

# Arnold Caplan

## List of Publications by Citations

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369  
papers

48,386  
citations

97  
h-index

217  
g-index

384  
ext. papers

52,282  
ext. citations

5.2  
avg, IF

8.13  
L-index

#	Paper	IF	Citations
369	Mesenchymal stem cells. <i>Journal of Orthopaedic Research</i> , <b>1991</b> , 9, 641-50	3.8	3534
368	Mesenchymal stem cells as trophic mediators. <i>Journal of Cellular Biochemistry</i> , <b>2006</b> , 98, 1076-84	4.7	2261
367	In vitro chondrogenesis of bone marrow-derived mesenchymal progenitor cells. <i>Experimental Cell Research</i> , <b>1998</b> , 238, 265-72	4.2	1965
366	Osteogenic differentiation of purified, culture-expanded human mesenchymal stem cells in vitro. <i>Journal of Cellular Biochemistry</i> , <b>1997</b> , 64, 295-312	4.7	1748
365	Adult mesenchymal stem cells for tissue engineering versus regenerative medicine. <i>Journal of Cellular Physiology</i> , <b>2007</b> , 213, 341-7	7	1538
364	The MSC: an injury drugstore. <i>Cell Stem Cell</i> , <b>2011</b> , 9, 11-5	18	1146
363	Mechanisms involved in the therapeutic properties of mesenchymal stem cells. <i>Cytokine and Growth Factor Reviews</i> , <b>2009</b> , 20, 419-27	17.9	1056
362	Rapid hematopoietic recovery after coinfusion of autologous-blood stem cells and culture-expanded marrow mesenchymal stem cells in advanced breast cancer patients receiving high-dose chemotherapy. <i>Journal of Clinical Oncology</i> , <b>2000</b> , 18, 307-16	2.2	956
361	Myogenic cells derived from rat bone marrow mesenchymal stem cells exposed to 5-azacytidine. <i>Muscle and Nerve</i> , <b>1995</b> , 18, 1417-26	3.4	922
360	Mesenchymal stem cells: building blocks for molecular medicine in the 21st century. <i>Trends in Molecular Medicine</i> , <b>2001</b> , 7, 259-64	11.5	901
359	Why are MSCs therapeutic? New data: new insight. <i>Journal of Pathology</i> , <b>2009</b> , 217, 318-24	9.4	895
358	A new human somatic stem cell from placental cord blood with intrinsic pluripotent differentiation potential. <i>Journal of Experimental Medicine</i> , <b>2004</b> , 200, 123-35	16.6	878
357	In search of the in vivo identity of mesenchymal stem cells. <i>Stem Cells</i> , <b>2008</b> , 26, 2287-99	5.8	838
356	Mesenchymal stem cells: environmentally responsive therapeutics for regenerative medicine. <i>Experimental and Molecular Medicine</i> , <b>2013</b> , 45, e54	12.8	767
355	The dynamic in vivo distribution of bone marrow-derived mesenchymal stem cells after infusion. <i>Cells Tissues Organs</i> , <b>2001</b> , 169, 12-20	2.1	759
354	The chondrogenic potential of human bone-marrow-derived mesenchymal progenitor cells. <i>Journal of Bone and Joint Surgery - Series A</i> , <b>1998</b> , 80, 1745-57	5.6	666
353	Mesenchymal stem cells in bone development, bone repair, and skeletal regeneration therapy. <i>Journal of Cellular Biochemistry</i> , <b>1994</b> , 56, 283-94	4.7	663

