Xiao-Lei Zhang

List of Publications by Year in Descending Order

101 papers	2,453 citations	30 h-index	45 g-index
105 ext. papers	3,306 ext. citations	6.1 avg, IF	4.94 L-index

#	Paper	IF	Citations
101	Itaconate attenuates osteoarthritis by inhibiting STING/NF-Β axis in chondrocytes and promoting M2 polarization in macrophages.. *Biochemical Pharmacology*, **2022**, 114935	6	5
100	Tangeretin suppresses osteoarthritis progression via the Nrf2/NF-Β and MAPK/NF-Β signaling pathways.. *Phytomedicine*, **2022**, 98, 153928	6.5	1
99	Enhancement of motor functional recovery using immunomodulatory extracellular vesicles-loaded injectable thermosensitive hydrogel post spinal cord injury. *Chemical Engineering Journal*, **2022**, 433, 134465	14.7	0
98	Immune-responsive gene 1/itaconate activates nuclear factor erythroid 2-related factor 2 in microglia to protect against spinal cord injury in mice.. *Cell Death and Disease*, **2022**, 13, 140	9.8	0
97	Senolytics: Eliminating Senescent Cells and Alleviating Intervertebral Disc Degeneration.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 823945	5.8	0
96	Apigenin Alleviates Intervertebral Disc Degeneration Restoring Autophagy Flux in Nucleus Pulposus Cells.. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 787278	5.7	2
95	Echinacoside Upregulates Sirt1 to Suppress Endoplasmic Reticulum Stress and Inhibit Extracellular Matrix Degradation and Ameliorates Osteoarthritis. *Oxidative Medicine and Cellular Longevity*, **2021**, 2021, 3137066	6.7	1
94	RNA-binding protein HuR suppresses senescence through Atg7 mediated autophagy activation in diabetic intervertebral disc degeneration. *Cell Proliferation*, **2021**, 54, e12975	7.9	7
93	Limonin Inhibits IL-1-Induced Inflammation and Catabolism in Chondrocytes and Ameliorates Osteoarthritis by Activating Nrf2. *Oxidative Medicine and Cellular Longevity*, **2021**, 2021, 7292512	6.7	2
92	Betulin Alleviates the Inflammatory Response in Mouse Chondrocytes and Ameliorates Osteoarthritis via AKT/Nrf2/HO-1/NF-Β Axis. *Frontiers in Pharmacology*, **2021**, 12, 754038	5.6	5
91	20-Deoxyingenol alleviates osteoarthritis by activating TFEB in chondrocytes. *Pharmacological Research*, **2021**, 165, 105361	10.2	4
90	Inhibition of LRRK2 restores parkin-mediated mitophagy and attenuates intervertebral disc degeneration. *Osteoarthritis and Cartilage*, **2021**, 29, 579-591	6.2	2
89	Xanthohumol suppresses inflammation in chondrocytes and ameliorates osteoarthritis in mice. *Biomedicine and Pharmacotherapy*, **2021**, 137, 111238	7.5	2
88	High glucose suppresses autophagy through the AMPK pathway while it induces autophagy via oxidative stress in chondrocytes. *Cell Death and Disease*, **2021**, 12, 506	9.8	2
87	The therapeutic effect of TBK1 in intervertebral disc degeneration via coordinating selective autophagy and autophagic functions. *Journal of Advanced Research*, **2021**, 30, 1-13	13	7
86	The endocrine role of bone: Novel functions of bone-derived cytokines. *Biochemical Pharmacology*, **2021**, 183, 114308	6	0
85	STING promotes senescence, apoptosis, and extracellular matrix degradation in osteoarthritis via the NF-Β signaling pathway. *Cell Death and Disease*, **2021**, 12, 13	9.8	21

84	Cardamonin protects nucleus pulposus cells against IL-1β induced inflammation and catabolism via Nrf2/NF-κB axis. *Food and Function*, **2021**, 12, 2703-2714	6.1	4
83	Targeting mitochondrial dysfunction with small molecules in intervertebral disc aging and degeneration. *GeroScience*, **2021**, 43, 517-537	8.9	12
82	Cycloastragenol and Astragaloside IV activate telomerase and protect nucleus pulposus cells against high glucose-induced senescence and apoptosis. *Experimental and Therapeutic Medicine*, **2021**, 22, 1326	2.1	2
