Byung-Soo Kim

List of Publications by Citations

349 papers	18,222 citations	75 h-index	120 g-index
352 ext. papers	20,057 ext. citations	7.3 avg, IF	6.54 L-index

#	Paper	IF	Citations
349	Development of biocompatible synthetic extracellular matrices for tissue engineering. *Trends in Biotechnology*, **1998**, 16, 224-30	15.1	751
348	Poly(lactide-co-glycolide)/hydroxyapatite composite scaffolds for bone tissue engineering. *Biomaterials*, **2006**, 27, 1399-409	15.6	651
347	Open pore biodegradable matrices formed with gas foaming. *Journal of Biomedical Materials Research Part B*, **1998**, 42, 396-402		626
346	Cyclic mechanical strain regulates the development of engineered smooth muscle tissue. *Nature Biotechnology*, **1999**, 17, 979-83	44.5	379
345	Angiogenesis in ischemic tissue produced by spheroid grafting of human adipose-derived stromal cells. *Biomaterials*, **2011**, 32, 2734-47	15.6	271
344	Genetic engineering of human stem cells for enhanced angiogenesis using biodegradable polymeric nanoparticles. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 3317-22	11.5	250
343	Biomaterials for tissue engineering. *World Journal of Urology*, **2000**, 18, 2-9	4	247
342	Enhancement of ectopic bone formation by bone morphogenetic protein-2 released from a heparin-conjugated poly(L-lactic-co-glycolic acid) scaffold. *Biomaterials*, **2007**, 28, 2763-71	15.6	230
341	Design of artificial extracellular matrices for tissue engineering. *Progress in Polymer Science*, **2011**, 36, 238-268	29.6	214
340	Early in vivo experience with tissue-engineered trileaflet heart valves. *Circulation*, **2000**, 102, III22-9	16.7	209
339	Optimizing seeding and culture methods to engineer smooth muscle tissue on biodegradable polymer matrices **1998**, 57, 46-54		206
338	In vivo biocompatibilty and degradation behavior of elastic poly(L-lactide-co-epsilon-caprolactone) scaffolds. *Biomaterials*, **2004**, 25, 5939-46	15.6	199
337	Small-diameter blood vessels engineered with bone marrow-derived cells. *Annals of Surgery*, **2005**, 241, 506-15	7.8	199
336	Implantation of bone marrow mononuclear cells using injectable fibrin matrix enhances neovascularization in infarcted myocardium. *Biomaterials*, **2005**, 26, 319-26	15.6	192
335	Mechano-active tissue engineering of vascular smooth muscle using pulsatile perfusion bioreactors and elastic PLCL scaffolds. *Biomaterials*, **2005**, 26, 1405-11	15.6	176
334	Improvement of postnatal neovascularization by human embryonic stem cell derived endothelial-like cell transplantation in a mouse model of hindlimb ischemia. *Circulation*, **2007**, 116, 2409-19	16.7	173
333	Engineered smooth muscle tissues: regulating cell phenotype with the scaffold. *Experimental Cell Research*, **1999**, 251, 318-28	4.2	173

332	Synergistic Oxygen Generation and Reactive Oxygen Species Scavenging by Manganese Ferrite/Ceria Co-decorated Nanoparticles for Rheumatoid Arthritis Treatment. *ACS Nano*, **2019**, 13, 3206-3217	16.7	171
331	Engineering smooth muscle tissue with a predefined structure. *Journal of Biomedical Materials Research Part B*, **1998**, 41, 322-32		171
330	Graphene oxide flakes as a cellular adhesive: prevention of reactive oxygen species mediated death of implanted cells for cardiac repair. *ACS Nano*, **2015**, 9, 4987-99	16.7	164
329	Long-term delivery enhances in vivo osteogenic efficacy of bone morphogenetic protein-2 compared to short-term delivery. *Biochemical and Biophysical Research Communications*, **2008**, 369, 774-80	3.4	163
328	Long-term and zero-order release of basic fibroblast growth factor from heparin-conjugated poly(L-lactide-co-glycolide) nanospheres and fibrin gel. *Biomaterials*, **2006**, 27, 1598-607	15.6	162
327	In vitro biocompatibility assessment of naturally derived and synthetic biomaterials using normal human urothelial cells. *Journal of Biomedical Materials Research Part B*, **2001**, 55, 33-9		161
326	Control of basic fibroblast growth factor release from fibrin gel with heparin and concentrations of fibrinogen and thrombin. *Journal of Controlled Release*, **2005**, 105, 249-59	11.7	156
325	pH-responsive assembly of gold nanoparticles and "spatiotemporally concerted" drug release for synergistic cancer therapy. *ACS Nano*, **2013**, 7, 3388-402	16.7	148
324	Delivery of a therapeutic protein for bone regeneration from a substrate coated with graphene oxide. *Small*, **2013**, 9, 4051-60	11	147
323	M1 Macrophage-Derived Nanovesicles Potentiate the Anticancer Efficacy of Immune Checkpoint Inhibitors. *ACS Nano*, **2018**, 12, 8977-8993	16.7	146
322	Hyaluronic acid-quantum dot conjugates for in vivo lymphatic vessel imaging. *ACS Nano*, **2009**, 3, 1389-98	16.7	146
321	Manufacture of elastic biodegradable PLCL scaffolds for mechano-active vascular tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, **2004**, 15, 645-60	3.5	144
320	Morphology of elastic poly(L-lactide-co-epsilon-caprolactone) copolymers and in vitro and in vivo degradation behavior of their scaffolds. *Biomacromolecules*, **2004**, 5, 1303-9	6.9	142
319	Scaffolds for engineering smooth muscle under cyclic mechanical strain conditions. *Journal of Biomechanical Engineering*, **2000**, 122, 210-5	2.1	137
318	Hyaluronate-gold nanoparticle/tocilizumab complex for the treatment of rheumatoid arthritis. *ACS Nano*, **2014**, 8, 4790-8	16.7	136
317	Transplantation of cord blood mesenchymal stem cells as spheroids enhances vascularization. *Tissue Engineering - Part A*, **2012**, 18, 2138-47	3.9	135
316	Regeneration of whole meniscus using meniscal cells and polymer scaffolds in a rabbit total meniscectomy model. *Journal of Biomedical Materials Research - Part A*, **2006**, 77, 659-71	5.4	133
315	In vivo bone formation from human embryonic stem cell-derived osteogenic cells in poly(d,l-lactic-co-glycolic acid)/hydroxyapatite composite scaffolds. *Biomaterials*, **2008**, 29, 1043-53	15.6	131

