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	Fabrication, Mechanical Properties, and Biocompatibility of Graphene-Reinforced Chitosan Composites. Biomacromolecules, 2010, 11, 2345-2351.	2.6	514
2	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
3	Hydroxyapatiteâ€“chitin materials as potential tissue engineered bone substitutes. Biomaterials, 2004, 25, 1049-1058.	5.7	141
4	Biomaterials and scaffolds for ligament tissue engineering. Journal of Biomedical Materials Research - Part A, 2006, 77A, 639-652.	2.1	123
5	Efficacy of Bone Marrowâ€“Derived Stem Cells in Strengthening Osteoporotic Bone in a Rabbit Model. Tissue Engineering, 2006, 12, 1753-1761.	4.9	119
6	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
7	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
8	Selection of Cell Source for Ligament Tissue Engineering. Cell Transplantation, 2005, 14, 573-583.	1.2	103
9	Osteoarthritis and therapy. Arthritis and Rheumatism, 2006, 55, 493-500.	6.7	98
10	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
11	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
12	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
13	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
14	Functional biomaterials for cartilage regeneration. Journal of Biomedical Materials Research - Part A, 2012, 100A, 2526-2536.	2.1	79
15	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
16	Orchestrated biomechanical, structural, and biochemical stimuli for engineering anisotropic meniscus. Science Translational Medicine, 2019, 11, .	5.8	79
17	Manufacture of degradable polymeric scaffolds for bone regeneration. Biomedical Materials (Bristol), 2008, 3, 022001.	1.7	67
18	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

#	Article	IF	Citations
19	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
20	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
21	High-throughput immunoassay through in-channel microfluidic patterning. Lab on A Chip, 2012, 12, 2487.	3.1	47
22	Developing Fe3O4 nanoparticles into an efficient multimodality imaging and therapeutic probe. Nanoscale, 2013, 5, 11954.	2.8	45
23	Cells Behave Distinctly Within Sponges and Hydrogels Due to Differences of Internal Structure. Tissue Engineering - Part A, 2013, 19, 2166-2175.	1.6	37
24	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
25	The influence of scaffold microstructure on chondrogenic differentiation of mesenchymal stem cells. Biomedical Materials (Bristol), 2014, 9, 035011.	1.7	36
26	ORIGINAL ARTICLE: Solubilization of vorinostat by cyclodextrins. Journal of Clinical Pharmacy and Therapeutics, 2010, 35, 521-526.	0.7	33
27	Nanosecond Pulsed Electric Fields (nsPEFs) Regulate Phenotypes of Chondrocytes through Wnt/Î²-catenin Signaling Pathway. Scientific Reports, 2014, 4, 5836.	1.6	32
28	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
29	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
30	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
31	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
32	Rational design of electrically conductive biomaterials toward excitable tissues regeneration. Progress in Polymer Science, 2022, 131, 101573.	11.8	21
33	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
34	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
35	Macroporous interpenetrating network of polyethylene glycol (PEG) and gelatin for cartilage regeneration. Biomedical Materials (Bristol), 2016, 11, 035014.	1.7	20
36	Diverse effects of pulsed electrical stimulation on cells - with a focus on chondrocytes and cartilage regeneration. , 2019, 38, 79-93.		20

#	ARTICLE	IF	CITATIONS
37	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
38	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
39	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
40	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
41	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
42	A Biocompatible Chitosan Composite Containing Phosphotungstic Acid Modified Single-Walled Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2010, 10, 7126-7129.	0.9	10
43	Optimization and characterization of chemically modified polymer microspheres and their effect on cell behavior. Materials Letters, 2015, 154, 68-72.	1.3	10
44	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
45	Proteomic profile of mouse fibroblasts exposed to pure magnesium extract. Materials Science and Engineering C, 2016, 69, 522-531.	3.8	9
46	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
47	Macrophages promote cartilage regeneration in a timeâ€•and phenotypeâ€•dependent manner. Journal of Cellular Physiology, 2022, 237, 2258-2270.	2.0	9
48	Characterization of human primary chondrocytes of osteoarthritic cartilage at varying severity. Chinese Medical Journal, 2011, 124, 4245-53.	0.9	9
49	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
50	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
51	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
52	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
53	Multiple nanosecond pulsed electric fields stimulation with conductive poly(<scp>l</scp> â€•lactic) Tj ETQq1 1 0.784314 rgBT /Overlo prolonged in vitro culture. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 1136-1148.	1.3	6
54	Cytotoxicity of core-shell polystyrene magnetic beads and related mechanisms. Molecular and Cellular Toxicology, 2012, 8, 217-227.	0.8	5

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55	Biomaterials for Cartilage Regeneration. Journal of the American Academy of Orthopaedic Surgeons, The, 2014, 22, 674-676.	1.1	4
56	Title is missing!. Journal of Medical and Biological Engineering, 2013, 33, 518.	1.0	4
57	Can Upregulation of Pluripotency Genes Enhance Stemness of Mesenchymal Stem Cells?. Stem Cell Reviews and Reports, 2021, 17, 1505-1507.	1.7	3
58	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
59	Title is missing!. Journal of Medical and Biological Engineering, 2014, 34, 130.	1.0	2
60	Title is missing!. Journal of Medical and Biological Engineering, 2013, 33, 449.	1.0	1
61	A simple magnetic force-based cell patterning method using soft lithography. Science China Life Sciences, 2015, 58, 400-402.	2.3	0
62	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