# Guoping Chen

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 216 papers | 10,198 citations | 51 h-index | 94 g-index |
| 233 ext. papers | 11,248 ext. citations | 7 avg, IF | 6.43 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 216 | Preparation of mesh-like collagen scaffolds for tissue engineering. *Materials Advances*, **2022**, 3, 1556-1564 | 5.3 | 2 |
| 215 | Development of a novel solar energy controllable Linear fresnel photoreactor (LFP) for high-efficiency photocatalytic wastewater treatment under actual weather. *Water Research*, **2022**, 208, 117880 | 12.5 | 2 |
| 214 | Light stimulation strategy for promoting bio-hydrogen production: Microbial community, metabolic pathway and long-term application.. *Bioresource Technology*, **2022**, 350, 126902 | 11 | 0 |
| 213 | Bactericidal process and practicability for environmental water sterilization by solar-light-driven Bi2WO6-based photocatalyst. *Journal of Water Process Engineering*, **2022**, 47, 102713 | 6.7 | 1 |
| 212 | Sustainable and efficient reduction of pollutants by immobilized PEG-P/Ag/AgO/AgPO/TiO photocatalyst for purification of saline wastewater.. *Marine Pollution Bulletin*, **2022**, 179, 113731 | 6.7 | |
| 211 | Preparation of composite scaffolds composed of gelatin and Au nanostar-deposited black phosphorus nanosheets for the photothermal ablation of cancer cells and adipogenic differentiation of stem cells **2022**, 138, 212938 | | |
| 210 | PLGA-collagen-BPNS Bifunctional composite mesh for photothermal therapy of melanoma and skin tissue engineering.. *Journal of Materials Chemistry B*, **2021**, | 7.3 | 6 |
| 209 | The varied influences of cell adhesion and spreading on gene transfection of mesenchymal stem cells on a micropatterned substrate. *Acta Biomaterialia*, **2021**, 125, 100-111 | 10.8 | 8 |
| 208 | Micropattern-controlled chirality of focal adhesions regulates the cytoskeletal arrangement and gene transfection of mesenchymal stem cells. *Biomaterials*, **2021**, 271, 120751 | 15.6 | 8 |
| 207 | Nanomaterials and their composite scaffolds for photothermal therapy and tissue engineering applications. *Science and Technology of Advanced Materials*, **2021**, 22, 404-428 | 7.1 | 11 |
| 206 | Photon number based anaerobic digestion process for efficient bio-methane conversion from ammonium-rich feedstock: Performance evaluation and practical potential. *Energy Conversion and Management*, **2021**, 238, 114155 | 10.6 | 2 |
| 205 | Influence of viscosity on chondrogenic differentiation of mesenchymal stem cells during 3D culture in viscous gelatin solution-embedded hydrogels. *Journal of Materials Science and Technology*, **2021**, 63, 1-8 | 9.1 | 4 |
| 204 | From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. *Exploration*, **2021**, 1, 9-20 | | 13 |
| 203 | Composite scaffolds of black phosphorus nanosheets and gelatin with controlled pore structures for photothermal cancer therapy and adipose tissue engineering. *Biomaterials*, **2021**, 275, 120923 | 15.6 | 7 |
| 202 | Regulation of gene transfection by cell size, shape and elongation on micropatterned surfaces. *Journal of Materials Chemistry B*, **2021**, 9, 4329-4339 | 7.3 | 3 |
| 201 | Interconnected collagen porous scaffolds prepared with sacrificial PLGA sponge templates for cartilage tissue engineering. *Journal of Materials Chemistry B*, **2021**, 9, 8491-8500 | 7.3 | 9 |
| 200 | Layered Ag/Ag2O/BiPO4/Bi2WO6 heterostructures by two-step method for enhanced photocatalysis. *Journal of Catalysis*, **2020**, 387, 28-38 | 7.3 | 16 |

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| 199 | Development of an oyster shell and lignite modified zeolite (OLMZ) fixed bioreactor coupled with intermittent light stimulation for high efficient ammonium-rich anaerobic digestion process. *Chemical Engineering Journal*, **2020**, 398, 125637 | 14.7 | 10 |
| 198 | PLGA-collagen-ECM hybrid meshes mimicking stepwise osteogenesis and their influence on the osteogenic differentiation of hMSCs. *Biofabrication*, **2020**, 12, 025027 | 10.5 | 14 |
| 197 | Polyethylene glycol (PEG)-modified Ag/AgO/AgPO/BiWO photocatalyst film with enhanced efficiency and stability under solar light. *Journal of Colloid and Interface Science*, **2020**, 569, 101-113 | 9.3 | 26 |
| 196 | Regulation of Stem Cell Functions by Micro-Patterned Structures. *Advances in Experimental Medicine and Biology*, **2020**, 1250, 141-155 | 3.6 | 2 |
| 195 | Preparation of PLGA-collagen hybrid scaffolds with controlled pore structures for cartilage tissue engineering. *Progress in Natural Science: Materials International*, **2020**, 30, 642-650 | 3.6 | 14 |
