

# Mauro Alini

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

195  
papers

11,171  
citations

61  
h-index

99  
g-index

232  
ext. papers

12,760  
ext. citations

5.6  
avg, IF

6.41  
L-index

#	Paper	IF	Citations
195	Cartilage tissue engineering <b>2022</b> , 555-586		
194	Hyaluronic acid-based interpenetrating network hydrogel as a cell carrier for nucleus pulposus repair. <i>Carbohydrate Polymers</i> , <b>2022</b> , 277, 118828	10.3	6
193	A single-cell transcriptome of mesenchymal stromal cells to fabricate bioactive hydroxyapatite materials for bone regeneration. <i>Bioactive Materials</i> , <b>2022</b> , 9, 281-298	16.7	1
192	Welcome to Volume 5!. <i>JOR Spine</i> , <b>2022</b> , 5, e1200	3.7	
191	Quality control methods in musculoskeletal tissue engineering: from imaging to biosensors. <i>Bone Research</i> , <b>2021</b> , 9, 46	13.3	2
190	A Hyaluronan and Platelet-Rich Plasma Hydrogel for Mesenchymal Stem Cell Delivery in the Intervertebral Disc: An Organ Culture Study. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	4
189	Transcriptional profiling of intervertebral disc in a post-traumatic early degeneration organ culture model. <i>JOR Spine</i> , <b>2021</b> , 4, e1146	3.7	0
188	Noninvasive multimodal fluorescence and magnetic resonance imaging of whole-organ intervertebral discs. <i>Biomedical Optics Express</i> , <b>2021</b> , 12, 3214-3227	3.5	1
187	Effect of expansion media and fibronectin coating on growth and chondrogenic differentiation of human bone marrow-derived mesenchymal stromal cells. <i>Scientific Reports</i> , <b>2021</b> , 11, 13089	4.9	2
186	One strike loading organ culture model to investigate the post-traumatic disc degenerative condition. <i>Journal of Orthopaedic Translation</i> , <b>2021</b> , 26, 141-150	4.2	4
185	Serum biomarkers for Modic changes in patients with chronic low back pain. <i>European Spine Journal</i> , <b>2021</b> , 30, 1018-1027	2.7	2
184	Ex Vivo Systems to Study Chondrogenic Differentiation and Cartilage Integration. <i>Journal of Functional Morphology and Kinesiology</i> , <b>2021</b> , 6,	2.4	5
183	Angiotensin II Type 1 Receptor Antagonist Losartan Inhibits TNF- $\alpha$ Induced Inflammation and Degeneration Processes in Human Nucleus Pulposus Cells. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 417	2.6	0
182	The Tissue Renin-Angiotensin System and Its Role in the Pathogenesis of Major Human Diseases: Quo Vadis?. <i>Cells</i> , <b>2021</b> , 10,	7.9	13
181	Establishment of an Inflammatory Osteoarthritis Model With Human Osteochondral Explants.. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2021</b> , 9, 787020	5.8	0
180	Hypoxic stress enhances extension and branching of dorsal root ganglion neuronal outgrowth. <i>JOR Spine</i> , <b>2020</b> , 3, e1090	3.7	1
179	Bioprinting Tissue Analogues with Decellularized Extracellular Matrix Bioink for Regeneration and Tissue Models of Cartilage and Intervertebral Discs. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909044	15.6	17

