

# Shuyun Liu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9031739/publications.pdf>

Version: 2024-02-01

67  
papers

2,700  
citations

147566

31  
h-index

205818

48  
g-index

71  
all docs

71  
docs citations

71  
times ranked

3165  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ECM-Cell Interaction of Cartilage Extracellular Matrix on Chondrocytes. BioMed Research International, 2014, 2014, 1-8.	0.9	215
2	<i>In vivo</i> cartilage repair using adipose-derived stem cell-loaded decellularized cartilage ECM scaffolds. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 442-453.	1.3	117
3	Immune characterization of mesenchymal stem cells in human umbilical cord Wharton's jelly and derived cartilage cells. Cellular Immunology, 2012, 278, 35-44.	1.4	104
4	The immune microenvironment in cartilage injury and repair. Acta Biomaterialia, 2022, 140, 23-42.	4.1	104
5	Enhancement of acellular cartilage matrix scaffold by Wharton's jelly mesenchymal stem cell-derived exosomes to promote osteochondral regeneration. Bioactive Materials, 2021, 6, 2711-2728.	8.6	90
6	Heterogeneity of mesenchymal stem cells in cartilage regeneration: from characterization to application. Npj Regenerative Medicine, 2021, 6, 14.	2.5	85
7	Chitosan hydrogel/3D-printed poly( $\epsilon$ -caprolactone) hybrid scaffold containing synovial mesenchymal stem cells for cartilage regeneration based on tetrahedral framework nucleic acid recruitment. Biomaterials, 2021, 278, 121131.	5.7	79
8	Immunomodulatory Functions of Mesenchymal Stem Cells in Tissue Engineering. Stem Cells International, 2019, 2019, 1-18.	1.2	76
9	PCL-MECM-Based Hydrogel Hybrid Scaffolds and Meniscal Fibrochondrocytes Promote Whole Meniscus Regeneration in a Rabbit Meniscectomy Model. ACS Applied Materials & Interfaces, 2019, 11, 41626-41639.	4.0	75
10	Clinical Application Status of Articular Cartilage Regeneration Techniques: Tissue-Engineered Cartilage Brings New Hope. Stem Cells International, 2020, 2020, 1-16.	1.2	71
11	In Situ Articular Cartilage Regeneration through Endogenous Reparative Cell Homing Using a Functional Bone Marrow-Specific Scaffolding System. ACS Applied Materials & Interfaces, 2018, 10, 38715-38728.	4.0	68
12	Fabrication and cell affinity of biomimetic structured PLGA/articular cartilage ECM composite scaffold. Journal of Materials Science: Materials in Medicine, 2011, 22, 693-704.	1.7	65
13	Endogenous cell recruitment strategy for articular cartilage regeneration. Acta Biomaterialia, 2020, 114, 31-52.	4.1	64
14	Bone Marrow- and Adipose Tissue-Derived Mesenchymal Stem Cells: Characterization, Differentiation, and Applications in Cartilage Tissue Engineering. Critical Reviews in Eukaryotic Gene Expression, 2018, 28, 285-310.	0.4	61
15	Enrichment of CD146 <sup>+</sup> Adipose-Derived Stem Cells in Combination with Articular Cartilage Extracellular Matrix Scaffold Promotes Cartilage Regeneration. Theranostics, 2019, 9, 5105-5121.	4.6	60
16	Tannic acid/Sr <sup>2+</sup> -coated silk/graphene oxide-based meniscus scaffold with anti-inflammatory and anti-ROS functions for cartilage protection and delaying osteoarthritis. Acta Biomaterialia, 2021, 126, 119-131.	4.1	53
17	Comparison of glutaraldehyde and carbodiimides to crosslink tissue engineering scaffolds fabricated by decellularized porcine menisci. Materials Science and Engineering C, 2017, 71, 891-900.	3.8	52
18	AMECM/DCB scaffold prompts successful total meniscus reconstruction in a rabbit total meniscectomy model. Biomaterials, 2016, 111, 13-26.	5.7	51

