# Kyriacos A Athanasiou

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 251<br>papers | 14,573<br>citations | 64<br>h-index | 112<br>g-index |
| 258<br>ext. papers | 16,507<br>ext. citations | 5.6<br>avg, IF | 6.98<br>L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 251 | Stiffness- and Bioactive Factor-Mediated Protection of Self-Assembled Cartilage against Macrophage Challenge in a Novel Co-Culture System.. *Cartilage*, **2022**, 13, 19476035221081466 | 3 | 1 |
| 250 | The functionality and translatability of neocartilage constructs are improved with the combination of fluid-induced shear stress and bioactive factors.. *FASEB Journal*, **2022**, 36, e22225 | 0.9 | |
| 249 | Yucatan Minipig Knee Meniscus Regional Biomechanics and Biochemical Structure Support its Suitability as a Large Animal Model for Translational Research.. *Frontiers in Bioengineering and Biotechnology*, **2022**, 10, 844416 | 5.8 | 0 |
| 248 | Clinical Replacement Strategies for Meniscus Tissue Deficiency. *Cartilage*, **2021**, 19476035211060512 | 3 | |
| 247 | Methodology to Quantify Collagen Subtypes and Crosslinks: Application in Minipig Cartilages. *Cartilage*, **2021**, 19476035211060508 | 3 | 2 |
| 246 | The effect of neonatal, juvenile, and adult donors on rejuvenated neocartilage functional properties. *Tissue Engineering - Part A*, **2021**, | 3.9 | 1 |
| 245 | In Vitro Effects of Bupivacaine on the Viability and Mechanics of Native and Engineered Cartilage Grafts. *American Journal of Sports Medicine*, **2021**, 49, 1305-1312 | 6.8 | |
| 244 | Rejuvenation of extensively passaged human chondrocytes to engineer functional articular cartilage. *Biofabrication*, **2021**, | 10.5 | 5 |
| 243 | Cartilage Assessment Requires a Surface Characterization Protocol: Roughness, Friction, and Function. *Tissue Engineering - Part C: Methods*, **2021**, 27, 276-286 | 2.9 | 4 |
| 242 | Knee orthopedics as a template for the temporomandibular joint. *Cell Reports Medicine*, **2021**, 2, 100241 | 18 | 1 |
| 241 | A Tribological Comparison of Facet Joint, Sacroiliac Joint, and Knee Cartilage in the Yucatan Minipig. *Cartilage*, **2021**, 19476035211021906 | 3 | 1 |
| 240 | Nondestructive testing of native and tissue-engineered medical products: adding numbers to pictures. *Trends in Biotechnology*, **2021**, | 15.1 | 1 |
| 239 | Characterization of Adult and Neonatal Articular Cartilage From the Equine Stifle. *Journal of Equine Veterinary Science*, **2021**, 96, 103294 | 1.2 | |
| 238 | Isolation and characterization of porcine macrophages and their inflammatory and fusion responses in different stiffness environments. *Biomaterials Science*, **2021**, 9, 7851-7861 | 7.4 | 1 |
| 237 | Diagnostic Arthroscopy of the Minipig Stifle (Knee) for Translational Large Animal Research. *Arthroscopy Techniques*, **2021**, 10, e297-e301 | 1.7 | 0 |
| 236 | Engineering large, anatomically shaped osteochondral constructs with robust interfacial shear properties. *Npj Regenerative Medicine*, **2021**, 6, 42 | 15.8 | 1 |
| 235 | Vibrometry as a noncontact alternative to dynamic and viscoelastic mechanical testing in cartilage.. *Journal of the Royal Society Interface*, **2021**, 18, 20210765 | 4.1 | 2 |

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| 234 | Biology and Health Education: Design, Implementation and Evaluation of a Course on Environmental Health Education aiming at the Scientific Literacy of Future Teachers **2021**, 1, 51-61 | | |
| 233 | Adult Dermal Stem Cells for Scaffold-Free Cartilage Tissue Engineering: Exploration of Strategies. *Tissue Engineering - Part C: Methods*, **2020**, 26, 598-607 | 2.9 | 2 |
