Zi-Gang Ge

List of Publications by Year
in descending order

62 papers	3,014 citations	186209 28 h-index	161767 54 g-index
65 all docs	65 docs citations	65 times ranked	5004 citing authors

#	Article	IF	Citations
1	Key considerations on the development of biodegradable biomaterials for clinical translation of medical devices: With cartilage repair products as an example. Bioactive Materials, 2022, 9, 332-342.	8.6	27
2	Nanosecond pulsed electric fields prime mesenchymal stem cells to peptide ghrelin and enhance chondrogenesis and osteochondral defect repair in vivo. Science China Life Sciences, 2022, 65, 927-939.	2.3	7
3	Macrophages promote cartilage regeneration in a timeâ€•and phenotypeâ€dependent manner. Journal of Cellular Physiology, 2022, 237, 2258-2270.	2.0	9
4	Rational design of electrically conductive biomaterials toward excitable tissues regeneration. Progress in Polymer Science, 2022, 131, 101573.	11.8	21
5	Modified hyaluronic acid hydrogels with chemical groups that facilitate adhesion to host tissues enhance cartilage regeneration. Bioactive Materials, 2021, 6, 1689-1698.	8.6	107
6	Can Upregulation of Pluripotency Genes Enhance Stemness of Mesenchymal Stem Cells?. Stem Cell Reviews and Reports, 2021, 17, 1505-1507.	1.7	3
7	Nanosecond pulsed electric fields enhance mesenchymal stem cells differentiation via DNMT1-regulated OCT4/NANOG gene expression. Stem Cell Research and Therapy, 2020, 11, 308.	2.4	17
8	Multiple nanosecond pulsed electric fields stimulation with conductive poly(<scp>l</scp> â€‘lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 prolonged in vitro culture. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 1136-1148.	1.3	6
9	Diverse effects of pulsed electrical stimulation on cells - with a focus on chondrocytes and cartilage regeneration. , 2019, 38, 79-93.		20
10	Nanosecond pulsed electric fields enhanced chondrogenic potential of mesenchymal stem cells via JNK/CREB-STAT3 signaling pathway. Stem Cell Research and Therapy, 2019, 10, 45.	2.4	26
11	Orchestrated biomechanical, structural, and biochemical stimuli for engineering anisotropic meniscus. Science Translational Medicine, 2019, 11, .	5.8	79
12	Enhancement of the chondrogenic differentiation of mesenchymal stem cells and cartilage repair by ghrelin. Journal of Orthopaedic Research, 2019, 37, 1387-1397.	1.2	18
13	TGF-Î²1 affinity peptides incorporated within a chitosan sponge scaffold can significantly enhance cartilage regeneration. Journal of Materials Chemistry B, 2018, 6, 675-687.	2.9	28
14	Preconditioning of mesenchymal stromal cells toward nucleus pulposus-like cells by microcryogels-based 3D cell culture and syringe-based pressure loading system. , 2017, 105, 507-520.		17
15	Biological effect and molecular mechanism study of biomaterials based on proteomic research. Journal of Materials Science and Technology, 2017, 33, 607-615.	5.6	9
16	Proteomic profile of mouse fibroblasts exposed to pure magnesium extract. Materials Science and Engineering C, 2016, 69, 522-531.	3.8	9
17	Physically entrapped gelatin in polyethylene glycol scaffolds for three-dimensional chondrocyte culture. Journal of Bioactive and Compatible Polymers, 2016, 31, 513-530.	0.8	6
18	Macroporous interpenetrating network of polyethylene glycol (PEG) and gelatin for cartilage regeneration. Biomedical Materials (Bristol), 2016, 11, 035014.	1.7	20