#	ARTICLE	IF	CITATIONS
19	An electrospun fiber reinforced scaffold promotes total meniscus regeneration in rabbit meniscectomy model. <i>Acta Biomaterialia</i> , 2018, 73, 127-140.	4.1	50
20	Advances and Prospects in Stem Cells for Cartilage Regeneration. <i>Stem Cells International</i> , 2017, 2017, 1-16.	1.2	49
21	Cell-Based Strategies for Meniscus Tissue Engineering. <i>Stem Cells International</i> , 2016, 2016, 1-10.	1.2	48
22	Characteristics of mesenchymal stem cells derived from Wharton's jelly of human umbilical cord and for fabrication of non-scaffold tissue-engineered cartilage. <i>Journal of Bioscience and Bioengineering</i> , 2014, 117, 229-235.	1.1	47
23	Cell-free decellularized cartilage extracellular matrix scaffolds combined with interleukin 4 promote osteochondral repair through immunomodulatory macrophages: In vitro and in vivo preclinical study. <i>Acta Biomaterialia</i> , 2021, 127, 131-145.	4.1	47
24	Cell-free 3D wet-electrospun PCL/silk fibroin/Sr2+ scaffold promotes successful total meniscus regeneration in a rabbit model. <i>Acta Biomaterialia</i> , 2020, 113, 196-209.	4.1	45
25	3D-Bioprinted Difunctional Scaffold for In Situ Cartilage Regeneration Based on Aptamer-Directed Cell Recruitment and Growth Factor-Enhanced Cell Chondrogenesis. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 23369-23383.	4.0	43
26	Hydrogel composite scaffolds achieve recruitment and chondrogenesis in cartilage tissue engineering applications. <i>Journal of Nanobiotechnology</i> , 2022, 20, 25.	4.2	41
27	Host Response to Biomaterials for Cartilage Tissue Engineering: Key to Remodeling. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 664592.	2.0	38
28	Co-culture systems-based strategies for articular cartilage tissue engineering. <i>Journal of Cellular Physiology</i> , 2018, 233, 1940-1951.	2.0	37
29	Advances and Prospects in Tissue-Engineered Meniscal Scaffolds for Meniscus Regeneration. <i>Stem Cells International</i> , 2015, 2015, 1-13.	1.2	36
30	Hierarchical macro-microporous WPU-ECM scaffolds combined with Microfracture Promote in Situ Articular Cartilage Regeneration in Rabbits. <i>Bioactive Materials</i> , 2021, 6, 1932-1944.	8.6	36
31	The optimal time to inject bone mesenchymal stem cells for fracture healing in a murine model. <i>Stem Cell Research and Therapy</i> , 2018, 9, 272.	2.4	35
32	Repair of Osteochondral Defects Using Human Umbilical Cord Wharton's Jelly-Derived Mesenchymal Stem Cells in a Rabbit Model. <i>BioMed Research International</i> , 2017, 2017, 1-12.	0.9	32
33	Three Dimensional Printing-Based Strategies for Functional Cartilage Regeneration. <i>Tissue Engineering - Part B: Reviews</i> , 2019, 25, 187-201.	2.5	32
34	Magnetic resonance imaging for non-invasive clinical evaluation of normal and regenerated cartilage. <i>International Journal of Energy Production and Management</i> , 2021, 8, rbab038.	1.9	32
35	Recent Developed Strategies for Enhancing Chondrogenic Differentiation of MSC: Impact on MSC-Based Therapy for Cartilage Regeneration. <i>Stem Cells International</i> , 2021, 2021, 1-15.	1.2	31
36	Advances and prospects in biomimetic multilayered scaffolds for articular cartilage regeneration. <i>International Journal of Energy Production and Management</i> , 2020, 7, 527-542.	1.9	30