| 194 | PEG assisted P/Ag/Ag2O/Ag3PO4/TiO2 photocatalyst with enhanced elimination of emerging organic pollutants in salinity condition under solar light illumination. *Chemical Engineering Journal*, **2020**, 385, 123765 | 14.7 | 30 |
| 193 | Folic Acid-Functionalized Composite Scaffolds of Gelatin and Gold Nanoparticles for Photothermal Ablation of Breast Cancer Cells. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 589905 | 5.8 | 7 |
| 192 | ECM scaffolds mimicking extracellular matrices of endochondral ossification for the regulation of mesenchymal stem cell differentiation. *Acta Biomaterialia*, **2020**, 114, 158-169 | 10.8 | 11 |
| 191 | Osteogenic and Adipogenic Differentiation of Mesenchymal Stem Cells in Gelatin Solutions of Different Viscosities. *Advanced Healthcare Materials*, **2020**, 9, e2000617 | 10.1 | 6 |
| 190 | Interaction of Immune Cells and Tumor Cells in Gold Nanorod-Gelatin Composite Porous Scaffolds. *Nanomaterials*, **2019**, 9, | 5.4 | 3 |
| 189 | Preparation of Stepwise Adipogenesis-Mimicking ECM-Deposited PLGA-Collagen Hybrid Meshes and Their Influence on Adipogenic Differentiation of hMSCs. *ACS Biomaterials Science and Engineering*, **2019**, 5, 6099-6108 | 5.5 | 7 |
| 188 | Encapsulation of individual living cells with enzyme responsive polymer nanoshell. *Biomaterials*, **2019**, 197, 317-326 | 15.6 | 31 |
| 187 | Influence of Cell Spreading Area on the Osteogenic Commitment and Phenotype Maintenance of Mesenchymal Stem Cells. *Scientific Reports*, **2019**, 9, 6891 | 4.9 | 23 |
| 186 | Superior disinfection effect of Escherichia coli by hydrothermal synthesized TiO-based composite photocatalyst under LED irradiation: Influence of environmental factors and disinfection mechanism. *Environmental Pollution*, **2019**, 247, 847-856 | 9.3 | 30 |
| 185 | Decellularization Techniques for Preparation of Decellularized Extracellular Matrices in Tissue Engineering Applications **2019**, 1-15 | | |
| 184 | PLGA-collagen-ECM hybrid scaffolds functionalized with biomimetic extracellular matrices secreted by mesenchymal stem cells during stepwise osteogenesis-co-adipogenesis. *Journal of Materials Chemistry B*, **2019**, 7, 7195-7206 | 7.3 | 23 |
| 183 | Solution viscosity regulates chondrocyte proliferation and phenotype during 3D culture. *Journal of Materials Chemistry B*, **2019**, 7, 7713-7722 | 7.3 | 23 |
| 182 | Influence of Cell Morphology on Mesenchymal Stem Cell Transfection. *ACS Applied Materials & Interfaces*, **2019**, 11, 1932-1941 | 9.5 | 16 |

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| 181 | Fabrication of gelatin-micropatterned surface and its effect on osteogenic differentiation of hMSCs. *Journal of Materials Chemistry B*, **2018**, 6, 1018-1025 | 7.3 | 7 |
| 180 | Porous Scaffolds for Regeneration of Cartilage, Bone and Osteochondral Tissue. *Advances in Experimental Medicine and Biology*, **2018**, 1058, 171-191 | 3.6 | 24 |
| 179 | The influence of carbon-encapsulated iron nanoparticles on elastic modulus of living human mesenchymal stem cells examined by atomic force microscopy. *Micron*, **2018**, 108, 41-48 | 2.3 | 18 |
| 178 | Regulation of mesenchymal stem cell functions by micro-nano hybrid patterned surfaces. *Journal of Materials Chemistry B*, **2018**, 6, 5424-5434 | 7.3 | 24 |
| 177 | Synthesis of photo-reactive poly (vinyl alcohol) and construction of scaffold-free cartilage like pellets. *International Journal of Energy Production and Management*, **2018**, 5, 159-166 | 5.3 | 8 |
| 176 | Preparation of Cell-Derived Decellularized Matrices Mimicking Native ECM During the Osteogenesis and Adipogenesis of Mesenchymal Stem Cells. *Methods in Molecular Biology*, **2018**, 1577, 71-86 | 1.4 | 5 |
| 175 | Preparation of Polymeric Porous Scaffolds for Regenerative Medicine. *Membrane*, **2018**, 43, 215-223 | 0 | |
| 174 | Photothermal Ablation of Cancer Cells by Albumin-Modified Gold Nanorods and Activation of Dendritic Cells. *Materials*, **2018**, 12, | 3.5 | 15 |
| 173 | Preparation of dexamethasone-loaded biphasic calcium phosphate nanoparticles/collagen porous composite scaffolds for bone tissue engineering. *Acta Biomaterialia*, **2018**, 67, 341-353 | 10.8 | 80 |
| 172 | Ligand density-dependent influence of arginine□glycine□aspartate functionalized gold nanoparticles on osteogenic and adipogenic differentiation of mesenchymal stem cells. *Nano Research*, **2018**, 11, 1247-1261 | 10 | 23 |
| 171 | Bifunctional scaffolds for the photothermal therapy of breast tumor cells and adipose tissue regeneration. *Journal of Materials Chemistry B*, **2018**, 6, 7728-7736 | 7.3 | 21 |
| 170 | Promoted Angiogenesis and Osteogenesis by Dexamethasone-loaded Calcium Phosphate Nanoparticles/Collagen Composite Scaffolds with Microgroove Networks. *Scientific Reports*, **2018**, 8, 14143 | 4.9 | 13 |