| 232 | Engineering self-assembled neomenisci through combination of matrix augmentation and directional remodeling. *Acta Biomaterialia*, **2020**, 109, 73-81 | 10.8 | 10 |
| 231 | Tissue engineering in oral and maxillofacial surgery **2020**, 1201-1220 | | 0 |
| 230 | Chondroitinase ABC Enhances Integration of Self-Assembled Articular Cartilage, but Its Dosage Needs to Be Moderated Based on Neocartilage Maturity. *Cartilage*, **2020**, 1947603520918653 | 3 | 7 |
| 229 | The tribology of cartilage: Mechanisms, experimental techniques, and relevance to translational tissue engineering. *Clinical Biomechanics*, **2020**, 79, 104880 | 2.2 | 12 |
| 228 | Shear stress induced by fluid flow produces improvements in tissue-engineered cartilage. *Biofabrication*, **2020**, 12, 045010 | 10.5 | 4 |
| 227 | Collagen: quantification, biomechanics, and role of minor subtypes in cartilage. *Nature Reviews Materials*, **2020**, 5, 730-747 | 73.3 | 30 |
| 226 | Remaining Hurdles for Tissue-Engineering the Temporomandibular Joint Disc. *Trends in Molecular Medicine*, **2019**, 25, 241-256 | 11.5 | 11 |
| 225 | Multimodal Label-Free Imaging for Detecting Maturation of Engineered Osteogenic Grafts. *ACS Biomaterials Science and Engineering*, **2019**, 5, 1956-1966 | 5.5 | 2 |
| 224 | Toward tissue-engineering of nasal cartilages. *Acta Biomaterialia*, **2019**, 88, 42-56 | 10.8 | 23 |
| 223 | Structure-function relationships of fetal ovine articular cartilage. *Acta Biomaterialia*, **2019**, 87, 235-244 | 10.8 | 4 |
| 222 | Exogenous Lysyl Oxidase-Like 2 and Perfusion Culture Induce Collagen Crosslink Formation in Osteogenic Grafts. *Biotechnology Journal*, **2019**, 14, e1700763 | 5.6 | 4 |
| 221 | Surgical and tissue engineering strategies for articular cartilage and meniscus repair. *Nature Reviews Rheumatology*, **2019**, 15, 550-570 | 8.1 | 178 |
| 220 | Translating the application of transforming growth factor-β, chondroitinase-ABC, and lysyl oxidase-like 2 for mechanically robust tissue-engineered human neocartilage. *Journal of Tissue Engineering and Regenerative Medicine*, **2019**, 13, 283-294 | 4.4 | 12 |
| 219 | Non-destructive detection of matrix stabilization correlates with enhanced mechanical properties of self-assembled articular cartilage. *Journal of Tissue Engineering and Regenerative Medicine*, **2019**, 13, 637-648 | 4.4 | 6 |
| 218 | A Comparison of Bone Marrow and Cord Blood Mesenchymal Stem Cells for Cartilage Self-Assembly. *Tissue Engineering - Part A*, **2018**, 24, 1262-1272 | 3.9 | 18 |
| 217 | Facet Joints of the Spine: Structure-Function Relationships, Problems and Treatments, and the Potential for Regeneration. *Annual Review of Biomedical Engineering*, **2018**, 20, 145-170 | 12 | 26 |

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| 216 | Biochemical and biomechanical characterisation of equine cervical facet joint cartilage. *Equine Veterinary Journal*, **2018**, 50, 800-808 | 2.4 | 4 |
| 215 | Characterization of costal cartilage and its suitability as a cell source for articular cartilage tissue engineering. *Journal of Tissue Engineering and Regenerative Medicine*, **2018**, 12, 1163-1176 | 4.4 | 18 |
| 214 | A Guide for Using Mechanical Stimulation to Enhance Tissue-Engineered Articular Cartilage Properties. *Tissue Engineering - Part B: Reviews*, **2018**, 24, 345-358 | 7.9 | 50 |
| 213 | Using Costal Chondrocytes to Engineer Articular Cartilage with Applications of Passive Axial Compression and Bioactive Stimuli. *Tissue Engineering - Part A*, **2018**, 24, 516-526 | 3.9 | 15 |
| 212 | Tissue engineering toward temporomandibular joint disc regeneration. *Science Translational Medicine*, **2018**, 10, | 17.5 | 45 |
| 211 | Detection of glycosaminoglycan loss in articular cartilage by fluorescence lifetime imaging. *Journal of Biomedical Optics*, **2018**, 23, 1-8 | 3.5 | 10 |
