

CITATION REPORT

List of articles citing

Bone tissue engineering using human mesenchymal stem cells: effects of scaffold material and medium flow

DOI: 10.1023/b:abme.00000007796.48329.b4

Annals of Biomedical Engineering, 2004, 32, 112-22.

Source: <https://exaly.com/paper-pdf/36902864/citation-report.pdf>

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
439	[In vitro long-term culture of human bone under physiological load conditions]. 2004 , 49, 364-7		
438	Bone engineering by controlled delivery of osteoinductive molecules and cells. 2004 , 4, 1015-27		54
437	Engineering cartilage-like tissue using human mesenchymal stem cells and silk protein scaffolds. 2004 , 88, 379-91		262
436	Engineering bone-like tissue in vitro using human bone marrow stem cells and silk scaffolds. 2004 , 71, 25-34		277
435	Bone morphogenetic protein-2 decorated silk fibroin films induce osteogenic differentiation of human bone marrow stromal cells. 2004 , 71, 528-37		258
434	Localized delivery of growth factors for bone repair. 2004 , 58, 197-208		275
433	Application of micro CT and computation modeling in bone tissue engineering. 2005 , 37, 1151-1161		110
432	The inflammatory responses to silk films in vitro and in vivo. 2005 , 26, 147-55		636
431	Osteogenic differentiation of mesenchymal stem cells in biodegradable sponges composed of gelatin and beta-tricalcium phosphate. 2005 , 26, 3587-96		264
430	In vitro cartilage tissue engineering with 3D porous aqueous-derived silk scaffolds and mesenchymal stem cells. 2005 , 26, 7082-94		376
429	Bioreactor cultivation of osteochondral grafts. 2005 , 8, 209-18		104
428	Characterization of nonexpanded mesenchymal progenitor cells from normal adult human bone marrow. 2005 , 33, 219-25		93
427	Microscopy analysis of bone marrow-derived osteoprogenitor cells cultured on hydrogel 3-D scaffold. 2005 , 66, 132-8		21
426	The healing of confined critical size cancellous defects in the presence of silk fibroin hydrogel. 2005 , 26, 3527-36		239
425	Alginate Microbeads as Potential Support for Cultivation of Bone Marrow Stromal Cells. 2005 , 494, 525-530		2
424	Perfusion culture enhances osteogenic differentiation of rat mesenchymal stem cells in collagen sponge reinforced with poly(glycolic Acid) fiber. <i>Tissue Engineering</i> , 2005 , 11, 1476-88		95
423	Adipose tissue-derived mesenchymal stem cells acquire bone cell-like responsiveness to fluid shear stress on osteogenic stimulation. <i>Tissue Engineering</i> , 2005 , 11, 1780-8		172

422	Processing Windows for Forming Silk Fibroin Biomaterials into a 3D Porous Matrix. 2005 , 58, 716	47
421	Silk implants for the healing of critical size bone defects. 2005 , 37, 688-98	371
420	Role of adult mesenchymal stem cells in bone tissue engineering applications: current status and future prospects. <i>Tissue Engineering</i> , 2005 , 11, 787-802	222
419	Effect of scaffold design on bone morphology in vitro. <i>Tissue Engineering</i> , 2006 , 12, 3417-29	117
418	Cartilage-like tissue engineering using silk scaffolds and mesenchymal stem cells. <i>Tissue Engineering</i> , 2006 , 12, 2729-38	159
417	RGD-functionalized bioengineered spider dragline silk biomaterial. 2006 , 7, 3139-45	170
416	Biocompatible Fibroin Blended Films with Recombinant Human-like Collagen for Hepatic Tissue Engineering. 2006 , 21, 23-37	61
415	Hydrogel-beta-TCP scaffolds and stem cells for tissue engineering bone. 2006 , 38, 555-63	152
414	Silk based biomaterials to heal critical sized femur defects. 2006 , 39, 922-31	190
413	Simulation of cell differentiation in fracture healing: mechanically loaded composite scaffolds in a novel bioreactor system. <i>Tissue Engineering</i> , 2006 , 12, 201-8	35
412	3D scaffolds for bone marrow stem cell support in bone repair. 2006 , 1, 519-28	40
411	Advanced tools for tissue engineering: scaffolds, bioreactors, and signaling. <i>Tissue Engineering</i> , 2006 , 12, 3285-305	223
410	Fibrous proteins and tissue engineering. 2006 , 9, 44-53	47
409	Osteogenesis by human mesenchymal stem cells cultured on silk biomaterials: comparison of adenovirus mediated gene transfer and protein delivery of BMP-2. 2006 , 27, 4993-5002	157
408	Stem cell-based tissue engineering with silk biomaterials. 2006 , 27, 6064-82	785
407	Metabolic changes in mesenchymal stem cells in osteogenic medium measured by autofluorescence spectroscopy. 2006 , 24, 1213-7	54
406	Basic fibroblast growth factor controls migration in human mesenchymal stem cells. 2006 , 24, 1750-8	191
405	Bone and cartilage tissue constructs grown using human bone marrow stromal cells, silk scaffolds and rotating bioreactors. 2006 , 27, 6138-49	157

404	Mesenchymal stem cells transmigrate over the endothelial barrier. 2006 , 85, 1179-88	87
403	Silk fibroin as an organic polymer for controlled drug delivery. 2006 , 111, 219-27	293
402	Engineering of osteoinductive grafts by isolation and expansion of ovine bone marrow stromal cells directly on 3D ceramic scaffolds. 2006 , 93, 181-7	53
401	Porous silk fibroin 3-D scaffolds for delivery of bone morphogenetic protein-2 in vitro and in vivo. 2006 , 78, 324-34	185
400	Substrate mineralization stimulates focal adhesion contact redistribution and cell motility of bone marrow stromal cells. 2006 , 79, 263-70	16
399	Chapter 3 Basic Technologies Developed for Tissue Engineering. 2006 , 8, 235-421	
398	Influence of in vitro cultivation on the integration of cell-matrix constructs after subcutaneous implantation. <i>Tissue Engineering</i> , 2007 , 13, 1059-67	24
397	Tissue engineering the mandibular condyle. <i>Tissue Engineering</i> , 2007 , 13, 1955-71	62
396	Mesenchymal stem cells induce endothelial activation via paracrine mechanisms. 2007 , 14, 53-63	32
395	Human shaped thumb bone tissue engineered by hydrogel-beta-tricalciumphosphate/poly-epsilon-caprolactone scaffolds and magnetically sorted stem cells. 2007 , 59, 46-52; discussion 52	8
394	Biodegradable Hydrogels. 2007 , 5-1-5-44	4
393	BMP-silk composite matrices heal critically sized femoral defects. 2007 , 41, 247-55	132
392	Bioreactors for tissues of the musculoskeletal system. 2006 , 585, 243-59	38
391	Altered membrane dynamics of quantum dot-conjugated integrins during osteogenic differentiation of human bone marrow derived progenitor cells. 2007 , 92, 1399-408	62
390	Natural origin biodegradable systems in tissue engineering and regenerative medicine: present status and some moving trends. 2007 , 4, 999-1030	843
389	Enhanced osteoblast-like cell adhesion and proliferation using sulfonate-bearing polymeric scaffolds. 2007 , 83, 990-998	15
388	Bone tissue engineering with human mesenchymal stem cell sheets constructed using magnetite nanoparticles and magnetic force. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2007 , 82, 471-80	3.5 111
387	Bone regeneration on macroporous aqueous-derived silk 3-D scaffolds. 2007 , 7, 643-55	118

