Sang-Hyug Park

List of Publications by Year
in descending order

71 papers	3,871 citations	136885 32 h-index	123376 61 g-index
71 all docs	71 docs citations	71 times ranked	5103 citing authors

#	Article	IF	Citations
1	Regulation of Silk Material Structure by Temperature-Controlled Water Vapor Annealing. Biomacromolecules, 2011, 12, 1686-1696.	2.6	530
2	Controlling silk fibroin particle features for drug delivery. Biomaterials, 2010, 31, 4583-4591.	5.7	433
3	The influence of elasticity and surface roughness on myogenic and osteogenic-differentiation of cells on silk-elastin biomaterials. Biomaterials, 2011, 32, 8979-8989.	5.7	188
4	Multilayered silk scaffolds for meniscus tissue engineering. Biomaterials, 2011, 32, 639-651.	5.7	181
5	Helicoidal multi-lamellar features of RGD-functionalized silk biomaterials for corneal tissue engineering. Biomaterials, 2010, 31, 8953-8963.	5.7	164
6	Relationships between degradability of silk scaffolds and osteogenesis. Biomaterials, 2010, 31, 6162-6172.	5.7	146
7	Tissue-engineered Cartilage Using Fibrin/Hyaluronan Composite Gel and Its In Vivo Implantation. Artificial Organs, 2005, 29, 838-845.	1.0	128
8	Response of Human Corneal Fibroblasts on Silk Film Surface Patterns. Macromolecular Bioscience, 2010, 10, 664-673.	2.1	124
9	Ingrowth of human mesenchymal stem cells into porous silk particle reinforced silk composite scaffolds: An in vitro study. Acta Biomaterialia, 2011, 7, 144-151.	4.1	112
10	Chip-Based Comparison of the Osteogenesis of Human Bone Marrow- and Adipose Tissue-Derived Mesenchymal Stem Cells under Mechanical Stimulation. PLoS ONE, 2012, 7, e46689.	1.1	104
11	Intervertebral Disk Tissue Engineering Using Biphasic Silk Composite Scaffolds. Tissue Engineering - Part A, 2012, 18, 447-458.	1.6	84
12	In vivo bone formation by human marrow stromal cells in biodegradable scaffolds that release dexamethasone and ascorbate-2-phosphate. Biochemical and Biophysical Research Communications, 2005, 332, 1053-1060.	1.0	83
13	Development of Printable Natural Cartilage Matrix Bioink for 3D Printing of Irregular Tissue Shape. Tissue Engineering and Regenerative Medicine, 2018, 15, 155-162.	1.6	79
14	Silk-Fibrin/Hyaluronic Acid Composite Gels for Nucleus Pulposus Tissue Regeneration. Tissue Engineering - Part A, 2011, 17, 2999-3009.	1.6	63
15	Dual pH-/thermo-responsive chitosan-based hydrogels prepared using "click" chemistry for colon-targeted drug delivery applications. Carbohydrate Polymers, 2021, 260, 117812.	5.1	60
16	<scp>I</scp>mpact of Sterilization on the Enzymatic Degradation and Mechanical Properties of Silk Biomaterials. Macromolecular Bioscience, 2014, 14, 257-269.	2.1	59
17	Quantifying Osteogenic Cell Degradation of Silk Biomaterials. Biomacromolecules, 2010, 11, 3592-3599.	2.6	55
18	Evaluation of mechanical strength and bone regeneration ability of 3D printed kagome-structure scaffold using rabbit calvarial defect model. Materials Science and Engineering C, 2019, 98, 949-959.	3.8	55

