

Sibylle Grad

List of Publications by Year in descending order

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Version: 2024-02-01

151
papers

7,638
citations

50244

46
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71651

76
g-index

165
all docs

165
docs citations

165
times ranked

5714
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | A single-cell transcriptome of mesenchymal stromal cells to fabricate bioactive hydroxyapatite materials for bone regeneration. <i>Bioactive Materials</i> , 2022, 9, 281-298. | 8.6 | 12 |
| 2 | The function of CD146 in human annulus fibrosus cells and mechanism of the regulation by TGF β ² . <i>Journal of Orthopaedic Research</i> , 2022, 40, 1661-1671. | 1.2 | 3 |
| 3 | Hyaluronic acid-based interpenetrating network hydrogel as a cell carrier for nucleus pulposus repair. <i>Carbohydrate Polymers</i> , 2022, 277, 118828. | 5.1 | 31 |
| 4 | Editorial “Disc Biology Special Issue. , 2022, 43, 1-3. | | 1 |
| 5 | Comparison and optimization of sheep in vivo intervertebral disc injury model. <i>JOR Spine</i> , 2022, 5, . | 1.5 | 7 |
| 6 | Small molecules of herbal origin for osteoarthritis treatment: in vitro and in vivo evidence. <i>Arthritis Research and Therapy</i> , 2022, 24, 105. | 1.6 | 10 |
| 7 | Neopeptide fragments as biomarkers for different phenotypes of intervertebral disc degeneration. <i>JOR Spine</i> , 2022, 5, . | 1.5 | 2 |
| 8 | Small molecule-based treatment approaches for intervertebral disc degeneration: Current options and future directions. <i>Theranostics</i> , 2021, 11, 27-47. | 4.6 | 101 |
| 9 | Optimization of hyaluronic acid-tyramine/silk-fibroin composite hydrogels for cartilage tissue engineering and delivery of anti-inflammatory and anabolic drugs. <i>Materials Science and Engineering C</i> , 2021, 120, 111701. | 3.8 | 72 |
| 10 | One strike loading organ culture model to investigate the post-traumatic disc degenerative condition. <i>Journal of Orthopaedic Translation</i> , 2021, 26, 141-150. | 1.9 | 21 |
| 11 | An impaired healing model of osteochondral defect in papain-induced arthritis. <i>Journal of Orthopaedic Translation</i> , 2021, 26, 101-110. | 1.9 | 8 |
| 12 | Serum biomarkers for Modic changes in patients with chronic low back pain. <i>European Spine Journal</i> , 2021, 30, 1018-1027. | 1.0 | 16 |
| 13 | Uncovering the secretome of mesenchymal stromal cells exposed to healthy, traumatic, and degenerative intervertebral discs: a proteomic analysis. <i>Stem Cell Research and Therapy</i> , 2021, 12, 11. | 2.4 | 38 |
| 14 | Angiotensin II Type 1 Receptor Antagonist Losartan Inhibits TNF- α -Induced Inflammation and Degeneration Processes in Human Nucleus Pulposus Cells. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 417. | 1.3 | 2 |
| 15 | The effect of hyaluronic acid on nucleus pulposus extracellular matrix production through hypoxia-inducible factor-1 α transcriptional activation of CD44 under hypoxia. , 2021, 41, 142-152. | | 9 |
| 16 | A Proinflammatory, Degenerative Organ Culture Model to Simulate Early-Stage Intervertebral Disc Disease.. <i>Journal of Visualized Experiments</i> , 2021, , . | 0.2 | 4 |
| 17 | The Tissue Renin-Angiotensin System and Its Role in the Pathogenesis of Major Human Diseases: Quo Vadis?. <i>Cells</i> , 2021, 10, 650. | 1.8 | 31 |
| 18 | The Application of Mesenchymal Stromal Cells and Their Homing Capabilities to Regenerate the Intervertebral Disc. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3519. | 1.8 | 33 |