386	Miscibility and biodegradability of silk fibroin/carboxymethyl chitin blend films. 2007 , 7, 1258-71	26
385	Control of in vitro tissue-engineered bone-like structures using human mesenchymal stem cells and porous silk scaffolds. 2007 , 28, 1152-62	270
384	Engineering adipose-like tissue in vitro and in vivo utilizing human bone marrow and adipose-derived mesenchymal stem cells with silk fibroin 3D scaffolds. 2007 , 28, 5280-90	309
383	Fabrication of nanocrystalline hydroxyapatite doped degradable composite hollow fiber for guided and biomimetic bone tissue engineering. 2007 , 27, 599-606	33
382	Silk as a Biomaterial. 2007 , 32, 991-1007	1842
381	Mesenchymal stem cells cultured on a collagen scaffold: In vitro osteogenic differentiation. 2007 , 52, 64-73	146
380	Osteogenic phenotypes and mineralization of cultured human periosteal-derived cells. 2007 , 52, 983-9	60
379	Osteogenic differentiation of human mesenchymal bone marrow cells in silk scaffolds is regulated by nitric oxide. 2007 , 1117, 367-76	34
378	Design of tissue engineering scaffolds as delivery devices for mechanical and mechanically modulated signals. <i>Tissue Engineering</i> , 2007 , 13, 2525-38	41
377	Flow perfusion improves seeding of tissue engineering scaffolds with different architectures. <i>Annals of Biomedical Engineering</i> , 2007 , 35, 429-42	4-7 94
376	Non-invasive time-lapsed monitoring and quantification of engineered bone-like tissue. <i>Annals of Biomedical Engineering</i> , 2007 , 35, 1657-67	4-7 43
375	Flow perfusion culture of human mesenchymal stem cells on silicate-substituted tricalcium phosphate scaffolds. 2008 , 29, 2616-27	100
374	3-D Nanofibrous electrospun multilayered construct is an alternative ECM mimicking scaffold. 2008 , 19, 1249-55	131
373	Skeletal tissue engineering using silk biomaterials. 2008 , 2, 71-80	91
372	Design of bioreactors for mesenchymal stem cell tissue engineering. 2008 , 83, 408-420	71
371	Development of a biodegradable scaffold with interconnected pores by heat fusion and its application to bone tissue engineering. 2008 , 84, 702-9	37
370	Effects of fluid flow and calcium phosphate coating on human bone marrow stromal cells cultured in a defined 2D model system. 2008 , 86, 411-9	52
369	Oscillatory perfusion seeding and culturing of osteoblast-like cells on porous beta-tricalcium phosphate scaffolds. 2008 , 86, 796-803	31

368	Effect of dynamic 3-D culture on proliferation, distribution, and osteogenic differentiation of human mesenchymal stem cells. 2009 , 89, 96-107		97
367	A review of materials, fabrication methods, and strategies used to enhance bone regeneration in engineered bone tissues. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008 , 85, 573-82	3.5	218
366	Growth and differentiation of alveolar bone cells in tissue-engineered constructs and monolayer cultures. 2008 , 100, 773-81		13
365	Primary cilia: cellular sensors for the skeleton. 2008 , 291, 1074-8		53
364	Combinatorial Polymer Scaffold Libraries for Screening Cell-Biomaterial Interactions in 3D. 2008 , 20, 2037-2043		60
363	In vivo degradation of three-dimensional silk fibroin scaffolds. 2008 , 29, 3415-28		573
362	Natural Polymers in tissue engineering applications. 2008 , 145-192		21
361	In vitro characterization of three-dimensional scaffolds seeded with human bone marrow stromal cells for tissue engineered growth of bone: mission impossible? A methodological approach. 2008 , 19, 379-86		13
360	Intrusion of teeth with class III furcation: a clinical, histologic and histometric study in dogs. 2008 , 35, 807-16		18
359	Effects of oxygen transport on 3-d human mesenchymal stem cell metabolic activity in perfusion and static cultures: experiments and mathematical model. 2005 , 21, 1269-80		100
358	Insulin-like growth factor I releasing silk fibroin scaffolds induce chondrogenic differentiation of human mesenchymal stem cells. 2008 , 127, 12-21		176
357	Engineering custom-designed osteochondral tissue grafts. 2008 , 26, 181-9		118
356	Effects of chondrogenic and osteogenic regulatory factors on composite constructs grown using human mesenchymal stem cells, silk scaffolds and bioreactors. 2008 , 5, 929-39		51
355	In vitro secreting profile of human mesenchymal stem cells. 2008 , 17, 199-206		172
354	The interactions between brain microvascular endothelial cells and mesenchymal stem cells under hypoxic conditions. 2008 , 75, 59-67		26
353	Vascular endothelial growth factor expression in cultured periosteal-derived cells. 2008 , 105, 554-60		16
352	Mechanical modulation of osteochondroprogenitor cell fate. 2008 , 40, 2720-38		84
351	Design and validation of a dynamic flow perfusion bioreactor for use with compliant tissue engineering scaffolds. 2008 , 133, 490-6		71

350	Accurately shaped tooth bud cell-derived mineralized tissue formation on silk scaffolds. 2008 , 14, 549-57	57
349	Mechanical Determinants of Tissue Development. 2008 , 480-497	1
348	Tissue engineered bone grafts: biological requirements, tissue culture and clinical relevance. 2008 , 3, 254-64	234
347	Inspiration from Natural Silks and Their Proteins. 2009 , 35, 119-160	1
346	In vitro evaluation of macroporous hydrogels to facilitate stem cell infiltration, growth, and mineralization. 2009 , 15, 1695-707	91
345	Amniotic fluid stem cells produce robust mineral deposits on biodegradable scaffolds. 2009 , 15, 3129-38	60
344	Biopolymer-based growth factor delivery for tissue repair: from natural concepts to engineered systems. 2009 , 15, 263-89	76
343	Treatment of traumatic brain injury in mice with bone marrow stromal cell-impregnated collagen scaffolds. 2009 , 111, 658-65	39
342	Regulation of adult human mesenchymal stem cells into osteogenic and chondrogenic lineages by different bioreactor systems. 2009 , 88, 935-46	51
341	Effect of seeding technique and scaffold material on bone formation in tissue-engineered constructs. 2009 , 90, 429-37	19
340	Fabrication, characterization, and in vitro evaluation of poly(lactic acid glycolic acid)/nano-hydroxyapatite composite microsphere-based scaffolds for bone tissue engineering in rotating bioreactors. 2009 , 91, 679-91	84
339	Proliferation and osteogenesis of immortalized bone marrow-derived mesenchymal stem cells in porous polylactic glycolic acid scaffolds under perfusion culture. 2010 , 92, 817-29	23
338	Geometry and force control of cell function. 2009 , 108, 1047-58	51
337	3D culture of osteoblast-like cells by unidirectional or oscillatory flow for bone tissue engineering. 2009 , 102, 1670-8	59
336	Oscillatory perfusion culture of CaP-based tissue engineering bone with and without dexamethasone. <i>Annals of Biomedical Engineering</i> , 2009 , 37, 146-55	4-7 11
335	Nucleation and growth of biomimetic apatite layers on 3D plotted biodegradable polymeric scaffolds: effect of static and dynamic coating conditions. <i>Acta Biomaterialia</i> , 2009 , 5, 1626-38	10.8 51
334	Signalling strategies for osteogenic differentiation of human umbilical cord mesenchymal stromal cells for 3D bone tissue engineering. 2009 , 3, 398-404	61
333	A tissue-like construct of human bone marrow MSCs composite scaffold support in vivo ectopic bone formation. 2010 , 4, 30-7	20

