Oju Jeon

List of Publications by Year
in descending order

77 papers	6,435 citations	76196 40 h-index	85405 71 g-index
80 all docs	80 docs citations	80 times ranked	8847 citing authors

#	Article	IF	Citations
1	Poly(lactide-co-glycolide)/hydroxyapatite composite scaffolds for bone tissue engineering. Biomaterials, 2006, 27, 1399-1409.	5.7	710
2	Photocrosslinked alginate hydrogels with tunable biodegradation rates and mechanical properties. Biomaterials, 2009, 30, 2724-2734.	5.7	511
3	Engineered polymers for advanced drug delivery. European Journal of Pharmaceutics and Biopharmaceutics, 2009, 71, 420-430.	2.0	298
4	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, 2763-2771.	5.7	244
5	Affinity-based growth factor delivery using biodegradable, photocrosslinked heparin-alginate hydrogels. Journal of Controlled Release, 2011, 154, 258-266.	4.8	221
6	3D Bioprinting of Developmentally Inspired Templates for Whole Bone Organ Engineering. Advanced Healthcare Materials, 2016, 5, 2353-2362.	3.9	209
7	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, 1598-1607.	5.7	173
8	Control of basic fibroblast growth factor release from fibrin gel with heparin and concentrations of fibrinogen and thrombin. Journal of Controlled Release, 2005, 105, 249-259.	4.8	170
9	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, 774-780.	1.0	170
10	The effect of oxidation on the degradation of photocrosslinkable alginate hydrogels. Biomaterials, 2012, 33, 3503-3514.	5.7	167
11	Mechanical properties and degradation behaviors of hyaluronic acid hydrogels cross-linked at various cross-linking densities. Carbohydrate Polymers, 2007, 70, 251-257.	5.1	166
12	Localized and Sustained Delivery of Silencing RNA from Macroscopic Biopolymer Hydrogels. Journal of the American Chemical Society, 2009, 131, 9204-9206.	6.6	165
13	Individual cell-only bioink and photocurable supporting medium for 3D printing and generation of engineered tissues with complex geometries. Materials Horizons, 2019, 6, 1625-1631.	6.4	161
14	Synthesis and Characterization of Poly(l-lactide)â^'Poly(Îµ-caprolactone) Multiblock Copolymers. Macromolecules, 2003, 36, 5585-5592.	2.2	160
15	Cryopreserved cell-laden alginate microgel bioink for 3D bioprinting of living tissues. Materials Today Chemistry, 2019, 12, 61-70.	1.7	140
16	Sustained localized presentation of RNA interfering molecules from in situ forming hydrogels to guide stem cell osteogenic differentiation. Biomaterials, 2014, 35, 6278-6286.	5.7	132
17	Effects of cardiac patches engineered with bone marrow-derived mononuclear cells and PGCL scaffolds in a rat myocardial infarction model. Biomaterials, 2007, 28, 641-649.	5.7	121
18	The effect of cyclic strain on embryonic stem cell-derived cardiomyocytes. Biomaterials, 2008, 29, 844-856.	5.7	114