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | A Hyaluronan and Platelet-Rich Plasma Hydrogel for Mesenchymal Stem Cell Delivery in the Intervertebral Disc: An Organ Culture Study. <i>International Journal of Molecular Sciences</i> , 2021, 22, 2963. | 1.8 | 22 |
| 20 | Transcriptional profiling of intervertebral disc in a post-traumatic early degeneration organ culture model. <i>JOR Spine</i> , 2021, 4, e1146. | 1.5 | 4 |
| 21 | Noninvasive multimodal fluorescence and magnetic resonance imaging of whole-organ intervertebral discs. <i>Biomedical Optics Express</i> , 2021, 12, 3214. | 1.5 | 5 |
| 22 | A comprehensive tool box for large animal studies of intervertebral disc degeneration. <i>JOR Spine</i> , 2021, 4, e1162. | 1.5 | 19 |
| 23 | In Vitro Evaluation of a Nanoparticle-Based mRNA Delivery System for Cells in the Joint. <i>Biomedicines</i> , 2021, 9, 794. | 1.4 | 6 |
| 24 | Therapeutic Strategies for IVD Regeneration through Hyaluronan/SDF-1-Based Hydrogel and Intravenous Administration of MSCs. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9609. | 1.8 | 7 |
| 25 | Effect of nanoparticle based mrna delivery on modulation of inflammation in an osteochondral inflammation model. <i>Osteoarthritis and Cartilage</i> , 2021, 29, S13. | 0.6 | 1 |
| 26 | In Vitro Model to Investigate Communication between Dorsal Root Ganglion and Spinal Cord Glia. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9725. | 1.8 | 10 |
| 27 | Effect of cyclic mechanical loading on immunoinflammatory microenvironment in biofabricating hydroxyapatite scaffold for bone regeneration. <i>Bioactive Materials</i> , 2021, 6, 3097-3108. | 8.6 | 29 |
| 28 | Evaluation of the influence of platelet-rich plasma (PRP), platelet lysate (PL) and mechanical loading on chondrogenesis in vitro. <i>Scientific Reports</i> , 2021, 11, 20188. | 1.6 | 16 |
| 29 | Quality control methods in musculoskeletal tissue engineering: from imaging to biosensors. <i>Bone Research</i> , 2021, 9, 46. | 5.4 | 10 |
| 30 | Establishment of an Ex Vivo Inflammatory Osteoarthritis Model With Human Osteochondral Explants. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 787020. | 2.0 | 3 |
| 31 | Effect of the CCL5-Releasing Fibrin Gel for Intervertebral Disc Regeneration. <i>Cartilage</i> , 2020, 11, 169-180. | 1.4 | 22 |
| 32 | Intervertebral disc organ culture for the investigation of disc pathology and regeneration – benefits, limitations, and future directions of bioreactors. <i>Connective Tissue Research</i> , 2020, 61, 304-321. | 1.1 | 30 |
| 33 | Evaluation of biomimetic hyaluronic-based hydrogels with enhanced endogenous cell recruitment and cartilage matrix formation. <i>Acta Biomaterialia</i> , 2020, 101, 293-303. | 4.1 | 66 |
| 34 | Mechanical and biological characterization of a composite annulus fibrosus repair strategy in an endplate delamination model. <i>JOR Spine</i> , 2020, 3, e1107. | 1.5 | 8 |
| 35 | Proinflammatory intervertebral disc cell and organ culture models induced by tumor necrosis factor alpha. <i>JOR Spine</i> , 2020, 3, e1104. | 1.5 | 23 |
| 36 | Mechanical Stress Inhibits Early Stages of Endogenous Cell Migration: A Pilot Study in an Ex Vivo Osteochondral Model. <i>Polymers</i> , 2020, 12, 1754. | 2.0 | 5 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Identification and Characterization of Serum microRNAs as Biomarkers for Human Disc Degeneration: An RNA Sequencing Analysis. <i>Diagnostics</i> , 2020, 10, 1063. | 1.3 | 5 |
| 38 | Hypoxic stress enhances extension and branching of dorsal root ganglion neuronal outgrowth. <i>JOR Spine</i> , 2020, 3, e1090. | 1.5 | 5 |
| 39 | Bioprinting Tissue Analogues with Decellularized Extracellular Matrix Bioink for Regeneration and Tissue Models of Cartilage and Intervertebral Discs. <i>Advanced Functional Materials</i> , 2020, 30, 1909044. | 7.8 | 48 |
| 40 | Preclinical ex-vivo Testing of Anti-inflammatory Drugs in a Bovine Intervertebral Degenerative Disc Model. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 583. | 2.0 | 26 |
| 41 | Anti-Inflammatory and Chondroprotective Effects of Vanillic Acid and Epimedin C in Human Osteoarthritic Chondrocytes. <i>Biomolecules</i> , 2020, 10, 932. | 1.8 | 33 |
| 42 | Morphological and biomechanical effects of annulus fibrosus injury and repair in an ovine cervical model. <i>JOR Spine</i> , 2020, 3, e1074. | 1.5 | 22 |
| 43 | Animal Models of Osteochondral Defect for Testing Biomaterials. <i>Biochemistry Research International</i> , 2020, 2020, 1-12. | 1.5 | 48 |
| 44 | Enhanced chondrogenic phenotype of primary bovine articular chondrocytes in Fibrin-Hyaluronan hydrogel by multi-axial mechanical loading and FGF18. <i>Acta Biomaterialia</i> , 2020, 105, 170-179. | 4.1 | 31 |
| 45 | Comparison of different transfection methods for mRNA delivery in articular joint cells. <i>Osteoarthritis and Cartilage</i> , 2020, 28, S197-S198. | 0.6 | 1 |
| 46 | Direct and Intervertebral Disc Mediated Sensitization of Dorsal Root Ganglion Neurons by Hypoxia and Low pH. <i>Neurospine</i> , 2020, 17, 42-59. | 1.1 | 16 |
| 47 | Functional cell phenotype induction with TGF- β 1 and collagen-polyurethane scaffold for annulus fibrosus rupture repair. , 2020, 39, 1-17. | | 24 |
| 48 | The tissue-renin-angiotensin-system of the human intervertebral disc. , 2020, 40, 115-132. | | 14 |
| 49 | Fibrin-Hyaluronic Acid Hydrogel (RegenoGel) with Fibroblast Growth Factor-18 for In Vitro 3D Culture of Human and Bovine Nucleus Pulposus Cells. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5036. | 1.8 | 18 |
| 50 | Kartogenin hydrolysis product 4-aminobiphenyl distributes to cartilage and mediates cartilage regeneration. <i>Theranostics</i> , 2019, 9, 7108-7121. | 4.6 | 25 |
| 51 | Fluorescence-Activated Cell Sorting Is More Potent to Fish Intervertebral Disk Progenitor Cells Than Magnetic and Beads-Based Methods. <i>Tissue Engineering - Part C: Methods</i> , 2019, 25, 571-580. | 1.1 | 15 |
| 52 | CD146/MCAM distinguishes stem cell subpopulations with distinct migration and regenerative potential in degenerative intervertebral discs. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 1094-1105. | 0.6 | 37 |
| 53 | Developing Bioreactors to Host Joint-Derived Tissues That Require Mechanical Stimulation. , 2019, , 261-261. | | 1 |
| 54 | Effect and mechanism of psoralidin on promoting osteogenesis and inhibiting adipogenesis. <i>Phytomedicine</i> , 2019, 61, 152860. | 2.3 | 23 |