| 169 | Biomimetic Extracellular Matrices and Scaffolds Prepared from Cultured Cells. *Advances in Experimental Medicine and Biology*, **2018**, 1078, 465-474 | 3.6 | 2 |
| 168 | Functional Hydrogels With Tunable Structures and Properties for Tissue Engineering Applications. *Frontiers in Chemistry*, **2018**, 6, 499 | 5 | 110 |
| 167 | Photo-Crosslinkable Hydrogels for Tissue Engineering Applications **2018**, 277-300 | | 6 |
| 166 | Surface Modification for Medical Devices **2018**, 133-177 | | 1 |
| 165 | Sub-10 nm gold nanoparticles promote adipogenesis and inhibit osteogenesis of mesenchymal stem cells. *Journal of Materials Chemistry B*, **2017**, 5, 1353-1362 | 7.3 | 28 |
| 164 | Nanoencapsulation of individual mammalian cells with cytoprotective polymer shell. *Biomaterials*, **2017**, 133, 253-262 | 15.6 | 32 |

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| 163 | Biomimetic Assembly of Vascular Endothelial Cells and Muscle Cells in Microgrooved Collagen Porous Scaffolds. *Tissue Engineering - Part C: Methods*, **2017**, 23, 367-376 | 2.9 | 25 |
| 162 | Induction of Chondrogenic Differentiation of Human Mesenchymal Stem Cells by Biomimetic Gold Nanoparticles with Tunable RGD Density. *Advanced Healthcare Materials*, **2017**, 6, 1700317 | 10.1 | 20 |
| 161 | Influence of microporous gelatin hydrogels on chondrocyte functions. *Journal of Materials Chemistry B*, **2017**, 5, 5753-5762 | 7.3 | 26 |
| 160 | Insight into the interactions between nanoparticles and cells. *Biomaterials Science*, **2017**, 5, 173-189 | 7.4 | 66 |
| 159 | IGF-2 coated porous collagen microwells for the culture of pancreatic islets. *Journal of Materials Chemistry B*, **2017**, 5, 220-225 | 7.3 | 11 |
| 158 | Composite scaffolds of gelatin and gold nanoparticles with tunable size and shape for photothermal cancer therapy. *Journal of Materials Chemistry B*, **2017**, 5, 245-253 | 7.3 | 43 |
| 157 | TEMPO-Conjugated Gold Nanoparticles for Reactive Oxygen Species Scavenging and Regulation of Stem Cell Differentiation. *ACS Applied Materials & Interfaces*, **2017**, 9, 35683-35692 | 9.5 | 45 |
| 156 | Targeting ligand-functionalized photothermal scaffolds for cancer cell capture and in situ ablation. *Biomaterials Science*, **2017**, 5, 2276-2284 | 7.4 | 8 |
| 155 | Preparation of dexamethasone-loaded calcium phosphate nanoparticles for the osteogenic differentiation of human mesenchymal stem cells. *Journal of Materials Chemistry B*, **2017**, 5, 6801-6810 | 7.3 | 14 |
| 154 | Maintenance of Cartilaginous Gene Expression of Serially Subcultured Chondrocytes on Poly(2-Methoxyethyl Acrylate) Analogous Polymers. *Macromolecular Bioscience*, **2017**, 17, 1700297 | 5.5 | 2 |
| 153 | Fabrication of Highly Crosslinked Gelatin Hydrogel and Its Influence on Chondrocyte Proliferation and Phenotype. *Polymers*, **2017**, 9, | 4.5 | 37 |
| 152 | Scaffolds, Porous Polymer: Tissue Engineering **2017**, 1374-1381 | | |
| 151 | Collagen-Based Porous Scaffolds for Tissue Engineering **2016**, 1-15 | | 1 |
| 150 | Preparation of gelatin/FeO composite scaffolds for enhanced and repeatable cancer cell ablation. *Journal of Materials Chemistry B*, **2016**, 4, 5664-5672 | 7.3 | 26 |
| 149 | Single mammalian cell encapsulation by in situ polymerization. *Journal of Materials Chemistry B*, **2016**, 4, 7662-7668 | 7.3 | 22 |
| 148 | Regulating the stemness of mesenchymal stem cells by tuning micropattern features. *Journal of Materials Chemistry B*, **2016**, 4, 37-45 | 7.3 | 68 |
| 147 | Gelatin Scaffolds with Controlled Pore Structure and Mechanical Property for Cartilage Tissue Engineering. *Tissue Engineering - Part C: Methods*, **2016**, 22, 189-98 | 2.9 | 66 |
| 146 | Matrices secreted during simultaneous osteogenesis and adipogenesis of mesenchymal stem cells affect stem cells differentiation. *Acta Biomaterialia*, **2016**, 35, 185-93 | 10.8 | 26 |

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| 145 | Gold nanoparticle size and shape influence on osteogenesis of mesenchymal stem cells. *Nanoscale*, **2016**, 8, 7992-8007 | 7.7 | 147 |
| 144 | Preparation of polymer-based porous scaffolds for tissue engineering **2016**, 105-125 | | 2 |
| 143 | Fabrication of multi-biofunctional gelatin-based electrospun fibrous scaffolds for enhancement of osteogenesis of mesenchymal stem cells. *Colloids and Surfaces B: Biointerfaces*, **2016**, 138, 26-31 | 6 | 35 |
| 142 | Decellularized Extracellular Matrix as an In Vitro Model to Study the Comprehensive Roles of the ECM in Stem Cell Differentiation. *Stem Cells International*, **2016**, 2016, 6397820 | 5 | 95 |
| 141 | Preparation of Polymer Scaffolds by Ice Particulate Method for Tissue Engineering **2016**, 77-95 | | 3 |
