inh</sub> reversed monocrotaline-induced rat pulmonary arterial hypertension. <i>Pulmonary Circulation</i> , 2020, 10, 1-11.	0.8	3
30	Identification of NCAPH as a biomarker for prognosis of breast cancer. <i>Molecular Biology Reports</i> , 2020, 47, 7831-7842.	1.0	17
31	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. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 1671-1680.	2.6	25
32	A dual functional collagen scaffold coordinates angiogenesis and inflammation for diabetic wound healing. <i>Biomaterials Science</i> , 2020, 8, 6337-6349.	2.6	45
33	Aligned collagen scaffold combination with human spinal cord-derived neural stem cells to improve spinal cord injury repair. <i>Biomaterials Science</i> , 2020, 8, 5145-5156.	2.6	51
34	Allotransplantation of adult spinal cord tissues after complete transected spinal cord injury: Long-term survival and functional recovery in canines. <i>Science China Life Sciences</i> , 2020, 63, 1879-1886.	2.3	9
35	Scaffolds for spinal cord injury repair: from proof of concept to first in-human studies and clinical trials. , 2020, , 603-619.		4
36	A novel hydrogel-based treatment for complete transection spinal cord injury repair is driven by microglia/macrophages repopulation. <i>Biomaterials</i> , 2020, 237, 119830.	5.7	77

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37	Specific angiogenic peptide binding with injectable cardiac <scp>ECM</scp> collagen gel promotes the recovery of myocardial infarction in rat. Journal of Biomedical Materials Research - Part A, 2020, 108, 1881-1889.	2.1	8
38	Identification of ZG16B as a prognostic biomarker in breast cancer. Open Medicine (Poland), 2020, 16, 1-13.	0.6	19
39	Myocardialâ€Infarctionâ€™Responsive Smart Hydrogels Targeting Matrix Metalloproteinase for Onâ€™Demand Growth Factor Delivery. Advanced Materials, 2019, 31, e1902900.	11.1	128
40	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.	2.3	38
41	Different functional bio-scaffolds share similar neurological mechanism to promote locomotor recovery of canines with complete spinal cord injury. Biomaterials, 2019, 214, 119230.	5.7	32
42	Transplantation of adult spinal cord grafts into spinal cord transected rats improves their locomotor function. Science China Life Sciences, 2019, 62, 725-733.	2.3	16
43	Aligned Scaffolds with Biomolecular Gradients for Regenerative Medicine. Polymers, 2019, 11, 341.	2.0	23
44	Pre-Clinical Evaluation of CBD-NT3 Modified Collagen Scaffolds in Completely Spinal Cord Transected Non-Human Primates. Journal of Neurotrauma, 2019, 36, 2316-2324.	1.7	17
45	Heparan sulfate proteoglycan promotes fibroblast growth factor-2 function for ischemic heart repair. Biomaterials Science, 2019, 7, 5438-5450.	2.6	21
46	LncRNA Neat1 mediates miR-124-induced activation of Wnt/ $\beta$ 2-catenin signaling in spinal cord neural progenitor cells. Stem Cell Research and Therapy, 2019, 10, 400.	2.4	60
47	Biom mineralization improves the thermostability of <i>foot-and-mouth disease</i> virus-like particles and the protective immune response induced. Nanoscale, 2019, 11, 22748-22761.	2.8	21
48	Scaffold-facilitated locomotor improvement post complete spinal cord injury: Motor axon regeneration versus endogenous neuronal relay formation. Biomaterials, 2019, 197, 20-31.	5.7	82
49	Taxol-modified collagen scaffold implantation promotes functional recovery after long-distance spinal cord complete transection in canines. Biomaterials Science, 2018, 6, 1099-1108.	2.6	50
50	Lower fluidity of supported lipid bilayers promotes neuronal differentiation of neural stem cells by enhancing focal adhesion formation. Biomaterials, 2018, 161, 106-116.	5.7	13