81	Puerarin suppresses inflammation and ECM degradation through Nrf2/HO-1 axis in chondrocytes and alleviates pain symptom in osteoarthritic mice. *Food and Function*, **2021**, 12, 2075-2089	6.1	10
80	Akebia Saponin D suppresses inflammation in chondrocytes via the NRF2/HO-1/NF-κB axis and ameliorates osteoarthritis in mice. *Food and Function*, **2020**, 11, 10852-10863	6.1	7
79	Association between Bone Mineral Density and Severity of Chronic Kidney Disease. *International Journal of Endocrinology*, **2020**, 2020, 8852690	2.7	2
78	Incidence of patients with bone metastases at diagnosis of solid tumors in adults: a large population-based study. *Annals of Translational Medicine*, **2020**, 8, 482	3.2	35
77	CO-Releasing Molecule (CORM)-3 Ameliorates Spinal Cord-Blood Barrier Disruption Following Injury to the Spinal Cord. *Frontiers in Pharmacology*, **2020**, 11, 761	5.6	3
76	Urolithin A-induced mitophagy suppresses apoptosis and attenuates intervertebral disc degeneration via the AMPK signaling pathway. *Free Radical Biology and Medicine*, **2020**, 150, 109-119	7.8	36
75	4D-Printed Dynamic Materials in Biomedical Applications: Chemistry, Challenges, and Their Future Perspectives in the Clinical Sector. *Journal of Medicinal Chemistry*, **2020**, 63, 8003-8024	8.3	47
74	S-allyl cysteine reduces osteoarthritis pathology in the tert-butyl hydroperoxide-treated chondrocytes and the destabilization of the medial meniscus model mice via the Nrf2 signaling pathway. *Aging*, **2020**, 12, 19254-19272	5.6	6
73	Dual regulation of microglia and neurons by Astragaloside IV-mediated mTORC1 suppression promotes functional recovery after acute spinal cord injury. *Journal of Cellular and Molecular Medicine*, **2020**, 24, 671-685	5.6	17
72	The Emerging Roles of the Gaseous Signaling Molecules NO, HS, and CO in the Regulation of Stem Cells. *ACS Biomaterials Science and Engineering*, **2020**, 6, 798-812	5.5	13
71	Sodium lactate promotes stemness of human mesenchymal stem cells through KDM6B mediated glycolytic metabolism. *Biochemical and Biophysical Research Communications*, **2020**, 532, 433-439	3.4	3
70	Circular RNAs in compression-induced intervertebral disk degeneration. *EBioMedicine*, **2020**, 54, 102720	8.8	3
69	RNA-Binding Protein HuR Suppresses Inflammation and Promotes Extracellular Matrix Homeostasis via NKRF in Intervertebral Disc Degeneration. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 611234	5.7	3
68	Classification of four distinct osteoarthritis subtypes with a knee joint tissue transcriptome atlas. *Bone Research*, **2020**, 8, 38	13.3	16
67	Stachydrine ameliorates the progression of intervertebral disc degeneration via the PI3K/Akt/NF-κB signaling pathway: in vitro and in vivo studies. *Food and Function*, **2020**, 11, 10864-10875	6.1	3

66	-Hydroxyisovalerylshikonin inhibits IL-1-induced chondrocyte inflammation Nrf2 and retards osteoarthritis in mice. *Food and Function*, **2020**, 11, 10219-10230	6.1	3
65	Projection of the Most Anterior Line of the Spinal Canal on Lateral Radiograph: An Anatomic Study for Percutaneous Kyphoplasty and Percutaneous Vertebroplasty. *Journal of Investigative Surgery*, **2020**, 33, 134-140	1.2	4
64	The Sirt1/P53 Axis in Diabetic Intervertebral Disc Degeneration Pathogenesis and Therapeutics. *Oxidative Medicine and Cellular Longevity*, **2019**, 2019, 7959573	6.7	15
63	BRD4 inhibition regulates MAPK, NF-B signals, and autophagy to suppress MMP-13 expression in diabetic intervertebral disc degeneration. *FASEB Journal*, **2019**, 33, 11555-11566	0.9	33
62	Luteoloside Inhibits IL-1-induced Apoptosis and Catabolism in Nucleus Pulposus Cells and Ameliorates Intervertebral Disk Degeneration. *Frontiers in Pharmacology*, **2019**, 10, 868	5.6	18
61	Inhibition of EZH2 ameliorates cartilage endplate degeneration and attenuates the progression of intervertebral disc degeneration via demethylation of Sox-9. *EBioMedicine*, **2019**, 48, 619-629	8.8	22