| # | ARTICLE | IF | CITATIONS |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 55 | Regulation of Inflammatory Response in Human Osteoarthritic Chondrocytes by Novel Herbal Small Molecules. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5745. | 1.8 | 19 |
| 56 | Does Riluzole Influence Bone Formation?. <i>Spine</i> , 2019, 44, 1107-1117. | 1.0 | 2 |
| 57 | The Effect of Zoledronic Acid on Serum Biomarkers among Patients with Chronic Low Back Pain and Modic Changes in Lumbar Magnetic Resonance Imaging. <i>Diagnostics</i> , 2019, 9, 212. | 1.3 | 10 |
| 58 | Mesenchymal Stem Cell Homing Into Intervertebral Discs Enhances the Tie2-positive Progenitor Cell Population, Prevents Cell Death, and Induces a Proliferative Response. <i>Spine</i> , 2019, 44, 1613-1622. | 1.0 | 27 |
| 59 | Hyaluronan-based hydrogel delivering anti-miR-221 for the guidance of endogenous cartilage repair. <i>Osteoarthritis and Cartilage</i> , 2018, 26, S163. | 0.6 | 2 |
| 60 | An intervertebral disc whole organ culture system to investigate proinflammatory and degenerative disc disease condition. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, e2051-e2061. | 1.3 | 55 |
| 61 | Mechanical loading of intervertebral disc modulates microglia proliferation, activation, and chemotaxis. <i>Osteoarthritis and Cartilage</i> , 2018, 26, 978-987. | 0.6 | 37 |
| 62 | Autologous Chondrocyte Implantation in Osteoarthritic Surroundings: TNF α and Its Inhibition by Adalimumab in a Knee-Specific Bioreactor. <i>American Journal of Sports Medicine</i> , 2018, 46, 431-440. | 1.9 | 16 |
| 63 | Isolation of high-quality RNA from intervertebral disc tissue via pronase predigestion and tissue pulverization. <i>JOR Spine</i> , 2018, 1, e1017. | 1.5 | 21 |
| 64 | Mechanically stimulated osteochondral organ culture for evaluation of biomaterials in cartilage repair studies. <i>Acta Biomaterialia</i> , 2018, 81, 256-266. | 4.1 | 40 |
| 65 | Effects of Level, Loading Rate, Injury and Repair on Biomechanical Response of Ovine Cervical Intervertebral Discs. <i>Annals of Biomedical Engineering</i> , 2018, 46, 1911-1920. | 1.3 | 13 |
| 66 | Critical aspects and challenges for intervertebral disc repair and regeneration—Harnessing advances in tissue engineering. <i>JOR Spine</i> , 2018, 1, e1029. | 1.5 | 79 |
| 67 | Successful fishing for nucleus pulposus progenitor cells of the intervertebral disc across species. <i>JOR Spine</i> , 2018, 1, e1018. | 1.5 | 44 |
| 68 | Stromal Cell Derived Factor-1-Mediated Migration of Mesenchymal Stem Cells Enhances Collagen Type II Expression in Intervertebral Disc. <i>Tissue Engineering - Part A</i> , 2018, 24, 1818-1830. | 1.6 | 10 |
| 69 | Intervertebral Disc Whole Organ Cultures. , 2018, , 67-101. | | 0 |
| 70 | Cell Recruitment for Intervertebral Disc. , 2018, , 155-182. | | 0 |
| 71 | Heterodimeric BMP α 2/7 for nucleus pulposus regeneration—In vitro and ex vivo studies. <i>Journal of Orthopaedic Research</i> , 2017, 35, 51-60. | 1.2 | 45 |
| 72 | The roles and perspectives of microRNAs as biomarkers for intervertebral disc degeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017, 11, 3481-3487. | 1.3 | 46 |