314	Elastic biodegradable poly(glycolide-co-caprolactone) scaffold for tissue engineering. *Journal of Biomedical Materials Research Part B*, **2003**, 66, 29-37		128
313	A poly(lactide-co-glycolide)/hydroxyapatite composite scaffold with enhanced osteoconductivity. *Journal of Biomedical Materials Research - Part A*, **2007**, 80, 206-15	5.4	127
312	Mechanical properties and degradation behaviors of hyaluronic acid hydrogels cross-linked at various cross-linking densities. *Carbohydrate Polymers*, **2007**, 70, 251-257	10.3	127
311	Mesenchymal Stem Cells Aggregate and Deliver Gold Nanoparticles to Tumors for Photothermal Therapy. *ACS Nano*, **2015**, 9, 9678-90	16.7	126
310	Engineering of volume-stable adipose tissues. *Biomaterials*, **2005**, 26, 3577-85	15.6	123
309	Dynamic seeding and in vitro culture of hepatocytes in a flow perfusion system. *Tissue Engineering*, **2000**, 6, 39-44		122
308	In Vitro Biocompatibility Evaluation Of Naturally Derived And Synthetic Biomaterials Using Normal Human Bladder Smooth Muscle Cells. *Journal of Urology*, **2002**, 167, 1867-1871	2.5	118
307	Graphene-regulated cardiomyogenic differentiation process of mesenchymal stem cells by enhancing the expression of extracellular matrix proteins and cell signaling molecules. *Advanced Healthcare Materials*, **2014**, 3, 176-81	10.1	117
306	Dual Roles of Graphene Oxide To Attenuate Inflammation and Elicit Timely Polarization of Macrophage Phenotypes for Cardiac Repair. *ACS Nano*, **2018**, 12, 1959-1977	16.7	116
305	Accelerated bonelike apatite growth on porous polymer/ceramic composite scaffolds in vitro. *Tissue Engineering*, **2006**, 12, 2997-3006		115
304	Dual Roles of Graphene Oxide in Chondrogenic Differentiation of Adult Stem Cells: Cell-Adhesion Substrate and Growth Factor-Delivery Carrier. *Advanced Functional Materials*, **2014**, 24, 6455-6464	15.6	112
303	A poly(lactic acid)/calcium metaphosphate composite for bone tissue engineering. *Biomaterials*, **2005**, 26, 6314-22	15.6	108
302	Enhanced cartilage formation via three-dimensional cell engineering of human adipose-derived stem cells. *Tissue Engineering - Part A*, **2012**, 18, 1949-56	3.9	107
301	Effects of cardiac patches engineered with bone marrow-derived mononuclear cells and PGCL scaffolds in a rat myocardial infarction model. *Biomaterials*, **2007**, 28, 641-9	15.6	107
300	Iron oxide nanoparticle-mediated development of cellular gap junction crosstalk to improve mesenchymal stem cells' therapeutic efficacy for myocardial infarction. *ACS Nano*, **2015**, 9, 2805-19	16.7	102
299	Efficacious and clinically relevant conditioned medium of human adipose-derived stem cells for therapeutic angiogenesis. *Molecular Therapy*, **2014**, 22, 862-72	11.7	102
298	The effect of cyclic strain on embryonic stem cell-derived cardiomyocytes. *Biomaterials*, **2008**, 29, 844-56	15.6	102
297	Poly(lactic-co-glycolic acid) microspheres as an injectable scaffold for cartilage tissue engineering. *Tissue Engineering*, **2005**, 11, 438-47		100

296	Covalent conjugation of mechanically stiff graphene oxide flakes to three-dimensional collagen scaffolds for osteogenic differentiation of human mesenchymal stem cells. *Carbon*, **2015**, 83, 162-172	10.4	97
295	Heparin-conjugated fibrin as an injectable system for sustained delivery of bone morphogenetic protein-2. *Tissue Engineering - Part A*, **2010**, 16, 1225-33	3.9	96
294	Injectable hyaluronic acid-tyramine hydrogels for the treatment of rheumatoid arthritis. *Acta Biomaterialia*, **2011**, 7, 666-74	10.8	95
293	In vivo bone formation following transplantation of human adipose-derived stromal cells that are not differentiated osteogenically. *Tissue Engineering - Part A*, **2008**, 14, 1285-94	3.9	95
292	Effect of cross-linking reagents for hyaluronic acid hydrogel dermal fillers on tissue augmentation and regeneration. *Bioconjugate Chemistry*, **2010**, 21, 240-7	6.3	94
291	Enhancement of adipose tissue formation by implantation of adipogenic-differentiated preadipocytes. *Biochemical and Biophysical Research Communications*, **2006**, 345, 588-94	3.4	92
290	Action potential duration restitution kinetics in human atrial fibrillation. *Journal of the American College of Cardiology*, **2002**, 39, 1329-36	15.1	88
289	Shear-reversibly crosslinked alginate hydrogels for tissue engineering. *Macromolecular Bioscience*, **2009**, 9, 895-901	5.5	87
288	Development of technologies aiding large-tissue engineering. *Biotechnology Progress*, **1998**, 14, 134-40	2.8	86
287	Studies of brush border enzymes, basement membrane components, and electrophysiology of tissue-engineered neointestine. *Journal of Pediatric Surgery*, **1998**, 33, 991-6; discussion 996-7	2.6	86
286	Peripheral nerve regeneration using acellular nerve grafts. *Journal of Biomedical Materials Research Part B*, **2004**, 68, 201-9		86
285	Graphene Potentiates the Myocardial Repair Efficacy of Mesenchymal Stem Cells by Stimulating the Expression of Angiogenic Growth Factors and Gap Junction Protein. *Advanced Functional Materials*, **2015**, 25, 2590-2600	15.6	85
284	Culture of neural cells and stem cells on graphene. *Tissue Engineering and Regenerative Medicine*, **2013**, 10, 39-46	4.5	84
283	Enhanced skin wound healing by a sustained release of growth factors contained in platelet-rich plasma. *Experimental and Molecular Medicine*, **2011**, 43, 622-9	12.8	84
282	Graphene enhances the cardiomyogenic differentiation of human embryonic stem cells. *Biochemical and Biophysical Research Communications*, **2014**, 452, 174-80	3.4	83
281	Apatite-coated poly(lactic-co-glycolic acid) microspheres as an injectable scaffold for bone tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2008**, 85, 747-56	5.4	83
280	Therapeutic effects of human adipose stem cell-conditioned medium on stroke. *Journal of Neuroscience Research*, **2012**, 90, 1794-802	4.4	82
279	Vascular patches tissue-engineered with autologous bone marrow-derived cells and decellularized tissue matrices. *Biomaterials*, **2005**, 26, 1915-24	15.6	82

278	Stem cell recruitment and angiogenesis of neuropeptide substance P coupled with self-assembling peptide nanofiber in a mouse hind limb ischemia model. *Biomaterials*, **2013**, 34, 1657-68	15.6	80
277	Therapeutic Efficacy-Potentiated and Diseased Organ-Targeting Nanovesicles Derived from Mesenchymal Stem Cells for Spinal Cord Injury Treatment. *Nano Letters*, **2018**, 18, 4965-4975	11.5	78
276	Transfection of mesenchymal stem cells with the FGF-2 gene improves their survival under hypoxic conditions. *Molecules and Cells*, **2005**, 19, 402-7	3.5	77
275	Efficient mRNA delivery with graphene oxide-polyethylenimine for generation of footprint-free human induced pluripotent stem cells. *Journal of Controlled Release*, **2016**, 235, 222-235	11.7	76
274	Tissue transglutaminase is essential for integrin-mediated survival of bone marrow-derived mesenchymal stem cells. *Stem Cells*, **2007**, 25, 1431-8	5.8	74
273	Injectable multifunctional microgel encapsulating outgrowth endothelial cells and growth factors for enhanced neovascularization. *Journal of Controlled Release*, **2014**, 187, 1-13	11.7	73
272	Comparison between heparin-conjugated fibrin and collagen sponge as bone morphogenetic protein-2 carriers for bone regeneration. *Experimental and Molecular Medicine*, **2012**, 44, 350-5	12.8	73
271	Control of the molecular degradation of hyaluronic acid hydrogels for tissue augmentation. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 685-93	5.4	73
270	Zinc Oxide Nanorod-Based Piezoelectric Dermal Patch for Wound Healing. *Advanced Functional Materials*, **2017**, 27, 1603497	15.6	72
269	The behavior of neural stem cells on biodegradable synthetic polymers. *Journal of Biomaterials Science, Polymer Edition*, **2007**, 18, 223-39	3.5	72
268	Thermally produced biodegradable scaffolds for cartilage tissue engineering. *Macromolecular Bioscience*, **2004**, 4, 802-10	5.5	70
267	Combining chondrocytes and smooth muscle cells to engineer hybrid soft tissue constructs. *Tissue Engineering*, **2000**, 6, 297-305		70
266	Mesenchymal stem cell-derived magnetic extracellular nanovesicles for targeting and treatment of ischemic stroke. *Biomaterials*, **2020**, 243, 119942	15.6	68
265	Highly porous polymer matrices as a three-dimensional culture system for hepatocytes. *Cell Transplantation*, **1997**, 6, 463-8	4	68
264	Articular cartilage regeneration with microfracture and hyaluronic acid. *Biotechnology Letters*, **2008** , 30, 435-9	3	68
263	Locally delivered growth factor enhances the angiogenic efficacy of adipose-derived stromal cells transplanted to ischemic limbs. *Stem Cells*, **2009**, 27, 1976-86	5.8	67
262	Suspension culture of mammalian cells using thermosensitive microcarrier that allows cell detachment without proteolytic enzyme treatment. *Cell Transplantation*, **2010**, 19, 1123-32	4	66
261	Gold Nanoparticle/Graphene Oxide Hybrid Sheets Attached on Mesenchymal Stem Cells for Effective Photothermal Cancer Therapy. *Chemistry of Materials*, **2017**, 29, 3461-3476	9.6	65