178	Preclinical Testing of Anti-inflammatory Drugs in a Bovine Intervertebral Degenerative Disc Model. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 583	5.8	15
177	Predicting and Promoting Human Bone Marrow MSC Chondrogenesis by Way of TGF $\beta$ Receptor Profiles: Toward Personalized Medicine. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 618	5.8	5
176	Tissue mimetic hyaluronan bioink containing collagen fibers with controlled orientation modulating cell migration and alignment. <i>Materials Today Bio</i> , <b>2020</b> , 7, 100058	9.9	25
175	Morphological and biomechanical effects of annulus fibrosus injury and repair in an ovine cervical model. <i>JOR Spine</i> , <b>2020</b> , 3, e1074	3.7	8
174	Enhanced chondrogenic phenotype of primary bovine articular chondrocytes in Fibrin-Hyaluronan hydrogel by multi-axial mechanical loading and FGF18. <i>Acta Biomaterialia</i> , <b>2020</b> , 105, 170-179	10.8	15
173	Sodium Hyaluronate Supplemented Culture Media as a New hMSC Chondrogenic Differentiation Media-Model for Screening of Potential Cartilage Repair Therapies. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 243	5.8	6
172	Functional cell phenotype induction with TGF- $\beta$ and collagen-polyurethane scaffold for annulus fibrosus rupture repair. <i>European Cells and Materials</i> , <b>2020</b> , 39, 1-17	4.3	5
171	The tissue-renin-angiotensin-system of the human intervertebral disc. <i>European Cells and Materials</i> , <b>2020</b> , 40, 115-132	4.3	8
170	Differential Regulation of circRNA, miRNA, and piRNA during Early Osteogenic and Chondrogenic Differentiation of Human Mesenchymal Stromal Cells. <i>Cells</i> , <b>2020</b> , 9,	7.9	24
169	Sound-induced morphogenesis of multicellular systems for rapid orchestration of vascular networks. <i>Biofabrication</i> , <b>2020</b> ,	10.5	12
168	Orbital floor repair using patient specific osteoinductive implant made by stereolithography. <i>Biomaterials</i> , <b>2020</b> , 233, 119721	15.6	18
167	Evaluation of biomimetic hyaluronic-based hydrogels with enhanced endogenous cell recruitment and cartilage matrix formation. <i>Acta Biomaterialia</i> , <b>2020</b> , 101, 293-303	10.8	41
166	Production and evaluation of decellularized extracellular matrix hydrogel for cartilage regeneration derived from knee cartilage. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2020</b> , 108, 938-946	5.4	22
165	Articular Joint-Simulating Mechanical Load Activates Endogenous TGF- $\beta$ in a Highly Cellularized Bioadhesive Hydrogel for Cartilage Repair. <i>American Journal of Sports Medicine</i> , <b>2020</b> , 48, 210-221	6.8	20
164	Visible Light-Induced 3D Bioprinting Technologies and Corresponding Bioink Materials for Tissue Engineering: A Review. <i>Engineering</i> , <b>2020</b> , 7, 966-966	9.7	23
163	Inhibition of hypertrophy and improving chondrocyte differentiation by MMP-13 inhibitor small molecule encapsulated in alginate-chondroitin sulfate-platelet lysate hydrogel. <i>Stem Cell Research and Therapy</i> , <b>2020</b> , 11, 436	8.3	6
162	Proinflammatory intervertebral disc cell and organ culture models induced by tumor necrosis factor alpha. <i>JOR Spine</i> , <b>2020</b> , 3, e1104	3.7	9
161	Mechanical Stress Inhibits Early Stages of Endogenous Cell Migration: A Pilot Study in an Ex Vivo Osteochondral Model. <i>Polymers</i> , <b>2020</b> , 12,	4.5	2