352	Review: mesenchymal stem cells: cell-based reconstructive therapy in orthopedics. <i>Tissue Engineering</i> , <b>2005</b> , 11, 1198-211		643
351	Sulfated proteoglycans in astroglial barriers inhibit neurite outgrowth in vitro. <i>Experimental Neurology</i> , <b>1990</b> , 109, 111-30	5.7	641
350	Mesenchymal stem cells: mechanisms of inflammation. <i>Annual Review of Pathology: Mechanisms of Disease</i> , <b>2011</b> , 6, 457-78	34	606
349	Use of mesenchymal stem cells in a collagen matrix for Achilles tendon repair. <i>Journal of Orthopaedic Research</i> , <b>1998</b> , 16, 406-13	3.8	602
348	All MSCs are pericytes?. <i>Cell Stem Cell</i> , <b>2008</b> , 3, 229-30	18	572
347	Mesenchymal stem cell perspective: cell biology to clinical progress. <i>Npj Regenerative Medicine</i> , <b>2019</b> , 4, 22	15.8	532
346	Mesenchymal Stem Cells: Time to Change the Name!. <i>Stem Cells Translational Medicine</i> , <b>2017</b> , 6, 1445-1461		517
345	The Mesengenic Process. <i>Clinics in Plastic Surgery</i> , <b>1994</b> , 21, 429-435	3	494
344	Cytokine expression by human marrow-derived mesenchymal progenitor cells in vitro: effects of dexamethasone and IL-1 alpha. <i>Journal of Cellular Physiology</i> , <b>1996</b> , 166, 585-92	7	492
343	Stem cell technology and bioceramics: from cell to gene engineering. <i>Journal of Biomedical Materials Research Part B</i> , <b>1999</b> , 48, 913-27		454
342	Autologous mesenchymal stem cell-mediated repair of tendon. <i>Tissue Engineering</i> , <b>1999</b> , 5, 267-77		449
341	Human bone marrow-derived mesenchymal stem cells induce Th2-polarized immune response and promote endogenous repair in animal models of multiple sclerosis. <i>Glia</i> , <b>2009</b> , 57, 1192-203	9	418
340	FGF-2 enhances the mitotic and chondrogenic potentials of human adult bone marrow-derived mesenchymal stem cells. <i>Journal of Cellular Physiology</i> , <b>2005</b> , 203, 398-409	7	395
339	Cultivation of rat marrow-derived mesenchymal stem cells in reduced oxygen tension: effects on in vitro and in vivo osteochondrogenesis. <i>Journal of Cellular Physiology</i> , <b>2001</b> , 187, 345-55	7	346
338	Fibroblast heterogeneity: more than skin deep. <i>Journal of Cell Science</i> , <b>2004</b> , 117, 667-75	5.3	342
337	Isolation and characterization of a population of immature dental pulp stem cells expressing OCT-4 and other embryonic stem cell markers. <i>Cells Tissues Organs</i> , <b>2006</b> , 184, 105-16	2.1	331
336	Hyaluronic acid-based polymers as cell carriers for tissue-engineered repair of bone and cartilage. <i>Journal of Orthopaedic Research</i> , <b>1999</b> , 17, 205-13	3.8	331
335	A quadripotential mesenchymal progenitor cell isolated from the marrow of an adult mouse. <i>Journal of Bone and Mineral Research</i> , <b>1999</b> , 14, 700-9	6.3	325

