# Jong Hoon Chung

## List of Publications by Citations



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|---|---|---|---|
| 84 papers | 1,597 citations | 23 h-index | 37 g-index |
| 90 ext. papers | 1,855 ext. citations | 5.4 avg, IF | 4.27 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 84 | Bioactive effects of graphene oxide cell culture substratum on structure and function of human adipose-derived stem cells. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 3520-30 | 5.4 | 126 |
| 83 | Graphene-incorporated chitosan substrata for adhesion and differentiation of human mesenchymal stem cells. *Journal of Materials Chemistry B*, **2013**, 1, 933-938 | 7.3 | 119 |
| 82 | Designing nanotopographical density of extracellular matrix for controlled morphology and function of human mesenchymal stem cells. *Scientific Reports*, **2013**, 3, 3552 | 4.9 | 104 |
| 81 | Synergistic effects of nanotopography and co-culture with endothelial cells on osteogenesis of mesenchymal stem cells. *Biomaterials*, **2013**, 34, 7257-68 | 15.6 | 87 |
| 80 | Multiscale patterned transplantable stem cell patches for bone tissue regeneration. *Biomaterials*, **2014**, 35, 9058-67 | 15.6 | 64 |
| 79 | Bacterial cellulose nanofibrillar patch as a wound healing platform of tympanic membrane perforation. *Advanced Healthcare Materials*, **2013**, 2, 1525-31 | 10.1 | 50 |
| 78 | Monolayer Graphene-Directed Growth and Neuronal Differentiation of Mesenchymal Stem Cells. *Journal of Biomedical Nanotechnology*, **2015**, 11, 2024-33 | 4 | 43 |
| 77 | Electrospun nanofibers composed of poly(□caprolactone) and polyethylenimine for tissue engineering applications. *Materials Science and Engineering C*, **2009**, 29, 1725-1731 | 8.3 | 43 |
| 76 | Enhanced chitosan-DNA interaction by 2-acrylamido-2-methylpropane coupling for an efficient transfection in cancer cells. *Journal of Materials Chemistry B*, **2015**, 3, 3465-3475 | 7.3 | 42 |
| 75 | Tympanic membrane regeneration using a water-soluble chitosan patch. *Tissue Engineering - Part A*, **2010**, 16, 225-32 | 3.9 | 42 |
| 74 | Metallic/bimetallic magnetic nanoparticle functionalization for immobilization of □amylase for enhanced reusability in bio-catalytic processes. *Bioresource Technology*, **2016**, 214, 528-533 | 11 | 42 |
| 73 | Bio-inspired configurable multiscale extracellular matrix-like structures for functional alignment and guided orientation of cells. *Biomaterials*, **2015**, 69, 158-64 | 15.6 | 41 |
| 72 | Regeneration of chronic tympanic membrane perforation using an EGF-releasing chitosan patch. *Tissue Engineering - Part A*, **2013**, 19, 2097-107 | 3.9 | 38 |
| 71 | Triphenylamine coupled chitosan with high buffering capacity and low viscosity for enhanced transfection in mammalian cells, in vitro and in vivo. *Journal of Materials Chemistry B*, **2013**, 1, 6053-6065 | 7.3 | 37 |
| 70 | Development of water-insoluble chitosan patch scaffold to repair traumatic tympanic membrane perforations. *Journal of Biomedical Materials Research - Part A*, **2009**, 90, 446-55 | 5.4 | 35 |
| 69 | The efficiency of membrane transport of vitamin B6 coupled to poly(ester amine) gene transporter and transfection in cancer cells. *Biomaterials*, **2013**, 34, 3716-28 | 15.6 | 31 |
| 68 | Charged nanomatrices as efficient platforms for modulating cell adhesion and shape. *Tissue Engineering - Part C: Methods*, **2012**, 18, 913-23 | 2.9 | 31 |

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| 67 | Latent progenitor cells as potential regulators for tympanic membrane regeneration. *Scientific Reports*, **2015**, 5, 11542 | 4.9 | 29 |
| 66 | In vitro effects of low-intensity pulsed ultrasound stimulation on the osteogenic differentiation of human alveolar bone-derived mesenchymal stem cells for tooth tissue engineering. *BioMed Research International*, **2013**, 2013, 269724 | 3 | 29 |
| 65 | A healing method of tympanic membrane perforations using three-dimensional porous chitosan scaffolds. *Tissue Engineering - Part A*, **2011**, 17, 2763-72 | 3.9 | 28 |