| 210 | Nondestructive assessment of collagen hydrogel cross-linking using time-resolved autofluorescence imaging. *Journal of Biomedical Optics*, **2018**, 23, 1-9 | 3.5 | 17 |
| 209 | Considerations for translation of tissue engineered fibrocartilage from bench to bedside. *Journal of Biomechanical Engineering*, **2018**, | 2.1 | 6 |
| 208 | Nondestructive fluorescence lifetime imaging and time-resolved fluorescence spectroscopy detect cartilage matrix depletion and correlate with mechanical properties. *European Cells and Materials*, **2018**, 36, 30-43 | 4.3 | 10 |
| 207 | Overcoming Challenges in Engineering Large, Scaffold-Free Neocartilage with Functional Properties. *Tissue Engineering - Part A*, **2018**, 24, 1652-1662 | 3.9 | 11 |
| 206 | Functional self-assembled neocartilage as part of a biphasic osteochondral construct. *PLoS ONE*, **2018**, 13, e0195261 | 3.7 | 12 |
| 205 | Engineering biomechanically functional neocartilage derived from expanded articular chondrocytes through the manipulation of cell-seeding density and dexamethasone concentration. *Journal of Tissue Engineering and Regenerative Medicine*, **2017**, 11, 2323-2332 | 4.4 | 12 |
| 204 | A Modified Hydroxyproline Assay Based on Hydrochloric Acid in Ehrlich's Solution Accurately Measures Tissue Collagen Content. *Tissue Engineering - Part C: Methods*, **2017**, 23, 243-250 | 2.9 | 79 |
| 203 | Tension stimulation drives tissue formation in scaffold-free systems. *Nature Materials*, **2017**, 16, 864-873 | 27 | 48 |
| 202 | Characterization of facet joint cartilage properties in the human and interspecies comparisons. *Acta Biomaterialia*, **2017**, 54, 367-376 | 10.8 | 11 |
| 201 | The Self-Assembling Process and Applications in Tissue Engineering. *Cold Spring Harbor Perspectives in Medicine*, **2017**, 7, | 5.4 | 38 |
| 200 | Functional properties of native and tissue-engineered cartilage toward understanding the pathogenesis of chondral lesions at the knee: A bovine cadaveric study. *Journal of Orthopaedic Research*, **2017**, 35, 2452-2464 | 3.8 | 8 |
| 199 | Temporal development of near-native functional properties and correlations with qMRI in self-assembling fibrocartilage treated with exogenous lysyl oxidase homolog 2. *Acta Biomaterialia*, **2017**, 64, 29-40 | 10.8 | 5 |

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| 198 | The application of 3-dimensional printing for preoperative planning in oral and maxillofacial surgery in dogs and cats. *Veterinary Surgery*, **2017**, 46, 942-951 | 1.7 | 30 |
| 197 | Tissue engineering potential of human dermis-isolated adult stem cells from multiple anatomical locations. *PLoS ONE*, **2017**, 12, e0182531 | 3.7 | 7 |
| 196 | The Yucatan Minipig Temporomandibular Joint Disc Structure-Function Relationships Support Its Suitability for Human Comparative Studies. *Tissue Engineering - Part C: Methods*, **2017**, 23, 700-709 | 2.9 | 19 |
| 195 | Ammonium-Chloride-Potassium Lysing Buffer Treatment of Fully Differentiated Cells Increases Cell Purity and Resulting Neotissue Functional Properties. *Tissue Engineering - Part C: Methods*, **2016**, 22, 895-903 | 2.9 | 13 |
| 194 | Superficial Zone Extracellular Matrix Extracts Enhance Boundary Lubrication of Self-Assembled Articular Cartilage. *Cartilage*, **2016**, 7, 256-64 | 3 | 6 |
| 193 | Articular cartilage tissue engineering: the role of signaling molecules. *Cellular and Molecular Life Sciences*, **2016**, 73, 1173-94 | 10.3 | 49 |
| 192 | Initiation of Chondrocyte Self-Assembly Requires an Intact Cytoskeletal Network. *Tissue Engineering - Part A*, **2016**, 22, 318-25 | 3.9 | 12 |