160	Effect of the CCL5-Releasing Fibrin Gel for Intervertebral Disc Regeneration. <i>Cartilage</i> , <b>2020</b> , 11, 169-180		8
159	Intervertebral disc organ culture for the investigation of disc pathology and regeneration - benefits, limitations, and future directions of bioreactors. <i>Connective Tissue Research</i> , <b>2020</b> , 61, 304-321	3.3	14
158	In vitro simulation of the early proinflammatory phase in fracture healing reveals strong immunomodulatory effects of CD146-positive mesenchymal stromal cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2019</b> , 13, 1466-1481	4.4	6
157	CD146/MCAM distinguishes stem cell subpopulations with distinct migration and regenerative potential in degenerative intervertebral discs. <i>Osteoarthritis and Cartilage</i> , <b>2019</b> , 27, 1094-1105	6.2	24
156	A common language for evaluating disc degeneration and regeneration: A /ORS Spine Section initiative. <i>JOR Spine</i> , <b>2019</b> , 2, e1056	3.7	3
155	Phenotypic Characterization of Bone Marrow Mononuclear Cells and Derived Stromal Cell Populations from Human Iliac Crest, Vertebral Body and Femoral Head. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	20
154	BMP2 and TGF- $\beta$ Cooperate Differently during Synovial-Derived Stem-Cell Chondrogenesis in a Dexamethasone-Dependent Manner. <i>Cells</i> , <b>2019</b> , 8,	7.9	14
153	Fibrin-Hyaluronic Acid Hydrogel (RegenoGel) with Fibroblast Growth Factor-18 for In Vitro 3D Culture of Human and Bovine Nucleus Pulposus Cells. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	11
152	Regulation of Inflammatory Response in Human Osteoarthritic Chondrocytes by Novel Herbal Small Molecules. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	13
151	Mesenchymal Stem Cell Homing Into Intervertebral Discs Enhances the Tie2-positive Progenitor Cell Population, Prevents Cell Death, and Induces a Proliferative Response. <i>Spine</i> , <b>2019</b> , 44, 1613-1622	3.3	14
150	A Stimuli-Responsive Nanocomposite for 3D Anisotropic Cell-Guidance and Magnetic Soft Robotics. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1804647	15.6	77
149	Articular fibrocartilage - Why does hyaline cartilage fail to repair?. <i>Advanced Drug Delivery Reviews</i> , <b>2019</b> , 146, 289-305	18.5	100
148	Chasing Chimeras - The elusive stable chondrogenic phenotype. <i>Biomaterials</i> , <b>2019</b> , 192, 199-225	15.6	22
147	Welcome to !. <i>JOR Spine</i> , <b>2018</b> , 1, e1009	3.7	
146	An intervertebral disc whole organ culture system to investigate proinflammatory and degenerative disc disease condition. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2018</b> , 12, e2051-e2061	4.4	26
145	With or without cells, that is the question!. <i>JOR Spine</i> , <b>2018</b> , 1, e1010	3.7	2
144	Mechanical loading of intervertebral disc modulates microglia proliferation, activation, and chemotaxis. <i>Osteoarthritis and Cartilage</i> , <b>2018</b> , 26, 978-987	6.2	23
143	Novel stepwise model of intervertebral disc degeneration with intact annulus fibrosus to test regeneration strategies. <i>Journal of Orthopaedic Research</i> , <b>2018</b> , 36, 2460-2468	3.8	9