| 140 | 3D Culture of Chondrocytes in Gelatin Hydrogels with Different Stiffness. *Polymers*, **2016**, 8, | 4.5 | 100 |
| 139 | Promotion of muscle regeneration by myoblast transplantation combined with the controlled and sustained release of bFGFcpr. *Journal of Tissue Engineering and Regenerative Medicine*, **2016**, 10, 325-33 | 4.4 | 11 |
| 138 | Morphological and Mechanical Properties of Osteosarcoma Microenvironment Cells Explored by Atomic Force Microscopy. *Analytical Sciences*, **2016**, 32, 1177-1182 | 1.7 | 15 |
| 137 | Discriminating the Independent Influence of Cell Adhesion and Spreading Area on Stem Cell Fate Determination Using Micropatterned Surfaces. *Scientific Reports*, **2016**, 6, 28708 | 4.9 | 43 |
| 136 | Influence of cell size on cellular uptake of gold nanoparticles. *Biomaterials Science*, **2016**, 4, 970-8 | 7.4 | 50 |
| 135 | Manipulating Cell Nanomechanics Using Micropatterns. *Advanced Functional Materials*, **2016**, 26, 7634-7643 | 15.6 | 23 |
| 134 | Polymeric and Biomimetic ECM Scaffolds for Tissue Engineering **2016**, 41-56 | | |
| 133 | Facile preparation of albumin-stabilized gold nanostars for the targeted photothermal ablation of cancer cells. *Journal of Materials Chemistry B*, **2015**, 3, 5806-5814 | 7.3 | 34 |
| 132 | Cellular effects of magnetic nanoparticles explored by atomic force microscopy. *Biomaterials Science*, **2015**, 3, 1284-90 | 7.4 | 10 |
| 131 | Influence of stepwise chondrogenesis-mimicking 3D extracellular matrix on chondrogenic differentiation of mesenchymal stem cells. *Biomaterials*, **2015**, 52, 199-207 | 15.6 | 60 |
| 130 | Gold nanoparticles with different charge and moiety induce differential cell response on mesenchymal stem cell osteogenesis. *Biomaterials*, **2015**, 54, 226-36 | 15.6 | 123 |
| 129 | Engineering multi-layered skeletal muscle tissue by using 3D microgrooved collagen scaffolds. *Biomaterials*, **2015**, 73, 23-31 | 15.6 | 99 |
| 128 | Influence of surfaces modified with biomimetic extracellular matrices on adhesion and proliferation of mesenchymal stem cells and osteosarcoma cells. *Colloids and Surfaces B: Biointerfaces*, **2015**, 126, 381-6 | 6 | 21 |

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| 127 | Effect of high molecular weight hyaluronic acid on chondrocytes cultured in collagen/hyaluronic acid porous scaffolds. *RSC Advances*, **2015**, 5, 94405-94410 | 3.7 | 13 |
| 126 | Cell response to single-walled carbon nanotubes in hybrid porous collagen sponges. *Colloids and Surfaces B: Biointerfaces*, **2015**, 126, 63-9 | 6 | 17 |
| 125 | Pore size effect of collagen scaffolds on cartilage regeneration. *Acta Biomaterialia*, **2014**, 10, 2005-13 | 10.8 | 208 |
| 124 | Preparation of collagen porous scaffolds with controlled and sustained release of bioactive insulin. *Journal of Bioactive and Compatible Polymers*, **2014**, 29, 95-109 | 2 | 11 |
| 123 | Long-term stem cell labeling by collagen-functionalized single-walled carbon nanotubes. *Nanoscale*, **2014**, 6, 1552-9 | 7.7 | 15 |
| 122 | Poly(vinyl alcohol)-micropatterned surfaces for manipulation of mesenchymal stem cell functions. *Methods in Cell Biology*, **2014**, 119, 17-33 | 1.8 | 5 |
| 121 | One-pot synthesis of polyaniline doped with transition metal ions using H2O2 as oxidant. *Polymers for Advanced Technologies*, **2014**, 25, 1391-1395 | 3.2 | 6 |
| 120 | Collagen microgel-assisted dexamethasone release from PLLA-collagen hybrid scaffolds of controlled pore structure for osteogenic differentiation of mesenchymal stem cells. *Journal of Biomaterials Science, Polymer Edition*, **2014**, 25, 1374-86 | 3.5 | 16 |
| 119 | Highly active porous scaffolds of collagen and hyaluronic acid prepared by suppression of polyion complex formation. *Journal of Materials Chemistry B*, **2014**, 2, 5612-5619 | 7.3 | 14 |
| 118 | Stem cell culture using cell-derived substrates. *Biomaterials Science*, **2014**, 2, 1595-1603 | 7.4 | 16 |
| 117 | Influence of micropattern width on differentiation of human mesenchymal stem cells to vascular smooth muscle cells. *Colloids and Surfaces B: Biointerfaces*, **2014**, 122, 316-323 | 6 | 33 |
| 116 | Cellular uptake of single-walled carbon nanotubes in 3D extracellular matrix-mimetic composite collagen hydrogels. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2487-92 | 1.3 | 10 |
| 115 | Chapter 2: Preparation of Tissue Development Mimicking Matrices and Their Applications. *Frontiers in Nanobiomedical Research*, **2014**, 61-75 | | |
| 114 | Collagen scaffolds with controlled insulin release and controlled pore structure for cartilage tissue engineering. *BioMed Research International*, **2014**, 2014, 623805 | 3 | 20 |