| 191 | Cell-based tissue engineering strategies used in the clinical repair of articular cartilage. *Biomaterials* , **2016**, 98, 1-22 | 15.6 | 242 |
| 190 | Tendon and ligament as novel cell sources for engineering the knee meniscus. *Osteoarthritis and Cartilage*, **2016**, 24, 2126-2134 | 6.2 | 6 |
| 189 | Recent Tissue Engineering Advances for the Treatment of Temporomandibular Joint Disorders. *Current Osteoporosis Reports*, **2016**, 14, 269-279 | 5.4 | 33 |
| 188 | Effects of passage number and post-expansion aggregate culture on tissue engineered, self-assembled neocartilage. *Acta Biomaterialia*, **2016**, 43, 150-159 | 10.8 | 11 |
| 187 | Biological augmentation and tissue engineering approaches in meniscus surgery. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2015**, 31, 944-55 | 5.4 | 55 |
| 186 | Harnessing biomechanics to develop cartilage regeneration strategies. *Journal of Biomechanical Engineering*, **2015**, 137, 020901 | 2.1 | 28 |
| 185 | Thyroid hormones enhance the biomechanical functionality of scaffold-free neocartilage. *Arthritis Research and Therapy*, **2015**, 17, 28 | 5.7 | 8 |
| 184 | Neocartilage integration in temporomandibular joint discs: physical and enzymatic methods. *Journal of the Royal Society Interface*, **2015**, 12, | 4.1 | 12 |
| 183 | Companion animals: Translational scientistß new best friends. *Science Translational Medicine*, **2015**, 7, 308ps21 | 17.5 | 109 |
| 182 | Concise Review: Human Dermis as an Autologous Source of Stem Cells for Tissue Engineering and Regenerative Medicine. *Stem Cells Translational Medicine*, **2015**, 4, 1187-98 | 6.9 | 25 |
| 181 | Digoxin and adenosine triphosphate enhance the functional properties of tissue-engineered cartilage. *Tissue Engineering - Part A*, **2015**, 21, 884-94 | 3.9 | 8 |

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| 180 | Critical seeding density improves the properties and translatability of self-assembling anatomically shaped knee menisci. *Acta Biomaterialia*, **2015**, 11, 173-82 | 10.8 | 7 |
| 179 | Biomechanical evaluation of suture-holding properties of native and tissue-engineered articular cartilage. *Biomechanics and Modeling in Mechanobiology*, **2015**, 14, 73-81 | 3.8 | 17 |
| 178 | Emergence of scaffold-free approaches for tissue engineering musculoskeletal cartilages. *Annals of Biomedical Engineering*, **2015**, 43, 543-54 | 4.7 | 83 |
| 177 | TGF-β1, GDF-5, and BMP-2 stimulation induces chondrogenesis in expanded human articular chondrocytes and marrow-derived stromal cells. *Stem Cells*, **2015**, 33, 762-73 | 5.8 | 107 |
| 176 | Advances in tissue engineering through stem cell-based co-culture. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 488-503 | 4.4 | 111 |
| 175 | Repair and tissue engineering techniques for articular cartilage. *Nature Reviews Rheumatology*, **2015**, 11, 21-34 | 8.1 | 663 |
| 174 | Engineering a fibrocartilage spectrum through modulation of aggregate redifferentiation. *Cell Transplantation*, **2015**, 24, 235-45 | 4 | 22 |
| 173 | ERK activation is required for hydrostatic pressure-induced tensile changes in engineered articular cartilage. *Journal of Tissue Engineering and Regenerative Medicine*, **2015**, 9, 368-74 | 4.4 | 4 |
| 172 | Cartilage immunoprivilege depends on donor source and lesion location. *Acta Biomaterialia*, **2015**, 23, 72-81 | 10.8 | 45 |
| 171 | The distribution of superficial zone protein (SZP)/lubricin/PRG4 and boundary mode frictional properties of the bovine diarthrodial joint. *Journal of Biomechanics*, **2015**, 48, 3406-12 | 2.9 | 19 |
| 170 | Tissue Engineering in Oral and Maxillofacial Surgery **2014**, 1487-1506 | | 4 |
| 169 | Clinical translation of stem cells: insight for cartilage therapies. *Critical Reviews in Biotechnology*, **2014**, 34, 89-100 | 9.4 | 23 |