332	Supercritical CO ₂ generating chitosan devices with controlled morphology. Potential application for drug delivery and mesenchymal stem cell culture. 2009 , 48, 269-277	57
331	Ear mesenchymal stem cells: an efficient adult multipotent cell population fit for rapid and scalable expansion. 2009 , 139, 291-9	57
330	Mandibular repair in rats with premineralized silk scaffolds and BMP-2-modified bMSCs. 2009 , 30, 4522-32	176
329	Silk fibroin/hyaluronan scaffolds for human mesenchymal stem cell culture in tissue engineering. 2009 , 30, 5068-76	115
328	Bone perforation and placement of collagen sponge facilitate bone augmentation. 2009 , 80, 505-11	16
327	Use of rapidly mineralising osteoblasts and short periods of mechanical loading to accelerate matrix maturation in 3D scaffolds. 2009 , 44, 822-9	74
326	Apatite-coated silk fibroin scaffolds to healing mandibular border defects in canines. 2009 , 45, 517-27	94
325	Effect of cell density on adipogenic differentiation of mesenchymal stem cells. 2009 , 381, 322-7	38
324	Stem cell- and scaffold-based tissue engineering approaches to osteochondral regenerative medicine. 2009 , 20, 646-55	208
323	Engineered microenvironments for controlled stem cell differentiation. 2009 , 15, 205-19	370
322	Toward regenerating a human thumb in situ. 2009 , 15, 2605-15	12
321	Microfluidic culture of single human embryonic stem cell colonies. 2009 , 9, 1749-55	80
320	Adult stem cells in tissue engineering. 2009 , 6, 621-40	32
319	Human and mouse osteoprogenitor cells exhibit distinct patterns of osteogenesis in three-dimensional tissue engineering scaffolds. 2009 , 124, 1869-1879	9
318	Spinning around or stagnation - what do osteoblasts and chondroblasts really like?. 2010 , 15, 35-43	5
317	Expansion of human mesenchymal stem cells in a fixed-bed bioreactor system based on non-porous glass carrier--part A: inoculation, cultivation, and cell harvest procedures. 2010 , 33, 512-25	52
316	Microengineering Approach for Directing Embryonic Stem Cell Differentiation. 2010 , 153-171	2
315	Boning up on Wolff's Law: mechanical regulation of the cells that make and maintain bone. 2010 , 43, 108-18	240

314	Osteogenic activity of MG63 cells on bone-like hydroxyapatite/collagen nanocomposite sponges. 2010 , 21, 1263-72	29
313	Housekeeping gene stability influences the quantification of osteogenic markers during stem cell differentiation to the osteogenic lineage. 2010 , 62, 109-20	37
312	Spatial regulation of human mesenchymal stem cell differentiation in engineered osteochondral constructs: effects of pre-differentiation, soluble factors and medium perfusion. 2010 , 18, 714-23	88
311	Enhancing annulus fibrosus tissue formation in porous silk scaffolds. 2010 , 92, 43-51	57
310	Cellular shellization: surface engineering gives cells an exterior. 2010 , 32, 698-708	28
309	Design of cellular porous biomaterials for wall shear stress criterion. 2010 , 107, 737-46	12
308	Osteogenesis of human stem cells in silk biomaterial for regenerative therapy. 2010 , 35, 1116-1127	38
307	Directing bone marrow-derived stromal cell function with mechanics. 2010 , 43, 807-17	77
306	The use of sulfonated silk fibroin derivatives to control binding, delivery and potency of FGF-2 in tissue regeneration. 2010 , 31, 1403-13	68
305	A comparison of bioreactors for culture of fetal mesenchymal stem cells for bone tissue engineering. 2010 , 31, 8684-95	87
304	Importance of dynamic culture for evaluating osteoblast activity on dense silicon-substituted hydroxyapatite. 2010 , 80, 138-44	25
303	The effect of an external magnetic force on cell adhesion and proliferation of magnetically labeled mesenchymal stem cells. 2010 , 2, 5	13
302	Biophysics and dynamics of natural and engineered stem cell microenvironments. 2010 , 2, 49-64	46
301	Bone grafts engineered from human adipose-derived stem cells in perfusion bioreactor culture. 2010 , 16, 179-89	138
300	Biomechanics in bone tissue engineering. 2010 , 13, 837-46	17
299	Design and validation of a novel bioreactor principle to combine online micro-computed tomography monitoring and mechanical loading in bone tissue engineering. 2010 , 81, 014303	27
298	Osteogenic differentiation of human umbilical cord mesenchymal stromal cells in polyglycolic acid scaffolds. 2010 , 16, 1937-48	64
297	A Novel Scaffold from Recombinant Spider Silk Protein in Tissue Engineering. 2010 , 152-153, 1734-1744	3

296	Temperature-driven processing techniques for manufacturing fully interconnected porous scaffolds in bone tissue engineering. 2010 , 224, 1389-400		33
295	Osteoblastic cell proliferation with uniform distribution in a large scaffold using radial-flow bioreactor. <i>Tissue Engineering - Part C: Methods</i> , 2010 , 16, 1387-98	2.9	7
294	Fundamental Biomechanics in Bone Tissue Engineering. 2010 , 2, 1-225		34
293	Effect of chitosan as a dispersant on collagen-hydroxyapatite composite matrices. <i>Tissue Engineering - Part C: Methods</i> , 2010 , 16, 71-9	2.9	20
292	Dynamic three-dimensional culture methods enhance mesenchymal stem cell properties and increase therapeutic potential. <i>Tissue Engineering - Part C: Methods</i> , 2010 , 16, 735-49	2.9	343
291	Bone tissue engineering with human stem cells. 2010 , 1, 10		147
290	Three-dimensional plotted PCL/βTCP scaffolds coated with a collagen layer: preparation, physical properties and in vitro evaluation for bone tissue regeneration. 2011 , 21, 6305		49
289	Ginsenoside-Rg1 mediates microenvironment-dependent endothelial differentiation of human mesenchymal stem cells in vitro. 2011 , 13, 1-11		12
288	Cell-scaffold transplant of hydrogel seeded with rat bone marrow progenitors for bone regeneration. 2011 , 39, 364-71		53
287	Silk fibroin biomaterials for controlled release drug delivery. 2011 , 8, 797-811		208
286	A model for tissue engineering applications: femoral critical size defect in immunodeficient mice. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 597-606	2.9	27
285	Natural Origin Materials for Bone Tissue Engineering [Properties, Processing, and Performance. 2011 , 557-586		7
284	Bioreactor cultivation of functional bone grafts. 2011 , 698, 231-41		18
283	Biopolymer-based hydrogels for cartilage tissue engineering. 2011 , 111, 4453-74		393
282	Silk Proteins [Biomaterials and Bioengineering. 2011 , 939-959		
281	Two-layer membranes of calcium phosphate/collagen/PLGA nanofibres: in vitro biomineralisation and osteogenic differentiation of human mesenchymal stem cells. 2011 , 3, 401-9		59
280	In vivo loading increases mechanical properties of scaffold by affecting bone formation and bone resorption rates. 2011 , 49, 1357-64		30
279	Tubular perfusion system for the long-term dynamic culture of human mesenchymal stem cells. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 337-48	2.9	65