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|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Intervertebral disc response to stem cell treatment is conditioned by disc state and cell carrier: An exÂvivo study. <i>Journal of Orthopaedic Translation</i> , 2017, 9, 43-51. | 1.9 | 16 |
| 74 | Bioreactor mechanically guided 3D mesenchymal stem cell chondrogenesis using a biocompatible novel thermo-reversible methylcellulose-based hydrogel. <i>Scientific Reports</i> , 2017, 7, 45018. | 1.6 | 77 |
| 75 | Injectable hyaluronic acid down-regulates interferon signaling molecules, IGFBP3 and IFIT3 in the bovine intervertebral disc. <i>Acta Biomaterialia</i> , 2017, 52, 118-129. | 4.1 | 33 |
| 76 | Ageing affects chondroitin sulfates and their synthetic enzymes in the intervertebral disc. <i>Signal Transduction and Targeted Therapy</i> , 2017, 2, 17049. | 7.1 | 37 |
| 77 | Hyaluronan supplementation as a mechanical regulator of cartilage tissue development under joint-kinematic-mimicking loading. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20170255. | 1.5 | 14 |
| 78 | Poly(β -glutamic acid) and poly(β -glutamic acid)-based nanocomplexes enhance type II collagen production in intervertebral disc. <i>Journal of Materials Science: Materials in Medicine</i> , 2017, 28, 6. | 1.7 | 20 |
| 79 | CD146 defines commitment of cultured annulus fibrosus cells to express a contractile phenotype. <i>Journal of Orthopaedic Research</i> , 2016, 34, 1361-1372. | 1.2 | 28 |
| 80 | Angiopoietin-1 receptor Tie2 distinguishes multipotent differentiation capability in bovine coccygeal nucleus pulposus cells. <i>Stem Cell Research and Therapy</i> , 2016, 7, 75. | 2.4 | 55 |
| 81 | Unique glycosignature for intervertebral disc and articular cartilage cells and tissues in immaturity and maturity. <i>Scientific Reports</i> , 2016, 6, 23062. | 1.6 | 18 |
| 82 | Development of an ex vivo cavity model to study repair strategies in loaded intervertebral discs. <i>European Spine Journal</i> , 2016, 25, 2898-2908. | 1.0 | 25 |
| 83 | Mesenchymal Stem/Stromal Cells seeded on cartilaginous endplates promote Intervertebral Disc Regeneration through Extracellular Matrix Remodeling. <i>Scientific Reports</i> , 2016, 6, 33836. | 1.6 | 37 |
| 84 | Polyurethane scaffold with in situ swelling capacity for nucleus pulposus replacement. <i>Biomaterials</i> , 2016, 84, 196-209. | 5.7 | 50 |
| 85 | Systemic blood plasma CCL5 and CXCL6: Potential biomarkers for human lumbar disc degeneration. , 2016, 31, 1-10. | | 44 |
| 86 | Gene Expression Profiling Identifies Interferon Signalling Molecules and IGFBP3 in Human Degenerative Annulus Fibrosus. <i>Scientific Reports</i> , 2015, 5, 15662. | 1.6 | 53 |
| 87 | A papain-induced disc degeneration model for the assessment of thermo-reversible hydrogel-cells therapeutic approach. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, E167-E176. | 1.3 | 28 |
| 88 | A Nucleotomy Model with Intact Annulus Fibrosus to Test Intervertebral Disc Regeneration Strategies. <i>Tissue Engineering - Part C: Methods</i> , 2015, 21, 1117-1124. | 1.1 | 23 |
| 89 | Defining the phenotype of young healthy nucleus pulposus cells: Recommendations of the Spine Research Interest Group at the 2014 annual ORS meeting. <i>Journal of Orthopaedic Research</i> , 2015, 33, 283-293. | 1.2 | 226 |
| 90 | Migration of bone marrowâ€derived cells for endogenous repair in a new tail-looping disc degeneration model in the mouse: a pilot study. <i>Spine Journal</i> , 2015, 15, 1356-1365. | 0.6 | 56 |