334	Repair of bone defects with marrow cells and porous ceramic. Experiments in rats. <i>Acta Orthopaedica</i> , <b>1989</b> , 60, 334-9		310
333	Hepatocyte growth factor mediates mesenchymal stem cell-induced recovery in multiple sclerosis models. <i>Nature Neuroscience</i> , <b>2012</b> , 15, 862-70	25.5	304
332	Stimulatory effects of basic fibroblast growth factor and bone morphogenetic protein-2 on osteogenic differentiation of rat bone marrow-derived mesenchymal stem cells. <i>Journal of Bone and Mineral Research</i> , <b>1997</b> , 12, 1606-14	6.3	304
331	Heterotopic osteogenesis in porous ceramics induced by marrow cells. <i>Journal of Orthopaedic Research</i> , <b>1989</b> , 7, 568-78	3.8	296
330	Injectable biodegradable hydrogel composites for rabbit marrow mesenchymal stem cell and growth factor delivery for cartilage tissue engineering. <i>Biomaterials</i> , <b>2007</b> , 28, 3217-27	15.6	295
329	Mesenchymal stem cells in tissue repair. <i>Frontiers in Immunology</i> , <b>2013</b> , 4, 201	8.4	287
328	A point mutation in KINDLIN3 ablates activation of three integrin subfamilies in humans. <i>Nature Medicine</i> , <b>2009</b> , 15, 313-8	50.5	281
327	The STRO-1+ marrow cell population is multipotential. <i>Cells Tissues Organs</i> , <b>2002</b> , 170, 73-82	2.1	273
326	MSCs: Delivery Routes and Engraftment, Cell-Targeting Strategies, and Immune Modulation. <i>Stem Cells International</i> , <b>2013</b> , 2013, 732742	5	271
325	A chemically defined medium supports in vitro proliferation and maintains the osteochondral potential of rat marrow-derived mesenchymal stem cells. <i>Experimental Cell Research</i> , <b>1995</b> , 219, 211-22	4.2	264
324	Effect of swelling ratio of injectable hydrogel composites on chondrogenic differentiation of encapsulated rabbit marrow mesenchymal stem cells in vitro. <i>Biomacromolecules</i> , <b>2009</b> , 10, 541-6	6.9	256
323	Tissue-engineered fabrication of an osteochondral composite graft using rat bone marrow-derived mesenchymal stem cells. <i>Tissue Engineering</i> , <b>2001</b> , 7, 363-71		241
322	Osteogenesis in marrow-derived mesenchymal cell porous ceramic composites transplanted subcutaneously: effect of fibronectin and laminin on cell retention and rate of osteogenic expression. <i>Cell Transplantation</i> , <b>1992</b> , 1, 23-32	4	241
321	Human and animal mesenchymal progenitor cells from bone marrow: Identification of serum for optimal selection and proliferation. <i>In Vitro Cellular and Developmental Biology - Animal</i> , <b>1996</b> , 32, 602-611 <sup>6</sup>		220
320	Bone marrow-derived mesenchymal stem cells remain host-derived despite successful hematopoietic engraftment after allogeneic transplantation in patients with lysosomal and peroxisomal storage diseases. <i>Experimental Hematology</i> , <b>1999</b> , 27, 1675-81	3.1	218
319	Repair of large full-thickness articular cartilage defects with allograft articular chondrocytes embedded in a collagen gel. <i>Tissue Engineering</i> , <b>1998</b> , 4, 429-44		217
318	Culture-expanded human periosteal-derived cells exhibit osteochondral potential in vivo. <i>Journal of Orthopaedic Research</i> , <b>1991</b> , 9, 465-76	3.8	213
317	Chondrogenic differentiation of mesenchymal stem cells: challenges and unfulfilled expectations. <i>Tissue Engineering - Part B: Reviews</i> , <b>2014</b> , 20, 596-608	7.9	205

316	PDGF in bone formation and regeneration: new insights into a novel mechanism involving MSCs. <i>Journal of Orthopaedic Research</i> , <b>2011</b> , 29, 1795-803	3.8	200
315	Chondrogenesis of adult stem cells from adipose tissue and bone marrow: induction by growth factors and cartilage-derived matrix. <i>Tissue Engineering - Part A</i> , <b>2010</b> , 16, 523-33	3.9	196
314	Bioreactors mediate the effectiveness of tissue engineering scaffolds. <i>FASEB Journal</i> , <b>2002</b> , 16, 1691-4	0.9	189
313	Effects of initial seeding density and fluid perfusion rate on formation of tissue-engineered bone. <i>Tissue Engineering - Part A</i> , <b>2008</b> , 14, 1809-20	3.9	186
312	Marrow cell induced osteogenesis in porous hydroxyapatite and tricalcium phosphate: a comparative histomorphometric study of ectopic bone formation. <i>Journal of Biomedical Materials Research Part B</i> , <b>1990</b> , 24, 1563-70		183
311	In vitro differentiation of bone and hypertrophic cartilage from periosteal-derived cells. <i>Experimental Cell Research</i> , <b>1991</b> , 195, 492-503	4.2	180
310	Hyaluronan-based polymers in the treatment of osteochondral defects. <i>Journal of Orthopaedic Research</i> , <b>2000</b> , 18, 773-80	3.8	177
309	Exploring the Trans-Cleavage Activity of CRISPR-Cas12a (cpf1) for the Development of a Universal Electrochemical Biosensor. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 17399-17405	16.4	176
308	Cancer stem cells: targeting the roots of cancer, seeds of metastasis, and sources of therapy resistance. <i>Cancer Research</i> , <b>2015</b> , 75, 924-9	10.1	169
307	Repair of osteochondral defects with hyaluronan- and polyester-based scaffolds. <i>Osteoarthritis and Cartilage</i> , <b>2005</b> , 13, 297-309	6.2	157
306	Isolation of human marrow-derived mesenchymal stem cells. <i>Experimental Hematology</i> , <b>2006</b> , 34, 1604-53	1	154
305	Adult stem cell driven genesis of human-shaped articular condyle. <i>Annals of Biomedical Engineering</i> , <b>2004</b> , 32, 911-23	4.7	153
304	Chondroprogenitor cells of synovial tissue. <i>Arthritis and Rheumatism</i> , <b>1999</b> , 42, 2631-7		153
303	Human mesenchymal stem cells suppress chronic airway inflammation in the murine ovalbumin asthma model. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , <b>2010</b> , 299, L760-70	5.8	150
302	LacZ and interleukin-3 expression in vivo after retroviral transduction of marrow-derived human osteogenic mesenchymal progenitors. <i>Human Gene Therapy</i> , <b>1997</b> , 8, 1417-27	4.8	150
301	Treatment of osteochondral defects with autologous bone marrow in a hyaluronan-based delivery vehicle. <i>Tissue Engineering</i> , <b>2002</b> , 8, 333-47		150
300	Fibroblast growth factor-2 enhances proliferation and delays loss of chondrogenic potential in human adult bone-marrow-derived mesenchymal stem cells. <i>Tissue Engineering - Part A</i> , <b>2010</b> , 16, 1009-19	3.9	149
299	BMP-2 induction and TGF-beta 1 modulation of rat periosteal cell chondrogenesis. <i>Journal of Cellular Biochemistry</i> , <b>2001</b> , 81, 284-94	4.7	147

