

Seung-Woo Cho

List of Publications by Year in descending order

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189
papers

10,276
citations

28274

55
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40979

93
g-index

200
all docs

200
docs citations

200
times ranked

13715
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Combinatorial development of biomaterials for clonal growth of human pluripotent stem cells. <i>Nature Materials</i> , 2010, 9, 768-778. | 27.5 | 504 |
| 2 | Tissue Adhesive Catechol-Modified Hyaluronic Acid Hydrogel for Effective, Minimally Invasive Cell Therapy. <i>Advanced Functional Materials</i> , 2015, 25, 3814-3824. | 14.9 | 351 |
| 3 | Angiogenesis in ischemic tissue produced by spheroid grafting of human adipose-derived stromal cells. <i>Biomaterials</i> , 2011, 32, 2734-2747. | 11.4 | 327 |
| 4 | Polydopamine-mediated surface modification of scaffold materials for human neural stem cell engineering. <i>Biomaterials</i> , 2012, 33, 6952-6964. | 11.4 | 311 |
| 5 | Genetic engineering of human stem cells for enhanced angiogenesis using biodegradable polymeric nanoparticles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 3317-3322. | 7.1 | 278 |
| 6 | Hyaluronic Acid Catechol: A Biopolymer Exhibiting a pH-Dependent Adhesive or Cohesive Property for Human Neural Stem Cell Engineering. <i>Advanced Functional Materials</i> , 2013, 23, 1774-1780. | 14.9 | 246 |
| 7 | Bioinspired, Calcium-Free Alginate Hydrogels with Tunable Physical and Mechanical Properties and Improved Biocompatibility. <i>Biomacromolecules</i> , 2013, 14, 2004-2013. | 5.4 | 242 |
| 8 | Implantation of bone marrow mononuclear cells using injectable fibrin matrix enhances neovascularization in infarcted myocardium. <i>Biomaterials</i> , 2005, 26, 319-326. | 11.4 | 214 |
| 9 | Small-Diameter Blood Vessels Engineered With Bone Marrow-Derived Cells. <i>Annals of Surgery</i> , 2005, 241, 506-515. | 4.2 | 213 |
| 10 | Mechano-active tissue engineering of vascular smooth muscle using pulsatile perfusion bioreactors and elastic PLCL scaffolds. <i>Biomaterials</i> , 2005, 26, 1405-1411. | 11.4 | 203 |
| 11 | Targeting protein and peptide therapeutics to the heart via tannic acid modification. <i>Nature Biomedical Engineering</i> , 2018, 2, 304-317. | 22.5 | 202 |
| 12 | Liver Extracellular Matrix Providing Dual Functions of Two-Dimensional Substrate Coating and Three-Dimensional Injectable Hydrogel Platform for Liver Tissue Engineering. <i>Biomacromolecules</i> , 2014, 15, 206-218. | 5.4 | 199 |
| 13 | Polydopamine-Assisted Osteoinductive Peptide Immobilization of Polymer Scaffolds for Enhanced Bone Regeneration by Human Adipose-Derived Stem Cells. <i>Biomacromolecules</i> , 2013, 14, 3202-3213. | 5.4 | 196 |
| 14 | Improvement of Postnatal Neovascularization by Human Embryonic Stem Cell-Derived Endothelial-Like Cell Transplantation in a Mouse Model of Hindlimb Ischemia. <i>Circulation</i> , 2007, 116, 2409-2419. | 1.6 | 190 |
| 15 | Microfluidic device with brain extracellular matrix promotes structural and functional maturation of human brain organoids. <i>Nature Communications</i> , 2021, 12, 4730. | 12.8 | 164 |
| 16 | Nanotopographical Manipulation of Focal Adhesion Formation for Enhanced Differentiation of Human Neural Stem Cells. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10529-10540. | 8.0 | 155 |
| 17 | Three-Dimensional Electroconductive Hyaluronic Acid Hydrogels Incorporated with Carbon Nanotubes and Polypyrrole by Catechol-Mediated Dispersion Enhance Neurogenesis of Human Neural Stem Cells. <i>Biomacromolecules</i> , 2017, 18, 3060-3072. | 5.4 | 144 |