51	Controlled release of collagen-binding SDF-1 $\beta$ from the collagen scaffold promoted tendon regeneration in a rat Achilles tendon defect model. Biomaterials, 2018, 162, 22-33.	5.7	59
52	Bridging the gap with functional collagen scaffolds: tuning endogenous neural stem cells for severe spinal cord injury repair. Biomaterials Science, 2018, 6, 265-271.	2.6	56
53	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.	1.3	50
54	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.	2.3	64

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55	Complete canine spinal cord transection model: a large animal model for the translational research of spinal cord regeneration. <i>Science China Life Sciences</i> , 2018, 61, 115-117.	2.3	20
56	Collagen-binding VEGF targeting the cardiac extracellular matrix promotes recovery in porcine chronic myocardial infarction. <i>Biomaterials Science</i> , 2018, 6, 356-363.	2.6	17
57	Collagen/Heparin Bi-Affinity Multilayer Modified Collagen Scaffolds for Controlled bFGF Release to Improve Angiogenesis In Vivo. <i>Macromolecular Bioscience</i> , 2018, 18, e1800086.	2.1	25
58	Comparison of subacute and chronic scar tissues after complete spinal cord transection. <i>Experimental Neurology</i> , 2018, 306, 132-137.	2.0	26
59	Cetuximab and Taxol co-modified collagen scaffolds show combination effects for the repair of acute spinal cord injury. <i>Biomaterials Science</i> , 2018, 6, 1723-1734.	2.6	55
60	A collagen microchannel scaffold carrying paclitaxel-liposomes induces neuronal differentiation of neural stem cells through Wnt/ $\beta$ -catenin signaling for spinal cord injury repair. <i>Biomaterials</i> , 2018, 183, 114-127.	5.7	118
61	Significant Improvement of Acute Complete Spinal Cord Injury Patients Diagnosed by a Combined Criteria Implanted with NeuroRegen Scaffolds and Mesenchymal Stem Cells. <i>Cell Transplantation</i> , 2018, 27, 907-915.	1.2	118
62	Functional Multichannel Poly(Propylene Fumarate)-Collagen Scaffold with Collagen-Binding Neurotrophic Factor 3 Promotes Neural Regeneration After Transected Spinal Cord Injury. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800315.	3.9	71
63	A modified collagen scaffold facilitates endogenous neurogenesis for acute spinal cord injury repair. <i>Acta Biomaterialia</i> , 2017, 51, 304-316.	4.1	117
64	A Dual Functional Scaffold Tethered with EGFR Antibody Promotes Neural Stem Cell Retention and Neuronal Differentiation for Spinal Cord Injury Repair. <i>Advanced Healthcare Materials</i> , 2017, 6, 1601279.	3.9	56
65	Transplantation of hUC-MSCs seeded collagen scaffolds reduces scar formation and promotes functional recovery in canines with chronic spinal cord injury. <i>Scientific Reports</i> , 2017, 7, 43559.	1.6	61
66	Clinical Study of NeuroRegen Scaffold Combined with Human Mesenchymal Stem Cells for the Repair of Chronic Complete Spinal Cord Injury. <i>Cell Transplantation</i> , 2017, 26, 891-900.	1.2	127
67	Cetuximab modified collagen scaffold directs neurogenesis of injury-activated endogenous neural stem cells for acute spinal cord injury repair. <i>Biomaterials</i> , 2017, 137, 73-86.	5.7	106
68	The neuronal differentiation microenvironment is essential for spinal cord injury repair. <i>Organogenesis</i> , 2017, 13, 63-70.	0.4	35
69	Acceleration of Healing of Traumatic Tympanic Membrane Perforation in Rats by Implanted Collagen Membrane Integrated with Collagen-Binding Basic Fibroblast Growth Factor. <i>Tissue Engineering - Part A</i> , 2017, 23, 20-29.	1.6	17
70	Systematic Analysis of mRNA and miRNA Expression of 3D-Cultured Neural Stem Cells (NSCs) in Spaceflight. <i>Frontiers in Cellular Neuroscience</i> , 2017, 11, 434.	1.8	10