298	Optimizing mesenchymal stem cell-based therapeutics. <i>Current Opinion in Biotechnology</i> , <b>2009</b> , 20, 531-61.4	11.4	141
297	Biomineralization and eggshells: cell-mediated acellular compartments of mineralized extracellular matrix. <i>International Review of Cytology</i> , <b>1993</b> , 145, 217-50		141
296	Fibroblasts-a diverse population at the center of it all. <i>International Review of Cell and Molecular Biology</i> , <b>2009</b> , 276, 161-214	6	140
295	Articular cartilage repair. Rabbit experiments with a collagen gel-biomatrix and chondrocytes cultured in it. <i>Acta Orthopaedica</i> , <b>1998</b> , 69, 56-62		140
294	Osteochondrogenic potential of marrow mesenchymal progenitor cells exposed to TGF-beta 1 or PDGF-BB as assayed in vivo and in vitro. <i>Journal of Bone and Mineral Research</i> , <b>1996</b> , 11, 1264-73	6.3	132
293	The effects of crosslinking of scaffolds engineered from cartilage ECM on the chondrogenic differentiation of MSCs. <i>Biomaterials</i> , <b>2013</b> , 34, 5802-12	15.6	130
292	Repair of osteochondral defect with tissue-engineered two-phase composite material of injectable calcium phosphate and hyaluronan sponge. <i>Tissue Engineering</i> , <b>2002</b> , 8, 827-37		129
291	Adult Mesenchymal Stem Cells: When, Where, and How. <i>Stem Cells International</i> , <b>2015</b> , 2015, 628767	5	128
290	Immunochemical and mechanical characterization of cartilage subtypes in rabbit. <i>Journal of Histochemistry and Cytochemistry</i> , <b>2002</b> , 50, 1049-58	3.4	128
289	Human bone marrow-derived mesenchymal (stromal) progenitor cells (MPCs) cannot be recovered from peripheral blood progenitor cell collections. <i>Stem Cells and Development</i> , <b>1997</b> , 6, 447-55		127
288	Osteogenic potential of culture-expanded rat marrow cells as assayed in vivo with porous calcium phosphate ceramic. <i>Biomaterials</i> , <b>1991</b> , 12, 253-8	15.6	125
287	Influence of adult mesenchymal stem cells on in vitro vascular formation. <i>Tissue Engineering - Part A</i> , <b>2009</b> , 15, 1751-61	3.9	123
286	Osteogenesis in cultures of limb mesenchymal cells. <i>Developmental Biology</i> , <b>1979</b> , 73, 84-102	3.1	123
285	Collagens of the chicken eggshell membranes. <i>Connective Tissue Research</i> , <b>1991</b> , 26, 37-45	3.3	120
284	What's in a name?. <i>Tissue Engineering - Part A</i> , <b>2010</b> , 16, 2415-7	3.9	114
283	Cartilage regeneration using principles of tissue engineering. <i>Clinical Orthopaedics and Related Research</i> , <b>2001</b> , S161-70	2.2	111
282	Hyaluronic acid bonded to cell culture surfaces inhibits the program of myogenesis. <i>Developmental Biology</i> , <b>1986</b> , 113, 10-6	3.1	104
281	Isolation of rat marrow-derived mesenchymal stem cells. <i>Experimental Hematology</i> , <b>2006</b> , 34, 1606-7	3.1	103