60	Astragoloside IV Loaded Polycaprolactone Membrane Repairs Blood Spinal Cord Barrier and Recovers Spinal Cord Function in Traumatic Spinal Cord Injury. *Journal of Biomedical Nanotechnology*, **2019**, 15, 799-812	4	6
59	BRD4 inhibition attenuates inflammatory response in microglia and facilitates recovery after spinal cord injury in rats. *Journal of Cellular and Molecular Medicine*, **2019**, 23, 3214-3223	5.6	30
58	TFEB protects nucleus pulposus cells against apoptosis and senescence via restoring autophagic flux. *Osteoarthritis and Cartilage*, **2019**, 27, 347-357	6.2	35
57	Carbon monoxide releasing molecule-3 alleviates neuron death after spinal cord injury via inflammasome regulation. *EBioMedicine*, **2019**, 40, 643-654	8.8	33
56	Melatonin protects vertebral endplate chondrocytes against apoptosis and calcification via the Sirt1-autophagy pathway. *Journal of Cellular and Molecular Medicine*, **2019**, 23, 177-193	5.6	37
55	Glucagon-like peptide-1 receptor regulates endoplasmic reticulum stress-induced apoptosis and the associated inflammatory response in chondrocytes and the progression of osteoarthritis in rat. *Cell Death and Disease*, **2018**, 9, 212	9.8	40
54	Monascin inhibits IL-1-induced catabolism in mouse chondrocytes and ameliorates murine osteoarthritis. *Food and Function*, **2018**, 9, 1454-1464	6.1	34
53	Sirt6 overexpression suppresses senescence and apoptosis of nucleus pulposus cells by inducing autophagy in a model of intervertebral disc degeneration. *Cell Death and Disease*, **2018**, 9, 56	9.8	69
52	Monotropein promotes angiogenesis and inhibits oxidative stress-induced autophagy in endothelial progenitor cells to accelerate wound healing. *Journal of Cellular and Molecular Medicine* , **2018**, 22, 1583-1600	5.6	32
51	Therapeutic effects of gefitinib-encapsulated thermosensitive injectable hydrogel in intervertebral disc degeneration. *Biomaterials*, **2018**, 160, 56-68	15.6	24
50	Gefitinib for Epidermal Growth Factor Receptor Activated Osteoarthritis Subpopulation Treatment. *EBioMedicine*, **2018**, 32, 223-233	8.8	16
49	Salidroside attenuates neuroinflammation and improves functional recovery after spinal cord injury through microglia polarization regulation. *Journal of Cellular and Molecular Medicine*, **2018**, 22, 1148-1166	5.6	62

48	Gastrodin reduces IL-1β-induced apoptosis, inflammation, and matrix catabolism in osteoarthritis chondrocytes and attenuates rat cartilage degeneration in vivo. *Biomedicine and Pharmacotherapy*, **2018**, 97, 642-651	7.5	29
47	SIRT3 Activation by Dihydromyricetin Suppresses Chondrocytes Degeneration via Maintaining Mitochondrial Homeostasis. *International Journal of Biological Sciences*, **2018**, 14, 1873-1882	11.2	27
46	Melatonin protects endothelial progenitor cells against AGE-induced apoptosis via autophagy flux stimulation and promotes wound healing in diabetic mice. *Experimental and Molecular Medicine*, **2018**, 50, 1-15	12.8	41
45	Small molecule natural compound agonist of SIRT3 as a therapeutic target for the treatment of intervertebral disc degeneration. *Experimental and Molecular Medicine*, **2018**, 50, 1-14	12.8	20
44	Therapeutic Potential of Naringin for Intervertebral Disc Degeneration: Involvement of Autophagy Against Oxidative Stress-Induced Apoptosis in Nucleus Pulposus Cells. *The American Journal of Chinese Medicine*, **2018**, 1-20	6	17
43	Parkin-mediated mitophagy as a potential therapeutic target for intervertebral disc degeneration. *Cell Death and Disease*, **2018**, 9, 980	9.8	41
42	Knockdown of lncRNA KCNQ1OT1 suppresses the adipogenic and osteogenic differentiation of tendon stem cell via downregulating miR-138 target genes PPARβ and RUNX2. *Cell Cycle*, **2018**, 17, 2374-2385	4.7	19