| 18 | Engineering of volume-stable adipose tissues. <i>Biomaterials</i> , 2005, 26, 3577-3585. | 11.4 | 134 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Polypyrrole/Alginate Hybrid Hydrogels: Electrically Conductive and Soft Biomaterials for Human Mesenchymal Stem Cell Culture and Potential Neural Tissue Engineering Applications. <i>Macromolecular Bioscience</i> , 2016, 16, 1653-1661. | 4.1 | 133 |
| 20 | Multiscale, Hierarchically Patterned Topography for Directing Human Neural Stem Cells into Functional Neurons. <i>ACS Nano</i> , 2014, 8, 7809-7822. | 14.6 | 132 |
| 21 | Painting blood vessels and atherosclerotic plaques with an adhesive drug depot. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 21444-21449. | 7.1 | 117 |
| 22 | Electrospun Silk Fibroin Nanofibrous Scaffolds with Two-Stage Hydroxyapatite Functionalization for Enhancing the Osteogenic Differentiation of Human Adipose-Derived Mesenchymal Stem Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7614-7625. | 8.0 | 117 |
| 23 | High-resolution acoustophoretic 3D cell patterning to construct functional collateral cylindroids for ischemia therapy. <i>Nature Communications</i> , 2018, 9, 5402. | 12.8 | 116 |
| 24 | The effect of cyclic strain on embryonic stem cell-derived cardiomyocytes. <i>Biomaterials</i> , 2008, 29, 844-856. | 11.4 | 114 |
| 25 | Catechol-Functionalized Hyaluronic Acid Hydrogels Enhance Angiogenesis and Osteogenesis of Human Adipose-Derived Stem Cells in Critical Tissue Defects. <i>Biomacromolecules</i> , 2016, 17, 1939-1948. | 5.4 | 113 |
| 26 | BMP-2 peptide-functionalized nanopatterned substrates for enhanced osteogenic differentiation of human mesenchymal stem cells. <i>Biomaterials</i> , 2013, 34, 7236-7246. | 11.4 | 109 |
| 27 | Tissue extracellular matrix hydrogels as alternatives to Matrigel for culturing gastrointestinal organoids. <i>Nature Communications</i> , 2022, 13, 1692. | 12.8 | 101 |
| 28 | Enhancement of adipose tissue formation by implantation of adipogenic-differentiated preadipocytes. <i>Biochemical and Biophysical Research Communications</i> , 2006, 345, 588-594. | 2.1 | 100 |
| 29 | Vascularized Liver Organoids Generated Using Induced Hepatic Tissue and Dynamic Liver-Specific Microenvironment as a Drug Testing Platform. <i>Advanced Functional Materials</i> , 2018, 28, 1801954. | 14.9 | 100 |
| 30 | Tissue Tapes-Phenolic Hyaluronic Acid Hydrogel Patches for Off-the-Shelf Therapy. <i>Advanced Functional Materials</i> , 2019, 29, 1903863. | 14.9 | 97 |
| 31 | Gastrointestinal tract modeling using organoids engineered with cellular and microbiota niches. <i>Experimental and Molecular Medicine</i> , 2020, 52, 227-237. | 7.7 | 96 |
| 32 | Gene delivery to human adult and embryonic cell-derived stem cells using biodegradable nanoparticulate polymeric vectors. <i>Gene Therapy</i> , 2009, 16, 533-546. | 4.5 | 95 |
| 33 | Paper-based bioactive scaffolds for stem cell-mediated bone tissue engineering. <i>Biomaterials</i> , 2014, 35, 9811-9823. | 11.4 | 93 |
| 34 | Triboelectric Nanogenerator Accelerates Highly Efficient Nonviral Direct Conversion and In Vivo Reprogramming of Fibroblasts to Functional Neuronal Cells. <i>Advanced Materials</i> , 2016, 28, 7365-7374. | 21.0 | 90 |
| 35 | Three-dimensional brain-like microenvironments facilitate the direct reprogramming of fibroblasts into therapeutic neurons. <i>Nature Biomedical Engineering</i> , 2018, 2, 522-539. | 22.5 | 86 |
| 36 | Vascular patches tissue-engineered with autologous bone marrow-derived cells and decellularized tissue matrices. <i>Biomaterials</i> , 2005, 26, 1915-1924. | 11.4 | 85 |