280	Age-related changes in the proteoglycans of human skin. <i>Archives of Biochemistry and Biophysics</i> , <b>2000</b> , 373, 91-101	4.1	103
279	Tissue engineering designs for the future: new logics, old molecules. <i>Tissue Engineering</i> , <b>2000</b> , 6, 1-8		103
278	MSCs: The Sentinel and Safe-Guards of Injury. <i>Journal of Cellular Physiology</i> , <b>2016</b> , 231, 1413-6	7	103
277	Myogenic Expression of Mesenchymal Stem Cells within Myotubes of mdx Mice in Vitro and in Vivo. <i>Tissue Engineering</i> , <b>1995</b> , 1, 327-43		102
276	Umbilical cord mesenchymal stem cells for COVID-19 acute respiratory distress syndrome: A double-blind, phase 1/2a, randomized controlled trial. <i>Stem Cells Translational Medicine</i> , <b>2021</b> , 10, 660-673	6.9	102
275	Ion-induced ultrastructural transformations in isolated mitochondria. The energized uptake of calcium. <i>Journal of Cell Biology</i> , <b>1969</b> , 42, 221-34	7.3	101
274	Stem cells in dental pulp of deciduous teeth. <i>Tissue Engineering - Part B: Reviews</i> , <b>2012</b> , 18, 129-38	7.9	98
273	Meniscus regeneration in a rabbit partial meniscectomy model. <i>Tissue Engineering</i> , <b>1999</b> , 5, 327-37		93
272	Human bone marrow stromal cells express an osteoblastic phenotype in culture. <i>In Vitro Cellular &amp; Developmental Biology</i> , <b>1993</b> , 29A, 699-707		92
271	Hyaluronic acid bonded to cell-culture surfaces stimulates chondrogenesis in stage 24 limb mesenchyme cell cultures. <i>Developmental Biology</i> , <b>1986</b> , 114, 504-18	3.1	92
270	A self-assembled fibroblast-endothelial cell co-culture system that supports in vitro vasculogenesis by both human umbilical vein endothelial cells and human dermal microvascular endothelial cells. <i>Cells Tissues Organs</i> , <b>2007</b> , 186, 157-68	2.1	91
269	Effect of dual growth factor delivery on chondrogenic differentiation of rabbit marrow mesenchymal stem cells encapsulated in injectable hydrogel composites. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2009</b> , 88, 889-97	5.4	90
268	In vitro generation of mechanically functional cartilage grafts based on adult human stem cells and 3D-woven poly(epsilon-caprolactone) scaffolds. <i>Biomaterials</i> , <b>2010</b> , 31, 2193-200	15.6	90
267	New era of cell-based orthopedic therapies. <i>Tissue Engineering - Part B: Reviews</i> , <b>2009</b> , 15, 195-200	7.9	89
266	New MSC: MSCs as pericytes are Sentinels and gatekeepers. <i>Journal of Orthopaedic Research</i> , <b>2017</b> , 35, 1151-1159	3.8	88
265	Sequential exposure to fibroblast growth factors (FGF) 2, 9 and 18 enhances hMSC chondrogenic differentiation. <i>Osteoarthritis and Cartilage</i> , <b>2015</b> , 23, 443-53	6.2	87
264	Isolated osteoclasts and their presumed progenitor cells, the monocyte, in culture. <i>The Journal of Experimental Zoology</i> , <b>1982</b> , 224, 331-44		85
263	Antimicrobial Properties of Mesenchymal Stem Cells: Therapeutic Potential for Cystic Fibrosis Infection, and Treatment. <i>Stem Cells International</i> , <b>2016</b> , 2016, 5303048	5	85