278	Osteogenic differentiation of equine cord blood multipotent mesenchymal stromal cells within coralline hydroxyapatite scaffolds in vitro. 2011 , 24, 354-62		8
277	Bioreactors for bone tissue engineering. 2011 , 34, 259-70		31
276	Bioprocess forces and their impact on cell behavior: implications for bone regeneration therapy. 2011 , 2011, 620247		45
275	Chitosan enhances mineralization during osteoblast differentiation of human bone marrow-derived mesenchymal stem cells, by upregulating the associated genes. 2011 , 44, 537-49		91
274	Cell sourcing for bone tissue engineering: amniotic fluid stem cells have a delayed, robust differentiation compared to mesenchymal stem cells. 2011 , 7, 17-27		40
273	Stem cell cultivation in bioreactors. 2011 , 29, 815-29		158
272	Bioreactor systems for bone tissue engineering. 2011 , 17, 263-80		152
271	The effects of intermittent dynamic loading on chondrogenic and osteogenic differentiation of human marrow stromal cells encapsulated in RGD-modified poly(ethylene glycol) hydrogels. <i>Acta Biomaterialia</i> , 2011 , 7, 3829-40	10.8	55
270	Shear stress magnitude is critical in regulating the differentiation of mesenchymal stem cells even with endothelial growth medium. 2011 , 33, 2351-9		33
269	A positron emission tomography approach to visualize flow perfusion in hollow-fiber membrane bioreactors. 2011 , 14, 318-30		6
268	Initial cell pre-cultivation can maximize ECM mineralization by human mesenchymal stem cells on silk fibroin scaffolds. <i>Acta Biomaterialia</i> , 2011 , 7, 2218-28	10.8	29
267	Integrative design of a poly(ethylene glycol)-poly(propylene glycol)-alginate hydrogel to control three dimensional biomineralization. 2011 , 32, 2695-703		47
266	Nucleation and growth of mineralized bone matrix on silk-hydroxyapatite composite scaffolds. 2011 , 32, 2812-20		211
265	Preparation of 3D fibroin/chitosan blend porous scaffold for tissue engineering via a simplified method. 2011 , 11, 419-26		18
264	Biomimetic Materials for Bone Tissue Engineering State of the Art and Future Trends. 2011 , 13, B135-B150		45
263	High-throughput screening of a small molecule library for promoters and inhibitors of mesenchymal stem cell osteogenic differentiation. 2011 , 108, 163-74		43
262	Optimizing the medium perfusion rate in bone tissue engineering bioreactors. 2011 , 108, 1159-70		113
261	Collagen-calcium phosphate cement scaffolds seeded with umbilical cord stem cells for bone tissue engineering. 2011 , 17, 2943-54		52

260	A computational tool for the upscaling of regular scaffolds during in vitro perfusion culture. <i>Tissue Engineering - Part C: Methods</i> , 2011 , 17, 619-30	2.9	16
259	Novel Natural Transdermal Otoliths/Collagen/Bacterial Cellulose Patch for Osteoporosis Treatment. 2011 , 2,		2
258	Design optimization of scaffold microstructures using wall shear stress criterion towards regulated flow-induced erosion. 2011 , 133, 081008		17
257	Microenvironment design for stem cell fate determination. 2012 , 126, 227-62		5
256	Effect of pulse frequency on the osteogenic differentiation of mesenchymal stem cells in a pulsatile perfusion bioreactor. 2011 , 133, 091005		17
255	Preparation of porous scaffolds from silk fibroin extracted from the silk gland of <i>Bombyx mori</i> (B. mori). 2012 , 13, 7762-75		27
254	Advances in meniscal tissue engineering. 2012 , 2012, 420346		11
253	An ectopic study of apatite-coated silk fibroin scaffolds seeded with AdBMP-2-modified canine bMSCs. 2012 , 23, 509-26		12
252	The role of perfusion bioreactors in bone tissue engineering. 2012 , 2, 167-75		97
251	Patterns of amino acid metabolism by proliferating human mesenchymal stem cells. 2012 , 18, 654-64		32
250	Engaging stem cells for customized tendon regeneration. 2012 , 2012, 309187		13
249	Bone tissue engineering: recent advances and challenges. 2012 , 40, 363-408		1340
248	Nanocomposites of high-density polyethylene with amorphous calcium phosphate: in vitro biomineralization and cytocompatibility of human mesenchymal stem cells. 2012 , 7, 054103		7
247	Bioreactors for Stem Cell Expansion and Differentiation. 2012 , 1-28		
246	Silks. 2012 , 1-16		1
245	Bioreactor strategy in bone tissue engineering: pre-culture and osteogenic differentiation under two flow configurations. 2012 , 18, 2354-64		29
244	Engineering complex tissues. 2012 , 4, 160rv12		364
243	Computational modeling of adherent cell growth in a hollow-fiber membrane bioreactor for large-scale 3-D bone tissue engineering. 2012 , 15, 250-65		18

242	Fibroin scaffold repairs critical-size bone defects in vivo supported by human amniotic fluid and dental pulp stem cells. 2012 , 18, 1006-13	91
241	Experimental formation of dentin-like structure in the root canal implant model using cryopreserved swine dental pulp progenitor cells. 2012 , 38, 913-9	47
240	Extracellular matrix protein mediated regulation of the osteoblast differentiation of bone marrow derived human mesenchymal stem cells. 2012 , 84, 185-92	80
239	Use of a special bioreactor for the cultivation of a new flexible polyurethane scaffold for aortic valve tissue engineering. 2012 , 11, 92	23
238	Preparation and Characterization of 3D Composite Scaffolds Based on Rapid-Prototyped PCL/ETCP Struts and Electrospun PCL Coated with Collagen and HA for Bone Regeneration. 2012 , 24, 903-913	91
237	Silk constructs for delivery of musculoskeletal therapeutics. 2012 , 64, 1111-22	86
236	Effects of implantation of three-dimensional engineered bone tissue with a vascular-like structure on repair of bone defects. 2012 , 262, 60-63	
235	Bone scaffold architecture modulates the development of mineralized bone matrix by human embryonic stem cells. 2012 , 33, 8329-42	79
234	The physics of tissue formation with mesenchymal stem cells. 2012 , 30, 583-90	6
233	Three-dimensional in vitro culture techniques for mesenchymal stem cells. 2012 , 916, 31-45	18
232	Biomimetic cell culture proteins as extracellular matrices for stem cell differentiation. 2012 , 112, 4507-40	104
231	Bone Grafts and Bone Replacements. 2012 , 1081-1096	6
230	Multilayer thin film coatings capable of extended programmable drug release: application to human mesenchymal stem cell differentiation. 2012 , 2, 375-83	15
229	Mapping the mechanome of live stem cells using a novel method to measure local strain fields in situ at the fluid-cell interface. 2012 , 7, e43601	32
228	Biomimetic strategies for bone repair and regeneration. 2012 , 3, 688-705	39
227	Macro and microfluidic flows for skeletal regenerative medicine. 2012 , 1, 1225-45	14
226	Phenotypic and functional characterization of human bone marrow stromal cells in hollow-fibre bioreactors. 2012 , 6, 369-77	9
225	Silk materials--a road to sustainable high technology. 2012 , 24, 2824-37	380