| 113 | Variation of mechanical property of single-walled carbon nanotubes-treated cells explored by atomic force microscopy. *Journal of Biomedical Nanotechnology*, **2014**, 10, 651-9 | 4 | 12 |
| 112 | Effect of single-wall carbon nanotubes on mechanical property of chondrocytes. *Journal of Nanoscience and Nanotechnology*, **2014**, 14, 2459-65 | 1.3 | 11 |
| 111 | Preparation of cylinder-shaped porous sponges of poly(L-lactic acid), poly(DL-lactic-co-glycolic acid), and poly(caprolactone). *BioMed Research International*, **2014**, 2014, 106082 | 3 | 11 |
| 110 | Stimulatory effects of the ionic products from Ca-Mg-Si bioceramics on both osteogenesis and angiogenesis in vitro. *Acta Biomaterialia*, **2013**, 9, 8004-14 | 10.8 | 148 |

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| 109 | Influence of cell protrusion and spreading on adipogenic differentiation of mesenchymal stem cells on micropatterned surfaces. *Soft Matter*, **2013**, 9, 4160 | 3.6 | 28 |
| 108 | Preparation of collagen porous scaffolds with a gradient pore size structure using ice particulates. *Materials Letters*, **2013**, 107, 280-283 | 3.3 | 35 |
| 107 | The combined influence of substrate elasticity and surface-grafted molecules on the ex vivo expansion of hematopoietic stem and progenitor cells. *Biomaterials*, **2013**, 34, 7632-44 | 15.6 | 37 |
| 106 | Uptake and intracellular distribution of collagen-functionalized single-walled carbon nanotubes. *Biomaterials*, **2013**, 34, 2472-9 | 15.6 | 46 |
| 105 | Preparation of collagen scaffolds with controlled pore structures and improved mechanical property for cartilage tissue engineering. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 426-438 | 2 | 38 |
| 104 | Cartilage tissue engineering with controllable shape using a poly(lactic-co-glycolic acid)/collagen hybrid scaffold. *Journal of Bioactive and Compatible Polymers*, **2013**, 28, 247-257 | 2 | 7 |
| 103 | Interplay between chemical state, electric properties, and ferromagnetism in Fe-doped ZnO films. *Journal of Applied Physics*, **2013**, 113, 104503 | 2.5 | 27 |
| 102 | Effects of extracellular matrix proteins in chondrocyte-derived matrices on chondrocyte functions. *Biotechnology Progress*, **2013**, 29, 1331-6 | 2.8 | 9 |
| 101 | The osteogenic differentiation of mesenchymal stem cells by controlled cell-cell interaction on micropatterned surfaces. *Journal of Biomedical Materials Research - Part A*, **2013**, 101, 3388-95 | 5.4 | 37 |
| 100 | Design and Synthesis of Photoreactive Polymers for Biomedical Applications **2013**, 253-278 | | 1 |
| 99 | SY31 Polymeric porous scaffolds for regenerative medicine. *The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME*, **2013**, 2013.25, 39-40 | 0 | |
| 98 | The balance of osteogenic and adipogenic differentiation in human mesenchymal stem cells by matrices that mimic stepwise tissue development. *Biomaterials*, **2012**, 33, 2025-31 | 15.6 | 59 |
| 97 | Spatial immobilization of bone morphogenetic protein-4 in a collagen-PLGA hybrid scaffold for enhanced osteoinductivity. *Biomaterials*, **2012**, 33, 6140-6 | 15.6 | 82 |
| 96 | Coating of collagen on a poly(l-lactic acid) sponge surface for tissue engineering. *Materials Science and Engineering C*, **2012**, 32, 290-295 | 8.3 | 15 |
| 95 | Maintenance of cartilaginous gene expression on extracellular matrix derived from serially passaged chondrocytes during in vitro chondrocyte expansion. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 694-702 | 5.4 | 33 |
| 94 | Exploring adipogenic differentiation of a single stem cell on poly(acrylic acid) and polystyrene micropatterns. *Soft Matter*, **2012**, 8, 8429 | 3.6 | 19 |
| 93 | Spatially guided angiogenesis by three-dimensional collagen scaffolds micropatterned with vascular endothelial growth factor. *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 2185-95 | 3.5 | 13 |
| 92 | Preparation of Porous Scaffolds from Ice Particulate Templates for Tissue Engineering **2012**, 47-61 | | |

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| 91 | Comparison of decellularization techniques for preparation of extracellular matrix scaffolds derived from three-dimensional cell culture. *Journal of Biomedical Materials Research - Part A*, **2012**, 100, 2507-16 | 5.4 | 55 |
| 90 | Preparation of porous collagen scaffolds with micropatterned structures. *Advanced Materials*, **2012** , 24, 4311-6 | 24 | 40 |
| 89 | Differentiation of PC12 cells in three-dimensional collagen sponges with micropatterned nerve growth factor. *Biotechnology Progress*, **2012**, 28, 773-9 | 2.8 | 8 |
| 88 | Silicate bioceramics induce angiogenesis during bone regeneration. *Acta Biomaterialia*, **2012**, 8, 341-9 | 10.8 | 206 |
| 87 | Micropatterned angiogenesis induced by poly(d,l-lactic-co-glycolic acid) mesh-structured scaffolds. *Journal of Bioactive and Compatible Polymers*, **2012**, 27, 97-106 | 2 | 7 |