| 64 | Effects of electromagnetic fields on osteogenesis of human alveolar bone-derived mesenchymal stem cells. *BioMed Research International*, **2013**, 2013, 296019 | 3 | 26 |
| 63 | Enhanced osteogenesis of human alveolar bone-derived mesenchymal stem cells for tooth tissue engineering using fluid shear stress in a rocking culture method. *Tissue Engineering - Part C: Methods*, **2013**, 19, 128-45 | 2.9 | 25 |
| 62 | Synergistic effects of orbital shear stress on in vitro growth and osteogenic differentiation of human alveolar bone-derived mesenchymal stem cells. *BioMed Research International*, **2014**, 2014, 316803 | 3 | 24 |
| 61 | Directional Matrix Nanotopography with Varied Sizes for Engineering Wound Healing. *Advanced Healthcare Materials*, **2017**, 6, 1700297 | 10.1 | 23 |
| 60 | Pulsed-Electromagnetic-Field-Assisted Reduced Graphene Oxide Substrates for Multidifferentiation of Human Mesenchymal Stem Cells. *Advanced Healthcare Materials*, **2016**, 5, 2069-79 | 10.1 | 23 |
| 59 | Nucleotide biosynthesis arrest by silencing SHMT1 function via vitamin B6-coupled vector and effects on tumor growth inhibition. *Biomaterials*, **2014**, 35, 9332-42 | 15.6 | 22 |
| 58 | Pulse frequency dependency of photobiomodulation on the bioenergetic functions of human dental pulp stem cells. *Scientific Reports*, **2017**, 7, 15927 | 4.9 | 20 |
| 57 | Calcium phosphate bioceramics fabricated from extracted human teeth for tooth tissue engineering. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2011**, 99, 399-411 | 3.5 | 19 |
| 56 | Neurogenic Differentiation of Human Dental Pulp Stem Cells on Graphene-Polycaprolactone Hybrid Nanofibers. *Nanomaterials*, **2018**, 8, | 5.4 | 18 |
| 55 | Biodegradable particulate delivery of vascular endothelial growth factor plasmid from polycaprolactone/polyethylenimine electrospun nanofibers for the treatment of myocardial infarction. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 7073-7 | 1.3 | 18 |
| 54 | Epidermal Growth Factor-Releasing Radially Aligned Electrospun Nanofibrous Patches for the Regeneration of Chronic Tympanic Membrane Perforations. *Advanced Healthcare Materials*, **2019**, 8, e1801160 | 10.1 | 18 |
| 53 | Xylanase immobilization on magnetite and magnetite core/shell nanocomposites using two different flexible alkyl length organophosphonates: Linker length and shell effect on enzyme catalytic activity. *International Journal of Biological Macromolecules*, **2018**, 115, 590-599 | 7.9 | 17 |
| 52 | Prevention of cisplatin-induced ototoxicity by the inhibition of gap junctional intercellular communication in auditory cells. *Cellular and Molecular Life Sciences*, **2014**, 71, 3859-71 | 10.3 | 15 |
| 51 | Hypoxia promotes CEMP1 expression and induces cementoblastic differentiation of human dental stem cells in an HIF-1-dependent manner. *Tissue Engineering - Part A*, **2014**, 20, 410-23 | 3.9 | 14 |
| 50 | Cell-Laden Thermosensitive Chitosan Hydrogel Bioinks for 3D Bioprinting Applications. *Applied Sciences (Switzerland)*, **2020**, 10, 2455 | 2.6 | 14 |

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| 49 | Latent stem cell-stimulating therapy for regeneration of chronic tympanic membrane perforations using IGFBP2-releasing chitosan patch scaffolds. *Journal of Biomaterials Applications*, **2019**, 34, 198-207 | 2.9 | 13 |
| 48 | Engineering structures and functions of mesenchymal stem cells by suspended large-area graphene nanopatterns. *2D Materials*, **2016**, 3, 035013 | 5.9 | 13 |
| 47 | Density of nanopatterned surfaces for designing bone tissue engineering scaffolds. *Materials Letters*, **2014**, 130, 227-231 | 3.3 | 13 |
| 46 | Chitosan/PEI patch releasing EGF and the EGFR gene for the regeneration of the tympanic membrane after perforation. *Biomaterials Science*, **2018**, 6, 364-371 | 7.4 | 13 |
| 45 | Hyperosmotic polydixylitol for crossing the blood brain barrier and efficient nucleic acid delivery. *Chemical Communications*, **2015**, 51, 3645-8 | 5.8 | 12 |