224	Human mesenchymal stem cell position within scaffolds influences cell fate during dynamic culture. 2012 , 109, 2381-91	39
223	Macro/microporous silk fibroin scaffolds with potential for articular cartilage and meniscus tissue engineering applications. <i>Acta Biomaterialia</i> , 2012 , 8, 289-301	10.8 237
222	Current trends in mesenchymal stem cell application in bone augmentation: a review of the literature. 2012 , 70, 972-82	66
221	Microfabricated biomaterials for engineering 3D tissues. 2012 , 24, 1782-804	310
220	Engineered bone tissue associated with vascularization utilizing a rotating wall vessel bioreactor. 2013 , 101, 421-7	39
219	The effect of fresh bone marrow cells on reconstruction of mouse calvarial defect combined with calvarial osteoprogenitor cells and collagen-apatite scaffold. 2013 , 7, 974-83	27
218	Boron enhances odontogenic and osteogenic differentiation of human tooth germ stem cells (hTGSCs) in vitro. 2013 , 153, 419-27	51
217	The effect of erythropoietin on autologous stem cell-mediated bone regeneration. 2013 , 34, 7364-71	44
216	Synthesis, Structure, and Properties of Biopolymers (Natural and Synthetic). 2013 , 11-107	5
215	Biocompatibility and osteoconduction of macroporous silk fibroin implants in cortical defects in sheep. 2013 , 85, 107-18	44
214	Effects of low-level laser irradiation on proliferation and osteoblastic differentiation of human mesenchymal stem cells seeded on a three-dimensional biomatrix: in vitro pilot study. 2013 , 28, 125-32	28
213	The effect of fibrinogen, collagen type I, and fibronectin on mesenchymal stem cell growth and differentiation into osteoblasts. 2013 , 19, 1416-23	57
212	Fluid Flow and Cell Proliferation of Mesenchymal Adipose-Derived Stem Cells in Small-Scale, Stirred, Single-Use Bioreactors. 2013 , 85, 95-102	48
211	Reprogramming of mesenchymal stem cells derived from iPSCs seeded on biofunctionalized calcium phosphate scaffold for bone engineering. 2013 , 34, 7862-72	84
210	Remodeling of tissue-engineered bone structures in vivo. 2013 , 85, 119-29	46
209	Bioreactors to influence stem cell fate: augmentation of mesenchymal stem cell signaling pathways via dynamic culture systems. 2013 , 1830, 2470-80	91
208	Natural Polymers in Tissue Engineering Applications. 2013 , 385-425	15
207	Bioreactor design for tendon/ligament engineering. 2013 , 19, 133-46	59

206	The influence of environmental factors on bone tissue engineering. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2013 , 101, 663-75	3.5	15
205	Tissue Engineering Scaffolds. 2013 , 1138-1159		5
204	Multiple silk coatings on biphasic calcium phosphate scaffolds: effect on physical and mechanical properties and in vitro osteogenic response of human mesenchymal stem cells. 2013 , 14, 2179-88		47
203	Initial anisotropy in demineralized bovine cortical bone in compressive cyclic loading-unloading. 2013 , 33, 817-23		8
202	Effects of treating traumatic brain injury with collagen scaffolds and human bone marrow stromal cells on sprouting of corticospinal tract axons into the denervated side of the spinal cord. 2013 , 118, 381-9		31
201	3D tissue-engineered construct analysis via conventional high-resolution microcomputed tomography without X-ray contrast. <i>Tissue Engineering - Part C: Methods</i> , 2013 , 19, 327-35	2.9	17
200	Biomimetic scaffolds for stem cell-based tissue engineering. 2013 , 181-206		1
199	Bioreactors for stem cell culture. 2013 , 69-114		3
198	Human embryonic stem cell-derived mesodermal progenitors display substantially increased tissue formation compared to human mesenchymal stem cells under dynamic culture conditions in a packed bed/column bioreactor. 2013 , 19, 175-87		24
197	Radial-flow bioreactor enables uniform proliferation of human mesenchymal stem cells throughout a three-dimensional scaffold. <i>Tissue Engineering - Part C: Methods</i> , 2013 , 19, 109-16	2.9	14
196	Role of culture conditions on in vitro transformation and cellular colonization of biomimetic HA-Col scaffolds. 2013 , 3,		8
195	Polymers from Renewable Resources. 2013 , 1, 83-112		18
194	Microbioreactor array screening of Wnt modulators and microenvironmental factors in osteogenic differentiation of mesenchymal progenitor cells. 2013 , 8, e82931		12
193	Tissue engineering bone using autologous progenitor cells in the peritoneum. 2014 , 9, e93514		11
192	Influence of the mechanical environment on the engineering of mineralised tissues using human dental pulp stem cells and silk fibroin scaffolds. 2014 , 9, e111010		34
191	Experimental Characterisation of Fluid Mechanics in a Spinner Flask Bioreactor. 2014 , 2, 753-772		16
190	Fabrication and perfusion culture of anatomically shaped artificial bone using stereolithography. 2014 , 6, 045002		21
189	Enhanced differentiation of human embryonic stem cells on extracellular matrix-containing osteomimetic scaffolds for bone tissue engineering. <i>Tissue Engineering - Part C: Methods</i> , 2014 , 20, 865-74 ⁹	2.9	29

188	The effects of tetracycline-loaded silk fibroin membrane on proliferation and osteogenic potential of mesenchymal stem cells. 2014 , 192, e1-9		18
187	Poly(sophorolipid) structural variation: effects on biomaterial physical and biological properties. 2014 , 15, 4214-27		23
186	The interaction between α integrins and ERK1/2 in osteogenic differentiation of human mesenchymal stem cells under fluid shear stress modelled by a perfusion system. 2014 , 8, 85-96		36
185	Modelling biological cell attachment and growth on adherent surfaces. 2014 , 68, 785-813		4
184	Bioreactors for Tissue Engineering Purposes. 2014 , 177-185		5
183	Cyclic tensile strain enhances osteogenesis and angiogenesis in mesenchymal stem cells from osteoporotic donors. 2014 , 20, 67-78		41
182	Use of perfusion bioreactors and large animal models for long bone tissue engineering. 2014 , 20, 126-46		42
181	Scaffold-based regeneration of skeletal tissues to meet clinical challenges. 2014 , 2, 7272-7306		74
180	Biomechanical forces in the skeleton and their relevance to bone metastasis: biology and engineering considerations. 2014 , 79-80, 119-34		26
179	Dynamic fabrication of tissue-engineered bone substitutes based on derived cancellous bone scaffold in a spinner flask bioreactor system. 2014 , 174, 1331-1343		15
178	Three-dimensional osteogenic and chondrogenic systems to model osteochondral physiology and degenerative joint diseases. 2014 , 239, 1080-95		51
177	Principles of Bioreactor Design for Tissue Engineering. 2014 , 261-278		1
176	Rabbit Mesenchymal Stem Cells Cultured in a Dynamic Culture System Displayed Superior Cell Proliferation and Osteogenetic Induction. 2014 , 6, 10-15		3
175	Bone regeneration via novel macroporous CPC scaffolds in critical-sized cranial defects in rats. 2014 , 30, e199-207		40
174	A multicompartiment holder for spinner flasks improves expansion and osteogenic differentiation of mesenchymal stem cells in three-dimensional scaffolds. <i>Tissue Engineering - Part C: Methods</i> , 2014 , 20, 984-93	2.9	14
173	Biofabrication of customized bone grafts by combination of additive manufacturing and bioreactor knowhow. 2014 , 6, 035006		40
172	Biomechanics and mechanobiology in functional tissue engineering. 2014 , 47, 1933-40		157
171	Adipose mesenchymal stem cells in the field of bone tissue engineering. 2014 , 6, 144-52		64