260	In situ hybridization of carbon nanotubes with bacterial cellulose for three-dimensional hybrid bioscaffolds. *Biomaterials*, **2015**, 58, 93-102	15.6	62
259	In vivo real-time bioimaging of hyaluronic acid derivatives using quantum dots. *Biopolymers*, **2008**, 89, 1144-53	2.2	61
258	Stimulation of chondrogenic differentiation of mesenchymal stem cells. *International Journal of Stem Cells*, **2012**, 5, 16-22	3	61
257	Effects of BMP-2 and vitamin D3 on the osteogenic differentiation of adipose stem cells. *Biochemical and Biophysical Research Communications*, **2011**, 408, 126-31	3.4	60
256	Hyaline cartilage regeneration by combined therapy of microfracture and long-term bone morphogenetic protein-2 delivery. *Tissue Engineering - Part A*, **2011**, 17, 1809-18	3.9	60
255	Porous poly(lactic-co-glycolic acid) microsphere as cell culture substrate and cell transplantation vehicle for adipose tissue engineering. *Tissue Engineering - Part C: Methods*, **2008**, 14, 25-34	2.9	60
254	Nanosphere-mediated delivery of vascular endothelial growth factor gene for therapeutic angiogenesis in mouse ischemic limbs. *Biomaterials*, **2008**, 29, 1109-17	15.6	56
253	Long-term follow-up of tissue-engineered intestine after anastomosis to native small bowel. *Transplantation*, **2000**, 69, 1927-32	1.8	55
252	Angiogenesis facilitated by autologous whole bone marrow stem cell transplantation for Buerger's disease. *Stem Cells*, **2006**, 24, 1194-200	5.8	54
251	Chitosan-g-hematin: enzyme-mimicking polymeric catalyst for adhesive hydrogels. *Acta Biomaterialia*, **2014**, 10, 224-33	10.8	53
250	In vivo tracking of mesechymal stem cells using fluorescent nanoparticles in an osteochondral repair model. *Molecular Therapy*, **2012**, 20, 1434-42	11.7	53
249	Orthotopic bone formation by implantation of apatite-coated poly(lactide-co-glycolide)/hydroxyapatite composite particulates and bone morphogenetic protein-2. *Journal of Biomedical Materials Research - Part A*, **2008**, 87, 245-53	5.4	53
248	Active blood vessel formation in the ischemic hindlimb mouse model using a microsphere/hydrogel combination system. *Pharmaceutical Research*, **2010**, 27, 767-74	4.5	52
247	Cyclic strain inhibits switching of smooth muscle cells to an osteoblast-like phenotype. *FASEB Journal*, **2003**, 17, 455-7	0.9	52
246	Nanogrooved substrate promotes direct lineage reprogramming of fibroblasts to functional induced dopaminergic neurons. *Biomaterials*, **2015**, 45, 36-45	15.6	50
245	Nanovesicles derived from iron oxide nanoparticles-incorporated mesenchymal stem cells for cardiac repair. *Science Advances*, **2020**, 6, eaaz0952	14.3	49
244	Self-assembled extracellular macromolecular matrices and their different osteogenic potential with preosteoblasts and rat bone marrow mesenchymal stromal cells. *Biomacromolecules*, **2012**, 13, 2811-20	6.9	48
243	Open macroporous poly(lactic-co-glycolic Acid) microspheres as an injectable scaffold for cartilage tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, **2009**, 20, 399-409	3.5	48

242	Modified Magnesium Hydroxide Nanoparticles Inhibit the Inflammatory Response to Biodegradable Poly(lactide- co-glycolide) Implants. *ACS Nano*, **2018**, 12, 6917-6925	16.7	48
241	Delivery of bone morphogenetic protein-2 and substance P using graphene oxide for bone regeneration. *International Journal of Nanomedicine*, **2014**, 9 Suppl 1, 107-16	7.3	47
240	The efficacy of bone morphogenetic protein-2 depends on its mode of delivery. *Artificial Organs*, **2010**, 34, 1150-3	2.6	47
239	In□vivo stem cell tracking with imageable nanoparticles that bind bioorthogonal chemical receptors on the stem cell surface. *Biomaterials*, **2017**, 139, 12-29	15.6	46
238	Electroactive electrospun polyaniline/poly[(L-lactide)-co-(□caprolactone)] fibers for control of neural cell function. *Macromolecular Bioscience*, **2012**, 12, 402-11	5.5	46
237	Heparin-conjugated polyethylenimine for gene delivery. *Journal of Controlled Release*, **2008**, 132, 236-42	11.7	46
236	Early diagnosis of arthritis in mice with collagen-induced arthritis, using a fluorogenic matrix metalloproteinase 3-specific polymeric probe. *Arthritis and Rheumatism*, **2011**, 63, 3824-32		45
235	Effects of anastomosis of tissue-engineered neointestine to native small bowel. *Journal of Surgical Research*, **1999**, 87, 6-13	2.5	44
234	Treatment of FGF-2 on stem cells from inflamed dental pulp tissue from human deciduous teeth. *Oral Diseases*, **2014**, 20, 191-204	3.5	43
233	Non-invasive optical imaging of cathepsin B with activatable fluorogenic nanoprobes in various metastatic models. *Biomaterials*, **2014**, 35, 2302-11	15.6	43
232	In vitro cardiomyogenic differentiation of adipose-derived stromal cells using transforming growth factor-beta1. *Cell Biochemistry and Function*, **2009**, 27, 148-54	4.2	43
231	Engineering of Human Cartilage Rods: Potential Application for Penile Prostheses. *Journal of Urology*, **2002**, 168, 1794-1797	2.5	43
230	Enhancement of the osteogenic efficacy of osteoblast transplantation by the sustained delivery of basic fibroblast growth factor. *Journal of Biomedical Materials Research - Part B Applied Biomaterials* , **2006**, 79, 353-9	3.5	42
229	Improvement of kidney failure with fetal kidney precursor cell transplantation. *Transplantation*, **2007**, 83, 1249-58	1.8	42
228	Poly(L-lactide-co-glycolide) nanospheres conjugated with a nuclear localization signal for delivery of plasmid DNA. *Journal of Drug Targeting*, **2007**, 15, 190-8	5.4	42
227	A Novel Polymeric Ionomer as a Potential Biomaterial: Crystallization Behavior, Degradation, and In-Vitro Cellular Interactions. *Advanced Functional Materials*, **2005**, 15, 367-374	15.6	42
226	Immunomodulatory Lipocomplex Functionalized with Photosensitizer-Embedded Cancer Cell Membrane Inhibits Tumor Growth and Metastasis. *Nano Letters*, **2019**, 19, 5185-5193	11.5	41
225	Enhancement of in vivo endothelialization of tissue-engineered vascular grafts by granulocyte colony-stimulating factor. *Journal of Biomedical Materials Research - Part A*, **2006**, 76, 252-63	5.4	41