142	A doxycycline inducible, adenoviral bone morphogenetic protein-2 gene delivery system to bone. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2018</b> , 12, e106-e118	4.4	12
141	Lessons to be learned and future directions for intervertebral disc biomaterials. <i>Acta Biomaterialia</i> , <b>2018</b> , 78, 13-22	10.8	27
140	Three-Dimensional Printing of a Tyramine Hyaluronan Derivative with Double Gelation Mechanism for Independent Tuning of Shear Thinning and Postprinting Curing. <i>ACS Biomaterials Science and Engineering</i> , <b>2018</b> , 4, 3088-3098	5.5	30
139	State of art and limitations in genetic engineering to induce stable chondrogenic phenotype. <i>Biotechnology Advances</i> , <b>2018</b> , 36, 1855-1869	17.8	13
138	Five Days Granulocyte Colony-Stimulating Factor Treatment Increases Bone Formation and Reduces Gap Size of a Rat Segmental Bone Defect: A Pilot Study. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2018</b> , 6, 5	5.8	10
137	Relevance of bioreactors and whole tissue cultures for the translation of new therapies to humans. <i>Journal of Orthopaedic Research</i> , <b>2018</b> , 36, 10-21	3.8	26
136	Mechanical stimulation of mesenchymal stem cells: Implications for cartilage tissue engineering. <i>Journal of Orthopaedic Research</i> , <b>2018</b> , 36, 52-63	3.8	95
135	Biomaterials for articular cartilage tissue engineering: Learning from biology. <i>Acta Biomaterialia</i> , <b>2018</b> , 65, 1-20	10.8	257
134	: A (first) year in review. <i>JOR Spine</i> , <b>2018</b> , 1, e1041	3.7	
133	Isolation of high-quality RNA from intervertebral disc tissue via pronase predigestion and tissue pulverization. <i>JOR Spine</i> , <b>2018</b> , 1, e1017	3.7	12
132	Future of spine research: "The Asian perspectives". <i>JOR Spine</i> , <b>2018</b> , 1, e1019	3.7	
131	Mechanically stimulated osteochondral organ culture for evaluation of biomaterials in cartilage repair studies. <i>Acta Biomaterialia</i> , <b>2018</b> , 81, 256-266	10.8	26
130	Improved Chondrogenic Differentiation of rAAV SOX9-Modified Human MSCs Seeded in Fibrin-Polyurethane Scaffolds in a Hydrodynamic Environment. <i>International Journal of Molecular Sciences</i> , <b>2018</b> , 19,	6.3	10
129	3D bioprinting of a hyaluronan bioink through enzymatic-and visible light-crosslinking. <i>Biofabrication</i> , <b>2018</b> , 10, 044104	10.5	74
128	Effects of Level, Loading Rate, Injury and Repair on Biomechanical Response of Ovine Cervical Intervertebral Discs. <i>Annals of Biomedical Engineering</i> , <b>2018</b> , 46, 1911-1920	4.7	8
127	The calcification potential of human MSCs can be enhanced by interleukin-1 $\beta$ in osteogenic medium. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2017</b> , 11, 564-571	4.4	16
126	Heterodimeric BMP-2/7 for nucleus pulposus regeneration-In vitro and ex vivo studies. <i>Journal of Orthopaedic Research</i> , <b>2017</b> , 35, 51-60	3.8	31
125	Surface-enrichment with hydroxyapatite nanoparticles in stereolithography-fabricated composite polymer scaffolds promotes bone repair. <i>Acta Biomaterialia</i> , <b>2017</b> , 54, 386-398	10.8	107

124	Fabrication of cell-compatible hyaluronan hydrogels with a wide range of biophysical properties through high tyramine functionalization. <i>Journal of Materials Chemistry B</i> , <b>2017</b> , 5, 2355-2363	7.3	12
123	Intervertebral disc response to stem cell treatment is conditioned by disc state and cell carrier: An study. <i>Journal of Orthopaedic Translation</i> , <b>2017</b> , 9, 43-51	4.2	12
122	Bioreactor mechanically guided 3D mesenchymal stem cell chondrogenesis using a biocompatible novel thermo-reversible methylcellulose-based hydrogel. <i>Scientific Reports</i> , <b>2017</b> , 7, 45018	4.9	62
121	Clinically relevant hydrogel-based on hyaluronic acid and platelet rich plasma as a carrier for mesenchymal stem cells: Rheological and biological characterization. <i>Journal of Orthopaedic Research</i> , <b>2017</b> , 35, 2109-2116	3.8	23
120	Injectable hyaluronic acid down-regulates interferon signaling molecules, IGFBP3 and IFIT3 in the bovine intervertebral disc. <i>Acta Biomaterialia</i> , <b>2017</b> , 52, 118-129	10.8	24
119	Ageing affects chondroitin sulfates and their synthetic enzymes in the intervertebral disc. <i>Signal Transduction and Targeted Therapy</i> , <b>2017</b> , 2, 17049	2.1	23
118	Hyaluronan supplementation as a mechanical regulator of cartilage tissue development under joint-kinematic-mimicking loading. <i>Journal of the Royal Society Interface</i> , <b>2017</b> , 14,	4.1	9
117	Self-Healing Dynamic Hydrogel as Injectable Shock-Absorbing Artificial Nucleus Pulposus. <i>Biomacromolecules</i> , <b>2017</b> , 18, 2360-2370	6.9	35
116	Joint mimicking mechanical load activates TGF $\beta$ 1 in fibrin-poly(ester-urethane) scaffolds seeded with mesenchymal stem cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2017</b> , 11, 2663-2668	4.4	33
115	Asymmetrical seeding of MSCs into fibrin-poly(ester-urethane) scaffolds and its effect on mechanically induced chondrogenesis. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , <b>2017</b> , 11, 2912-2921	4.4	50
114	Platelet-Rich Plasma as an Autologous and Proangiogenic Cell Delivery System. <i>Mediators of Inflammation</i> , <b>2017</b> , 2017, 1075975	4.3	11
113	An In Vitro Investigation of Platelet-Rich Plasma-Gel as a Cell and Growth Factor Delivery Vehicle for Tissue Engineering. <i>Tissue Engineering - Part C: Methods</i> , <b>2016</b> , 22, 49-58	2.9	47
112	Polyurethane scaffold with in situ swelling capacity for nucleus pulposus replacement. <i>Biomaterials</i> , <b>2016</b> , 84, 196-209	15.6	38
111	Systemic blood plasma CCL5 and CXCL6: Potential biomarkers for human lumbar disc degeneration. <i>European Cells and Materials</i> , <b>2016</b> , 31, 1-10	4.3	30
110	Differences in human mesenchymal stem cell secretomes during chondrogenic induction. <i>European Cells and Materials</i> , <b>2016</b> , 31, 221-35	4.3	25
109	Pericyte plasticity - comparative investigation of the angiogenic and multilineage potential of pericytes from different human tissues. <i>European Cells and Materials</i> , <b>2016</b> , 31, 236-49	4.3	27
108	A surprisingly poor correlation between in vitro and in vivo testing of biomaterials for bone regeneration: results of a multicentre analysis. <i>European Cells and Materials</i> , <b>2016</b> , 31, 312-22	4.3	66
107	Tissue engineering and regenerative approaches to improving the healing of large bone defects. <i>European Cells and Materials</i> , <b>2016</b> , 32, 87-110	4.3	59