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|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 91 | Endogenous Cell Homing for Intervertebral Disk Regeneration. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2015, 23, 264-266. | 1.1 | 7 |
| 92 | A combined biomaterial and cellular approach for annulus fibrosus rupture repair. <i>Biomaterials</i> , 2015, 42, 11-19. | 5.7 | 91 |
| 93 | Advancing the cellular and molecular therapy for intervertebral disc disease. <i>Advanced Drug Delivery Reviews</i> , 2015, 84, 159-171. | 6.6 | 239 |
| 94 | Potential and Limitations of Intervertebral Disc Endogenous Repair. <i>Current Stem Cell Research and Therapy</i> , 2015, 10, 329-338. | 0.6 | 30 |
| 95 | Organ Culture Bioreactors – Platforms to Study Human Intervertebral Disc Degeneration and Regenerative Therapy. <i>Current Stem Cell Research and Therapy</i> , 2015, 10, 339-352. | 0.6 | 78 |
| 96 | Influence of extremely low frequency, low energy electromagnetic fields and combined mechanical stimulation on chondrocytes in 3D constructs for cartilage tissue engineering. <i>Bioelectromagnetics</i> , 2014, 35, 116-128. | 0.9 | 27 |
| 97 | Particulate cartilage under bioreactor-induced compression and shear. <i>International Orthopaedics</i> , 2014, 38, 1105-1111. | 0.9 | 33 |
| 98 | Platelet-rich plasma induces annulus fibrosus cell proliferation and matrix production. <i>European Spine Journal</i> , 2014, 23, 745-753. | 1.0 | 42 |
| 99 | Stem Cell-Based Intervertebral Disc Regeneration: Evaluation in Organ Culture. <i>Spine Journal</i> , 2014, 14, S62. | 0.6 | 0 |
| 100 | The effect of hyaluronan-based delivery of stromal cell-derived factor-1 on the recruitment of MSCs in degenerating intervertebral discs. <i>Biomaterials</i> , 2014, 35, 8144-8153. | 5.7 | 78 |
| 101 | Biodegradable Electrospun Scaffolds for Annulus Fibrosus Tissue Engineering: Effect of Scaffold Structure and Composition on Annulus Fibrosus Cells <i>In Vitro</i> . <i>Tissue Engineering - Part A</i> , 2014, 20, 140123085256009. | 1.6 | 30 |
| 102 | Biomimetic fibrin-hyaluronan hydrogels for nucleus pulposus regeneration. <i>Regenerative Medicine</i> , 2014, 9, 309-326. | 0.8 | 44 |
| 103 | Induction of Osteogenic Differentiation by Nanostructured Alumina Surfaces. <i>Journal of Biomedical Nanotechnology</i> , 2014, 10, 831-845. | 0.5 | 17 |
| 104 | CCL5/RANTES is a key chemoattractant released by degenerative intervertebral discs in organ culture. , 2014, 27, 124-136. | | 75 |
| 105 | Cell therapy for intervertebral disc repair: advancing cell therapy from bench to clinics. , 2014, 27s, 5-11. | | 61 |
| 106 | Thermoreversible hyaluronan-based hydrogel supports <i>in vitro</i> and <i>ex vivo</i> disc-like differentiation of human mesenchymal stem cells. <i>Spine Journal</i> , 2013, 13, 1627-1639. | 0.6 | 93 |
| 107 | Bioreactor-Induced Chondrocyte Maturation Is Dependent on Cell Passage and Onset of Loading. <i>Cartilage</i> , 2013, 4, 165-176. | 1.4 | 19 |
| 108 | Mesenchymal stem cell chondrogenesis: composite growth factor bioreactor synergism for human stem cell chondrogenesis. <i>Regenerative Medicine</i> , 2013, 8, 157-170. | 0.8 | 10 |