| 86 | PLLA-collagen and PLLA-gelatin hybrid scaffolds with funnel-like porous structure for skin tissue engineering. *Science and Technology of Advanced Materials*, **2012**, 13, 064210 | 7.1 | 52 |
| 85 | Hybrid Porous Scaffolds of Biodegradable Synthetic Polymers and Collagen for Tissue Engineering **2012**, 417-434 | | 1 |
| 84 | Adipogenic differentiation of individual mesenchymal stem cell on different geometric micropatterns. *Langmuir*, **2011**, 27, 6155-62 | 4 | 92 |
| 83 | Culture of bovine articular chondrocytes in funnel-like collagen-PLGA hybrid sponges. *Biomedical Materials (Bristol)*, **2011**, 6, 045011 | 3.5 | 11 |
| 82 | Cultured cell-derived extracellular matrix scaffolds for tissue engineering. *Biomaterials*, **2011**, 32, 9658-66 | 15.6 | 163 |
| 81 | Effects of Structural Change Induced by Physical Aging on the Biodegradation Behavior of PLGA Films at Physiological Temperature. *Macromolecular Materials and Engineering*, **2011**, 296, 1028-1034 | 3.9 | 9 |
| 80 | Effects of extracellular matrices derived from different cell sources on chondrocyte functions. *Biotechnology Progress*, **2011**, 27, 788-95 | 2.8 | 28 |
| 79 | Autologous extracellular matrix scaffolds for tissue engineering. *Biomaterials*, **2011**, 32, 2489-99 | 15.6 | 157 |
| 78 | Mechanism of regulation of PPARG expression of mesenchymal stem cells by osteogenesis-mimicking extracellular matrices. *Bioscience, Biotechnology and Biochemistry*, **2011**, 75, 2099-104 | 2.1 | 18 |
| 77 | Dependence of Spreading and Differentiation of Mesenchymal Stem Cells on Micropatterned Surface Area. *Journal of Nanomaterials*, **2011**, 2011, 1-9 | 3.2 | 39 |
| 76 | Focus on nanobiomaterials and technologies for breakthrough in future medicine. *Science and Technology of Advanced Materials*, **2010**, 11, 010302 | 7.1 | 3 |
| 75 | Preparation of Novel Collagen Sponges Using an Ice Particulate Template. *Journal of Bioactive and Compatible Polymers*, **2010**, 25, 360-373 | 2 | 42 |
| 74 | Response to Comment on Enhanced spin injection and voltage bias in (Zn,Co)O/MgO/(Zn,Co)O magnetic tunnel junctions [Appl. Phys. Lett. 96, 116101 (2010)]. *Applied Physics Letters*, **2010**, 96, 116102 | 3.4 | |

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| 73 | Hysteretic giant magnetoresistance curves induced by interlayer magnetostatic coupling in [Pd/Co]/Cu/Co/Cu/[Co/Pd] dual spin valves. *Journal of Applied Physics*, **2010**, 107, 083902 | 2.5 | 8 |
| 72 | Decellularized matrices for tissue engineering. *Expert Opinion on Biological Therapy*, **2010**, 10, 1717-28 | 5.4 | 223 |
| 71 | A novel cylinder-type poly(L-lactic acid)-collagen hybrid sponge for cartilage tissue engineering. *Tissue Engineering - Part C: Methods*, **2010**, 16, 329-38 | 2.9 | 37 |
| 70 | In vitro proliferation and osteogenic differentiation of human bone marrow-derived mesenchymal stem cells cultured with hardystonite (Ca2ZnSi 2O7) and {beta}-TCP ceramics. *Journal of Biomaterials Applications*, **2010**, 25, 39-56 | 2.9 | 47 |
| 69 | Change of the mechanical properties of chondrocytes during expansion culture. *Soft Matter*, **2010**, 6, 2462 | 3.6 | 6 |
| 68 | A cell leakproof PLGA-collagen hybrid scaffold for cartilage tissue engineering. *Biotechnology Progress*, **2010**, 26, 819-26 | 2.8 | 45 |
| 67 | Influence of the Mn concentration on the electromechanical response d33 of Mn-doped ZnO films. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 209-211 | 2.5 | 8 |
| 66 | Tracheal defect repair using a PLGA-collagen hybrid scaffold reinforced by a copolymer stent with bFGF-impregnated gelatin hydrogel. *Pediatric Surgery International*, **2010**, 26, 575-80 | 2.1 | 48 |
| 65 | Preparation of chitosan scaffolds with a hierarchical porous structure. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2010**, 93, 341-50 | 3.5 | 40 |
| 64 | Development of extracellular matrices mimicking stepwise adipogenesis of mesenchymal stem cells. *Advanced Materials*, **2010**, 22, 3042-7 | 24 | 67 |
| 63 | Preparation and characterization of complex gel of type I collagen and aluminosilicate containing imogolite nanofibers. *Journal of Applied Polymer Science*, **2010**, 118, n/a-n/a | 2.9 | 3 |
| 62 | Preparation of collagen-glycosaminoglycan sponges with open surface porous structures using ice particulate template method. *Macromolecular Bioscience*, **2010**, 10, 860-71 | 5.5 | 29 |
| 61 | The influence of structural design of PLGA/collagen hybrid scaffolds in cartilage tissue engineering. *Biomaterials*, **2010**, 31, 2141-52 | 15.6 | 197 |
| 60 | Cartilage tissue engineering using funnel-like collagen sponges prepared with embossing ice particulate templates. *Biomaterials*, **2010**, 31, 5825-35 | 15.6 | 74 |