41	Polydatin suppresses nucleus pulposus cell senescence, promotes matrix homeostasis and attenuates intervertebral disc degeneration in rats. *Journal of Cellular and Molecular Medicine*, **2018**, 22, 5720-5731	5.6	26
40	TFEB, a potential therapeutic target for osteoarthritis via autophagy regulation. *Cell Death and Disease*, **2018**, 9, 858	9.8	44
39	Metformin Improves Functional Recovery After Spinal Cord Injury via Autophagy Flux Stimulation. *Molecular Neurobiology*, **2017**, 54, 3327-3341	6.2	87
38	Hydrogen sulfide protects against endoplasmic reticulum stress and mitochondrial injury in nucleus pulposus cells and ameliorates intervertebral disc degeneration. *Pharmacological Research*, **2017**, 117, 357-369	10.2	52
37	Salvianolic acid B inhibits IL-1β-induced inflammatory cytokine production in human osteoarthritis chondrocytes and has a protective effect in a mouse osteoarthritis model. *International Immunopharmacology*, **2017**, 46, 31-37	5.8	27
36	Celastrol reduces IL-1β-induced matrix catabolism, oxidative stress and inflammation in human nucleus pulposus cells and attenuates rat intervertebral disc degeneration in vivo. *Biomedicine and Pharmacotherapy*, **2017**, 91, 208-219	7.5	41
35	Effects of hypoxia on differentiation of menstrual blood stromal stem cells towards tenogenic cells in a co-culture system with Achilles tendon cells. *Experimental and Therapeutic Medicine*, **2017**, 13, 3195-3202	2.1	7
34	Kdm6b regulates cartilage development and homeostasis through anabolic metabolism. *Annals of the Rheumatic Diseases*, **2017**, 76, 1295-1303	2.4	33
33	Endoplasmic Reticulum Stress and NF-[Formula: see text]B Pathway in Salidroside Mediated Neuroprotection: Potential of Salidroside in Neurodegenerative Diseases. *The American Journal of Chinese Medicine*, **2017**, 45, 1459-1475	6	14
32	Differentiation Potential of Mesenchymal Stem Cells Derived from Adipose Tissue vs Bone Marrow Toward Annulus Fibrosus Cells In vitro. *Current Stem Cell Research and Therapy*, **2017**, 12, 432-439	3.6	6
31	Artificial periosteum in bone defect repair—A review. *Chinese Chemical Letters*, **2017**, 28, 1801-1807	8.1	25

30	Metformin ameliorates BSCB disruption by inhibiting neutrophil infiltration and MMP-9 expression but not direct TJ proteins expression regulation. *Journal of Cellular and Molecular Medicine*, **2017**, 21, 3322-3336	5.6	27
29	Delivery of epidermal growth factor receptor inhibitor via a customized collagen scaffold promotes meniscal defect regeneration in a rabbit model. *Acta Biomaterialia*, **2017**, 62, 210-221	10.8	11
28	A novel micro-CT-based method to monitor the morphology of blood vessels in the rabbit endplate. *European Spine Journal*, **2017**, 26, 221-227	2.7	4
27	Proliferation of rabbit chondrocyte and inhibition of IL-1β induced apoptosis through MEK/ERK signaling by statins. *In Vitro Cellular and Developmental Biology - Animal*, **2017**, 53, 124-131	2.6	15
26	Trehalose ameliorates oxidative stress-mediated mitochondrial dysfunction and ER stress via selective autophagy stimulation and autophagic flux restoration in osteoarthritis development. *Cell Death and Disease*, **2017**, 8, e3081	9.8	111
25	Effect of Hypoxia on Self-Renewal Capacity and Differentiation in Human Tendon-Derived Stem Cells. *Medical Science Monitor*, **2017**, 23, 1334-1339	3.2	15
24	Wogonoside inhibits IL-1β induced catabolism and hypertrophy in mouse chondrocyte and ameliorates murine osteoarthritis. *Oncotarget*, **2017**, 8, 61440-61456	3.3	23
23	Metformin protects against apoptosis and senescence in nucleus pulposus cells and ameliorates disc degeneration in vivo. *Cell Death and Disease*, **2016**, 7, e2441	9.8	167