262	Topical delivery of mesenchymal stem cells and their function in wounds. <i>Stem Cell Research and Therapy</i> , <b>2010</b> , 1, 30	8.3	83
261	A rapid seeding technique for the assembly of large cell/scaffold composite constructs. <i>Tissue Engineering</i> , <b>2006</b> , 12, 1851-63		83
260	Principles of tissue engineered regeneration of skeletal tissues. <i>Clinical Orthopaedics and Related Research</i> , <b>1999</b> , S12-6	2.2	83
259	Hyaluronan-based polymer scaffold modulates the expression of inflammatory and degradative factors in mesenchymal stem cells: Involvement of Cd44 and Cd54. <i>Journal of Cellular Physiology</i> , <b>2006</b> , 207, 364-73	7	82
258	MSC frequency correlates with blood vessel density in equine adipose tissue. <i>Tissue Engineering - Part A</i> , <b>2009</b> , 15, 221-9	3.9	81
257	Cartilage. <i>Scientific American</i> , <b>1984</b> , 251, 84-7, 90-4	0.5	81
256	Mesenchymal stem cells and gene therapy. <i>Clinical Orthopaedics and Related Research</i> , <b>2000</b> , S67-70	2.2	80
255	Biochemical and ultrastructural properties of osmotically lysed rat-liver mitochondria. <i>Journal of Cell Biology</i> , <b>1966</b> , 31, 455-72	7.3	80
254	Human mesenchymal stem cells signals regulate neural stem cell fate. <i>Neurochemical Research</i> , <b>2007</b> , 32, 353-62	4.6	78
253	Dilution of human mesenchymal stem cells with dermal fibroblasts and the effects on in vitro and in vivo osteochondrogenesis. <i>Developmental Dynamics</i> , <b>2000</b> , 219, 50-62	2.9	78
252	Microstructure of matrix and mineral components of eggshells from White Leghorn chickens ( <i>Gallus gallus</i> ). <i>Journal of Morphology</i> , <b>1996</b> , 228, 287-306	1.6	78
251	Substrate-bonded hyaluronic acid exhibits a size-dependent stimulation of chondrogenic differentiation of stage 24 limb mesenchymal cells in culture. <i>Developmental Biology</i> , <b>1986</b> , 114, 519-28	3.1	78
250	Partial biochemical and immunochemical characterization of avian eggshell extracellular matrices. <i>Archives of Biochemistry and Biophysics</i> , <b>1992</b> , 298, 293-302	4.1	77
249	Tissue engineering of autologous cartilage grafts in three-dimensional in vitro macroaggregate culture system. <i>Tissue Engineering</i> , <b>2004</b> , 10, 1695-706		76
248	The MSC curtain that stops the immune system. <i>Immunology Letters</i> , <b>2015</b> , 168, 136-9	4.1	75
247	Differentiation potential of conditionally immortalized mesenchymal progenitor cells from adult marrow of a H-2Kb-tsA58 transgenic mouse. <i>Journal of Cellular Physiology</i> , <b>1996</b> , 167, 523-38	7	74
246	Age-related changes in the proteoglycans of human skin. Specific cleavage of decorin to yield a major catabolic fragment in adult skin. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 17566-72	5.4	72
245	In vitro dexamethasone pretreatment enhances bone formation of human mesenchymal stem cells in vivo. <i>Journal of Orthopaedic Research</i> , <b>2009</b> , 27, 916-21	3.8	71