71	Bladder regeneration in a canine model using a bladder acellular matrix loaded with a collagen-binding bFGF. <i>Biomaterials Science</i> , 2017, 5, 2427-2436.	2.6	26
72	Training Neural Stem Cells on Functional Collagen Scaffolds for Severe Spinal Cord Injury Repair. <i>Advanced Functional Materials</i> , 2016, 26, 5835-5847.	7.8	58

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73	One-year clinical study of NeuroRegen scaffold implantation following scar resection in complete chronic spinal cord injury patients. <i>Science China Life Sciences</i> , 2016, 59, 647-655.	2.3	90
74	Transplantation of human adipose-derived mesenchymal stem cells on a bladder acellular matrix for bladder regeneration in a canine model. <i>Biomedical Materials (Bristol)</i> , 2016, 11, 031001.	1.7	22
75	Radially Aligned Electrospun Fibers with Continuous Gradient of SDF1 $\beta$ for the Guidance of Neural Stem Cells. <i>Small</i> , 2016, 12, 5009-5018.	5.2	81
76	Controlled Release of Collagen-Binding SDF-1 $\beta$ Improves Cardiac Function after Myocardial Infarction by Recruiting Endogenous Stem Cells. <i>Scientific Reports</i> , 2016, 6, 26683.	1.6	37
77	Functionalized collagen scaffold implantation and cAMP administration collectively facilitate spinal cord regeneration. <i>Acta Biomaterialia</i> , 2016, 30, 233-245.	4.1	61
78	Functionalized Collagen Scaffold Neutralizing the Myelin-Inhibitory Molecules Promoted Neurites Outgrowth in Vitro and Facilitated Spinal Cord Regeneration in Vivo. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 13960-13971.	4.0	76
79	The linear-ordered collagen scaffold-BDNF complex significantly promotes functional recovery after completely transected spinal cord injury in canine. <i>Biomaterials</i> , 2015, 41, 89-96.	5.7	123
80	Modified VEGF targets the ischemic myocardium and promotes functional recovery after myocardial infarction. <i>Journal of Controlled Release</i> , 2015, 213, 27-35.	4.8	44
81	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. <i>International Journal of Molecular Sciences</i> , 2014, 15, 18593-18609.	1.8	24
82	Promotion of diabetic wound healing by collagen scaffold with collagen-binding vascular endothelial growth factor in a diabetic rat model. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014, 8, 195-201.	1.3	54
83	Collagen scaffolds modified with collagen-binding bFGF promotes the neural regeneration in a rat hemisectioned spinal cord injury model. <i>Science China Life Sciences</i> , 2014, 57, 232-240.	2.3	49
84	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Basic Fibroblast Growth Factor Facilitate Recovery of Sciatic Nerve Injury in Rats. <i>Tissue Engineering - Part A</i> , 2014, 20, 1253-1262.	1.6	47
85	Bladder Acellular Matrix Conjugated with Basic Fibroblast Growth Factor for Bladder Regeneration. <i>Tissue Engineering - Part A</i> , 2014, 20, 2234-2242.	1.6	24
86	Collagen scaffolds modified with CNTF and bFGF promote facial nerve regeneration in minipigs. <i>Biomaterials</i> , 2014, 35, 7819-7827.	5.7	74
87	Promotion of neuronal differentiation of neural progenitor cells by using EGFR antibody functionalized collagen scaffolds for spinal cord injury repair. <i>Biomaterials</i> , 2013, 34, 5107-5116.	5.7	104
88	Single-molecule level binding force between collagen and collagen binding domain-growth factor conjugates. <i>Biomaterials</i> , 2013, 34, 6139-6146.	5.7	28
89	The enhancement of cancer stem cell properties of MCF-7 cells in 3D collagen scaffolds for modeling of cancer and anti-cancer drugs. <i>Biomaterials</i> , 2012, 33, 1437-1444.	5.7	241
90	The effect of collagen-binding vascular endothelial growth factor on the remodeling of scarred rat uterus following full-thickness injury. <i>Biomaterials</i> , 2012, 33, 1801-1807.	5.7	89