170	Cell seeding density is a critical determinant for copolymer scaffolds-induced bone regeneration. 2015 , 103, 3649-58	36
169	Mechanical Regulation of Myofibroblasts: Mechanically Guided Matrix Remodeling and Prevention of Fibrosis in Regenerative Medicine. 2015 , 115-144	
168	Bio-Based and Bio-Inspired Cellular Materials. 2015 , 1-37	
167	Titanium phosphate glass microcarriers induce enhanced osteogenic cell proliferation and human mesenchymal stem cell protein expression. 2015 , 6, 2041731415617741	19
166	Cell Sheet-Based Tissue Engineering for Organizing Anisotropic Tissue Constructs Produced Using Microfabricated Thermoresponsive Substrates. 2015 , 4, 2388-407	49
165	Influence of cassette design on three-dimensional perfusion culture of artificial bone. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2015 , 103, 84-91	3.5 8
164	Structural properties of scaffolds: Crucial parameters towards stem cells differentiation. 2015 , 7, 728-44	115
163	Additively Manufactured Device for Dynamic Culture of Large Arrays of 3D Tissue Engineered Constructs. 2015 , 4, 864-73	16
162	Mesenchymal stem cells derived from human induced pluripotent stem cells retain adequate osteogenicity and chondrogenicity but less adipogenicity. 2015 , 6, 144	74
161	The evolution of simulation techniques for dynamic bone tissue engineering in bioreactors. 2015 , 9, 903-17	33
160	Structures, mechanical properties and applications of silk fibroin materials. 2015 , 46, 86-110	558
159	Synergistic effect of sustained release of growth factors and dynamic culture on osteoblastic differentiation of mesenchymal stem cells. 2015 , 103, 2161-71	37
158	In vitro augmentation of mesenchymal stem cells viability in stressful microenvironments : In vitro augmentation of mesenchymal stem cells viability. 2015 , 20, 237-51	71
157	Application of natural and semi-synthetic polymers for the delivery of sensitive drugs. 2015 , 60, 101-131	39
156	Processing silk hydrogel and its applications in biomedical materials. 2015 , 31, 630-40	33
155	Bio-based polymers, supercritical fluids and tissue engineering. 2015 , 50, 826-838	63
154	Tracking calcification in tissue-engineered bone using synchrotron micro-FTIR and SEM. 2015 , 407, 1097-105	6
153	Development of new graphene oxide incorporated tricomponent scaffolds with polysaccharides and hydroxyapatite and study of their osteoconductivity on MG-63 cell line for bone tissue engineering. 2015 , 5, 41135-41143	34

152	Delivery of demineralized bone matrix powder using a salt-leached silk fibroin carrier for bone regeneration. 2015 , 3, 3177-3188	19
151	Mechano-regulation theory-based finite element analysis on the effects of driving strain history on cellular differentiation. 2015 , 16, 1851-1858	3
150	Effects of flow configuration on bone tissue engineering using human mesenchymal stem cells in 3D chitosan composite scaffolds. 2015 , 103, 2509-20	6
149	Polymeric scaffolds as stem cell carriers in bone repair. 2015 , 9, 1093-119	35
148	Imaging strategies for tissue engineering applications. 2015 , 21, 88-102	85
147	Stem cell augmented mesh materials: an in vitro and in vivo study. 2015 , 26, 675-83	11
146	Ornamenting 3D printed scaffolds with cell-laid extracellular matrix for bone tissue regeneration. 2015 , 37, 230-41	241
145	Adipose-derived stem cells cultivated on electrospun l-lactide/glycolide copolymer fleece and gelatin hydrogels under flow conditions - aiming physiological reality in hypodermis tissue engineering. 2015 , 41, 163-71	13
144	Mechanical regulation of mesenchymal stem cell differentiation. 2015 , 227, 717-31	120
143	Synergistic intrafibrillar/extrafibrillar mineralization of collagen scaffolds based on a biomimetic strategy to promote the regeneration of bone defects. 2016 , 11, 2053-67	32
142	Stem cell therapies for wounds. 2016 , 177-200	1
141	Microsphere-Based Hierarchically Juxtapositioned Biphasic Scaffolds Prepared from Poly(Lactic-co-Glycolic Acid) and Nanohydroxyapatite for Osteochondral Tissue Engineering. 2016 , 8,	17
140	Optimizing Biomaterials for Tissue Engineering Human Bone Using Mesenchymal Stem Cells. 2016 , 137, 854-863	15
139	Fabrication of intrafibrillar and extrafibrillar mineralized collagen/apatite scaffolds with a hierarchical structure. 2016 , 104, 1153-61	23
138	Cell-free scaffolds with different stiffness but same microstructure promote bone regeneration in rabbit large bone defect model. 2016 , 104, 833-41	29
137	Tissue Chips to aid drug development and modeling for rare diseases. 2016 , 4, 1113-1121	26
136	Stem Cell Behavior on Microenvironment Mimicked Surfaces. 2016 , 425-452	3
135	Osteogenic Differentiation of Mesenchymal Stem Cells by Mimicking the Cellular Niche of the Endochondral Template. 2016 , 22, 1176-1190	24

134	Controlled release of NELL-1 protein from chitosan/hydroxyapatite-modified TCP particles. 2016 , 511, 79-89		7
133	Characterization of a novel bioreactor system for 3D cellular mechanobiology studies. 2016 , 113, 1825-37		27
132	Maltitol-based biodegradable polyesters with tailored degradation and controlled release for bone regeneration. 2016 , 6, 40539-40551		9
131	Development of three-dimensional tissue engineered bone-oral mucosal composite models. 2016 , 27, 65		29
130	Wet electrospun silk fibroin/gold nanoparticle 3D matrices for wound healing applications. 2016 , 6, 13234-13256		6
129	Assessment of activated porous granules on implant fixation and early bone formation in sheep. 2016 , 5, 38-47		6
128	New N-(2-carboxybenzyl)chitosan composite scaffolds containing nanoTiO ₂ or bioactive glass with enhanced cell proliferation for bone-tissue engineering applications. 2017 , 66, 71-81		18
127	Artificial Bone via Bone Tissue Engineering: Current Scenario and Challenges. 2017 , 14, 1-14		52
126	Bioreactors in Tissue Engineering. 2017 , 169-213		1
125	Stem cell homing-based tissue engineering using bioactive materials. 2017 , 11, 93-105		16
124	Biomimetic Approaches for Bone Tissue Engineering. 2017 , 23, 480-493		46
123	2D μ -Particle Image Velocimetry and Computational Fluid Dynamics Study Within a 3D Porous Scaffold. <i>Annals of Biomedical Engineering</i> , 2017 , 45, 1341-1351	4.7	13
122	In vitro and in vivo study of the application of volvox spheres to co-culture vehicles in liver tissue engineering. <i>Acta Biomaterialia</i> , 2017 , 63, 261-273	10.8	11
121	A coupled diffusion-fluid pressure model to predict cell density distribution for cells encapsulated in a porous hydrogel scaffold under mechanical loading. 2017 , 89, 181-189		3
120	Collagen and Hydroxyapatite Scaffolds Activate Distinct Osteogenesis Signaling Pathways in Adult Adipose-Derived Multipotent Stromal Cells. <i>Tissue Engineering - Part C: Methods</i> , 2017 , 23, 592-603	2.9	15
119	In Vivo Models for the Evaluation of the Osteogenic Potency of Bone Substitutes Seeded with Mesenchymal Stem Cells of Human Origin: A Concise Review. <i>Tissue Engineering - Part C: Methods</i> , 2017 , 23, 881-888	2.9	15
118	Calcium phosphate flowers. 2017 , 20, 657-658		1
117	Programmable cells of monocytic origin as a source of osteochondroprogenitors: Effect of growth factors on osteogenic differentiation. 2017 , 45, 1515-1520		2