| 44 | Application of ultrasound stimulation in bone tissue engineering. *International Journal of Stem Cells* , **2010**, 3, 74-9 | 3 | 12 |
| 43 | Development of a bio-electrospray system for cell and non-viral gene delivery.. *RSC Advances*, **2018**, 8, 6452-6459 | 3.7 | 10 |
| 42 | Histological and Mathematical Analysis of the Irreversibly Electroporated Liver Tissue. *Technology in Cancer Research and Treatment*, **2017**, 16, 488-496 | 2.7 | 8 |
| 41 | Highly efficient gene transfection by a hyperosmotic polymannitol based gene tranporter through regulation of caveolae and COX-2 induced endocytosis. *Journal of Materials Chemistry B*, **2014**, 2, 2666-2679 | 7.2 | 8 |
| 40 | Cell Image Processing Methods for Automatic Cell Pattern Recognition and Morphological Analysis of Mesenchymal Stem Cells - An Algorithm for Cell Classification and Adaptive Brightness Correction -. *Journal of Biosystems Engineering*, **2013**, 38, 55-63 | 1.1 | 8 |
| 39 | Hierarchically Micro- and Nanopatterned Topographical Cues for Modulation of Cellular Structure and Function. *IEEE Transactions on Nanobioscience*, **2016**, 15, 835-842 | 3.4 | 8 |
| 38 | Effects of pulsing of light on the dentinogenesis of dental pulp stem cells in vitro. *Scientific Reports*, **2018**, 8, 2057 | 4.9 | 7 |
| 37 | Physical Stimulation-Based Osteogenesis: Effect of Secretion In Vitro on Fluid Dynamic Shear Stress of Human Alveolar Bone-Derived Mesenchymal Stem Cells. *IEEE Transactions on Nanobioscience*, **2016**, 15, 881-890 | 3.4 | 7 |
| 36 | 3D-Printed Poly(□Caprolactone)/Hydroxyapatite Scaffolds Modified with Alkaline Hydrolysis Enhance Osteogenesis In Vitro. *Polymers*, **2021**, 13, | 4.5 | 7 |
| 35 | Effects of Actin Cytoskeleton Disruption on Electroporation In Vitro. *Applied Biochemistry and Biotechnology*, **2020**, 191, 1545-1561 | 3.2 | 6 |
| 34 | Physicochemical factors that affect electroporation of lung cancer and normal cell lines. *Biochemical and Biophysical Research Communications*, **2019**, 517, 703-708 | 3.4 | 6 |
| 33 | A fully automated bioreactor system for precise control of stem cell proliferation and differentiation. *Biochemical Engineering Journal*, **2019**, 150, 107258 | 4.2 | 6 |
| 32 | Topographical extracellular matrix cues on anticancer drug-induced cytotoxicity in stem cells. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2015**, 103, 1320-7 | 3.5 | 6 |

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| 31 | Effects of Micro-Electrical Stimulation on Regulation of Behavior of Electro-Active Stem Cells. *Journal of Biosystems Engineering*, **2013**, 38, 113-120 | 1.1 | 6 |
| 30 | Development and Characterization of Horse Bone-derived Natural Calcium Phosphate Powders. *Journal of Biosystems Engineering*, **2014**, 39, 122-133 | 1.1 | 6 |
| 29 | Development and Evaluation of Natural Hydroxyapatite Ceramics Produced by the Heat Treatment of Pig Bones. *Journal of Biosystems Engineering*, **2014**, 39, 227-234 | 1.1 | 6 |
| 28 | Effects of co-culture of dental pulp stem cells and periodontal ligament stem cells on assembled dual disc scaffolds. *Tissue Engineering and Regenerative Medicine*, **2014**, 11, 47-58 | 4.5 | 5 |
| 27 | Aligned Nanofiber-Guided Bone Regeneration Barrier Incorporated with Equine Bone-Derived Hydroxyapatite for Alveolar Bone Regeneration. *Polymers*, **2020**, 13, | 4.5 | 5 |
| 26 | Enhanced Osteogenic Differentiation of Periodontal Ligament Stem Cells Using a Graphene Oxide-Coated Poly(Ɛcaprolactone) Scaffold. *Polymers*, **2021**, 13, | 4.5 | 5 |
| 25 | Development of novel gene carrier using modified nano hydroxyapatite derived from equine bone for osteogenic differentiation of dental pulp stem cells. *Bioactive Materials*, **2021**, 6, 2742-2751 | 16.7 | 5 |
| 24 | Response to "letter to the editor" written by Peter Luke Santa Maria, MBBS, PhD. *Tissue Engineering - Part A*, **2013**, 19, 2110-1 | 3.9 | 4 |
| 23 | Guided extracellular matrix formation from fibroblast cells cultured on bio-inspired configurable multiscale substrata. *Data in Brief*, **2015**, 5, 203-7 | 1.2 | 3 |