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|----|---|------|-----------|
| 37 | A serotonin-modified hyaluronic acid hydrogel for multifunctional hemostatic adhesives inspired by a platelet coagulation mediator. <i>Materials Horizons</i> , 2019, 6, 1169-1178. | 12.2 | 83 |
| 38 | Fungal brain infection modelled in a human-neurovascular-unit-on-a-chip with a functional blood-brain barrier. <i>Nature Biomedical Engineering</i> , 2021, 5, 830-846. | 22.5 | 83 |
| 39 | Single-Droplet Multiplex Bioassay on a Robust and Stretchable Extreme Wetting Substrate through Vacuum-Based Droplet Manipulation. <i>ACS Nano</i> , 2018, 12, 932-941. | 14.6 | 82 |
| 40 | Graphene Oxide Hierarchical Patterns for the Derivation of Electrophysiologically Functional Neuron-like Cells from Human Neural Stem Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 17763-17774. | 8.0 | 81 |
| 41 | Switchable Water-Adhesive, Superhydrophobic Palladium-Layered Silicon Nanowires Potentiate the Angiogenic Efficacy of Human Stem Cell Spheroids. <i>Advanced Materials</i> , 2014, 26, 7043-7050. | 21.0 | 73 |
| 42 | Locally Delivered Growth Factor Enhances the Angiogenic Efficacy of Adipose-Derived Stromal Cells Transplanted to Ischemic Limbs. <i>Stem Cells</i> , 2009, 27, 1976-1986. | 3.2 | 72 |
| 43 | Electroconductive nanoscale topography for enhanced neuronal differentiation and electrophysiological maturation of human neural stem cells. <i>Nanoscale</i> , 2017, 9, 18737-18752. | 5.6 | 72 |
| 44 | Facile Synthetic Route for Surface-Functionalized Magnetic Nanoparticles: Cell Labeling and Magnetic Resonance Imaging Studies. <i>ACS Nano</i> , 2011, 5, 4329-4336. | 14.6 | 71 |
| 45 | Combinatorial Extracellular Matrices for Human Embryonic Stem Cell Differentiation in 3D. <i>Biomacromolecules</i> , 2010, 11, 1909-1914. | 5.4 | 68 |
| 46 | Ascidian-Inspired Fast-Forming Hydrogel System for Versatile Biomedical Applications: Pyrogallol Chemistry for Dual Modes of Crosslinking Mechanism. <i>Advanced Functional Materials</i> , 2018, 28, 1705244. | 14.9 | 68 |
| 47 | Mapping the Interactions among Biomaterials, Adsorbed Proteins, and Human Embryonic Stem Cells. <i>Advanced Materials</i> , 2009, 21, 2781-2786. | 21.0 | 67 |
| 48 | Recapitulation of in vivo-like paracrine signals of human mesenchymal stem cells for functional neuronal differentiation of human neural stem cells in a 3D microfluidic system. <i>Biomaterials</i> , 2015, 63, 177-188. | 11.4 | 67 |
| 49 | Path-programmable water droplet manipulations on an adhesion controlled superhydrophobic surface. <i>Scientific Reports</i> , 2015, 5, 12326. | 3.3 | 65 |
| 50 | Nonviral delivery of genetic medicine for therapeutic angiogenesis. <i>Advanced Drug Delivery Reviews</i> , 2012, 64, 40-52. | 13.7 | 64 |
| 51 | Angiogenesis Facilitated by Autologous Whole Bone Marrow Stem Cell Transplantation for Buerger's Disease. <i>Stem Cells</i> , 2006, 24, 1194-1200. | 3.2 | 63 |
| 52 | Three-dimensional extracellular matrix-mediated neural stem cell differentiation in a microfluidic device. <i>Lab on A Chip</i> , 2012, 12, 2305. | 6.0 | 61 |
| 53 | Bio-inspired oligovitronectin-grafted surface for enhanced self-renewal and long-term maintenance of human pluripotent stem cells under feeder-free conditions. <i>Biomaterials</i> , 2015, 50, 127-139. | 11.4 | 59 |
| 54 | Reconstituting Vascular Microenvironment of Neural Stem Cell Niche in Three-Dimensional Extracellular Matrix. <i>Advanced Healthcare Materials</i> , 2014, 3, 1457-1464. | 7.6 | 58 |