106	Platelet Rich Plasma and Hyaluronic Acid Blend for the Treatment of Osteoarthritis: Rheological and Biological Evaluation. <i>PLoS ONE</i> , <b>2016</b> , 11, e0157048	3.7	47
105	CD146 defines commitment of cultured annulus fibrosus cells to express a contractile phenotype. <i>Journal of Orthopaedic Research</i> , <b>2016</b> , 34, 1361-72	3.8	25
104	Unique glycosignature for intervertebral disc and articular cartilage cells and tissues in immaturity and maturity. <i>Scientific Reports</i> , <b>2016</b> , 6, 23062	4.9	13
103	Monitoring live human mesenchymal stromal cell differentiation and subsequent selection using fluorescent RNA-based probes. <i>Scientific Reports</i> , <b>2016</b> , 6, 26014	4.9	13
102	Development of an ex vivo cavity model to study repair strategies in loaded intervertebral discs. <i>European Spine Journal</i> , <b>2016</b> , 25, 2898-908	2.7	20
101	Microfabrication of Photo-Cross-Linked Hyaluronan Hydrogels by Single- and Two-Photon Tyramine Oxidation. <i>Biomacromolecules</i> , <b>2015</b> , 16, 2624-30	6.9	36
100	Migration of bone marrow-derived cells for endogenous repair in a new tail-looping disc degeneration model in the mouse: a pilot study. <i>Spine Journal</i> , <b>2015</b> , 15, 1356-65	4	42
99	Induction of Osteogenic Differentiation in Human Mesenchymal Stem Cells by Crosstalk with Osteoblasts. <i>BioResearch Open Access</i> , <b>2015</b> , 4, 121-30	2.4	18
98	In vitro osteogenic potential of human mesenchymal stem cells is predicted by Runx2/Sox9 ratio. <i>Tissue Engineering - Part A</i> , <b>2015</b> , 21, 115-23	3.9	54
97	A combined biomaterial and cellular approach for annulus fibrosus rupture repair. <i>Biomaterials</i> , <b>2015</b> , 42, 11-9	15.6	70
96	Cells and secretome--towards endogenous cell re-activation for cartilage repair. <i>Advanced Drug Delivery Reviews</i> , <b>2015</b> , 84, 135-45	18.5	27
95	Precise tailoring of tyramine-based hyaluronan hydrogel properties using DMTMM conjugation. <i>Carbohydrate Polymers</i> , <b>2015</b> , 115, 325-33	10.3	42
94	Local drug delivery for enhancing fracture healing in osteoporotic bone. <i>Acta Biomaterialia</i> , <b>2015</b> , 11, 412-34	10.8	116
93	Gene Expression Profiling Identifies Interferon Signalling Molecules and IGFBP3 in Human Degenerative Annulus Fibrosus. <i>Scientific Reports</i> , <b>2015</b> , 5, 15662	4.9	32
92	Injectable Hyaluronan Hydrogels with Peptide-Binding Dendrimers Modulate the Controlled Release of BMP-2 and TGF- $\beta$ . <i>Macromolecular Bioscience</i> , <b>2015</b> , 15, 1035-44	5.5	21
91	Strategies to Stimulate Mobilization and Homing of Endogenous Stem and Progenitor Cells for Bone Tissue Repair. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2015</b> , 3, 79	5.8	62
90	Human Articular Cartilage Progenitor Cells Are Responsive to Mechanical Stimulation and Adenoviral-Mediated Overexpression of Bone-Morphogenetic Protein 2. <i>PLoS ONE</i> , <b>2015</b> , 10, e0136229	3.7	30
89	Endothelial Progenitor Cell Fraction Contained in Bone Marrow-Derived Mesenchymal Stem Cell Populations Impairs Osteogenic Differentiation. <i>BioMed Research International</i> , <b>2015</b> , 2015, 659542	3	8