| 59 | Structural changes and biodegradation of PLLA, PCL, and PLGA sponges during in vitro incubation. *Polymer Engineering and Science*, **2010**, 50, 1895-1903 | 2.3 | 29 |
| 58 | Development of stepwise osteogenesis-mimicking matrices for the regulation of mesenchymal stem cell functions. *Journal of Biological Chemistry*, **2009**, 284, 31164-73 | 5.4 | 94 |
| 57 | Enhanced spin injection and voltage bias in (Zn,Co)O/MgO/(Zn,Co)O magnetic tunnel junctions. *Applied Physics Letters*, **2009**, 95, 232508 | 3.4 | 15 |
| 56 | Surface modification of porous scaffolds with nanothick collagen layer by centrifugation and freeze-drying. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2009**, 90, 864-72 | 3.5 | 25 |

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| 55 | Effect of cell density on adipogenic differentiation of mesenchymal stem cells. *Biochemical and Biophysical Research Communications*, **2009**, 381, 322-7 | 3.4 | 38 |
| 54 | Three-dimensional Cultures of Rat Pancreatic RIN-5F Cells in Porous PLGA-collagen Hybrid Scaffolds. *Journal of Bioactive and Compatible Polymers*, **2009**, 24, 25-42 | 2 | 35 |
| 53 | Adipogenic differentiation of mesenchymal stem cells on micropatterned polyelectrolyte surfaces. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 230-9 | 1.3 | 16 |
| 52 | Optical antenna effect in semiconducting nanowires. *Nano Letters*, **2008**, 8, 1341-6 | 11.5 | 96 |
| 51 | Nuclear deformation and expression change of cartilaginous genes during in vitro expansion of chondrocytes. *Biochemical and Biophysical Research Communications*, **2008**, 374, 688-92 | 3.4 | 11 |
| 50 | Collagen-based scaffolds **2008**, 396-415 | | 1 |
| 49 | First-Principles Study on the Electronic Structure and Elastic Properties of YCu, DyCu and YAg. *Materials Transactions*, **2008**, 49, 2480-2483 | 1.3 | 8 |
| 48 | In vitro evaluation of biodegradation of poly(lactic-co-glycolic acid) sponges. *Biomaterials*, **2008**, 29, 3438-48 | 8.3 | 75 |
| 47 | Osteogenic differentiation of human mesenchymal stem cells on chargeable polymer-modified surfaces. *Journal of Biomedical Materials Research - Part A*, **2008**, 87, 903-12 | 5.4 | 37 |
| 46 | Chondrogenic differentiation of human mesenchymal stem cells on photoreactive polymer-modified surfaces. *Biomaterials*, **2008**, 29, 23-32 | 15.6 | 69 |
| 45 | Chondrogenic differentiation of mesenchymal stem cells in a leakproof collagen sponge. *Materials Science and Engineering C*, **2008**, 28, 195-201 | 8.3 | 14 |
| 44 | Grid pattern of nanothick microgel network. *Langmuir*, **2007**, 23, 5864-7 | 4 | 21 |
| 43 | Electrospun PHBV/collagen composite nanofibrous scaffolds for tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, **2007**, 18, 81-94 | 3.5 | 98 |
| 42 | Equal Channel Angular Pressing Die Outer Corner Angle Influence on Flow and Strain Homogeneity. *Advanced Engineering Materials*, **2007**, 9, 572-576 | 3.5 | 8 |
| 41 | Thermoresponsive Microtextured Culture Surfaces Facilitate Fabrication of Capillary Networks. *Advanced Materials*, **2007**, 19, 3633-3636 | 24 | 24 |
| 40 | Cellular control of tissue architectures using a three-dimensional tissue fabrication technique. *Biomaterials*, **2007**, 28, 4939-46 | 15.6 | 160 |
| 39 | Biodegradability Evaluation of Scaffolds. *Journal of Life Support Engineering*, **2007**, 19, 164-164 | 0 | |
| 38 | Preparation of a biphasic scaffold for osteochondral tissue engineering. *Materials Science and Engineering C*, **2006**, 26, 118-123 | 8.3 | 73 |

| | | | |
|---|---|---|---|
| 37 | Heterotypic cell interactions on a dually patterned surface. *Biochemical and Biophysical Research Communications*, **2006**, 348, 937-44 | 3.4 | 90 |
| 36 | Polyfunctional Scaffolds for Tissue Engineering. *Journal of Biomechanical Science and Engineering*, **2006**, 1, 8-15 | 0.8 | |
| 35 | Osteochondral tissue engineering using a PLGA□collagen hybrid mesh. *Materials Science and Engineering C*, **2006**, 26, 124-129 | 8.3 | 28 |
| 34 | Culturing of skin fibroblasts in a thin PLGA-collagen hybrid mesh. *Biomaterials*, **2005**, 26, 2559-66 | 15.6 | 162 |
| 33 | InGaAs quantum wells on wafer-bonded InP□GaAs substrates. *Journal of Applied Physics*, **2005**, 98, 093526 | 2.5 | 12 |
| 32 | Osteogenesis with Cells and Scaffold.. *Journal of Hard Tissue Biology*, **2005**, 14, 255-257 | 0.4 | |
| 31 | Biodegradable polymer with collagen microsponge serves as a new bioengineered cardiovascular prosthesis. *Journal of Thoracic and Cardiovascular Surgery*, **2004**, 128, 472-9 | 1.5 | 68 |
| 30 | Custom-shaping system for bone regeneration by seeding marrow stromal cells onto a web-like biodegradable hybrid sheet. *Cell and Tissue Research*, **2004**, 316, 141-53 | 4.2 | 24 |