224	Survival and function of rat hepatocytes cocultured with nonparenchymal cells or sinusoidal endothelial cells on biodegradable polymers under flow conditions. *Journal of Pediatric Surgery*, **2000**, 35, 1287-90	2.6	41
223	Three-dimensional cell grafting enhances the angiogenic efficacy of human umbilical vein endothelial cells. *Tissue Engineering - Part A*, **2012**, 18, 310-9	3.9	40
222	Engineered adipose tissue formation enhanced by basic fibroblast growth factor and a mechanically stable environment. *Cell Transplantation*, **2007**, 16, 421-34	4	40
221	Smooth muscle-like tissues engineered with bone marrow stromal cells. *Biomaterials*, **2004**, 25, 2979-86	15.6	40
220	Modulation of BMP-2-induced chondrogenic versus osteogenic differentiation of human mesenchymal stem cells by cell-specific extracellular matrices. *Tissue Engineering - Part A*, **2013**, 19, 49-58	3.9	39
219	Apatite-coated collagen scaffold for bone morphogenetic protein-2 delivery. *Tissue Engineering - Part A*, **2011**, 17, 2153-64	3.9	39
218	The effect of the controlled release of nerve growth factor from collagen gel on the efficiency of neural cell culture. *Biomaterials*, **2009**, 30, 126-32	15.6	39
217	Nanothin Coculture Membranes with Tunable Pore Architecture and Thermoresponsive Functionality for Transfer-Printable Stem Cell-Derived Cardiac Sheets. *ACS Nano*, **2015**, 9, 10186-202	16.7	37
216	Additive effect of endothelial progenitor cell mobilization and bone marrow mononuclear cell transplantation on angiogenesis in mouse ischemic limbs. *Journal of Biomedical Science*, **2007**, 14, 323-30	13.3	37
215	Regenerative signals for intestinal epithelial organoid units transplanted on biodegradable polymer scaffolds for tissue engineering of small intestine. *Transplantation*, **1999**, 67, 227-33	1.8	37
214	Open pore biodegradable matrices formed with gas foaming **1998**, 42, 396		37
213	Injury-Mediated Vascular Regeneration Requires Endothelial ER71/ETV2. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, 86-96	9.4	36
212	Controlled release of nerve growth factor from fibrin gel. *Journal of Biomedical Materials Research - Part A*, **2007**, 80, 998-1002	5.4	36
211	Regeneration of whole meniscus using meniscal cells and polymer scaffolds in a rabbit total meniscectomy model. *Journal of Biomedical Materials Research - Part A*, **2006**, 78, 659-71	5.4	36
210	Basic fibroblast growth factor promotes bone marrow stromal cell transplantation-mediated neural regeneration in traumatic brain injury. *Biochemical and Biophysical Research Communications*, **2007**, 359, 40-5	3.4	36
209	Cellular interactions and degradation of aliphatic poly(ester amide)s derived from glycine and/or 4-amino butyric acid. *Biomaterials*, **2003**, 24, 3453-62	15.6	36
208	Skin regeneration using keratinocytes and dermal fibroblasts cultured on biodegradable microspherical polymer scaffolds. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2005**, 75, 369-77	3.5	36
207	Adhesive barrier/directional controlled release for cartilage repair by endogenous progenitor cell recruitment. *Biomaterials*, **2015**, 39, 173-81	15.6	35

206	Bone morphogenetic protein-2 for bone regeneration Dose reduction through graphene oxide-based delivery. *Carbon*, **2014**, 78, 428-438	10.4	35
205	Behaviors of stem cells on carbon nanotube. *Biomaterials Research*, **2015**, 19, 3	16.8	35
204	Small intestinal submucosa as a small-caliber venous graft: a novel model for hepatocyte transplantation on synthetic biodegradable polymer scaffolds with direct access to the portal venous system. *Journal of Pediatric Surgery*, **1999**, 34, 124-8	2.6	35
203	Delivery of basic fibroblast growth factor using heparin-conjugated fibrin for therapeutic angiogenesis. *Tissue Engineering - Part A*, **2010**, 16, 2113-9	3.9	34
202	Evidence for in vivo growth potential and vascular remodeling of tissue-engineered artery. *Tissue Engineering - Part A*, **2009**, 15, 901-12	3.9	34
201	Effect of chondrocyte passage number on histological aspects of tissue-engineered cartilage. *Bio-Medical Materials and Engineering*, **2007**, 17, 269-76	1	34
200	Dual-Modal Imaging-Guided Precise Tracking of Bioorthogonally Labeled Mesenchymal Stem Cells in Mouse Brain Stroke. *ACS Nano*, **2019**, 13, 10991-11007	16.7	33
199	Mutual effect of subcutaneously transplanted human adipose-derived stem cells and pancreatic islets within fibrin gel. *Biomaterials*, **2013**, 34, 7247-56	15.6	33
198	Cartilage tissue formation from dedifferentiated chondrocytes by codelivery of BMP-2 and SOX-9 genes encoding bicistronic vector. *Cell Transplantation*, **2013**, 22, 1519-28	4	33
197	Cathepsin B-sensitive nanoprobe for in vivo tumor diagnosis. *Journal of Materials Chemistry*, **2011**, 21, 17631		33
196	Tissue-engineered neomucosa: morphology, enterocyte dynamics, and SGLT1 expression topography. *Transplantation*, **2003**, 75, 181-5	1.8	33
195	TISSUE ENGINEERED STENTS CREATED FROM CHONDROCYTES. *Journal of Urology*, **2001**, 165, 2091-2095	2.5	33
194	End-to-end anastomosis between tissue-engineered intestine and native small bowel. *Tissue Engineering*, **1999**, 5, 339-46		32
193	In vivo fluorescence imaging for cancer diagnosis using receptor-targeted epidermal growth factor-based nanoprobe. *Biomaterials*, **2013**, 34, 9149-59	15.6	31
192	Synergistic effect of sustained delivery of basic fibroblast growth factor and bone marrow mononuclear cell transplantation on angiogenesis in mouse ischemic limbs. *Biomaterials*, **2006**, 27, 1617-25	15.6	31
191	The role of tauroursodeoxycholic acid on adipogenesis of human adipose-derived stem cells by modulation of ER stress. *Biomaterials*, **2014**, 35, 2851-8	15.6	30
190	Enhancement of angiogenic efficacy of human cord blood cell transplantation. *Tissue Engineering*, **2006**, 12, 1651-61		30
189	Integration of mesenchymal stem cells with nanobiomaterials for the repair of myocardial infarction. *Advanced Drug Delivery Reviews*, **2015**, 95, 15-28	18.5	29

188	Cooperative Catechol-Functionalized Polypept(o)ide Brushes and Ag Nanoparticles for Combination of Protein Resistance and Antimicrobial Activity on Metal Oxide Surfaces. *Biomacromolecules*, **2018**, 19, 1602-1613	6.9	29
187	Preliminary experience with tissue engineering of a venous vascular patch by using bone marrow-derived cells and a hybrid biodegradable polymer scaffold. *Journal of Vascular Surgery*, **2006**, 44, 1329-40	3.5	29
186	Development of comprehensive accuracy assessment indexes for building footprint extraction. *IEEE Transactions on Geoscience and Remote Sensing*, **2005**, 43, 402-404	8.1	29
185	Successful anastomosis between tissue-engineered intestine and native small bowel. *Transplantation*, **1999**, 67, 241-5	1.8	29
184	Conditioned medium of adipose-derived stromal cell culture in three-dimensional bioreactors for enhanced wound healing. *Journal of Surgical Research*, **2015**, 194, 8-17	2.5	28
183	Three-dimensional scaffolds of carbonized polyacrylonitrile for bone tissue regeneration. *Angewandte Chemie - International Edition*, **2014**, 53, 9213-7	16.4	28
182	Ridge regeneration of damaged extraction sockets using rhBMP-2: an experimental study in canine. *Journal of Clinical Periodontology*, **2015**, 42, 678-87	7.7	28
181	Spinner-flask culture induces redifferentiation of de-differentiated chondrocytes. *Biotechnology Letters*, **2011**, 33, 829-36	3	28
180	Development of functional fibrous matrices for the controlled release of basic fibroblast growth factor to improve therapeutic angiogenesis. *Tissue Engineering - Part A*, **2010**, 16, 2999-3010	3.9	28
179	Solid free-form fabrication-based PCL/HA scaffolds fabricated with a multi-head deposition system for bone tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, **2010**, 21, 951-62	3.5	28
178	Electrical properties of composite films using carbon nanotube/polyelectrolyte self-assembled particles. *Macromolecular Research*, **2008**, 16, 76-80	1.9	28
177	Dual roles of hyaluronic acids in multilayer films capturing nanocarriers for drug-eluting coatings. *Biomaterials*, **2012**, 33, 5468-77	15.6	27
176	A dual delivery of substance P and bone morphogenetic protein-2 for mesenchymal stem cell recruitment and bone regeneration. *Tissue Engineering - Part A*, **2015**, 21, 1275-87	3.9	27
175	Tissue engineering of heart valves by recellularization of glutaraldehyde-fixed porcine valves using bone marrow-derived cells. *Experimental and Molecular Medicine*, **2006**, 38, 273-83	12.8	27
174	Synergistic effect of keratinocyte transplantation and epidermal growth factor delivery on epidermal regeneration. *Cell Transplantation*, **2005**, 14, 809-17	4	27
173	High-resolution elasticity imaging for tissue engineering. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, **2000**, 47, 956-66	3.2	27
172	T-Cell-Mimicking Nanoparticles for Cancer Immunotherapy. *Advanced Materials*, **2020**, 32, e2003368	24	27
171	Graphene oxide reinforced hydrogels for osteogenic differentiation of human adipose-derived stem cells. *RSC Advances*, **2017**, 7, 20779-20788	3.7	26