88	A Nucleotomy Model with Intact Annulus Fibrosus to Test Intervertebral Disc Regeneration Strategies. <i>Tissue Engineering - Part C: Methods</i> , <b>2015</b> , 21, 1117-24	2.9	20
87	Potential and limitations of intervertebral disc endogenous repair. <i>Current Stem Cell Research and Therapy</i> , <b>2015</b> , 10, 329-38	3.6	26
86	Mesenchymal Stem Cells Derived from Human Bone Marrow. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1340, 41-52	1.4	36
85	Platelet-rich plasma induces annulus fibrosus cell proliferation and matrix production. <i>European Spine Journal</i> , <b>2014</b> , 23, 745-53	2.7	31
84	Concise review: Bone marrow-derived mesenchymal stem cells change phenotype following in vitro culture: implications for basic research and the clinic. <i>Stem Cells</i> , <b>2014</b> , 32, 1713-23	5.8	229
83	Deciphering mechanical regulation of chondrogenesis in fibrin-polyurethane composite scaffolds enriched with human mesenchymal stem cells: a dual computational and experimental approach. <i>Tissue Engineering - Part A</i> , <b>2014</b> , 20, 1197-212	3.9	12
82	Multivalent dendrimers presenting spatially controlled clusters of binding epitopes in thermoresponsive hyaluronan hydrogels. <i>Acta Biomaterialia</i> , <b>2014</b> , 10, 4340-50	10.8	21
81	The effect of hyaluronan-based delivery of stromal cell-derived factor-1 on the recruitment of MSCs in degenerating intervertebral discs. <i>Biomaterials</i> , <b>2014</b> , 35, 8144-53	15.6	59
80	Biodegradable electrospun scaffolds for annulus fibrosus tissue engineering: effect of scaffold structure and composition on annulus fibrosus cells in vitro. <i>Tissue Engineering - Part A</i> , <b>2014</b> , 20, 672-82	3.9	23
79	Biomimetic fibrin-hyaluronan hydrogels for nucleus pulposus regeneration. <i>Regenerative Medicine</i> , <b>2014</b> , 9, 309-26	2.5	35
78	Direct cell-cell contact between mesenchymal stem cells and endothelial progenitor cells induces a pericyte-like phenotype in vitro. <i>BioMed Research International</i> , <b>2014</b> , 2014, 395781	3	62
77	Influence of extremely low frequency, low energy electromagnetic fields and combined mechanical stimulation on chondrocytes in 3-D constructs for cartilage tissue engineering. <i>Bioelectromagnetics</i> , <b>2014</b> , 35, 116-28	1.6	24
76	CD34/CD133 enriched bone marrow progenitor cells promote neovascularization of tissue engineered constructs in vivo. <i>Stem Cell Research</i> , <b>2014</b> , 13, 465-77	1.6	45
75	Chondrogenic differentiation of human bone marrow-derived mesenchymal stem cells in a simulated osteochondral environment is hydrogel dependent. <i>European Cells and Materials</i> , <b>2014</b> , 27, 112-23; discussion 123	4.3	29
74	CCL5/RANTES is a key chemoattractant released by degenerative intervertebral discs in organ culture. <i>European Cells and Materials</i> , <b>2014</b> , 27, 124-36; discussion 136	4.3	58
73	Enhancing inflammatory and chemotactic signals to regulate bone regeneration. <i>European Cells and Materials</i> , <b>2014</b> , 28, 320-34	4.3	26
72	Chondrogenesis of human bone marrow-derived mesenchymal stem cells is modulated by complex mechanical stimulation and adenoviral-mediated overexpression of bone morphogenetic protein 2. <i>Tissue Engineering - Part A</i> , <b>2013</b> , 19, 1285-94	3.9	40
71	Thermoreversible hyaluronan-based hydrogel supports in vitro and ex vivo disc-like differentiation of human mesenchymal stem cells. <i>Spine Journal</i> , <b>2013</b> , 13, 1627-39	4	70