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19	Perspectives on Animal Models Utilized for the Research and Development of Regenerative Therapies for Articular Cartilage. Current Molecular Biology Reports, 2016, 2, 90-100.	0.8	10
20	Cross-talk between TGF-beta/SMAD and integrin signaling pathways in regulating hypertrophy of mesenchymal stem cell chondrogenesis under deferral dynamic compression. Biomaterials, 2015, 38, 72-85.	5.7	96
21	A simple magnetic force-based cell patterning method using soft lithography. Science China Life Sciences, 2015, 58, 400-402.	2.3	0
22	Probing cellâ€"matrix interactions in RGD-decorated macroporous poly (ethylene glycol) hydrogels for 3D chondrocyte culture. Biomedical Materials (Bristol), 2015, 10, 035016.	1.7	19
23	Optimization and characterization of chemically modified polymer microspheres and their effect on cell behavior. Materials Letters, 2015, 154, 68-72.	1.3	10
24	Biomaterials for Cartilage Regeneration. Journal of the American Academy of Orthopaedic Surgeons, The, 2014, 22, 674-676.	1.1	4
25	The influence of scaffold microstructure on chondrogenic differentiation of mesenchymal stem cells. Biomedical Materials (Bristol), 2014, 9, 035011.	1.7	36
26	Effects of fluctuant magnesium concentration on phenotype of the primary chondrocytes. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	2.1	13
27	Optimization of dual effects of Mgâ€"1Ca alloys on the behavior of chondrocytes and osteoblasts in vitro. Progress in Natural Science: Materials International, 2014, 24, 433-440.	1.8	2
28	Nanosecond Pulsed Electric Fields (nsPEFs) Regulate Phenotypes of Chondrocytes through Wnt/Î²-catenin Signaling Pathway. Scientific Reports, 2014, 4, 5836.	1.6	32
29	Title is missing!. Journal of Medical and Biological Engineering, 2014, 34, 130.	1.0	2
30	Protocol of Chondrogenesis of BMSC to Chondrocyte Using Chitosan-Modified Poly(L-Lactide-co-Îµ-Caprolactone) Scaffolds. Manuals in Biomedical Research, 2014, , 49-58.	0.0	0
31	Plasma and synovial fluid programmed cell death 5 (PDCD5) levels are inversely associated with TNF-Î± and disease activity in patients with rheumatoid arthritis. Biomarkers, 2013, 18, 155-159.	0.9	20
32	Developing Fe3O4 nanoparticles into an efficient multimodality imaging and therapeutic probe. Nanoscale, 2013, 5, 11954.	2.8	45
33	Poly (l-lactide-co-caprolactone) scaffolds enhanced with poly (Î²-hydroxybutyrate-co-Î²-hydroxyvalerate) microspheres for cartilage regeneration. Biomedical Materials (Bristol), 2013, 8, 025005.	1.7	28
34	Cells Behave Distinctly Within Sponges and Hydrogels Due to Differences of Internal Structure. Tissue Engineering - Part A, 2013, 19, 2166-2175.	1.6	37
35	RELATIONSHIP BETWEEN CELL FUNCTION AND INITIAL CELL SEEDING DENSITY OF PRIMARY PORCINE CHONDROCYTES <i>IN VITRO</i>. Biomedical Engineering - Applications, Basis and Communications, 2013, 25, 1340001.	0.3	6
36	Title is missing!. Journal of Medical and Biological Engineering, 2013, 33, 518.	1.0	4