170	Mesenchymal stem cell-conditioned medium enhances osteogenic and chondrogenic differentiation of human embryonic stem cells and human induced pluripotent stem cells by mesodermal lineage induction. *Tissue Engineering - Part A*, **2014**, 20, 1306-13	3.9	26
169	Transplantation of heterospheroids of islet cells and mesenchymal stem cells for effective angiogenesis and antiapoptosis. *Tissue Engineering - Part A*, **2015**, 21, 1024-35	3.9	26
168	Acquisition of human alveolar bone-derived stromal cells using minimally irrigated implant osteotomy: in vitro and in vivo evaluations. *Journal of Clinical Periodontology*, **2012**, 39, 495-505	7.7	26
167	Tissue-engineered blood vessels with endothelial nitric oxide synthase activity. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2008**, 85, 537-46	3.5	26
166	Regenerative signals for tissue-engineered small intestine. *Transplantation Proceedings*, **1999**, 31, 657-60	1.1	26
165	pH-triggered release of manganese from MnAu nanoparticles that enables cellular neuronal differentiation without cellular toxicity. *Biomaterials*, **2015**, 55, 33-43	15.6	25
164	Enhanced Bone Repair by Guided Osteoblast Recruitment Using Topographically Defined Implant. *Tissue Engineering - Part A*, **2016**, 22, 654-64	3.9	25
163	Generation of Integration-Free Induced Neurons Using Graphene Oxide-Polyethylenimine. *Small*, **2017**, 13, 1601993	11	25
162	Thermosensitive, Stretchable, and Piezoelectric Substrate for Generation of Myogenic Cell Sheet Fragments from Human Mesenchymal Stem Cells for Skeletal Muscle Regeneration. *Advanced Functional Materials*, **2017**, 27, 1703853	15.6	24
161	Enhancement of long-term angiogenic efficacy of adipose stem cells by delivery of FGF2. *Microvascular Research*, **2012**, 84, 1-8	3.7	24
160	A collagen matrix derived from bladder can be used to engineer smooth muscle tissue. *World Journal of Urology*, **2008**, 26, 307-14	4	24
159	Tissue engineering of heart valves in vivo using bone marrow-derived cells. *Artificial Organs*, **2006**, 30, 554-7	2.6	24
158	Enhanced neuronal differentiation of pheochromocytoma 12 cells on polydopamine-modified surface. *Biochemical and Biophysical Research Communications*, **2013**, 430, 1294-300	3.4	23
157	The effect of the delivery carrier on the quality of bone formed via bone morphogenetic protein-2. *Artificial Organs*, **2012**, 36, 642-7	2.6	23
156	The role of transforming growth factor-beta and bone morphogenetic protein with fibrin glue in healing of bone-tendon junction injury. *Connective Tissue Research*, **2007**, 48, 309-15	3.3	23
155	Kidney tissue reconstruction by fetal kidney cell transplantation: effect of gestation stage of fetal kidney cells. *Stem Cells*, **2007**, 25, 1393-401	5.8	23
154	The use of poly(lactic-co-glycolic acid) microspheres as injectable cell carriers for cartilage regeneration in rabbit knees. *Journal of Biomaterials Science, Polymer Edition*, **2006**, 17, 925-39	3.5	23
153	Mesenchymal stem cells for treatment of myocardial infarction. *International Journal of Stem Cells*, **2008**, 1, 49-54	3	23

152	Enhancement of osteogenic and chondrogenic differentiation of human embryonic stem cells by mesodermal lineage induction with BMP-4 and FGF2 treatment. *Biochemical and Biophysical Research Communications*, **2013**, 430, 793-7	3.4	22
151	Bone morphogenetic protein-2 enhances bone regeneration mediated by transplantation of osteogenically undifferentiated bone marrow-derived mesenchymal stem cells. *Biotechnology Letters*, **2008**, 30, 1163-8	3	22
150	Renal tissue reconstitution by the implantation of renal segments on biodegradable polymer scaffolds. *Biotechnology Letters*, **2003**, 25, 1505-8	3	22
149	Effects of culture conditions on osteogenic differentiation in human mesenchymal stem cells. *Journal of Microbiology and Biotechnology*, **2007**, 17, 1113-9	3.3	22
148	Artificial Slanted Nanocilia Array as a Mechanotransducer for Controlling Cell Polarity. *ACS Nano*, **2017**, 11, 730-741	16.7	21
147	Simple and facile preparation of recombinant human bone morphogenetic protein-2 immobilized titanium implant via initiated chemical vapor deposition technique to promote osteogenesis for bone tissue engineering application. *Materials Science and Engineering C*, **2019**, 100, 949-958	8.3	21
146	Platelet-rich plasma enhances the dermal regeneration efficacy of human adipose-derived stromal cells administered to skin wounds. *Cell Transplantation*, **2013**, 22, 437-45	4	21
145	The effect of platelet rich plasma from bone marrow aspirate with added bone morphogenetic protein-2 on the Achilles tendon-bone junction in rabbits. *Clinics in Orthopedic Surgery*, **2011**, 3, 325-31	2.9	21
144	Porcine vesical acellular matrix graft of tunica albuginea for penile reconstruction. *Asian Journal of Andrology*, **2006**, 8, 543-8	2.8	21
143	3,4-dihydroxyphenylalanine-assisted hydroxyapatite nanoparticle coating on polymer scaffolds for efficient osteoconduction. *Tissue Engineering - Part C: Methods*, **2012**, 18, 245-51	2.9	20
142	Optimization of matrix metalloproteinase fluorogenic probes for osteoarthritis imaging. *Amino Acids*, **2011**, 41, 1113-22	3.5	20
141	Combined sustained delivery of basic fibroblast growth factor and administration of granulocyte colony-stimulating factor: synergistic effect on angiogenesis in mouse ischemic limbs. *Journal of Endovascular Therapy*, **2006**, 13, 175-81	2.5	20
140	Measurement of MMP Activity in Synovial Fluid in Cases of Osteoarthritis and Acute Inflammatory Conditions of the Knee Joints Using a Fluorogenic Peptide Probe-Immobilized Diagnostic Kit. *Theranostics*, **2012**, 2, 198-206	12.1	19
139	Comparison of osteogenic potential between apatite-coated poly(lactide-co-glycolide)/hydroxyapatite particulates and Bio-Oss. *Dental Materials Journal*, **2008**, 27, 368-75	2.5	19
138	Poly(lactic-co-glycolic acid) nanosphere as a vehicle for gene delivery to human cord blood-derived mesenchymal stem cells: comparison with polyethylenimine. *Biotechnology Letters*, **2008**, 30, 1177-82	3	19
137	Granulocyte colony-stimulating factor treatment enhances the efficacy of cellular cardiomyoplasty with transplantation of embryonic stem cell-derived cardiomyocytes in infarcted myocardium. *Biochemical and Biophysical Research Communications*, **2006**, 340, 573-82	3.4	19
136	The enhancement of recombinant protein production by polymer nanospheres in cell suspension culture. *Biomaterials*, **2005**, 26, 2173-81	15.6	19
135	Optimizing seeding and culture methods to engineer smooth muscle tissue on biodegradable polymer matrices **1998**, 57, 46		19