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91	Extrahepatic bile duct regeneration in pigs using collagen scaffolds loaded with human collagen-binding bFGF. <i>Biomaterials</i> , 2012, 33, 4298-4308.	5.7	42
92	Regeneration of uterine horns in rats by collagen scaffolds loaded with collagen-binding human basic fibroblast growth factor. <i>Biomaterials</i> , 2011, 32, 8172-8181.	5.7	131
93	Neural regrowth induced by PLGA nerve conduits and neurotrophin-3 in rats with complete spinal cord transection. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2011, 97B, 271-277.	1.6	31
94	Regeneration of full-thickness abdominal wall defects in rats using collagen scaffolds loaded with collagen-binding basic fibroblast growth factor. <i>Biomaterials</i> , 2011, 32, 753-759.	5.7	64
95	The use of laminin modified linear ordered collagen scaffolds loaded with laminin-binding ciliary neurotrophic factor for sciatic nerve regeneration in rats. <i>Biomaterials</i> , 2011, 32, 3939-3948.	5.7	123
96	The promotion of neurological recovery in the rat spinal cord crushed injury model by collagen-binding BDNF. <i>Biomaterials</i> , 2010, 31, 8634-8641.	5.7	60
97	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. <i>Biomaterials</i> , 2010, 31, 9212-9220.	5.7	123
98	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Neurotrophin-3 Promote Axonal Regeneration and Partial Functional Recovery after Complete Spinal Cord Transection. <i>Journal of Neurotrauma</i> , 2010, 27, 1671-1683.	1.7	73
99	Bladder Regeneration by Collagen Scaffolds With Collagen Binding Human Basic Fibroblast Growth Factor. <i>Journal of Urology</i> , 2010, 183, 2432-2439.	0.2	58
100	Acceleration of diabetic wound healing by collagen-binding vascular endothelial growth factor in diabetic rat model. <i>Diabetes Research and Clinical Practice</i> , 2010, 90, 66-72.	1.1	62
101	Collagen-Targeting Vascular Endothelial Growth Factor Improves Cardiac Performance After Myocardial Infarction. <i>Circulation</i> , 2009, 119, 1776-1784.	1.6	115
102	Linear Ordered Collagen Scaffolds Loaded with Collagen-Binding Brain-Derived Neurotrophic Factor Improve the Recovery of Spinal Cord Injury in Rats. <i>Tissue Engineering - Part A</i> , 2009, 15, 2927-2935.	1.6	126
103	Improved neovascularization and wound repair by targeting human basic fibroblast growth factor (bFGF) to fibrin. <i>Journal of Molecular Medicine</i> , 2008, 86, 1127-1138.	1.7	42
104	Nogo-66 Promotes the Differentiation of Neural Progenitors into Astroglial Lineage Cells through mTOR-STAT3 Pathway. <i>PLoS ONE</i> , 2008, 3, e1856.	1.1	89
105	Vascularization and cellularization of collagen scaffolds incorporated with two different collagen-targeting human basic fibroblast growth factors. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 82A, 630-636.	2.1	69
106	Homogeneous osteogenesis and bone regeneration by demineralized bone matrix loading with collagen-targeting bone morphogenetic protein-2. <i>Biomaterials</i> , 2007, 28, 1027-1035.	5.7	163
107	The effect of collagen-targeting platelet-derived growth factor on cellularization and vascularization of collagen scaffolds. <i>Biomaterials</i> , 2006, 27, 5708-5714.	5.7	101
108	Novel nerve guidance material prepared from bovine aponeurosis. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 79A, 591-598.	2.1	73

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109	Specific biofunctional <scp>CBDâ€PRIP</scp> peptide binding <scp>VEGF</scp> to collagen hydrogels promotes the recovery of cerebral ischemia in rats. Journal of Biomedical Materials Research - Part A, 0, , .	2.1	6