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|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 109 | The Transpedicular Approach As an Alternative Route for Intervertebral Disc Regeneration. <i>Spine</i> , 2013, 38, E319-E324. | 1.0 | 43 |
| 110 | Isolation and Characterisation of a Recombinant Antibody Fragment That Binds NCAM1-Expressing Intervertebral Disc Cells. <i>PLoS ONE</i> , 2013, 8, e83678. | 1.1 | 9 |
| 111 | Challenges and strategies in the repair of ruptured annulus fibrosus. , 2013, 25, 1-21. | | 181 |
| 112 | Homing of Mesenchymal Stem Cells in Induced Degenerative Intervertebral Discs in a Whole Organ Culture System. <i>Spine</i> , 2012, 37, 1865-1873. | 1.0 | 91 |
| 113 | Exhaustion of nucleus pulposus progenitor cells with ageing and degeneration of the intervertebral disc. <i>Nature Communications</i> , 2012, 3, 1264. | 5.8 | 357 |
| 114 | Diversity of intervertebral disc cells: phenotype and function. <i>Journal of Anatomy</i> , 2012, 221, 480-496. | 0.9 | 237 |
| 115 | Thermoreversible Hyaluronan-Based Hydrogels Support Mesenchymal Stem Cells Disc-Like Differentiation In Vitro and Ex-Vivo. <i>Spine Journal</i> , 2012, 12, S63-S64. | 0.6 | 0 |
| 116 | Injectable thermoreversible hyaluronan-based hydrogels for nucleus pulposus cell encapsulation. <i>European Spine Journal</i> , 2012, 21, 839-849. | 1.0 | 98 |
| 117 | Sliding motion modulates stiffness and friction coefficient at the surface of tissue engineered cartilage. <i>Osteoarthritis and Cartilage</i> , 2012, 20, 288-295. | 0.6 | 58 |
| 118 | Physiological Cartilage Tissue Engineering. <i>International Review of Cell and Molecular Biology</i> , 2011, 289, 37-87. | 1.6 | 13 |
| 119 | Differential response of human bone marrow stromal cells to either TGF- β 21 or rhGDF-5. <i>European Spine Journal</i> , 2011, 20, 962-971. | 1.0 | 67 |
| 120 | An injectable vehicle for nucleus pulposus cell-based therapy. <i>Biomaterials</i> , 2011, 32, 2862-2870. | 5.7 | 203 |
| 121 | Physical Stimulation of Chondrogenic Cells In Vitro: A Review. <i>Clinical Orthopaedics and Related Research</i> , 2011, 469, 2764-2772. | 0.7 | 147 |
| 122 | Identification of cell surface-specific markers to target human nucleus pulposus cells: Expression of carbonic anhydrase XII varies with age and degeneration. <i>Arthritis and Rheumatism</i> , 2011, 63, 3876-3886. | 6.7 | 68 |
| 123 | Varying Regional Topology Within Knee Articular Chondrocytes Under Simulated <i>In Vivo</i> Conditions. <i>Tissue Engineering - Part A</i> , 2011, 17, 451-461. | 1.6 | 22 |
| 124 | Confocal Imaging Protocols for Live/Dead Staining in Three-Dimensional Carriers. <i>Methods in Molecular Biology</i> , 2011, 740, 127-140. | 0.4 | 21 |
| 125 | Role of hypoxia and growth and differentiation factor-5 on differentiation of human mesenchymal stem cells towards intervertebral nucleus pulposus-like cells. , 2011, 21, 533-547. | | 144 |
| 126 | A combination of shear and dynamic compression leads to mechanically induced chondrogenesis of human mesenchymal stem cells. , 2011, 22, 214-225. | | 155 |