134	In vitro biocompatibility evaluation of naturally derived and synthetic biomaterials using normal human bladder smooth muscle cells. *Journal of Urology*, **2002**, 167, 1867-71	2.5	19
133	Therapeutic angiogenesis by a myoblast layer harvested by tissue transfer printing from cell-adhesive, thermosensitive hydrogels. *Biomaterials*, **2013**, 34, 8258-68	15.6	18
132	Novel application of human periodontal ligament stem cells and water-soluble chitin for collagen tissue regeneration: in vitro and in vivo investigations. *Tissue Engineering - Part A*, **2012**, 18, 643-53	3.9	18
131	Cyclic mechanical strain promotes transforming-growth-factor-beta1-mediated cardiomyogenic marker expression in bone-marrow-derived mesenchymal stem cells in vitro. *Biotechnology and Applied Biochemistry*, **2010**, 55, 191-7	2.8	18
130	Therapeutic Angiogenesis via Solar Cell-Facilitated Electrical Stimulation. *ACS Applied Materials & Interfaces*, **2017**, 9, 38344-38355	9.5	17
129	Controlled delivery of low-dose bone morphogenetic protein-2 using heparin-conjugated fibrin in the posterolateral lumbar fusion of rabbits. *Artificial Organs*, **2013**, 37, 487-94	2.6	17
128	Design and characterization of a maltose binding protein-linked growth factor for matrix engineering. *Biotechnology Letters*, **2009**, 31, 1677-84	3	17
127	Stable hepatocyte transplantation using fibrin matrix. *Biotechnology Letters*, **2004**, 26, 505-8	3	17
126	Controlled release of BMP-2 using a heparin-conjugated carrier system reduces in vivo adipose tissue formation. *Journal of Biomedical Materials Research - Part A*, **2015**, 103, 545-54	5.4	16
125	Sensors in heart-on-a-chip: A review on recent progress. *Talanta*, **2020**, 219, 121269	6.2	16
124	Efficient formation of cell spheroids using polymer nanofibers. *Biotechnology Letters*, **2012**, 34, 795-803	3	16
123	Enhanced nerve growth factor efficiency in neural cell culture by immobilization on the culture substrate. *Biochemical and Biophysical Research Communications*, **2009**, 382, 315-20	3.4	16
122	Stretchable Piezoelectric Substrate Providing Pulsatile Mechanoelectric Cues for Cardiomyogenic Differentiation of Mesenchymal Stem Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 22101-22111	9.5	15
121	Stem-cell therapy for peripheral arterial occlusive disease. *European Journal of Vascular and Endovascular Surgery*, **2011**, 42, 667-75	2.3	15
120	Combined delivery of heme oxygenase-1 gene and fibroblast growth factor-2 protein for therapeutic angiogenesis. *Biomaterials*, **2009**, 30, 6247-56	15.6	15
119	Electrorheological properties of carbon nanotube/polyelectrolyte self-assembled polystyrene particles by layer-by-layer assembly. *Journal of Polymer Science Part A*, **2008**, 46, 1058-1065	2.5	15
118	Combined therapy with human cord blood cell transplantation and basic fibroblast growth factor delivery for treatment of myocardial infarction. *European Journal of Heart Failure*, **2007**, 9, 974-85	12.3	15
117	Anastomosis between tissue-engineered intestine and native small bowel. *Transplantation Proceedings*, **1999**, 31, 661-2	1.1	15

116	Autologous bone marrow cell transplantation combined with off-pump coronary artery bypass grafting in patients with ischemic cardiomyopathy. *Canadian Journal of Surgery*, **2008**, 51, 269-75	2	15
115	Cellular Layer-by-Layer Coculture Platform Using Biodegradable, Nanoarchitectured Membranes for Stem Cell Therapy. *Chemistry of Materials*, **2017**, 29, 5134-5147	9.6	14
114	Dose- and time-dependent effects of recombinant human bone morphogenetic protein-2 on the osteogenic and adipogenic potentials of alveolar bone-derived stromal cells. *Journal of Periodontal Research*, **2012**, 47, 645-54	4.3	14
113	Modelling APOE e3/4 allele-associated sporadic Alzheimer's disease in an induced neuron. *Brain*, **2017**, 140, 2193-2209	11.2	14
112	Control of adult stem cell behavior with biomaterials. *Tissue Engineering and Regenerative Medicine*, **2014**, 11, 423-430	4.5	14
111	Enhanced chondrogenic marker expression of human mesenchymal stem cells by interaction with both TGF-β and hyaluronic acid. *Biotechnology and Applied Biochemistry*, **2011**, 58, 271-6	2.8	14
110	Apatite-coated porous poly(lactic-co-glycolic acid) microspheres as an injectable bone substitute. *Journal of Biomaterials Science, Polymer Edition*, **2010**, 21, 635-45	3.5	14
109	Suspension culture of anchorage-dependent animal cells using nanospheres of the biodegradable polymer, poly(lactic-co-glycolic acid). *Biotechnology Letters*, **2003**, 25, 1363-7	3	14
108	Suspension culture of hematopoietic stem cells in stirred bioreactors. *Biotechnology Letters*, **2003**, 25, 179-82	3	14
107	Interleukin-4 Gene Transfection and Spheroid Formation Potentiate Therapeutic Efficacy of Mesenchymal Stem Cells for Osteoarthritis. *Advanced Healthcare Materials*, **2020**, 9, e1901612	10.1	13
106	Administration of tauroursodeoxycholic acid enhances osteogenic differentiation of bone marrow-derived mesenchymal stem cells and bone regeneration. *Bone*, **2016**, 83, 73-81	4.7	13
105	Enhanced random skin flap survival by sustained delivery of fibroblast growth factor 2 in rats. *ANZ Journal of Surgery*, **2013**, 83, 354-8	1	13
104	Poly(lactic-co-glycolic acid) microspheres as a potential bulking agent for urological injection therapy: preliminary results. *Journal of Biomedical Materials Research Part B*, **2005**, 72, 166-72		13
103	Heat-Generating Iron Oxide Multigranule Nanoclusters for Enhancing Hyperthermic Efficacy in Tumor Treatment. *ACS Applied Materials & Interfaces*, **2020**, 12, 33483-33491	9.5	12
102	Large scale and integrated platform for digital mass culture of anchorage dependent cells. *Nature Communications*, **2019**, 10, 4824	17.4	12
101	Three-Dimensional Scaffolds of Carbonized Polyacrylonitrile for Bone Tissue Regeneration. *Angewandte Chemie*, **2014**, 126, 9367-9371	3.6	12
100	The dynamic healing profile of human periodontal ligament stem cells: histological and immunohistochemical analysis using an ectopic transplantation model. *Journal of Periodontal Research*, **2012**, 47, 514-24	4.3	12
99	Delivery of fibroblast growth factor 2 enhances the viability of cord blood-derived mesenchymal stem cells transplanted to ischemic limbs. *Journal of Bioscience and Bioengineering*, **2011**, 111, 584-9	3.3	12

98	Enhancement of in vivo bone regeneration efficacy of osteogenically undifferentiated human cord blood mesenchymal stem cells. *Journal of Biomedical Materials Research - Part A*, **2010**, 93, 666-72	5.4	12
97	Combined gene therapy with hypoxia-inducible factor-1 and heme oxygenase-1 for therapeutic angiogenesis. *Tissue Engineering - Part A*, **2011**, 17, 915-26	3.9	12
96	Improved spinal fusion efficacy by long-term delivery of bone morphogenetic protein-2 in a rabbit model. *Monthly Notices of the Royal Astronomical Society: Letters*, **2011**, 82, 756-60	4.3	12
95	In situ cardiomyogenic differentiation of implanted bone marrow mononuclear cells by local delivery of transforming growth factor-. *Cell Transplantation*, **2012**, 21, 299-312	4	12
94	Highly porous polymer matrices as a three-dimensional culture system for hepatocytes: initial results. *Transplantation Proceedings*, **1997**, 29, 2032-4	1.1	12
93	Production of human hematopoietic progenitors in a clinical-scale stirred suspension bioreactor. *Biotechnology Letters*, **1998**, 20, 595-601	3	12
92	Nanocomplex-Mediated In Vivo Programming to Chimeric Antigen Receptor-M1 Macrophages for Cancer Therapy. *Advanced Materials*, **2021**, 33, e2103258	24	12
91	Non-invasive optical imaging of matrix metalloproteinase activity with albumin-based fluorogenic nanoprobes during angiogenesis in a mouse hindlimb ischemia model. *Biomaterials*, **2013**, 34, 6871-81	15.6	11
90	Reduction of Adipose Tissue Formation by the Controlled Release of BMP-2 Using a Hydroxyapatite-Coated Collagen Carrier System for Sinus-Augmentation/Extraction-Socket Grafting. *Materials*, **2015**, 8, 7634-7649	3.5	11
89	Efficient bone regeneration induced by bone morphogenetic protein-2 released from apatite-coated collagen scaffolds. *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 1659-71	3.5	11
88	Lumbar posterolateral fusion using heparin-conjugated fibrin for sustained delivery of bone morphogenic protein-2 in a rabbit model. *Artificial Organs*, **2012**, 36, 629-34	2.6	11
87	Skin regeneration with fibroblast growth factor 2 released from heparin-conjugated fibrin. *Biotechnology Letters*, **2011**, 33, 845-51	3	11
86	Effect of nucleus pulposus cells having different phenotypes on chondrogenic differentiation of adipose-derived stromal cells in a coculture system using porous membranes. *Tissue Engineering - Part A*, **2011**, 17, 2445-51	3.9	11
85	Regeneration of kidney tissue using in vitro cultured fetal kidney cells. *Experimental and Molecular Medicine*, **2008**, 40, 361-9	12.8	11
84	Targeted Delivery of Mesenchymal Stem Cell-Derived Nanovesicles for Spinal Cord Injury Treatment. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	10
83	3,4-dihydroxy-L-phenylalanine as a cell adhesion molecule in serum-free cell culture. *Biotechnology Progress*, **2012**, 28, 1055-60	2.8	10
82	Enhanced bone formation by marrow-derived endothelial and osteogenic cell transplantation. *Journal of Biomedical Materials Research - Part A*, **2010**, 92, 246-53	5.4	10
81	A method for the effective formation of hepatocyte spheroids using a biodegradable polymer nanosphere. *Journal of Biomedical Materials Research - Part A*, **2006**, 78, 268-75	5.4	10