| 168 | Developing functional musculoskeletal tissues through hypoxia and lysyl oxidase-induced collagen cross-linking. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4832-41 | 11.5 | 90 |
| 167 | Surface zone articular chondrocytes modulate the bulk and surface mechanical properties of the tissue-engineered cartilage. *Tissue Engineering - Part A*, **2014**, 20, 3332-41 | 3.9 | 19 |
| 166 | Conceptual Inventory of Natural Selection as a Tool for Measuring Greek University StudentsP Evolution Knowledge: Differences between novice and advanced students. *International Journal of Science Education*, **2014**, 36, 1262-1285 | 2.2 | 21 |
| 165 | Topographic variations in biomechanical and biochemical properties in the ankle joint: an in vitro bovine study evaluating native and engineered cartilage. *Arthroscopy - Journal of Arthroscopic and Related Surgery*, **2014**, 30, 1317-26 | 5.4 | 8 |
| 164 | Promoting increased mechanical properties of tissue engineered neocartilage via the application of hyperosmolarity and 4αphorbol 12,13-didecanoate (4αPDD). *Journal of Biomechanics*, **2014**, 47, 3712-8 | 2.9 | 8 |
| 163 | Antigen removal for the production of biomechanically functional, xenogeneic tissue grafts. *Journal of Biomechanics*, **2014**, 47, 1987-96 | 2.9 | 39 |

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| 162 | Combined use of chondroitinase-ABC, TGF-β, and collagen crosslinking agent lysyl oxidase to engineer functional neotissues for fibrocartilage repair. *Biomaterials*, **2014**, 35, 6787-96 | 15.6 | 54 |
| 161 | Cartilage tissue engineering using dermis isolated adult stem cells: the use of hypoxia during expansion versus chondrogenic differentiation. *PLoS ONE*, **2014**, 9, e98570 | 3.7 | 21 |
| 160 | Building an anisotropic meniscus with zonal variations. *Tissue Engineering - Part A*, **2014**, 20, 294-302 | 3.9 | 21 |
| 159 | Transforming growth factor βinduced superficial zone protein accumulation in the surface zone of articular cartilage is dependent on the cytoskeleton. *Tissue Engineering - Part A*, **2014**, 20, 921-9 | 3.9 | 25 |
| 158 | Passive strain-induced matrix synthesis and organization in shape-specific, cartilaginous neotissues. *Tissue Engineering - Part A*, **2014**, 20, 3290-302 | 3.9 | 11 |
| 157 | Alteration of the fibrocartilaginous nature of scaffoldless constructs formed from leporine meniscus cells and chondrocytes through manipulation of culture and processing conditions. *Cells Tissues Organs*, **2013**, 197, 360-71 | 2.1 | 20 |
| 156 | Computed tomographic findings in dogs and cats with temporomandibular joint disorders: 58 cases (2006-2011). *Journal of the American Veterinary Medical Association*, **2013**, 242, 69-75 | 1 | 61 |
| 155 | A chondroitinase-ABC and TGF-β treatment regimen for enhancing the mechanical properties of tissue-engineered fibrocartilage. *Acta Biomaterialia*, **2013**, 9, 4626-34 | 10.8 | 45 |
| 154 | Enhancing the mechanical properties of engineered tissue through matrix remodeling via the signaling phospholipid lysophosphatidic acid. *Biochemical and Biophysical Research Communications*, **2013**, 433, 133-8 | 3.4 | 13 |
| 153 | Characterization of degenerative changes in the temporomandibular joint of the bengal tiger (Panthera tigris tigris) and siberian tiger (Panthera tigris altaica). *Journal of Comparative Pathology*, **2013**, 149, 495-502 | 1 | 7 |
| 152 | Stepwise solubilization-based antigen removal for xenogeneic scaffold generation in tissue engineering. *Acta Biomaterialia*, **2013**, 9, 6492-501 | 10.8 | 48 |
| 151 | Inducing articular cartilage phenotype in costochondral cells. *Arthritis Research and Therapy*, **2013**, 15, R214 | 5.7 | 15 |