| 22 | Allogeneic Fibrin Clot for Odontogenic/Cementogenic Differentiation of Human Dental Mesenchymal Stem Cells. *Tissue Engineering and Regenerative Medicine*, **2020**, 17, 511-524 | 4.5 | 3 |
| 21 | Evaluation of Bone Regeneration Potential of Long-Term Soaked Natural Hydroxyapatite.. *ACS Applied Bio Materials*, **2019**, 2, 5535-5543 | 4.1 | 3 |
| 20 | Development and characterization of waste equine bone-derived calcium phosphate cements with human alveolar bone-derived mesenchymal stem cells. *Connective Tissue Research*, **2021**, 62, 164-175 | 3.3 | 3 |
| 19 | Photobiomodulation as an antioxidant substitute in post-thawing trauma of human stem cells from the apical papilla. *Scientific Reports*, **2021**, 11, 17329 | 4.9 | 3 |
| 18 | Development and characterization of fast-hardening composite cements composed of natural ceramics originated from horse bones and chitosan solution. *Tissue Engineering and Regenerative Medicine*, **2014**, 11, 362-371 | 4.5 | 2 |
| 17 | Design, Fabrication, and Application of a Microfluidic Device for Investigating Physical Stress-Induced Behavior in Yeast and Microalgae. *Journal of Biosystems Engineering*, **2014**, 39, 244-252 | 1.1 | 2 |
| 16 | Evaluation of electroporated area using 2,3,5-triphenyltetrazolium chloride in a potato model. *Scientific Reports*, **2021**, 11, 20431 | 4.9 | 2 |
| 15 | A Comparative Study on Aqueous Chitosan Solution and Various Submucosal Injection Fluids Using a Three-Dimensional Sensor. *Gut and Liver*, **2021**, 15, 217-224 | 4.8 | 2 |
| 14 | Synergistic effects of hyperosmotic polymannitol based non-viral vectors and nanotopographical cues for enhanced gene delivery. *RSC Advances*, **2016**, 6, 111233-111238 | 3.7 | 2 |

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| 13 | Evaluation of the Osteogenic Potential of Stem Cells in the Presence of Growth Hormone under Magnetic Field Stimulation. *ACS Biomaterials Science and Engineering*, **2020**, 6, 4141-4154 | 5.5 | 2 |
| 12 | Sulfur(VI) Fluoride Exchange (SuFEx)-Mediated Synthesis of the Chitosan-PEG Conjugate and Its Supramolecular Hydrogels for Protein Delivery. *Nanomaterials*, **2021**, 11, | 5.4 | 2 |
| 11 | Isolation and identification of mesenchymal stem cells from human mastoid bone marrow. *Tissue Engineering and Regenerative Medicine*, **2015**, 12, 195-202 | 4.5 | 1 |
| 10 | JNK2 silencing and caspase-9 activation by hyperosmotic polymer inhibits tumor progression. *International Journal of Biological Macromolecules*, **2018**, 120, 2215-2224 | 7.9 | 1 |
| 9 | Incorporation of Reversible Electroporation Into Electrolysis Accelerates Apoptosis for Rat Liver Tissue. *Technology in Cancer Research and Treatment*, **2020**, 19, 1533033820948051 | 2.7 | 1 |
| 8 | Induction of Apoptosis of Cancer Cells Using the Cisplatin Delivery Based Electrospray (CDES) System. *Applied Sciences (Switzerland)*, **2021**, 11, 3203 | 2.6 | 1 |
| 7 | Injectable Thermosensitive Chitosan Solution with -Glycerophosphate as an Optimal Submucosal Fluid Cushion for Endoscopic Submucosal Dissection. *Polymers*, **2021**, 13, | 4.5 | 1 |
| 6 | Stem Cell Substrates: Pulsed-Electromagnetic-Field-Assisted Reduced Graphene Oxide Substrates for Multidifferentiation of Human Mesenchymal Stem Cells (Adv. Healthcare Mater. 16/2016). *Advanced Healthcare Materials*, **2016**, 5, 2144-2144 | 10.1 | 1 |
| 5 | SHMT1 siRNA-Loaded hyperosmotic nanochains for blood-brain/tumor barrier post-transmigration therapy.. *Biomaterials*, **2021**, 281, 121359 | 15.6 | 0 |
| 4 | Induction of Stem Cell Like Cells from Mouse Embryonic Fibroblast by Short-Term Shear Stress and Vitamin C. *Applied Sciences (Switzerland)*, **2021**, 11, 1941 | 2.6 | 0 |
| 3 | Reduced graphene oxide-incorporated calcium phosphate cements with pulsed electromagnetic fields for bone regeneration.. *RSC Advances*, **2022**, 12, 5557-5570 | 3.7 | 0 |
| 2 | Engineering Cell□Graphene Interface for Controlling Stem Cell Behavior **2020**, 89-117 | | |
| 1 | Scaffolds for Human Dental Stem Cells to Regenerate Cementum **2012**, 161-170 | | |