#	ARTICLE	IF	CITATIONS
37	Nerve growth factor (NGF) and NGF receptors in mesenchymal stem/stromal cells: Impact on potential therapies. <i>Stem Cells Translational Medicine</i> , 2021, 10, 1008-1020.	1.6	30
38	Research Progress on Stem Cell Therapies for Articular Cartilage Regeneration. <i>Stem Cells International</i> , 2021, 2021, 1-25.	1.2	29
39	3D-printed cell-free PCL/MECM scaffold with biomimetic micro-structure and micro-environment to enhance in situ meniscus regeneration. <i>Bioactive Materials</i> , 2021, 6, 3620-3633.	8.6	29
40	The Application of Bioreactors for Cartilage Tissue Engineering: Advances, Limitations, and Future Perspectives. <i>Stem Cells International</i> , 2021, 2021, 1-13.	1.2	29
41	Acellular Cauda Equina Allograft as Main Material Combined with Biodegradable Chitin Conduit for Regeneration of Long-Distance Sciatic Nerve Defect in Rats. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800276.	3.9	26
42	Mesenchymal Stem Cells in Oriented PLGA/ACECM Composite Scaffolds Enhance Structure-Specific Regeneration of Hyaline Cartilage in a Rabbit Model. <i>Stem Cells International</i> , 2018, 2018, 1-12.	1.2	25
43	Cell-Free Strategies for Repair and Regeneration of Meniscus Injuries through the Recruitment of Endogenous Stem/Progenitor Cells. <i>Stem Cells International</i> , 2018, 2018, 1-10.	1.2	25
44	3D Printed Poly( $\mu$ -Caprolactone)/Meniscus Extracellular Matrix Composite Scaffold Functionalized With Kartogenin-Releasing PLGA Microspheres for Meniscus Tissue Engineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 662381.	2.0	25
45	Extracellular Vesicles and Autophagy in Osteoarthritis. <i>BioMed Research International</i> , 2016, 2016, 1-8.	0.9	22
46	Fabrication and In Vitro Study of Tissue-Engineered Cartilage Scaffold Derived from Wharton's Jelly Extracellular Matrix. <i>BioMed Research International</i> , 2017, 2017, 1-12.	0.9	19
47	The application of electrospinning used in meniscus tissue engineering. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2018, 29, 461-475.	1.9	17
48	Integrated bioactive scaffold with aptamer-targeted stem cell recruitment and growth factor-induced pro-differentiation effects for anisotropic meniscal regeneration. <i>Bioengineering and Translational Medicine</i> , 2022, 7, .	3.9	17
49	hWJECM-Derived Oriented Scaffolds with Autologous Chondrocytes for Rabbit Cartilage Defect Repairing. <i>Tissue Engineering - Part A</i> , 2018, 24, 905-914.	1.6	16
50	Tetrahedral framework nucleic acids promote the biological functions and related mechanism of synovium-derived mesenchymal stem cells and show improved articular cartilage regeneration activity in situ. <i>Bioactive Materials</i> , 2022, 9, 411-427.	8.6	16
51	Biochemical Stimulus-Based Strategies for Meniscus Tissue Engineering and Regeneration. <i>BioMed Research International</i> , 2018, 2018, 1-15.	0.9	15
52	Co-culture of hWJMSCs and pACs in double biomimetic ACECM oriented scaffold enhances mechanical properties and accelerates articular cartilage regeneration in a caprine model. <i>Stem Cell Research and Therapy</i> , 2020, 11, 180.	2.4	15
53	Biomechanical Stimulus Based Strategies for Meniscus Tissue Engineering and Regeneration. <i>Tissue Engineering - Part B: Reviews</i> , 2018, 24, 392-402.	2.5	14
54	Coculture of hWJMSCs and pACs in Oriented Scaffold Enhances Hyaline Cartilage Regeneration <i>In Vitro</i> . <i>Stem Cells International</i> , 2019, 2019, 1-11.	1.2	14

#	ARTICLE	IF	CITATIONS
55	Meniscal Regenerative Scaffolds Based on Biopolymers and Polymers: Recent Status and Applications. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 661802.	1.8	14
56	Hybrid material mimics a hypoxic environment to promote regeneration of peripheral nerves. <i>Biomaterials</i> , 2021, 277, 121068.	5.7	14
57	Adipose Tissue-Derived Pericytes for Cartilage Tissue Engineering. <i>Current Stem Cell Research and Therapy</i> , 2017, 12, 513-521.	0.6	14
58	In vitro and in vivo Study on an Injectable Glycol Chitosan/Dibenzaldehyde-Terminated Polyethylene Glycol Hydrogel in Repairing Articular Cartilage Defects. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 607709.	2.0	12
59	Quantifying the degradation of degradable implants and bone formation in the femoral condyle using micro-CT 3D reconstruction. <i>Experimental and Therapeutic Medicine</i> , 2018, 15, 93-102.	0.8	11
60	In vivo construction of tissue-engineered cartilage using adipose-derived stem cells and bioreactor technology. <i>Cell and Tissue Banking</i> , 2015, 16, 123-133.	0.5	10
61	Biofunctionalized Structure and Ingredient Mimicking Scaffolds Achieving Recruitment and Chondrogenesis for Staged Cartilage Regeneration. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 655440.	1.8	10
62	Chondrogenic differentiation of human adipose-derived stem cells using microcarrier and bioreactor combination technique. <i>Molecular Medicine Reports</i> , 2015, 11, 1195-1199.	1.1	9
63	Advanced Polymer-Based Drug Delivery Strategies for Meniscal Regeneration. <i>Tissue Engineering - Part B: Reviews</i> , 2021, 27, 266-293.	2.5	7
64	Native tissue-based strategies for meniscus repair and regeneration. <i>Cell and Tissue Research</i> , 2018, 373, 337-350.	1.5	6
65	Porcine fibrin sealant combined with autologous chondrocytes successfully promotes full-thickness cartilage regeneration in a rabbit model. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2021, 15, 776-787.	1.3	5
66	Repair of articular cartilage defect using adipose-derived stem cell-loaded scaffold derived from native cartilage extracellular matrix. <i>Journal of Cellular Physiology</i> , 2021, 236, 4244-4257.	2.0	2
67	Small Ruminant Models for Articular Cartilage Regeneration by Scaffold-Based Tissue Engineering. <i>Stem Cells International</i> , 2021, 2021, 1-14.	1.2	0