| 150 | Hypoxia-induced collagen crosslinking as a mechanism for enhancing mechanical properties of engineered articular cartilage. *Osteoarthritis and Cartilage*, **2013**, 21, 634-41 | 6.2 | 50 |
| 149 | TRPV4 channel activation improves the tensile properties of self-assembled articular cartilage constructs. *Acta Biomaterialia*, **2013**, 9, 5554-61 | 10.8 | 23 |
| 148 | Engineering functional anisotropy in fibrocartilage neotissues. *Biomaterials*, **2013**, 34, 9980-9 | 15.6 | 41 |
| 147 | Self-organization and the self-assembling process in tissue engineering. *Annual Review of Biomedical Engineering*, **2013**, 15, 115-36 | 12 | 131 |
| 146 | A copper sulfate and hydroxylysine treatment regimen for enhancing collagen cross-linking and biomechanical properties in engineered neocartilage. *FASEB Journal*, **2013**, 27, 2421-30 | 0.9 | 43 |
| 145 | Tensile characterization of porcine temporomandibular joint disc attachments. *Journal of Dental Research*, **2013**, 92, 753-8 | 8.1 | 21 |

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| 144 | Chondrogenically tuned expansion enhances the cartilaginous matrix-forming capabilities of primary, adult, leporine chondrocytes. *Cell Transplantation*, **2013**, 22, 331-40 | 4 | 17 |
| 143 | Enhancing post-expansion chondrogenic potential of costochondral cells in self-assembled neocartilage. *PLoS ONE*, **2013**, 8, e56983 | 3.7 | 27 |
| 142 | Temporomandibular disorders: a review of etiology, clinical management, and tissue engineering strategies. *International Journal of Oral and Maxillofacial Implants*, **2013**, 28, e393-414 | 2.8 | 149 |
| 141 | Dermis isolated adult stem cells for cartilage tissue engineering. *Biomaterials*, **2012**, 33, 109-19 | 15.6 | 39 |
| 140 | Mechanisms underlying the synergistic enhancement of self-assembled neocartilage treated with chondroitinase-ABC and TGF-β1. *Biomaterials*, **2012**, 33, 3187-94 | 15.6 | 43 |
| 139 | Unlike bone, cartilage regeneration remains elusive. *Science*, **2012**, 338, 917-21 | 33.3 | 694 |
| 138 | Biomechanics of meniscus cells: regional variation and comparison to articular chondrocytes and ligament cells. *Biomechanics and Modeling in Mechanobiology*, **2012**, 11, 1047-56 | 3.8 | 14 |
| 137 | Biomechanics-driven chondrogenesis: from embryo to adult. *FASEB Journal*, **2012**, 26, 3614-24 | 0.9 | 49 |
| 136 | Engineering lubrication in articular cartilage. *Tissue Engineering - Part B: Reviews*, **2012**, 18, 88-100 | 7.9 | 95 |
| 135 | The temporomandibular joint disc of Asian elephant (Elephas maximus) and African elephant (Loxodonta africana). *European Journal of Wildlife Research*, **2012**, 58, 451-459 | 2 | 5 |
| 134 | Introducing New Deputy Editor-in-Chief Daniel Elson, Imperial College, London, UK. *Annals of Biomedical Engineering*, **2012**, 40, 763-763 | 4.7 | |
| 133 | The regional contribution of glycosaminoglycans to temporomandibular joint disc compressive properties. *Journal of Biomechanical Engineering*, **2012**, 134, 011011 | 2.1 | 27 |
| 132 | Identification of potential biophysical and molecular signalling mechanisms underlying hyaluronic acid enhancement of cartilage formation. *Journal of the Royal Society Interface*, **2012**, 9, 3564-73 | 4.1 | 30 |
| 131 | Regional effects of enzymatic digestion on knee meniscus cell yield and phenotype for tissue engineering. *Tissue Engineering - Part C: Methods*, **2012**, 18, 235-43 | 2.9 | 12 |
| 130 | Conceptual Ecology of the Evolution Acceptance among Greek Education Students: Knowledge, religious practices and social influences. *International Journal of Science Education*, **2012**, 34, 903-924 | 2.2 | 31 |