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19	An Electromagnetic Compressive Force by Cell Exciter Stimulates Chondrogenic Differentiation of Bone Marrowâ€“Derived Mesenchymal Stem Cells. Tissue Engineering, 2006, 12, 3107-3117.	4.9	53
20	Tunable porosity of covalently crosslinked alginate-based hydrogels and its significance in drug release behavior. Carbohydrate Polymers, 2021, 260, 117779.	5.1	53
21	Stem Cell-Based Meniscus Tissue Engineering. Tissue Engineering - Part A, 2011, 17, 2749-2761.	1.6	50
22	ECM Based Bioink for Tissue Mimetic 3D Bioprinting. Advances in Experimental Medicine and Biology, 2018, 1064, 335-353.	0.8	50
23	Advances in three-dimensional bioprinting for hard tissue engineering. Tissue Engineering and Regenerative Medicine, 2016, 13, 622-635.	1.6	47
24	Development of an in vitro model to study the impact of BMP-2 on metastasis to bone. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, 590-599.	1.3	45
25	Quantitative analysis of the role of nanohydroxyapatite (nHA) on 3D-printed PCL/nHA composite scaffolds. Materials Letters, 2018, 220, 112-115.	1.3	45
26	Mechanically Robust, Rapidly Actuating, and Biologically Functionalized Macroporous Poly(N-isopropylacrylamide)/Silk Hybrid Hydrogels. Langmuir, 2010, 26, 15614-15624.	1.6	44
27	Mechanical Stimulation by Ultrasound Enhances Chondrogenic Differentiation of Mesenchymal Stem Cells in a Fibrin-Hyaluronic Acid Hydrogel. Artificial Organs, 2013, 37, 648-655.	1.0	43
28	Synergistic Effect of Combined Growth Factors in Porcine Intervertebral Disc Degeneration. Connective Tissue Research, 2013, 54, 181-186.	1.1	41
29	Biomimetic Scaffolds for Bone Tissue Engineering. Advances in Experimental Medicine and Biology, 2018, 1064, 109-121.	0.8	36
30	Multi-stimuli responsive hydrogels derived from hyaluronic acid for cancer therapy application. Carbohydrate Polymers, 2022, 286, 119303.	5.1	36
31	Hypoxia and Amino Acid Supplementation Synergistically Promote the Osteogenesis of Human Mesenchymal Stem Cells on Silk Protein Scaffolds. Tissue Engineering - Part A, 2010, 16, 3623-3634.	1.6	35
32	Chondrogenesis of Rabbit Mesenchymal Stem Cells in Fibrin/Hyaluronan Composite Scaffold<i>In Vitro</i>. Tissue Engineering - Part A, 2011, 17, 1277-1286.	1.6	34
33	Snapshot of degenerative aging of porcine intervertebral disc: a model to unravel the molecular mechanisms. Experimental and Molecular Medicine, 2011, 43, 334.	3.2	34
34	Dual cross-linked chitosan/alginate hydrogels prepared by Nb-Tz â€˜clickâ€™ reaction for pH responsive drug delivery. Carbohydrate Polymers, 2022, 288, 119389.	5.1	34
35	Potential of Fortified Fibrin/Hyaluronic Acid Composite Gel as a Cell Delivery Vehicle for Chondrocytes. Artificial Organs, 2009, 33, 439-447.	1.0	32
36	Injectable and biocompatible alginate-derived porous hydrogels cross-linked by IEDDA click chemistry for reduction-responsive drug release application. Carbohydrate Polymers, 2022, 278, 118964.	5.1	32

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37	Patterned Silk Film Scaffolds for Aligned Lamellar Bone Tissue Engineering. Macromolecular Bioscience, 2012, 12, 1671-1679.	2.1	29
38	The effect of sonication on simulated osteoarthritis. Part II: Alleviation of osteoarthritis pathogenesis by 1 MHz ultrasound with simultaneous hyaluronate injection. Ultrasound in Medicine and Biology, 2005, 31, 1559-1566.	0.7	28
39	Sizable Scaffoldâ€Free Tissueâ€Engineered Articular Cartilage Construct for Cartilage Defect Repair. Artificial Organs, 2019, 43, 278-287.	1.0	27
40	Highly porous and injectable hydrogels derived from cartilage acellularized matrix exhibit reduction and NIR light dual-responsive drug release properties for application in antitumor therapy. NPG Asia Materials, 2022, 14, .	3.8	27
41	The effect of sonication on simulated osteoarthritis. Part I: Effects of 1 MHz ultrasound on uptake of hyaluronan into the rabbit synovium. Ultrasound in Medicine and Biology, 2005, 31, 1551-1558.	0.7	25
42	Fabrication and characterization of 3D scaffolds made from blends of sodium alginate and poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.9	25
43	Mechanically Reinforced Extracellular Matrix Scaffold for Application of Cartilage Tissue Engineering. Tissue Engineering and Regenerative Medicine, 2018, 15, 287-299.	1.6	24
44	In vitro chondrogenic differentiation of human adipose-derived stem cells with silk scaffolds. Journal of Tissue Engineering, 2012, 3, 204173141246640.	2.3	22
45	Mechanical properties and cell-culture characteristics of a polycaprolactone kagome-structure scaffold fabricated by a precision extruding deposition system. Biomedical Materials (Bristol), 2017, 12, 055003.	1.7	22
46	Noninvasive visualization of early osteoarthritic cartilage using targeted nanosomes in a destabilization of the medial meniscus mouse model. International Journal of Nanomedicine, 2018, Volume 13, 1215-1224.	3.3	20
47	Synthesis of Argâ€“Glyâ€“Asp (RGD) Sequence Conjugated Thermo-Reversible Gelviathe PEG Spacer Arm as an Extracellular Matrix for a Pheochromocytoma Cell (PC12) Culture. Bioscience, Biotechnology and Biochemistry, 2004, 68, 2224-2229.	0.6	19
48	Fabrication of an osteochondral graft with using a solid freeform fabrication system. Tissue Engineering and Regenerative Medicine, 2015, 12, 239-248.	1.6	17
49	Three dimensional plotted extracellular matrix scaffolds using a rapid prototyping for tissue engineering application. Tissue Engineering and Regenerative Medicine, 2015, 12, 172-180.	1.6	17
50	Phlorofucofuroeckol A from Ecklonia cava ameliorates TGF-Î²1-induced fibrotic response of human tracheal fibroblasts via the downregulation of MAPKs and SMAD 2/3 pathways inactivated TGF-Î² receptor. Biochemical and Biophysical Research Communications, 2020, 522, 626-632.	1.0	16
51	Effect of joint mimicking loading system on zonal organization into tissue-engineered cartilage. PLoS ONE, 2018, 13, e0202834.	1.1	15
52	Rabbit Calvarial Defect Model for Customized 3D-Printed Bone Grafts. Tissue Engineering - Part C: Methods, 2018, 24, 255-262.	1.1	14
53	Fabrication of Microchannels and Evaluation of Guided Vascularization in Biomimetic Hydrogels. Tissue Engineering and Regenerative Medicine, 2018, 15, 403-413.	1.6	14
54	Construction of a Tissue-Engineered Annulus Fibrosus. Artificial Organs, 2013, 37, E131-E138.	1.0	11