116	Challenges in engineering large customized bone constructs. 2017 , 114, 1129-1139		32
115	Endochondral Priming: A Developmental Engineering Strategy for Bone Tissue Regeneration. 2017 , 23, 128-141		23
114	Improved proliferation and osteogenic differentiation of mesenchymal stem cells on polyaniline composited by polyethersulfone nanofibers. 2017 , 45, 78-84		37
113	Silk fibroin scaffolds with inverse opal structure for bone tissue engineering. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2017 , 105, 2074-2084	3-5	31
112	A current overview of materials and strategies for potential use in maxillofacial tissue regeneration. 2017 , 70, 913-929		55
111	3D perfusion bioreactor-activated porous granules on implant fixation and early bone formation in sheep. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2017 , 105, 2465-2476	3-5	2
110	Concise Review: The Use of Adipose-Derived Stromal Vascular Fraction Cells and Platelet Rich Plasma in Regenerative Plastic Surgery. 2017 , 35, 117-134		86
109	Advanced processing techniques for customized ceramic medical devices. 2017 , 433-468		2
108	A Concert between Biology and Biomechanics: The Influence of the Mechanical Environment on Bone Healing. 2016 , 7, 678		64
107	The Use of Finite Element Analyses to Design and Fabricate Three-Dimensional Scaffolds for Skeletal Tissue Engineering. 2017 , 5, 30		19
106	Cell Colonization Ability of a Commercialized Large Porous Alveolar Scaffold. 2017 , 2017, 8949264		
105	Material and Mechanobiological Considerations for Bone Regeneration. 2017 , 197-264		2
104	Evaluation of tissue-engineered bone constructs using rabbit fetal osteoblasts on acellular bovine cancellous bone matrix. 2017 , 10, 163-169		6
103	Engineering Vascular Niche for Bone Tissue Regeneration. 2017 , 517-529		
102	Effects of sulfur mustard on mesenchymal stem cells. 2018 , 293, 98-104		5
101	Preparation of dexamethasone-loaded biphasic calcium phosphate nanoparticles/collagen porous composite scaffolds for bone tissue engineering. <i>Acta Biomaterialia</i> , 2018 , 67, 341-353	10.8	80
100	Fatigue performance of additively manufactured meta-biomaterials: The effects of topology and material type. <i>Acta Biomaterialia</i> , 2018 , 65, 292-304	10.8	104
99	Improved osteogenic differentiation of umbilical cord blood MSCs using custom made perfusion bioreactor. 2018 , 41, 290-297		9

98	Osteogenic differentiation of Wharton's jelly-derived mesenchymal stem cells cultured on WJ-scaffold through conventional signalling mechanism. 2018 , 46, S1032-S1042	7
97	Mesenchymal Stem Cells and Transforming Growth Factor- β to Enhance the Regenerative Ability of an Albumin Scaffold in Full Thickness Wound Healing. 2018 , 9,	11
96	TGF- Inhibitor SB431542 Promotes the Differentiation of Induced Pluripotent Stem Cells and Embryonic Stem Cells into Mesenchymal-Like Cells. 2018 , 2018, 7878201	4
95	Cell preparation for 3D bioprinting. 2018 , 75-88	
94	Mesenchymal Stromal Cells Anno 2019: Dawn of the Therapeutic Era? Concise Review. 2019 , 8, 1126-1134	74
93	Sponge (Porifera) Collagen for Bone Tissue Engineering. 2019 , 247-283	
92	Utilization of Finite Element Analysis for Articular Cartilage Tissue Engineering. 2019 , 12,	10
91	Healing of Bone Defects in Pig's Femur Using Mesenchymal Cells Originated from the Sinus Membrane with Different Scaffolds. 2019 , 2019, 4185942	3
90	Resorbable polymers in bone repair and regeneration. 2019 , 87-125	4
89	Biomimetic Polymer-Based Engineered Scaffolds for Improved Stem Cell Function. 2019 , 12,	11
88	Combining Stem Cells and Biomaterial Scaffolds for Constructing Tissues and Cell Delivery. 2019 , 1, 1-25	39
87	Quantitative analysis of F-actin alterations in adherent human mesenchymal stem cells: Influence of slow-freezing and vitrification-based cryopreservation. 2019 , 14, e0211382	2
86	Matrix Mediated Viral Gene Delivery: A Review. 2019 , 30, 384-399	7
85	Characterization and in vitro evaluation of gelatin-chitosan scaffold reinforced with bioceramic nanoparticles for bone tissue engineering. 2019 , 34, 2807-2818	10
84	Integration of Technologies for Bone Tissue Engineering. 2019 ,	3
83	Bioengineered Constructs of the Ramus/Condyle Unit. 2019 , 351-372	
82	Cells integration onto scaffolds prepared from polyester based polymers - Importance of polymer thermal properties in addition to hydrophilicity. 2019 , 68, 1068-1077	3
81	Metallic ion doped tri-calcium phosphate ceramics: Effect of dynamic loading on in vivo bone regeneration. 2019 , 96, 227-235	4

80	Biomaterial Enhanced Regeneration Design Research for Skin and Load Bearing Applications. 2019 , 10,	6
79	Culture surfaces induce hypoxia-regulated genes in human mesenchymal stromal cells. 2019 , 14, 035012	7
78	Bone Grafts and Bone Replacements. 2019 , 1314-1326	
77	Mesenchymal Stromal Cell-Based Bone Regeneration Therapies: From Cell Transplantation and Tissue Engineering to Therapeutic Secretomes and Extracellular Vesicles. 2019 , 7, 352	54
76	Bacteriophage-based biomaterials for tissue regeneration. 2019 , 145, 73-95	13
75	Evaluation of the Osteogenic Potential of Different Scaffolds Embedded with Human Stem Cells Originated from Schneiderian Membrane: An Study. 2019 , 2019, 2868673	11
74	The effect of larger than cell diameter polylactic acid surface patterns on osteogenic differentiation of rat dental pulp stem cells. 2019 , 107, 174-186	9
73	Decellularized bovine small intestinal submucosa-PCL/hydroxyapatite-based multilayer composite scaffold for hard tissue repair. 2019 , 94, 788-797	22
72	Strategies for MSC expansion and MSC-based microtissue for bone regeneration. 2019 , 196, 67-79	48
71	Dynamic microfactories co-encapsulating osteoblastic and adipose-derived stromal cells for the biofabrication of bone units. 2019 , 12, 015005	17
70	Tissue engineering strategies for the treatment of skeletal maxillofacial defects resulting from neoplasms resections. 2020 , 697-730	
69	Silk fibroin as a natural polymeric based bio-material for tissue engineering and drug delivery systems-A review. 2020 , 163, 2145-2161	19
68	Bioreactors in tissue engineering: mimicking the microenvironment. 2020 , 709-752	2
67	Natural Fibrous Protein for Advanced Tissue Engineering Applications: Focusing on Silk Fibroin and Keratin. 2020 , 1249, 39-49	7
66	3D printing of silk microparticle reinforced polycaprolactone scaffolds for tissue engineering applications. 2021 , 118, 111433	29
65	Acellular dense collagen-S53P4 bioactive glass hybrid gel scaffolds form more bone than stem cell delivered constructs. 2021 , 120, 111743	3
64	Transcriptome Analysis of Dnmt3l Knock-Out Mice Derived Multipotent Mesenchymal Stem/Stromal Cells During Osteogenic Differentiation. 2021 , 9, 615098	1
63	Biomimetic Mineralization Promotes Viability and Differentiation of Human Mesenchymal Stem Cells in a Perfusion Bioreactor. 2021 , 22,	3