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|----|---|------|-----------|
| 55 | Plant Flavonoid-Mediated Multifunctional Surface Modification Chemistry: Catechin Coating for Enhanced Osteogenesis of Human Stem Cells. <i>Chemistry of Materials</i> , 2017, 29, 4375-4384. | 6.7 | 56 |
| 56 | A Phenol-amine Superglue Inspired by Insect Sclerotization Process. <i>Advanced Materials</i> , 2020, 32, e2002118. | 21.0 | 55 |
| 57 | Significant improvement in cell adhesion and wear resistance of biomedical β -type titanium alloy through ultrasonic nanocrystal surface modification. <i>Journal of Alloys and Compounds</i> , 2018, 762, 941-949. | 5.5 | 54 |
| 58 | Biodegradable Nanotopography Combined with Neurotrophic Signals Enhances Contact Guidance and Neuronal Differentiation of Human Neural Stem Cells. <i>Macromolecular Bioscience</i> , 2015, 15, 1348-1356. | 4.1 | 53 |
| 59 | Sonic hedgehog intradermal gene therapy using a biodegradable poly(β -amino esters) nanoparticle to enhance wound healing. <i>Biomaterials</i> , 2012, 33, 9148-9156. | 11.4 | 51 |
| 60 | Osteoconductive hybrid hyaluronic acid hydrogel patch for effective bone formation. <i>Journal of Controlled Release</i> , 2020, 327, 571-583. | 9.9 | 51 |
| 61 | Bio-artificial tongue with tongue extracellular matrix and primary taste cells. <i>Biomaterials</i> , 2018, 151, 24-37. | 11.4 | 49 |
| 62 | Engineered Adipose Tissue Formation Enhanced by Basic Fibroblast Growth Factor and a Mechanically Stable Environment. <i>Cell Transplantation</i> , 2007, 16, 421-434. | 2.5 | 47 |
| 63 | Enhancement of in vivo endothelialization of tissue-engineered vascular grafts by granulocyte colony-stimulating factor. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 76A, 252-263. | 4.0 | 46 |
| 64 | Enhancement of the osteogenic efficacy of osteoblast transplantation by the sustained delivery of basic fibroblast growth factor. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2006, 79B, 353-359. | 3.4 | 46 |
| 65 | Mussel-Inspired Cell Adhesion Peptide Modification for Enhanced Endothelialization of Decellularized Blood Vessels. <i>Macromolecular Bioscience</i> , 2014, 14, 1181-1189. | 4.1 | 46 |
| 66 | Lipid-Like Nanoparticles for Small Interfering RNA Delivery to Endothelial Cells. <i>Advanced Functional Materials</i> , 2009, 19, 3112-3118. | 14.9 | 45 |
| 67 | Three-Dimensional Cell Grafting Enhances the Angiogenic Efficacy of Human Umbilical Vein Endothelial Cells. <i>Tissue Engineering - Part A</i> , 2012, 18, 310-319. | 3.1 | 44 |
| 68 | A microfluidic array for quantitative analysis of human neural stem cell self-renewal and differentiation in three-dimensional hypoxic microenvironment. <i>Biomaterials</i> , 2013, 34, 6607-6614. | 11.4 | 44 |
| 69 | Tissue-Adhesive Chondroitin Sulfate Hydrogel for Cartilage Reconstruction. <i>ACS Biomaterials Science and Engineering</i> , 2021, 7, 4230-4243. | 5.2 | 43 |
| 70 | Smooth muscle-like tissues engineered with bone marrow stromal cells. <i>Biomaterials</i> , 2004, 25, 2979-2986. | 11.4 | 42 |
| 71 | Basic fibroblast growth factor promotes bone marrow stromal cell transplantation-mediated neural regeneration in traumatic brain injury. <i>Biochemical and Biophysical Research Communications</i> , 2007, 359, 40-45. | 2.1 | 42 |
| 72 | A Novel Family of Biodegradable Poly(ester amide) Elastomers. <i>Advanced Materials</i> , 2011, 23, H95-100. | 21.0 | 41 |