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19	Poly(lactic-co-glycolic acid) Microspheres as an Injectable Scaffold for Cartilage Tissue Engineering. Tissue Engineering, 2005, 11, 438-447.	4.9	111
20	<i>In Vivo</i> Bone Formation Following Transplantation of Human Adiposeâ€"Derived Stromal Cells That Are Not Differentiated Osteogenically. Tissue Engineering - Part A, 2008, 14, 1285-1294.	1.6	108
21	Biodegradable, Photocrosslinked Alginate Hydrogels with Independently Tailorable Physical Properties and Cell Adhesivity. Tissue Engineering - Part A, 2010, 16, 2915-2925.	1.6	101
22	Single and dual crosslinked oxidized methacrylated alginate/PEG hydrogels for bioadhesive applications. Acta Biomaterialia, 2014, 10, 47-55.	4.1	98
23	<sup />Three-Dimensional Bioprinting of Polycaprolactone Reinforced Gene Activated Bioinks for Bone Tissue Engineering. Tissue Engineering - Part A, 2017, 23, 891-900.	1.6	98
24	3D printing of fibre-reinforced cartilaginous templates for the regeneration of osteochondral defects. Acta Biomaterialia, 2020, 113, 130-143.	4.1	97
25	Inâ€Situ Formation of Growthâ€Factorâ€Loaded Coacervate Microparticleâ€Embedded Hydrogels for Directing Encapsulated Stem Cell Fate. Advanced Materials, 2015, 27, 2216-2223.	11.1	96
26	Real-time in situ rheology of alginate hydrogel photocrosslinking. Soft Matter, 2011, 7, 11510.	1.2	95
27	Biochemical and Physical Signal Gradients in Hydrogels to Control Stem Cell Behavior. Advanced Materials, 2013, 25, 6366-6372.	11.1	88
28	RNA interfering molecule delivery from in situ forming biodegradable hydrogels for enhancement of bone formation in rat calvarial bone defects. Acta Biomaterialia, 2018, 75, 105-114.	4.1	81
29	Suspension Culture of Mammalian Cells Using Thermosensitive Microcarrier that Allows Cell Detachment without Proteolytic Enzyme Treatment. Cell Transplantation, 2010, 19, 1123-1132.	1.2	77
30	Highly Elastic and Tough Interpenetrating Polymer Network-Structured Hybrid Hydrogels for Cyclic Mechanical Loading-Enhanced Tissue Engineering. Chemistry of Materials, 2017, 29, 8425-8432.	3.2	70
31	Nanosphere-mediated delivery of vascular endothelial growth factor gene for therapeutic angiogenesis in mouse ischemic limbs. Biomaterials, 2008, 29, 1109-1117.	5.7	62
32	Photofunctionalization of Alginate Hydrogels to Promote Adhesion and Proliferation of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2013, 19, 1424-1432.	1.6	61
33	Endochondral Ossification in Critical-Sized Bone Defects via Readily Implantable Scaffold-Free Stem Cell Constructs. Stem Cells Translational Medicine, 2017, 6, 1644-1659.	1.6	53
34	Enhancement of ectopic bone formation by bone morphogenetic protein-2 delivery using heparin-conjugated PLGA nanoparticles with transplantation of bone marrow-derived mesenchymal stem cells. Journal of Biomedical Science, 2008, 15, 771-7.	2.6	52
35	High-throughput approaches for screening and analysis of cell behaviors. Biomaterials, 2018, 153, 85-101.	5.7	52
36	Heparin-conjugated polyethylenimine for gene delivery. Journal of Controlled Release, 2008, 132, 236-242.	4.8	49

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37	Biodegradable photo-crosslinked alginate nanofibre scaffolds with tuneable physical properties, cell adhesivity and growth factor release. , 2012, 24, 331-343.		49
38	Jammed Microâ€Flake Hydrogel for Fourâ€Dimensional Living Cell Bioprinting. Advanced Materials, 2022, 34, e2109394.	11.1	49
39	Bone Morphogenetic Proteinâ€2 Promotes Human Mesenchymal Stem Cell Survival and Resultant Bone Formation When Entrapped in Photocrosslinked Alginate Hydrogels. Advanced Healthcare Materials, 2016, 5, 2501-2509.	3.9	45
40	Poly(l-lactide-co-glycolide) nanospheres conjugated with a nuclear localization signal for delivery of plasmid DNA. Journal of Drug Targeting, 2007, 15, 190-198.	2.1	43
41	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, 323-330.	2.6	43
42	Combinatorial screening of biochemical and physical signals for phenotypic regulation of stem cellâ€"based cartilage tissue engineering. Science Advances, 2020, 6, eaaz5913.	4.7	42
43	Controlled release of nerve growth factor from fibrin gel. Journal of Biomedical Materials Research - Part A, 2007, 80A, 998-1002.	2.1	40
44	Cellâ€Laden Multipleâ€Step and Reversible 4D Hydrogel Actuators to Mimic Dynamic Tissue Morphogenesis. Advanced Science, 2021, 8, 2004616.	5.6	40
45	Spatial Micropatterning of Growth Factors in 3D Hydrogels for Locationâ€Specific Regulation of Cellular Behaviors. Small, 2018, 14, e1800579.	5.2	39
46	Induction of Fourâ€Dimensional Spatiotemporal Geometric Transformations in High Cell Density Tissues via Shapeâ€Changing Hydrogels. Advanced Functional Materials, 2021, 31, 2010104.	7.8	39
47	Regulation of Stem Cell Fate in a Threeâ€Dimensional Micropatterned Dualâ€Crosslinked Hydrogel System. Advanced Functional Materials, 2013, 23, 4765-4775.	7.8	36
48	Interconnectable Dynamic Compression Bioreactors for Combinatorial Screening of Cell Mechanobiology in Three Dimensions. ACS Applied Materials & Interfaces, 2018, 10, 13293-13303.	4.0	36
49	A Modular Strategy to Engineer Complex Tissues and Organs. Advanced Science, 2018, 5, 1700402.	5.6	34
50	Preliminary experience with tissue engineering of a venous vascular patch by using bone marrowâ€"derived cells and a hybrid biodegradable polymer scaffold. Journal of Vascular Surgery, 2006, 44, 1329-1340.	0.6	32
51	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, 1617-1625.	5.7	31
52	Dual-crosslinked hydrogel microwell system for formation and culture of multicellular human adipose tissue-derived stem cell spheroids. Journal of Materials Chemistry B, 2016, 4, 3526-3533.	2.9	31
53	Hypoxia mimicking hydrogels to regulate the fate of transplanted stem cells. Acta Biomaterialia, 2019, 88, 314-324.	4.1	31
54	Tissueâ€engineered blood vessels with endothelial nitric oxide synthase activity. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 85B, 537-546.	1.6	30