80	Tissue engineering of cartilage with chondrocytes cultured in a chemically-defined, serum-free medium. *Biotechnology Letters*, **2004**, 26, 709-12	3	10
79	Modulation of stem cell differentiation with biomaterials. *International Journal of Stem Cells*, **2010**, 3, 80-4	3	10
78	Enhancement of human peripheral blood mononuclear cell transplantation-mediated bone formation. *Cell Transplantation*, **2011**, 20, 1445-52	4	9
77	The effect of microsphere degradation rate on the efficacy of polymeric microspheres as bulking agents: an 18-month follow-up study. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2007**, 80, 253-9	3.5	9
76	HEK 293 cell suspension culture using fibronectin-adsorbed polymer nanospheres in serum-free medium. *Journal of Biomedical Materials Research Part B*, **2004**, 71, 128-33		9
75	Therapeutic angiogenesis using tumor cell-conditioned medium. *Biotechnology Progress*, **2016**, 32, 456-64	2.8	9
74	Cardiac-mimetic cell-culture system for direct cardiac reprogramming. *Theranostics*, **2019**, 9, 6734-6744	12.1	8
73	Biocompatible Ag nanoparticle-embedded poly(2-hydroxyethyl methacrylate) derivative films with bacterial adhesion-resistant and antibacterial properties. *Macromolecular Research*, **2014**, 22, 337-343	1.9	8
72	Effect of humoral factors from hPDLSCs on the biologic activity of hABCs. *Oral Diseases*, **2012**, 18, 537-47	3.5	8
71	Synthesis and characterization of biocompatible copolymers containing plant-based cardanol and zwitterionic groups for antifouling and bactericidal coating applications. *European Polymer Journal*, **2019**, 112, 688-695	5.2	8
70	Regulatory T Cell-Mediated Tissue Repair. *Advances in Experimental Medicine and Biology*, **2018**, 1064, 221-233	3.6	8
69	Local delivery of a senolytic drug in ischemia and reperfusion-injured heart attenuates cardiac remodeling and restores impaired cardiac function. *Acta Biomaterialia*, **2021**, 135, 520-533	10.8	8
68	Incorporation of gold-coated microspheres into embryoid body of human embryonic stem cells for cardiomyogenic differentiation. *Tissue Engineering - Part A*, **2015**, 21, 374-81	3.9	7
67	Prevascularized, multiple-layered cell sheets of direct cardiac reprogrammed cells for cardiac repair. *Biomaterials Science*, **2020**, 8, 4508-4520	7.4	7
66	The clinical effect of locally delivered minocycline in association with flap surgery for the treatment of chronic severe periodontitis: a split-mouth design. *Journal of Clinical Periodontology*, **2012**, 39, 753-9	7.7	7
65	Bacterial adhesion-resistant poly(2-hydroxyethyl methacrylate) derivative for mammalian cell cultures. *Macromolecular Bioscience*, **2012**, 12, 211-7	5.5	7
64	Antibacterial and biocompatible ABA-triblock copolymers containing perfluoropolyether and plant-based cardanol for versatile coating applications. *RSC Advances*, **2017**, 7, 38091-38099	3.7	7
63	Culture on a 3,4-dihydroxy-l-phenylalanine-coated surface promotes the osteogenic differentiation of human mesenchymal stem cells. *Tissue Engineering - Part A*, **2013**, 19, 1255-63	3.9	7

62	Volume-stable adipose tissue formation by implantation of human adipose-derived stromal cells using solid free-form fabrication-based polymer scaffolds. *Annals of Plastic Surgery*, **2013**, 70, 98-102	1.7	7
61	Angiogenesis induced by autologous whole bone marrow stem cells transplantation. *International Journal of Stem Cells*, **2008**, 1, 64-9	3	7
60	In Vitro Biocompatibility Evaluation Of Naturally Derived And Synthetic Biomaterials Using Normal Human Bladder Smooth Muscle Cells. *Journal of Urology*, **2002**, 1867-1871	2.5	7
59	Comprehensive study on the formation mechanism of highly bioactive compounds from Allium hookeri root using subcritical water and their antioxidant and anticancer effects. *Journal of Supercritical Fluids*, **2020**, 157, 104709	4.2	7
58	Nanoparticle-Mediated Blocking of Excessive Inflammation for Prevention of Heart Failure Following Myocardial Infarction. *Small*, **2021**, 17, e2101207	11	7
57	Synergistic Therapeutic Effect of Three-Dimensional Stem Cell Clusters and Angiopoietin-1 on Promoting Vascular Regeneration in Ischemic Region. *Tissue Engineering - Part A*, **2018**, 24, 616-630	3.9	7
56	Efficient Direct Lineage Reprogramming of Fibroblasts into Induced Cardiomyocytes Using Nanotopographical Cues. *Journal of Biomedical Nanotechnology*, **2017**, 13, 269-79	4	6
55	An Injectable Decellularized Matrix That Improves Mesenchymal Stem Cell Engraftment for Therapeutic Angiogenesis. *ACS Biomaterials Science and Engineering*, **2018**, 4, 2571-2581	5.5	6
54	Apatite-coated collagen sponge for the delivery of bone morphogenetic protein-2 in rabbit posterolateral lumbar fusion. *Artificial Organs*, **2014**, 38, 893-9	2.6	6
53	Local Delivery of Senolytic Drug Inhibits Intervertebral Disc Degeneration and Restores Intervertebral Disc Structure. *Advanced Healthcare Materials*, **2021**, e2101483	10.1	6
52	The Senolytic Drug JQ1 Removes Senescent Cells via Ferroptosis. *Tissue Engineering and Regenerative Medicine*, **2021**, 18, 841-850	4.5	6
51	A Disposable Photovoltaic Patch Controlling Cellular Microenvironment for Wound Healing. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	6
50	Reversible Cell Layering for Heterogeneous Cell Assembly Mediated by Ionic Cross-Linking of Chitosan and a Functionalized Cell Surface Membrane. *Chemistry of Materials*, **2017**, 29, 5294-5305	9.6	5
49	Tumor-targeting glycol chitosan nanocarriers: overcoming the challenges posed by chemotherapeutics. *Expert Opinion on Drug Delivery*, **2019**, 16, 835-846	8	5
48	Novel analysis model for implant osseointegration using ectopic bone formation via the recombinant human bone morphogenetic protein-2/macroporous biphasic calcium phosphate block system in rats: a proof-of-concept study. *Journal of Periodontal and Implant Science*, **2012**, 42, 136-43	2	5
47	Anti-coagulating hydroxyethyl starch blended with hyaluronic acid as a novel post-surgical adhesion barrier. *Macromolecular Research*, **2010**, 18, 1076-1080	1.9	5
46	Submucosal injection of poly(lactic-co-glycolic acid) microspheres in rabbit bladder as a potential treatment for urinary incontinence and vesicoureteral reflux: preliminary results. *Journal of Biomaterials Science, Polymer Edition*, **2005**, 16, 1109-20	3.5	5
45	Mammalian cell cultivation on serum-coated microcarriers. *Biotechnology Letters*, **1992**, 6, 347-352		5