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|----|---|------|-----------|
| 73 | Thermo-responsive polymeric nanoparticles for enhancing neuronal differentiation of human induced pluripotent stem cells. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2015, 11, 1861-1869. | 3.3 | 40 |
| 74 | Functional Skeletal Muscle Regeneration with Thermally Drawn Porous Fibers and Reprogrammed Muscle Progenitors for Volumetric Muscle Injury. <i>Advanced Materials</i> , 2021, 33, e2007946. | 21.0 | 40 |
| 75 | Aligned Brain Extracellular Matrix Promotes Differentiation and Myelination of Human-Induced Pluripotent Stem Cell-Derived Oligodendrocytes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 15344-15353. | 8.0 | 39 |
| 76 | Organoid engineering with microfluidics and biomaterials for liver, lung disease, and cancer modeling. <i>Acta Biomaterialia</i> , 2021, 132, 37-51. | 8.3 | 39 |
| 77 | Evidence for <i>In Vivo</i> Growth Potential and Vascular Remodeling of Tissue-Engineered Artery. <i>Tissue Engineering - Part A</i> , 2009, 15, 901-912. | 3.1 | 38 |
| 78 | Therapeutic angiogenesis using genetically engineered human endothelial cells. <i>Journal of Controlled Release</i> , 2012, 160, 515-524. | 9.9 | 38 |
| 79 | Diving beetle-like miniaturized plungers with reversible, rapid biofluid capturing for machine learning-based care of skin disease. <i>Science Advances</i> , 2021, 7, . | 10.3 | 36 |
| 80 | Multiphoton luminescent graphene quantum dots for in vivo tracking of human adipose-derived stem cells. <i>Nanoscale</i> , 2016, 8, 8512-8519. | 5.6 | 35 |
| 81 | In Situ Self-Cross-Linkable, Long-Term Stable Hyaluronic Acid Filler by Gallol Autoxidation for Tissue Augmentation and Wrinkle Correction. <i>Chemistry of Materials</i> , 2019, 31, 9614-9624. | 6.7 | 35 |
| 82 | Enhancement of Angiogenic Efficacy of Human Cord Blood Cell Transplantation. <i>Tissue Engineering</i> , 2006, 12, 1651-1661. | 4.6 | 34 |
| 83 | Nanostructured Tendon-Derived Scaffolds for Enhanced Bone Regeneration by Human Adipose-Derived Stem Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 22819-22829. | 8.0 | 33 |
| 84 | Preliminary experience with tissue engineering of a venous vascular patch by using bone marrow-derived cells and a hybrid biodegradable polymer scaffold. <i>Journal of Vascular Surgery</i> , 2006, 44, 1329-1340. | 1.1 | 32 |
| 85 | Electrochemical deposition of dopamine-hyaluronic acid conjugates for anti-biofouling bioelectrodes. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4507-4513. | 5.8 | 32 |
| 86 | Tissue engineering of heart valves by recellularization of glutaraldehyde-fixed porcine valves using bone marrow-derived cells. <i>Experimental and Molecular Medicine</i> , 2006, 38, 273-283. | 7.7 | 31 |
| 87 | Liver tissue engineering: Recent advances in the development of a bio-artificial liver. <i>Biotechnology and Bioprocess Engineering</i> , 2012, 17, 427-438. | 2.6 | 31 |
| 88 | Photoactive Poly(3-hexylthiophene) Nanoweb for Optoelectrical Stimulation to Enhance Neurogenesis of Human Stem Cells. <i>Theranostics</i> , 2017, 7, 4591-4604. | 10.0 | 31 |
| 89 | Distinct Mechanosensing of Human Neural Stem Cells on Extremely Limited Anisotropic Cellular Contact. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 33891-33900. | 8.0 | 31 |
| 90 | Tissue Beads: Tissue-specific Extracellular Matrix Microbeads to Potentiate Reprogrammed Cell-based Therapy. <i>Advanced Functional Materials</i> , 2019, 29, 1807803. | 14.9 | 31 |