| 129 | Immunogenicity of bovine and leporine articular chondrocytes and meniscus cells. *Tissue Engineering - Part A*, **2012**, 18, 568-75 | 3.9 | 21 |
| 128 | Temporomandibular Joint **2012**, 153-178 | | |
| 127 | Temporal assessment of ribose treatment on self-assembled articular cartilage constructs. *Biochemical and Biophysical Research Communications*, **2011**, 414, 431-6 | 3.4 | 7 |

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| 126 | Tensile properties, collagen content, and crosslinks in connective tissues of the immature knee joint. *PLoS ONE*, **2011**, 6, e26178 | 3.7 | 72 |
| 125 | Tension-compression loading with chemical stimulation results in additive increases to functional properties of anatomic meniscal constructs. *PLoS ONE*, **2011**, 6, e27857 | 3.7 | 53 |
| 124 | Regional variation in the mechanical role of knee meniscus glycosaminoglycans. *Journal of Applied Physiology*, **2011**, 111, 1590-6 | 3.7 | 48 |
| 123 | The knee meniscus: structure-function, pathophysiology, current repair techniques, and prospects for regeneration. *Biomaterials*, **2011**, 32, 7411-31 | 15.6 | 597 |
| 122 | The role of protein solubilization in antigen removal from xenogeneic tissue for heart valve tissue engineering. *Biomaterials*, **2011**, 32, 8129-38 | 15.6 | 37 |
| 121 | Special issues. *Annals of Biomedical Engineering*, **2011**, 39, 1607 | 4.7 | 1 |
| 120 | Assessment of growth factor treatment on fibrochondrocyte and chondrocyte co-cultures for TMJ fibrocartilage engineering. *Acta Biomaterialia*, **2011**, 7, 1710-8 | 10.8 | 46 |
| 119 | Maturational growth of self-assembled, functional menisci as a result of TGF-β1 and enzymatic chondroitinase-ABC stimulation. *Biomaterials*, **2011**, 32, 2052-8 | 15.6 | 72 |
| 118 | BENEFICIAL EFFECTS OF EXOGENOUS CROSSLINKING AGENTS ON SELF-ASSEMBLED TISSUE ENGINEERED CARTILAGE CONSTRUCT BIOMECHANICAL PROPERTIES. *Journal of Mechanics in Medicine and Biology*, **2011**, 11, 433-443 | 0.7 | 15 |
| 117 | An interspecies comparison of the temporomandibular joint disc. *Journal of Dental Research*, **2011**, 90, 193-8 | 8.1 | 83 |
| 116 | Effects of hydrostatic pressure on leporine meniscus cell-seeded PLLA scaffolds. *Journal of Biomedical Materials Research - Part A*, **2010**, 92, 896-905 | 5.4 | 17 |
| 115 | Developing an articular cartilage decellularization process toward facet joint cartilage replacement. *Neurosurgery*, **2010**, 66, 722-7; discussion 727 | 3.2 | 98 |
| 114 | Passing the Baton to the Davis Editorial Office January 2010. *Annals of Biomedical Engineering*, **2010**, 38, 1-1 | 4.7 | 1 |
| 113 | Unique biomechanical interactions between myeloma cells and bone marrow stroma cells. *Progress in Biophysics and Molecular Biology*, **2010**, 103, 148-56 | 4.7 | 12 |
| 112 | Intracellular Na(+) and Ca(2+) modulation increases the tensile properties of developing engineered articular cartilage. *Arthritis and Rheumatism*, **2010**, 62, 1097-107 | | 34 |
| 111 | Additive and synergistic effects of bFGF and hypoxia on leporine meniscus cell-seeded PLLA scaffolds. *Journal of Tissue Engineering and Regenerative Medicine*, **2010**, 4, 115-22 | 4.4 | 30 |
| 110 | Chondroitinase ABC treatment results in greater tensile properties of self-assembled tissue-engineered articular cartilage. *Tissue Engineering - Part A*, **2009**, 15, 3119-28 | 3.9 | 64 |
| 109 | Mechanical characterization of differentiated human embryonic stem cells. *Journal of Biomechanical Engineering*, **2009**, 131, 061011 | 2.1 | 41 |

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| 108 | Effects of temporal hydrostatic pressure on tissue-engineered bovine articular cartilage constructs. *Tissue Engineering - Part A*, **2009**, 15, 1151-8 | 3.9 | 52 |