44	Enhanced biocompatibility in poly(3-hexylthiophene)-based organic thin-film transistors upon blending with poly(2-(2-acetoxyacetyl)ethyl methacrylate). *RSC Advances*, **2016**, 6, 16540-16547	3.7	5
43	T-Cell-Derived Nanovesicles for Cancer Immunotherapy. *Advanced Materials*, **2021**, 33, e2101110	24	5
42	3D hierarchical scaffolds enabled by a post-patternable, reconfigurable, and biocompatible 2D vitrimer film for tissue engineering applications. *Journal of Materials Chemistry B*, **2019**, 7, 3341-3345	7.3	4
41	Enhancing Therapeutic Efficacy and Reducing Cell Dosage in Stem Cell Transplantation Therapy for Ischemic Limb Diseases by Modifying the Cell Injection Site. *Tissue Engineering - Part A*, **2016**, 22, 349-62	3.9	4
40	Preparation of mechanically enhanced hydrogel scaffolds by incorporating interfacial polymer nanorods for nerve electrode application. *Fibers and Polymers*, **2017**, 18, 2248-2254	2	4
39	Reconstruction of a Rabbit Ulna Bone Defect Using Bone Marrow Stromal Cells and a PLA/□TCP Composite by a Novel Sintering Method. *Advanced Engineering Materials*, **2009**, 11, B169-B176	3.5	4
38	Histological Behavior of HDPE Scaffolds Fabricated by the □Press-and-Baking□Method. *Journal of Bioactive and Compatible Polymers*, **2005**, 20, 361-376	2	4
37	Nanovesicle-mediated targeted delivery of immune checkpoint blockades to potentiate therapeutic efficacy and prevent side effects.. *Advanced Materials*, **2021**, e2106516	24	4
36	Senolytic Therapy for Cerebral Ischemia-Reperfusion Injury. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	4
35	Intracellular Uptake Mechanism of Bioorthogonally Conjugated Nanoparticles on Metabolically Engineered Mesenchymal Stem Cells. *Bioconjugate Chemistry*, **2021**, 32, 199-214	6.3	4
34	In vitro biocompatibility assessment of naturally derived and synthetic biomaterials using normal human urothelial cells **2001**, 55, 33		4
33	Topography-Guided Control of Local Migratory Behaviors and Protein Expression of Cancer Cells. *Advanced Healthcare Materials*, **2017**, 6, 1700155	10.1	3
32	CO2-assisted hydrothermal reactions for ginseng extract. *Journal of Supercritical Fluids*, **2018**, 135, 17-24	4.2	3
31	The Healing Effect of Bone Morphogenic Protein with Fibrin Glue on an Injury of the Tendon-Bone Junction. *The Journal of the Korean Orthopaedic Association*, **2007**, 42, 115	0.1	3
30	Engineering of Human Cartilage Rods: Potential Application for Penile Prostheses. *Journal of Urology*, **2002**, 1794-1797	2.5	3
29	Generation of an induced pluripotent stem cell line KUMCi001-A from CD34+ bone marrow cells of a patient with acute lymphoblastic leukemia using human placenta-derived cell conditioned medium. *Stem Cell Research*, **2020**, 47, 101913	1.6	3
28	In vivo monitoring of angiogenesis in a mouse hindlimb ischemia model using fluorescent peptide-based probes. *Amino Acids*, **2016**, 48, 1641-54	3.5	3
27	Predicting in vivo therapeutic efficacy of bioorthogonally labeled endothelial progenitor cells in hind limb ischemia models via non-invasive fluorescence molecular tomography. *Biomaterials*, **2021**, 266, 120472	15.6	3

26	Defining the role of transforming growth factor β in Foxp3 T regulatory cells. *Immunity*, **2021**, 54, 393-394	32.3	3
25	Lineage Specific Differentiation of Magnetic Nanoparticle-Based Size Controlled Human Embryoid Body. *ACS Biomaterials Science and Engineering*, **2017**, 3, 1719-1729	5.5	2
24	Tissue Engineered Bone Formation with Polymer/Ceramic Composites by Press-and-Baking Method. *Key Engineering Materials*, **2005**, 288-289, 79-82	0.4	2
23	GENITOURINARY SYSTEM **2000**, 655-667		2
22	Mesenchymal Cell Culture **2002**, 287-292		2
21	Spontaneous healing of human amnion in the premature rupture of membrane model. *Placenta*, **2020**, 97, 29-35	3.4	2
20	Umbilical Cord Mesenchymal Stem Cell-Derived Nanovesicles Potentiate the Bone-Formation Efficacy of Bone Morphogenetic Protein 2. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	2
19	Preparation of an Acellular Scaffold. *Manuals in Biomedical Research*, **2007**, 133-140		1
18	Long-term Angiogenesis Efficacy Using a Heparin-Conjugated Fibrin (HCF) Delivery System with HBM-MSCs. *International Journal of Stem Cells*, **2012**, 5, 23-30	3	1
17	Enhanced Immunogenicity of Engineered HER2 Antigens Potentiates Antitumor Immune Responses. *Vaccines*, **2020**, 8,	5.3	1
16	Recovery of water-soluble bioactive components from defatted sesame meal using carbon dioxide assisted hydrothermal process. *Journal of Supercritical Fluids*, **2021**, 168, 105069	4.2	1
15	3D Microphysiological System-Inspired Scalable Vascularized Tissue Constructs for Regenerative Medicine. *Advanced Functional Materials*,2105475	15.6	1
14	Open pore biodegradable matrices formed with gas foaming **1998**, 42, 396		1
13	Functional Extracellular Vesicles for Regenerative Medicine.. *Small*, **2022**, e2106569	11	1
12	A Senolytic-Eluting Coronary Stent for the Prevention of In-Stent Restenosis.. *ACS Biomaterials Science and Engineering*, **2022**,	5.5	1
11	Multilayered Cell Sheets of Cardiac Reprogrammed Cells for the Evaluation of Drug Cytotoxicity. *Tissue Engineering and Regenerative Medicine*, **2021**, 18, 807-818	4.5	0
10	Inhibition of topoisomerase I shapes antitumor immunity through the induction of monocyte-derived dendritic cells. *Cancer Letters*, **2021**, 520, 38-47	9.9	0
9	Porous Poly(Lactic-Co-Glycolic Acid) Microsphere as Cell Culture Substrate and Cell Transplantation Vehicle **2012**, 355-364		

List of Publications

8	Tissue-Engineered Blood Vessels With Endothelial Nitric Oxide Synthase Activity. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2008**, 87B, 302-302	3.5
7	Plasmid stability in a recombinant mammalian cell bioprocess. *Biotechnology Letters*, **1992**, 14, 351-356	3
6	A human pluripotent stem cell line KUMi004-A generated from a patient with chronic lymphocytic leukemia.. *Stem Cell Research*, **2022**, 60, 102668	1.6
5	Enhancement of Angiogenic Efficacy of Human Cord Blood Cell Transplantation. *Tissue Engineering*, **2006**, 060706073730045	
4	Combined Therapies of Cell Transplantation and Molecular Delivery. *Biotechnology and Bioprocessing Series*, **2011**, 281-290	
3	Generation of induced pluripotent stem cell line KUMi002-A with normal karyotype from a patient with Philadelphia chromosome-positive chronic myeloid leukemia. *Stem Cell Research*, **2021**, 55, 102465	1.6
2	Generation of the induced pluripotent stem cell line KUMi001-A carrying the Philadelphia chromosome from a chronic myeloid leukemia patient. *Stem Cell Research*, **2021**, 55, 102464	1.6
1	Generation of a human induced pluripotent stem cell line KUMi006 from a patient with multiple myeloma.. *Stem Cell Research*, **2022**, 61, 102767	1.6