70	Enhanced adenovirus transduction of hMSCs using 3D hydrogel cell carriers. <i>Molecular Biotechnology</i> , <b>2013</b> , 53, 207-16	3	26
69	Bioreactor-Induced Chondrocyte Maturation Is Dependent on Cell Passage and Onset of Loading. <i>Cartilage</i> , <b>2013</b> , 4, 165-76	3	19
68	The transpedicular approach as an alternative route for intervertebral disc regeneration. <i>Spine</i> , <b>2013</b> , 38, E319-24	3.3	38
67	Chondrogenesis of mesenchymal stem cells for cartilage tissue engineering. <i>Histology and Histopathology</i> , <b>2013</b> , 28, 23-42	1.4	32
66	Challenges and strategies in the repair of ruptured annulus fibrosus. <i>European Cells and Materials</i> , <b>2013</b> , 25, 1-21	4.3	148
65	Tissue engineering for articular cartilage repair--the state of the art. <i>European Cells and Materials</i> , <b>2013</b> , 25, 248-67	4.3	258
64	Sliding motion modulates stiffness and friction coefficient at the surface of tissue engineered cartilage. <i>Osteoarthritis and Cartilage</i> , <b>2012</b> , 20, 288-95	6.2	49
63	Exhaustion of nucleus pulposus progenitor cells with ageing and degeneration of the intervertebral disc. <i>Nature Communications</i> , <b>2012</b> , 3, 1264	17.4	267
62	Diversity of intervertebral disc cells: phenotype and function. <i>Journal of Anatomy</i> , <b>2012</b> , 221, 480-96	2.9	182
61	Single step synthesis and characterization of thermoresponsive hyaluronan hydrogels. <i>Carbohydrate Polymers</i> , <b>2012</b> , 90, 1378-85	10.3	50
60	Injectable thermoreversible hyaluronan-based hydrogels for nucleus pulposus cell encapsulation. <i>European Spine Journal</i> , <b>2012</b> , 21 Suppl 6, S839-49	2.7	75
59	Homing of mesenchymal stem cells in induced degenerative intervertebral discs in a whole organ culture system. <i>Spine</i> , <b>2012</b> , 37, 1865-73	3.3	71
58	Differential response of human bone marrow stromal cells to either TGF- $\beta$ 1 or rhGDF-5. <i>European Spine Journal</i> , <b>2011</b> , 20, 962-71	2.7	56
57	An injectable vehicle for nucleus pulposus cell-based therapy. <i>Biomaterials</i> , <b>2011</b> , 32, 2862-70	15.6	161
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