22	The effects of lactate and acid on articular chondrocytes function: Implications for polymeric cartilage scaffold design. *Acta Biomaterialia*, **2016**, 42, 329-340	10.8	26
21	Stabilization of HIF-1β by FG-4592 promotes functional recovery and neural protection in experimental spinal cord injury. *Brain Research*, **2016**, 1632, 19-26	3.7	34
20	Percutaneous atlantoaxial anterior transarticular screw fixation combined with mini-open posterior C1/2 wire fusion for patients with a high-riding vertebral artery. *Journal of Spinal Cord Medicine*, **2016**, 39, 234-9	1.9	2
19	Autologous Olfactory Lamina Propria Transplantation for Chronic Spinal Cord Injury: Three-Year Follow-Up Outcomes From a Prospective Double-Blinded Clinical Trial. *Cell Transplantation*, **2016**, 25, 141-57	4	21
18	An injectable nano-hydroxyapatite (n-HA)/glycol chitosan (G-CS)/hyaluronic acid (HyA) composite hydrogel for bone tissue engineering. *RSC Advances*, **2016**, 6, 33529-33536	3.7	50
17	Dual-color labeled anti-mucin 1 antibody for imaging of ovarian cancer: A preliminary animal study. *Oncology Letters*, **2015**, 9, 1231-1235	2.6	7
16	Inhibition of Rac1 activity by controlled release of NSC23766 from chitosan microspheres effectively ameliorates osteoarthritis development in vivo. *Annals of the Rheumatic Diseases*, **2015**, 74, 285-93	2.4	44
15	Stimulation of autophagy promotes functional recovery in diabetic rats with spinal cord injury. *Scientific Reports*, **2015**, 5, 17130	4.9	59
14	3D-Printed Atsttrin-Incorporated Alginate/Hydroxyapatite Scaffold Promotes Bone Defect Regeneration with TNF/TNFR Signaling Involvement. *Advanced Healthcare Materials*, **2015**, 4, 1701-8	10.1	41
13	The amelioration of cartilage degeneration by ADAMTS-5 inhibitor delivered in a hyaluronic acid hydrogel. *Biomaterials*, **2014**, 35, 2827-36	15.6	51

12	Pooled analysis of non-union, re-operation, infection, and approach related complications after anterior odontoid screw fixation. *PLoS ONE*, **2014**, 9, e103065	3.7	31
11	Differentiation of menstrual blood-derived stem cells toward nucleus pulposus-like cells in a coculture system with nucleus pulposus cells. *Spine*, **2014**, 39, 754-60	3.3	16
10	Lactate down-regulates matrix systhesis and promotes apoptosis and autophagy in rat nucleus pulposus cells. *Journal of Orthopaedic Research*, **2014**, 32, 253-61	3.8	22
9	Minimally invasive versus open transforaminal lumbar interbody fusion: a meta-analysis based on the current evidence. *European Spine Journal*, **2013**, 22, 1741-9	2.7	112
8	Apoptosis, senescence, and autophagy in rat nucleus pulposus cells: Implications for diabetic intervertebral disc degeneration. *Journal of Orthopaedic Research*, **2013**, 31, 692-702	3.8	121
7	Enhancement of bone formation with a synthetic matrix containing bone morphogenetic protein-2 by the addition of calcium citrate. *Knee Surgery, Sports Traumatology, Arthroscopy*, **2013**, 21, 456-65	5.5	7
6	Management of hangman's fracture with percutaneous transpedicular screw fixation. *European Spine Journal*, **2013**, 22, 79-86	2.7	16
5	Effects of extracellular calcium on viability and osteogenic differentiation of bone marrow stromal cells in vitro. *Human Cell*, **2013**, 26, 114-20	4.5	19
4	Incidence of heterotopic ossification after implantation of interspinous process devices. *Neurosurgical Focus*, **2013**, 35, E3	4.2	11
3	Quantitative assessment of the motor-sensory specificity of the motor and primary sensory neurons after the end-to-side neurorrhaphy. *Journal of Reconstructive Microsurgery*, **2013**, 29, 579-86	2.5	2
2	Fusion versus nonfusion for surgically treated thoracolumbar burst fractures: a meta-analysis. *PLoS ONE*, **2013**, 8, e63995	3.7	26
1	The projection of nerve roots on the posterior aspect of spine from T11 to L5: a cadaver and radiological study. *Spine*, **2012**, 37, E1232-7	3.3	7