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|-----|--|------|-----------|
| 91 | A Surface-Tailoring Method for Rapid Non-Thermosensitive Cell Sheet Engineering via Functional Polymer Coatings. <i>Advanced Materials</i> , 2020, 32, e1907225. | 21.0 | 31 |
| 92 | Tissue-engineered blood vessels with endothelial nitric oxide synthase activity. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2008, 85B, 537-546. | 3.4 | 30 |
| 93 | In Situ Bone Tissue Engineering With an Endogenous Stem Cell Mobilizer and Osteoinductive Nanofibrous Polymeric Scaffolds. <i>Biotechnology Journal</i> , 2017, 12, 1700062. | 3.5 | 30 |
| 94 | Synthesis of electroconductive hydrogel films by an electro-controlled click reaction and their application to drug delivery systems. <i>Polymer Chemistry</i> , 2015, 6, 4473-4478. | 3.9 | 29 |
| 95 | High-density lipoprotein-mimicking nanodiscs carrying peptide for enhanced therapeutic angiogenesis in diabetic hindlimb ischemia. <i>Biomaterials</i> , 2018, 161, 69-80. | 11.4 | 29 |
| 96 | Biodegradable Nerve Guidance Conduit with Microporous and Micropatterned Poly(lactide-co-glycolic acid)-Accelerated Sciatic Nerve Regeneration. <i>Macromolecular Bioscience</i> , 2018, 18, e1800290. | 4.1 | 29 |
| 97 | Kidney Tissue Reconstruction by Fetal Kidney Cell Transplantation: Effect of Gestation Stage of Fetal Kidney Cells. <i>Stem Cells</i> , 2007, 25, 1393-1401. | 3.2 | 28 |
| 98 | Intragenic CpG islands play important roles in bivalent chromatin assembly of developmental genes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E1885-E1894. | 7.1 | 27 |
| 99 | Tissue Engineering of Heart Valves In Vivo Using Bone Marrow-derived Cells. <i>Artificial Organs</i> , 2006, 30, 554-557. | 1.9 | 26 |
| 100 | A high throughput micro-array system of polymer surfaces for the manipulation of primary pancreatic islet cells. <i>Biomaterials</i> , 2010, 31, 8989-8995. | 11.4 | 26 |
| 101 | Hepatocyte Cytotoxicity Evaluation with Zinc Oxide Nanoparticles. <i>Journal of Biomedical Nanotechnology</i> , 2013, 9, 926-929. | 1.1 | 26 |
| 102 | Inhibition of hepatitis C virus in mouse models by lipidoid nanoparticle-mediated systemic delivery of siRNA against PRK2. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2016, 12, 1489-1498. | 3.3 | 26 |
| 103 | Mussel Adhesion-Inspired Reverse Transfection Platform Enhances Osteogenic Differentiation and Bone Formation of Human Adipose-Derived Stem Cells. <i>Small</i> , 2016, 12, 6266-6278. | 10.0 | 25 |
| 104 | Mechanically-reinforced and highly adhesive decellularized tissue-derived hydrogel for efficient tissue repair. <i>Chemical Engineering Journal</i> , 2022, 427, 130926. | 12.7 | 25 |
| 105 | Granulocyte colony-stimulating factor treatment enhances the efficacy of cellular cardiomyoplasty with transplantation of embryonic stem cell-derived cardiomyocytes in infarcted myocardium. <i>Biochemical and Biophysical Research Communications</i> , 2006, 340, 573-582. | 2.1 | 24 |
| 106 | Spheroform: Therapeutic Spheroid-Forming Nanotextured Surfaces Inspired by Desert Beetle <i>Physosterna cribripes</i> . <i>Advanced Healthcare Materials</i> , 2015, 4, 511-515. | 7.6 | 24 |
| 107 | Bioengineered Extracellular Membranous Nanovesicles for Efficient Small-Interfering RNA Delivery: Versatile Platforms for Stem Cell Engineering and In Vivo Delivery. <i>Advanced Functional Materials</i> , 2016, 26, 5804-5817. | 14.9 | 24 |