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55	Onlay-graft of 3D printed Kagome-structure PCL scaffold incorporated with rhBMP-2 based on hyaluronic acid hydrogel. Biomedical Materials (Bristol), 2021, 16, 055004.	1.7	11
56	Sargahydroquinoic Acid, a Cyclooxygenase-2 Inhibitor, Attenuates Inflammatory Responses by Regulating NF-ÎºB Inactivation and Nrf2 Activation in Lipopolysaccharide-Stimulated Cells. Inflammation, 2021, 44, 2120-2131.	1.7	10
57	Novel Marine Organism-Derived Extracellular Vesicles for Control of Anti-Inflammation. Tissue Engineering and Regenerative Medicine, 2021, 18, 71-79.	1.6	10
58	Development of three-dimensional articular cartilage construct using silica nano-patterned substrate. PLoS ONE, 2019, 14, e0208291.	1.1	9
59	Preparation of a Cross-Linked Cartilage Acellular-Matrix Film and Its In Vivo Evaluation as an Antiadhesive Barrier. Polymers, 2019, 11, 247.	2.0	9
60	Extracellular Matrix (ECM) Multilayer Membrane as a Sustained Releasing Growth Factor Delivery System for rhTGF-Î²3 in Articular Cartilage Repair. PLoS ONE, 2016, 11, e0156292.	1.1	9
61	Near-Infrared Light-Responsive Shell-Crosslinked Micelles of Poly(d,l-lactide)-b-poly((furfuryl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 of Doxorubicin. Materials, 2021, 14, 7913.	1.3	9
62	Conditioned media derived from human fetal progenitor cells improves skin regeneration in burn wound healing. Cell and Tissue Research, 2022, 389, 289-308.	1.5	9
63	A phlorotanninsâ€loaded homogeneous acellular matrix film modulates postâ€implantation inflammatory responses. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 51-62.	1.3	8
64	Sargahydroquinoic acid (SHQA) suppresses cellular senescence through Akt/mTOR signaling pathway. Experimental Gerontology, 2021, 151, 111406.	1.2	6
65	Immobilization of fibrinogen antibody on self-assembled gold monolayers for immunosensor applications. Tissue Engineering and Regenerative Medicine, 2014, 11, 10-15.	1.6	5
66	Corneal Repair with Adhesive Cell Sheets of Fetal Cartilage-Derived Stem Cells. Tissue Engineering and Regenerative Medicine, 2021, 18, 187-198.	1.6	4
67	Characterization of Marine Organism Extracellular Matrix-Anchored Extracellular Vesicles and Their Biological Effect on the Alleviation of Pro-Inflammatory Cytokines. Marine Drugs, 2021, 19, 592.	2.2	4
68	Effects of Induction Culture on Osteogenesis of Scaffold-Free Engineered Tissue for Bone Regeneration Applications. Tissue Engineering and Regenerative Medicine, 2022, 19, 417-429.	1.6	4
69	Fabrication and Preliminary Test Results of A MEMS Cell Stimulator for Stem Cell Research. , 2006, , .		0
70	Relationships between structural stability of implanted site and biomechanical properties of tissue-engineered cartilage in the tibiofemoral joint defect. Tissue Engineering and Regenerative Medicine, 2015, 12, 105-112.	1.6	0
71	<scp>Interfaceâ€cross</scp> â€linked micelles of poly(D,Lâ€lactide)â€<i>b</i> â€poly(furfuryl methacrylate)â€• <i>b</i> â€poly(Nâ€acryloylmorpholine) for nearâ€infraredâ€triggered drug delivery application. Polymers for Advanced Technologies, 0, , .	1.6	0