62	Evaluation of bone regeneration in mandible large defect using undifferentiated adipose stem cells loaded on gelatin carrier: An animal model case study. 2021 , 15, 22-29	
61	A Biphasic Osteovascular Biomimetic Scaffold for Rapid and Self-Sustained Endochondral Ossification. 2021 , 10, e2100070	2
60	Whitlockite-Enabled Hydrogel for Craniofacial Bone Regeneration. 2021 , 13, 35342-35355	5
59	Regenerating Craniofacial Dental Defects With Calcium Phosphate Cement Scaffolds: Current Status and Innovative Scope Review. 2021 , 2,	0
58	Bone Grafts in Trauma and Orthopaedics. 2021 , 13, e17705	1
57	The effect of macropore size of hydroxyapatite scaffold on the osteogenic differentiation of bone mesenchymal stem cells under perfusion culture. 2021 , 8, rbab050	2
56	Chapter 4:Silk Fibroin-based Soft Biomaterial/Scaffolds for Tissue Engineering Strategies. 2021 , 88-111	0
55	Rational design of a highly porous electronic scaffold with concurrent enhancement in cell behaviors and differentiation under electrical stimulation. 2021 , 9, 7674-7685	1
54	Modulation of cell differentiation in bone tissue engineering constructs cultured in a bioreactor. 2006 , 585, 225-41	32
53	Engineering Carbon Nanomaterials for Stem Cell-Based Tissue Engineering. 2014 , 641-665	3
52	Engineering Functional Bone Grafts. 2011 , 221-235	3
51	Tissue Engineering. 2007 , 133-151	1
50	Bone Grafts and Bone Replacements. 2006 , 1030-1036	2
49	Tissue Engineering the Mandibular Condyle. <i>Tissue Engineering</i> , 2007 , 070124172705001	1
48	A sulfated nanofibrous mesh supporting the osteogenic differentiation of periosteum-derived cells. 2013 , 3, 486-493	4
47	Silk. 2006 ,	2
46	In situ spatiotemporal mapping of flow fields around seeded stem cells at the subcellular length scale. 2010 , 5, e12796	24
45	Pressureless mechanical induction of stem cell differentiation is dose and frequency dependent. 2013 , 8, e81362	20

- 44 Biomimetic polymer scaffolds to promote stem cell-mediated osteogenesis. **2013**, 6, 87-91 14
- 43 Three Dimensional OCT in the Engineering of Tissue Constructs: A Potentially Powerful Tool for Assessing Optimal Scaffold Structure. **2009**, 2, 8-13 19
- 42 Bioreactor Systems for Human Bone Tissue Engineering. **2014**, 2, 494-525 50
- 41 Application of Bioreactor in Stem Cell Culture. **2017**, 10, 485-499 4
- 40 Engineering stem cell niches in bioreactors. **2013**, 5, 124-35 26
- 39 Adults Mesenchymal Stem Cells for Bone Tissue Engineering. *Journal of Korean Endocrine Society*, **2005**, 20, 425
- 38 Molecular Biology Techniques in Musculoskeletal Research. **2006**, 981-990
- 37 Simulation of Cell Differentiation in Fracture Healing-Mechanically Loaded Composite Scaffolds in a Novel Bioreactor System. *Tissue Engineering*, **2006**, 060118075515006
- 36 Simulation of Cell Differentiation in Fracture Healing-Mechanically Loaded Composite Scaffolds in a Novel Bioreactor System. *Tissue Engineering*, **2006**, 060127071904004
- 35 Simulation of Cell Differentiation in Fracture Healing-Mechanically Loaded Composite Scaffolds in a Novel Bioreactor System. *Tissue Engineering*, **2006**, 060207125535001
- 34 Cartilage-like Tissue Engineering Using Silk Scaffolds and Mesenchymal Stem Cells. *Tissue Engineering*, **2006**, 060915113954001 1
- 33 Effect of Scaffold Design on Bone Morphology in Vitro. *Tissue Engineering*, **2006**, 061017080728004
- 32 Mechanical Adaptation of Bone. *Advances in Polymeric Biomaterials Series*, **2006**, 351-366
- 31 Tissue Engineering Bioreactors. **2007**, 15-1-15-18
- 30 Mesenchymal Stem Cells and Mesenchymal-Derived Endothelial Cells: Repair of Bone Defects. **2012**, 277-281
- 29 Approaches to Mathematical Modeling of Tissue Engineering Systems. **2012**, 228-250
- 28 Osteogenic Adult Stem Cells and Titanium Constructs for Repair and Regeneration. **2012**, 281-298
- 27 Mechanical Stimulation for Functional Orthopaedic Tissue Engineering. **2012**, 513-560

26	Biologic Biomaterials. 2012 , 7-1-7-20		
25	Growth Factor Delivery Matrices for Cardiovascular Regeneration. 2015 , 159-214		
24	In Vitro and In Vivo Evaluation of Composite Scaffolds for Bone Tissue Engineering. 2015 , 1-22		
23	Silk Natural Nanofibers. 7244-7254		
22	Smart Biomaterials in Tissue-Engineering Applications. 2016 , 125-150		
21	Use of Stem Cells in Acute and Complex Wounds. <i>Stem Cells in Clinical Applications</i> , 2017 , 195-226	0.3	1
20	Chapter 2:Adult Stem Cell Culture on Extracellular Matrices and Natural Biopolymers. <i>Biomaterials Science Series</i> , 2019 , 12-85	0.6	
19	Engineering of Bone: Uncovering Strategies of Static and Dynamic Environments. <i>Materials Horizons</i> , 2019 , 175-214	0.6	
18	Application of Bioreactors in Dental and Oral Tissue Engineering. 2020 , 89-148		
17	Stem Cells and the Art of Mesenchymal Maintenance. 2007 , 1-16		
16	Bone Scaffolds: An Incorporation of Biomaterials, Cells, and Biofactors. <i>ACS Biomaterials Science and Engineering</i> , 2021 ,	5.5	4
15	Dextran Sulfate-amplified Extracellular Matrix Deposition Promotes Osteogenic Differentiation of Mesenchymal Stem Cells. <i>Acta Biomaterialia</i> , 2021 ,	10.8	2
14	Bioreactors and Scale-Up in Bone Tissue Engineering. 2022 , 225-247		
13	BONE TISSUE ENGINEERING USING OSTEOGENIC CELLS: FROM THE BENCH TO THE CLINICAL APPLICATION.. <i>Tissue Engineering - Part C: Methods</i> , 2022 ,	2.9	0
12	Efficacy of bioreactor-activated bone substitute with bone marrow nuclear cells on fusion rate and fusion mass microarchitecture in sheep.. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2022 ,	3.5	0
11	Smart/stimuli-responsive hydrogels: State-of-the-art platforms for bone tissue engineering. <i>Applied Materials Today</i> , 2022 , 101560	6.6	5
10	Developments of microfluidics for orthopedic applications: A review. 2022 ,		
9	Progress and challenges of graphene and its congeners for biomedical applications: Drug delivery, gene delivery, biosensing, bioimaging, and tissue engineering. 2022 , 120703		1

- 8 Current Issues of Biomechanics in Bone Tissue Engineering. **2010**, 193-213 ○
- 7 Bioengineering of bone tissues using bioreactors for modulation of mechano-sensitivity in bone. 1-41 ○
- 6 Customizable 3D printed perfusion bioreactor for the engineering of stem cell microenvironments. 10, ○
- 5 Additive Manufacturing of Polyhydroxyalkanoate-Based Blends Using Fused Deposition Modelling for the Development of Biomedical Devices. **2023**, 14, 40 1
- 4 Advances in In Vitro and In Vivo Bioreactor-Based Bone Generation for Craniofacial TissueEngineering. 1
- 3 Biomechanical, biophysical and biochemical modulators of cytoskeletal remodelling and emergent stem cell lineage commitment. **2023**, 6, 1
- 2 Ultrasound-derived mechanical stimulation of cell-laden collagen hydrogels for bone repair. ○
- 1 Cell surface markers for mesenchymal stem cells related to the skeletal system: A scoping review. **2023**, 9, e13464 ○