| 108 | Graded functionalization of biomaterial surfaces using mussel-inspired adhesive coating of polydopamine. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 159, 546-556. | 5.0 | 23 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Highly durable and biocompatible periodical Si/DLC nanocomposite coatings. <i>Nanoscale</i> , 2018, 10, 4852-4860. | 5.6 | 23 |
| 110 | Effects of a Catechol-Functionalized Hyaluronic Acid Patch Combined with Human Adipose-Derived Stem Cells in Diabetic Wound Healing. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2632. | 4.1 | 23 |
| 111 | Photoactivation of Noncovalently Assembled Peptide Ligands on Carbon Nanotubes Enables the Dynamic Regulation of Stem Cell Differentiation. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26470-26481. | 8.0 | 22 |
| 112 | Magnetic Control of Axon Navigation in Reprogrammed Neurons. <i>Nano Letters</i> , 2019, 19, 6517-6523. | 9.1 | 22 |
| 113 | Organoids for Advanced Therapeutics and Disease Models. <i>Advanced Therapeutics</i> , 2019, 2, 1800087. | 3.2 | 22 |
| 114 | Inhibition of Hepatitis C Virus in Mice by a Small Interfering RNA Targeting a Highly Conserved Sequence in Viral IRES Pseudoknot. <i>PLoS ONE</i> , 2016, 11, e0146710. | 2.5 | 22 |
| 115 | Reconstruction of Muscle Fascicle-Like Tissues by Anisotropic 3D Patterning. <i>Advanced Functional Materials</i> , 2021, 31, 2006227. | 14.9 | 21 |
| 116 | Cell-permeable mitochondrial ubiquinol-cytochrome c reductase binding protein induces angiogenesis in vitro and in vivo. <i>Cancer Letters</i> , 2015, 366, 52-60. | 7.2 | 20 |
| 117 | Hyaluronic Acid-based Biomimetic Hydrogels for Tissue Engineering and Medical Applications. <i>Biotechnology and Bioprocess Engineering</i> , 2021, 26, 503-516. | 2.6 | 20 |
| 118 | Combined therapy with human cord blood cell transplantation and basic fibroblast growth factor delivery for treatment of myocardial infarction. <i>European Journal of Heart Failure</i> , 2007, 9, 974-985. | 7.1 | 19 |
| 119 | Therapeutic angiogenesis by a myoblast layer harvested by tissue transfer printing from cell-adhesive, thermosensitive hydrogels. <i>Biomaterials</i> , 2013, 34, 8258-8268. | 11.4 | 19 |
| 120 | Genetically Engineered Myoblast Sheet for Therapeutic Angiogenesis. <i>Biomacromolecules</i> , 2014, 15, 361-372. | 5.4 | 19 |
| 121 | Enhanced Self-Renewal and Accelerated Differentiation of Human Fetal Neural Stem Cells Using Graphene Oxide Nanoparticles. <i>Macromolecular Bioscience</i> , 2017, 17, 1600540. | 4.1 | 19 |
| 122 | Decellularized Tissue Matrix for Stem Cell and Tissue Engineering. <i>Advances in Experimental Medicine and Biology</i> , 2018, 1064, 161-180. | 1.6 | 18 |
| 123 | Autologous bone marrow cell transplantation combined with off-pump coronary artery bypass grafting in patients with ischemic cardiomyopathy. <i>Canadian Journal of Surgery</i> , 2008, 51, 269-75. | 1.2 | 18 |
| 124 | Shape Control of Cellulose Nanocrystals via Compositional Acid Hydrolysis. <i>Journal of Biomedical Nanotechnology</i> , 2013, 9, 1293-1298. | 1.1 | 17 |
| 125 | Strong contact coupling of neuronal growth cones with height-controlled vertical silicon nanocolumns. <i>Nano Research</i> , 2018, 11, 2532-2543. | 10.4 | 17 |
| 126 | Evolutionarily conserved sequence motif analysis guides development of chemically defined hydrogels for therapeutic vascularization. <i>Science Advances</i> , 2020, 6, eaaz5894. | 10.3 | 17 |