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37	Title is missing!. Journal of Medical and Biological Engineering, 2013, 33, 449.	1.0	1
38	A Viscoelastic Chitosan-Modified Three-Dimensional Porous Poly(L-Lactide-co-Îµ-Caprolactone) Scaffold for Cartilage Tissue Engineering. Journal of Biomaterials Science, Polymer Edition, 2012, 23, 405-424.	1.9	55
39	Functional biomaterials for cartilage regeneration. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2526-2536.	2.1	79
40	Cytotoxicity of core-shell polystyrene magnetic beads and related mechanisms. Molecular and Cellular Toxicology, 2012, 8, 217-227.	0.8	5
41	Improved Mesenchymal Stem Cells Attachment and<i>In Vitro</i>Cartilage Tissue Formation on Chitosan-Modified Poly(<scp>l</scp>-Lactide-<i>co</i>-Epsilon-Caprolactone) Scaffold. Tissue Engineering - Part A, 2012, 18, 242-251.	1.6	79
42	High-throughput immunoassay through in-channel microfluidic patterning. Lab on A Chip, 2012, 12, 2487.	3.1	47
43	Characterization of human primary chondrocytes of osteoarthritic cartilage at varying severity. Chinese Medical Journal, 2011, 124, 4245-53.	0.9	9
44	A Biocompatible Chitosan Composite Containing Phosphotungstic Acid Modified Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 7126-7129.	0.9	10
45	Fabrication, Mechanical Properties, and Biocompatibility of Graphene-Reinforced Chitosan Composites. Biomacromolecules, 2010, 11, 2345-2351.	2.6	514
46	Induced adult stem (iAS) cells and induced transit amplifying progenitor (iTAP) cells-a possible alternative to induced pluripotent stem (iPS) cells?. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, 159-162.	1.3	7
47	ORIGINAL ARTICLE: Solubilization of vorinostat by cyclodextrins. Journal of Clinical Pharmacy and Therapeutics, 2010, 35, 521-526.	0.7	33
48	Proliferation and Differentiation of Human Osteoblasts within 3D printed Poly-Lactic-co-Glycolic Acid Scaffolds. Journal of Biomaterials Applications, 2009, 23, 533-547.	1.2	62
49	Histological evaluation of osteogenesis of 3D-printed poly-lactic-co-glycolic acid (PLGA) scaffolds in a rabbit model. Biomedical Materials (Bristol), 2009, 4, 021001.	1.7	85
50	Manufacture of degradable polymeric scaffolds for bone regeneration. Biomedical Materials (Bristol), 2008, 3, 022001.	1.7	67
51	Comparison of osteogenesis of human embryonic stem cells within 2D and 3D culture systems. Scandinavian Journal of Clinical and Laboratory Investigation, 2008, 68, 58-67.	0.6	88
52	Modification of sericin-free silk fibers for ligament tissue engineering application. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2007, 82B, 129-138.	1.6	85
53	Mechanical dissociation of human embryonic stem cell colonies by manual scraping after collagenase treatment is much more detrimental to cellular viability than is trypsinization with gentle pipetting. Biotechnology and Applied Biochemistry, 2007, 47, 33.	1.4	20
54	Repair of Large Articular Osteochondral Defects Using Hybrid Scaffolds and Bone Marrow-Derived Mesenchymal Stem Cells in a Rabbit Model. Tissue Engineering, 2006, 12, 1539-1551.	4.9	181

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55	Efficacy of Bone Marrowâ€"Derived Stem Cells in Strengthening Osteoporotic Bone in a Rabbit Model. Tissue Engineering, 2006, 12, 1753-1761.	4.9	119
56	Loss of viability during freezeâ€"thaw of intact and adherent human embryonic stem cells with conventional slow-cooling protocols is predominantly due toâ£apoptosis rather than cellular necrosis. Journal of Biomedical Science, 2006, 13, 433-445.	2.6	108
57	Osteoarthritis and therapy. Arthritis and Rheumatism, 2006, 55, 493-500.	6.7	98
58	Biomaterials and scaffolds for ligament tissue engineering. Journal of Biomedical Materials Research - Part A, 2006, 77A, 639-652.	2.1	123
59	The Effects of Bone Marrow-Derived Mesenchymal Stem Cells and Fascia Wrap Application to Anterior Cruciate Ligament Tissue Engineering. Cell Transplantation, 2005, 14, 763-773.	1.2	65
60	Selection of Cell Source for Ligament Tissue Engineering. Cell Transplantation, 2005, 14, 573-583.	1.2	103
61	Characterization of knitted polymeric scaffolds for potential use in ligament tissue engineering. Journal of Biomaterials Science, Polymer Edition, 2005, 16, 1179-1192.	1.9	36
62	Hydroxyapatiteâ€"chitin materials as potential tissue engineered bone substitutes. Biomaterials, 2004, 25, 1049-1058.	5.7	141