| 29 | Evaluation of PLLA□collagen hybrid sponge as a scaffold for cartilage tissue engineering. *Materials Science and Engineering C*, **2004**, 24, 365-372 | 8.3 | 44 |
| 28 | Application of PLGA-collagen hybrid mesh for three-dimensional culture of canine anterior cruciate ligament cells. *Materials Science and Engineering C*, **2004**, 24, 861-866 | 8.3 | 23 |
| 27 | Cell adhesion of bone marrow cells, chondrocytes, ligament cells and synovial cells on a PLGA□collagen hybrid mesh. *Materials Science and Engineering C*, **2004**, 24, 867-873 | 8.3 | 12 |
| 26 | Optical Properties of Rectangular Cross-sectional ZnS Nanowires. *Nano Letters*, **2004**, 4, 1663-1668 | 11.5 | 185 |
| 25 | Tissue engineering of cartilage using a hybrid scaffold of synthetic polymer and collagen. *Tissue Engineering*, **2004**, 10, 323-30 | | 139 |
| 24 | Growth factor combination for chondrogenic induction from human mesenchymal stem cell. *Biochemical and Biophysical Research Communications*, **2004**, 320, 914-9 | 3.4 | 327 |
| 23 | Chondrogenic differentiation of human mesenchymal stem cells cultured in a cobweb-like biodegradable scaffold. *Biochemical and Biophysical Research Communications*, **2004**, 322, 50-5 | 3.4 | 72 |
| 22 | The use of a novel PLGA fiber/collagen composite web as a scaffold for engineering of articular cartilage tissue with adjustable thickness. *Journal of Biomedical Materials Research - Part A*, **2003**, 67, 1170-80 | 5.4 | 137 |
| 21 | Tissue-engineered urinary bladder wall using PLGA mesh-collagen hybrid scaffolds: a comparison study of collagen sponge and gel as a scaffold. *Journal of Pediatric Surgery*, **2003**, 38, 1781-4 | 2.6 | 49 |
| 20 | Redifferentiation of dedifferentiated bovine chondrocytes when cultured in vitro in a PLGA-collagen hybrid mesh. *FEBS Letters*, **2003**, 542, 95-9 | 3.8 | 61 |

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|---|---|---|---|
| 19 | Scaffold Design for Tissue Engineering. *Macromolecular Bioscience*, **2002**, 2, 67-77 | 5.5 | 501 |
| 18 | Biodegradable porous scaffolds for tissue engineering. *Journal of Artificial Organs*, **2002**, 5, 77-83 | 1.8 | 32 |
| 17 | Scaffold Design for Tissue Engineering **2002**, 2, 67 | | 1 |
| 16 | Gradient micropattern immobilization of EGF to investigate the effect of artificial juxtacrine stimulation. *Biomaterials*, **2001**, 22, 2453-7 | 15.6 | 86 |
| 15 | Preparation of poly(L-lactic acid) and poly(DL-lactic-co-glycolic acid) foams by use of ice microparticulates. *Biomaterials*, **2001**, 22, 2563-7 | 15.6 | 125 |
| 14 | Development of biodegradable porous scaffolds for tissue engineering. *Materials Science and Engineering C*, **2001**, 17, 63-69 | 8.3 | 174 |
| 13 | Poly(DL-lactic-co-glycolic acid) sponge hybridized with collagen microsponges and deposited apatite particulates. *Journal of Biomedical Materials Research Part B*, **2001**, 57, 8-14 | | 73 |
| 12 | A biodegradable hybrid sponge nested with collagen microsponges. *Journal of Biomedical Materials Research Part B*, **2000**, 51, 273-9 | | 164 |
| 11 | A hybrid network of synthetic polymer mesh and collagen sponge. *Chemical Communications*, **2000**, 1505-1506 | 5.8 | 50 |
| 10 | X-ray photoelectron spectroscopy analysis of Mo metal surface exposed to sulfate-reducing bacteria. *Surface and Interface Analysis*, **1999**, 27, 230-235 | 1.5 | 6 |
| 9 | Photolithographic Synthesis of Hydrogels. *Macromolecules*, **1998**, 31, 4379-4381 | 5.5 | 33 |
| 8 | Influence of Sulfate-Reducing Bacteria on the Passivity of Type 304 Austenitic Stainless Steel. *Journal of the Electrochemical Society*, **1997**, 144, 3140-3146 | 3.9 | 37 |
| 7 | Photo-immobilization of epidermal growth factor enhances its mitogenic effect by artificial juxtacrine signaling. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **1997**, 1358, 200-8 | 4.9 | 72 |
| 6 | Graft copolymers that exhibit temperature-induced phase transitions over a wide range of pH. *Nature*, **1995**, 373, 49-52 | 50.4 | 1125 |
| 5 | Synthesis of carboxylated poly(NIPAAm) oligomers and their application to form thermo-reversible polymer-enzyme conjugates. *Journal of Biomaterials Science, Polymer Edition*, **1994**, 5, 371-82 | 3.5 | 49 |
| 4 | Preparation and properties of thermoreversible, phase-separating enzyme-oligo(N-isopropylacrylamide) conjugates. *Bioconjugate Chemistry*, **1993**, 4, 509-14 | 6.3 | 138 |
| 3 | Micropattern-Controlled Cell Density and Its Effect on Gene Transfection of Mesenchymal Stem Cells. *Advanced Materials Interfaces*,2101978 | 4.6 | 1 |
| 2 | Scaffolds, Porous Polymer: Tissue Engineering7085-7092 | | |

1 Biomimetic ECM Scaffolds Prepared from Cultured Cells243-252