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|-----|---|------|-----------|
| 127 | Stem Cell Therapy in Patients with Thromboangiitis Obliterans: Assessment of the Long-Term Clinical Outcome and Analysis of the Prognostic Factors. <i>International Journal of Stem Cells</i> , 2011, 4, 88-98. | 1.8 | 17 |
| 128 | Exceptional improvement in the wear resistance of biomedical β -type titanium alloy with the use of a biocompatible multilayer Si/DLC nanocomposite coating. <i>Ceramics International</i> , 2022, 48, 17376-17384. | 4.8 | 17 |
| 129 | Implantable microfluidic device for the formation of three-dimensional vasculature by human endothelial progenitor cells. <i>Biotechnology and Bioprocess Engineering</i> , 2014, 19, 379-385. | 2.6 | 16 |
| 130 | Surface Chemistry of Vitamin: Pyridoxal 5-phosphate (Vitamin B ₆) as a Multifunctional Compound for Surface Functionalization. <i>Advanced Functional Materials</i> , 2015, 25, 4754-4760. | 14.9 | 16 |
| 131 | Ferritin nanoparticles for improved self-renewal and differentiation of human neural stem cells. <i>Biomaterials Research</i> , 2018, 22, 5. | 6.9 | 16 |
| 132 | Delivery of small interfering RNA for inhibition of endothelial cell apoptosis by hypoxia and serum deprivation. <i>Biochemical and Biophysical Research Communications</i> , 2008, 376, 158-163. | 2.1 | 15 |
| 133 | Nonviral delivery for reprogramming to pluripotency and differentiation. <i>Archives of Pharmacal Research</i> , 2014, 37, 107-119. | 6.3 | 15 |
| 134 | Galactosylated Lipidoid Nanoparticles for Delivery of Small Interfering RNA to Inhibit Hepatitis C Viral Replication In Vivo. <i>Advanced Healthcare Materials</i> , 2016, 5, 2931-2941. | 7.6 | 15 |
| 135 | Vertical Nanowire Electrode Array for Enhanced Neurogenesis of Human Neural Stem Cells via Intracellular Electrical Stimulation. <i>Nano Letters</i> , 2021, 21, 6343-6351. | 9.1 | 15 |
| 136 | DNA-mediated self-assembly of taste cells and neurons for taste signal transmission. <i>Biomaterials Science</i> , 2018, 6, 3388-3396. | 5.4 | 14 |
| 137 | Immunomodulatory Scaffolds Derived from Lymph Node Extracellular Matrices. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 14037-14049. | 8.0 | 14 |
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