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55	Micropatterning: Regulation of Stem Cell Fate in a Three-Dimensional Micropatterned Dual-Crosslinked Hydrogel System (Adv. Funct. Mater. 38/2013). Advanced Functional Materials, 2013, 23, 4764-4764.	7.8	30
56	Controlled and sustained gene delivery from injectable, porous PLGA scaffolds. Journal of Biomedical Materials Research - Part A, 2011, 98A, 72-79.	2.1	27
57	Spatial Control of Cell Gene Expression by siRNA Gradients in Biodegradable Hydrogels. Advanced Healthcare Materials, 2015, 4, 714-722.	3.9	25
58	A Lightâ€Curable and Tunable Extracellular Matrix Hydrogel for In Situ Sutureâ€Free Corneal Repair. Advanced Functional Materials, 2022, 32, .	7.8	25
59	Effects of culture conditions on osteogenic differentiation in human mesenchymal stem cells. Journal of Microbiology and Biotechnology, 2007, 17, 1113-9.	0.9	24
60	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, 175-181.	0.8	22
61	RALA complexed Î±-TCP nanoparticle delivery to mesenchymal stem cells induces bone formation in tissue engineered constructs in vitro and in vivo. Journal of Materials Chemistry B, 2017, 5, 1753-1764.	2.9	19
62	Stem cell-laden hydrogel bioink for generation of high resolution and fidelity engineered tissues with complex geometries. Bioactive Materials, 2022, 15, 185-193.	8.6	17
63	Human Cardiac Mesenchymal Stem Cells Remodel in Disease and Can Regulate Arrhythmia Substrates. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008740.	2.1	15
64	An <i>in-situ</i> photocrosslinking microfluidic technique to generate non-spherical, cytocompatible, degradable, monodisperse alginate microgels for chondrocyte encapsulation. Biomicrofluidics, 2018, 12, 014106.	1.2	13
65	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, 80B, 253-259.	1.6	12
66	<i>In-situ</i> photopolymerization of monodisperse and discoid oxidized methacrylated alginate microgels in a microfluidic channel. Biomicrofluidics, 2016, 10, 011101.	1.2	11
67	Reversible dynamic mechanics of hydrogels for regulation of cellular behavior. Acta Biomaterialia, 2021, 136, 88-98.	4.1	11
68	3D Bioprinting: 3D Bioprinting of Developmentally Inspired Templates for Whole Bone Organ Engineering (Adv. Healthcare Mater. 18/2016). Advanced Healthcare Materials, 2016, 5, 2352-2352.	3.9	3
69	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.	0.0	3
70	Tissue Engineering: A Modular Strategy to Engineer Complex Tissues and Organs (Adv. Sci. 5/2018). Advanced Science, 2018, 5, 1870028.	5.6	2
71	Fourâ€Dimensional Materials: Induction of Fourâ€Dimensional Spatiotemporal Geometric Transformations in High Cell Density Tissues via Shapeâ€Changing Hydrogels (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	7.8	2
72	Jammed Microâ€Flake Hydrogel for Fourâ€Dimensional Living Cell Bioprinting (Adv. Mater. 15/2022). Advanced Materials, 2022, 34, .	11.1	1

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73	Synthesis and Characterization of Polyethylenimine-Graft-Poly(L-Lactide-Co-Glycolide) Block Copolymers for Gene Delivery. Key Engineering Materials, 2007, 342-343, 521-524.	0.4	0
74	Tissueâ€Engineered Blood Vessels With Endothelial Nitric Oxide Synthase Activity. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2008, 87B, 302-302.	1.6	0
75	Tissue Regeneration: Spatial Control of Cell Gene Expression by siRNA Gradients in Biodegradable Hydrogels (Adv. Healthcare Mater. 5/2015). Advanced Healthcare Materials, 2015, 4, 784-784.	3.9	0
76	Hydrogels: In-Situ Formation of Growth-Factor-Loaded Coacervate Microparticle-Embedded Hydrogels for Directing Encapsulated Stem Cell Fate (Adv. Mater. 13/2015). Advanced Materials, 2015, 27, 2215-2215.	11.1	0
77	Osteogenesis: Bone Morphogenetic Proteinâ€2 Promotes Human Mesenchymal Stem Cell Survival and Resultant Bone Formation When Entrapped in Photocrosslinked Alginate Hydrogels (Adv. Healthcare) Tj ETQq1 1 0.784314 rgBT /Overlo	3.9	0