244	Scaling-up of dental pulp stem cells isolated from multiple niches. <i>PLoS ONE</i> , <b>2012</b> , 7, e39885	3.7	71
243	In Vivo Osteochondrogenic Potential of Cultured Cells Derived From the Periosteum. <i>Clinical Orthopaedics and Related Research</i> , <b>1990</b> , &NA;, 223-232	2.2	71
242	Chondrogenesis and mineralization during in vitro culture of human mesenchymal stem cells on three-dimensional woven scaffolds. <i>Tissue Engineering - Part A</i> , <b>2010</b> , 16, 3709-18	3.9	69
241	Targeted delivery of progenitor cells for cartilage repair. <i>Journal of Orthopaedic Research</i> , <b>2004</b> , 22, 735-48	3.8	69
240	Cell-based tissue engineering therapies: the influence of whole body physiology. <i>Advanced Drug Delivery Reviews</i> , <b>1998</b> , 33, 3-14	18.5	66
239	Marrow-derived progenitor cell injections enhance new bone formation during distraction. <i>Journal of Orthopaedic Research</i> , <b>1999</b> , 17, 900-8	3.8	66
238	Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a polyanhydride delivery vehicle. <i>Journal of Biomedical Materials Research Part B</i> , <b>1990</b> , 24, 901-11		65
237	Dermatan sulfate proteoglycans from the mineralized matrix of the avian eggshell. <i>Connective Tissue Research</i> , <b>1997</b> , 36, 175-93	3.3	63
236	In vivo osteogenesis assay: a rapid method for quantitative analysis. <i>Biomaterials</i> , <b>1998</b> , 19, 1323-8	15.6	63
235	Effect of age and sampling site on the chondro-osteogenic potential of rabbit marrow-derived mesenchymal progenitor cells. <i>Journal of Orthopaedic Research</i> , <b>2000</b> , 18, 18-24	3.8	63
234	High variability in rabbit bone marrow-derived mesenchymal cell preparations. <i>Cell Transplantation</i> , <b>1999</b> , 8, 511-9	4	61
233	Defining human mesenchymal stem cell efficacy in vivo. <i>Journal of Inflammation</i> , <b>2010</b> , 7, 51	6.7	58
232	First bone formation in the developing chick limb. <i>Developmental Biology</i> , <b>1981</b> , 86, 147-56	3.1	57
231	Mesenchymal Stem Cells Current Clinical Applications: A Systematic Review. <i>Archives of Medical Research</i> , <b>2021</b> , 52, 93-101	6.6	57
230	The avian eggshell extracellular matrix as a model for biomineralization. <i>Connective Tissue Research</i> , <b>1996</b> , 35, 325-9	3.3	55
229	Bone development and repair. <i>BioEssays</i> , <b>1987</b> , 6, 171-5	4.1	55
228	Mesenchymal stem cells regulate melanoma cancer cells extravasation to bone and liver at their perivascular niche. <i>International Journal of Cancer</i> , <b>2016</b> , 138, 417-27	7.5	54
227	Cartilage tissue engineering for laryngotracheal reconstruction: comparison of chondrocytes from three anatomic locations in the rabbit. <i>Tissue Engineering</i> , <b>2007</b> , 13, 843-53		53

226	Human dermal fibroblast subpopulations; differential interactions with vascular endothelial cells in coculture: nonsoluble factors in the extracellular matrix influence interactions. <i>Wound Repair and Regeneration</i> , <b>2008</b> , 16, 300-9	3.6	52
225	Structural domains in chondroitin sulfate identified by anti-chondroitin sulfate monoclonal antibodies. Immunosequencing of chondroitin sulfates. <i>Matrix Biology</i> , <b>1993</b> , 13, 351-61		52
224	The possible differentiation of osteogenic elements in vitro from chick limb mesodermal cells. I. Morphological evidence. <i>Developmental Biology</i> , <b>1976</b> , 52, 283-99	3.1	52
223	Bone morphogenetic protein 2 stimulates osteogenesis but does not affect chondrogenesis in osteochondrogenic differentiation of periosteum-derived cells. <i>Journal of Bone and Mineral Research</i> , <b>1994</b> , 9, 1195-204	6.3	51
222	Patterns of glycosaminoglycan/proteoglycan immunostaining in human skin during aging. <i>Journal of Investigative Dermatology</i> , <b>1991</b> , 96, 968-74	4.3	51
221	Platelet-Derived Growth Factor BB Enhances Osteogenesis of Adipose-Derived But Not Bone Marrow-Derived Mesenchymal Stromal/Stem Cells. <i>Stem Cells</i> , <b>2015</b> , 33, 2773-84	5.8	50
220	A simple method for stem cell labeling with fluorine 18. <i>Nuclear Medicine and Biology</i> , <b>2005</b> , 32, 701-5	2.1	50
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74	Breakout Session 2: Stem Cells for Gene Delivery. <i>Clinical Orthopaedics and Related Research</i> , <b>2000</b> , 379, S98-S100	2.2	4
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