| 107 | Development of serum-free, chemically defined conditions for human embryonic stem cell-derived fibrochondrogenesis. *Tissue Engineering - Part A*, **2009**, 15, 2249-57 | 3.9 | 19 |
| 106 | Success rates and immunologic responses of autogenic, allogenic, and xenogenic treatments to repair articular cartilage defects. *Tissue Engineering - Part B: Reviews*, **2009**, 15, 1-15 | 7.9 | 109 |
| 105 | Articular Cartilage Tissue Engineering **2009**, 1, 1-182 | | 34 |
| 104 | Systematic assessment of growth factor treatment on biochemical and biomechanical properties of engineered articular cartilage constructs. *Osteoarthritis and Cartilage*, **2009**, 17, 114-23 | 6.2 | 73 |
| 103 | A comparison of primary and passaged chondrocytes for use in engineering the temporomandibular joint. *Archives of Oral Biology*, **2009**, 54, 138-45 | 2.8 | 34 |
| 102 | Effects of multiple chondroitinase ABC applications on tissue engineered articular cartilage. *Journal of Orthopaedic Research*, **2009**, 27, 949-56 | 3.8 | 54 |
| 101 | Effects of co-cultures of meniscus cells and articular chondrocytes on PLLA scaffolds. *Biotechnology and Bioengineering*, **2009**, 103, 808-16 | 4.9 | 24 |
| 100 | Effects of TGF-beta1 and hydrostatic pressure on meniscus cell-seeded scaffolds. *Biomaterials*, **2009**, 30, 565-73 | 15.6 | 57 |
| 99 | Extraction techniques for the decellularization of tissue engineered articular cartilage constructs. *Biomaterials*, **2009**, 30, 3749-56 | 15.6 | 152 |
| 98 | The Knee Meniscus: A Complex Tissue of Diverse Cells. *Cellular and Molecular Bioengineering*, **2009**, 2, 332-340 | 3.9 | 26 |
| 97 | Effects of agarose mould compliance and surface roughness on self-assembled meniscus-shaped constructs. *Journal of Tissue Engineering and Regenerative Medicine*, **2009**, 3, 521-30 | 4.4 | 22 |
| 96 | Hydrostatic pressure in articular cartilage tissue engineering: from chondrocytes to tissue regeneration. *Tissue Engineering - Part B: Reviews*, **2009**, 15, 43-53 | 7.9 | 179 |
| 95 | Engineering the Knee Meniscus **2009**, 1, 1-97 | | 50 |
| 94 | Contribution of the cytoskeleton to the compressive properties and recovery behavior of single cells. *Biophysical Journal*, **2009**, 97, 1873-82 | 2.9 | 75 |
| 93 | Fibrochondrogenesis of hESCs: growth factor combinations and cocultures. *Stem Cells and Development*, **2009**, 18, 283-92 | 4.4 | 70 |
| 92 | Biomechanical, biochemical, and histological characterization of canine lumbar facet joint cartilage. *Journal of Neurosurgery: Spine*, **2009**, 10, 623-8 | 2.8 | 11 |
| 91 | The role of tissue engineering in articular cartilage repair and regeneration. *Critical Reviews in Biomedical Engineering*, **2009**, 37, 1-57 | 1.1 | 274 |

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| 90 | Traumatic loading of articular cartilage: Mechanical and biological responses and post-injury treatment. *Biorheology*, **2009**, 46, 451-85 | 1.7 | 39 |
| 89 | ARTICULAR CARTILAGE BIOMECHANICS, MECHANOBIOLOGY, AND TISSUE ENGINEERING **2009**, 1-37 | | 2 |
| 88 | The effects of protein-coated surfaces on passaged porcine TMJ disc cells. *Archives of Oral Biology*, **2008**, 53, 53-9 | 2.8 | 14 |
| 87 | Hypoxic chondrogenic differentiation of human embryonic stem cells enhances cartilage protein synthesis and biomechanical functionality. *Osteoarthritis and Cartilage*, **2008**, 16, 1450-6 | 6.2 | 123 |
| 86 | Static compression of single chondrocytes catabolically modifies single-cell gene expression. *Biophysical Journal*, **2008**, 94, 2412-22 | 2.9 | 41 |
| 85 | Scaffold and growth factor selection in temporomandibular joint disc engineering. *Journal of Dental Research*, **2008**, 87, 180-5 | 8.1 | 38 |
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