| # | ARTICLE | IF | CITATIONS |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 127 | The Combined Effects of Limited Nutrition and High-Frequency Loading on Intervertebral Discs With Endplates. <i>Spine</i> , 2010, 35, 1744-1752. | 1.0 | 100 |
| 128 | Variations in gene and protein expression in human nucleus pulposus in comparison with annulus fibrosus and cartilage cells: potential associations with aging and degeneration. <i>Osteoarthritis and Cartilage</i> , 2010, 18, 416-423. | 0.6 | 147 |
| 129 | Farsenolâ€modified biodegradable polyurethanes for cartilage tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 92A, 393-408. | 2.1 | 35 |
| 130 | Cells and Biomaterials for Intervertebral Disc Regeneration. <i>Synthesis Lectures on Tissue Engineering</i> , 2010, 2, 1-104. | 0.3 | 14 |
| 131 | Physicobiochemical Synergism Through Gene Therapy and Functional Tissue Engineering for <i>In Vitro</i> Chondrogenesis. <i>Tissue Engineering - Part A</i> , 2009, 15, 2513-2524. | 1.6 | 28 |
| 132 | The effect of sliding velocity on chondrocytes activity in 3D scaffolds. <i>Journal of Biomechanics</i> , 2009, 42, 424-429. | 0.9 | 23 |
| 133 | Cells and biomaterials in cartilage tissue engineering. <i>Regenerative Medicine</i> , 2009, 4, 81-98. | 0.8 | 115 |
| 134 | Differential Phenotype of Intervertebral Disc Cells. <i>Spine</i> , 2009, 34, 1448-1456. | 1.0 | 123 |
| 135 | Effect of reduced oxygen tension and long-term mechanical stimulation on chondrocyte-polymer constructs. <i>Cell and Tissue Research</i> , 2008, 331, 473-483. | 1.5 | 70 |
| 136 | An injectable cross-linked scaffold for nucleus pulposus regeneration. <i>Biomaterials</i> , 2008, 29, 438-447. | 5.7 | 131 |
| 137 | Association of the Asporin D14 Allele with Lumbar-Disc Degeneration in Asians. <i>American Journal of Human Genetics</i> , 2008, 82, 744-747. | 2.6 | 132 |
| 138 | Different response of articular chondrocyte subpopulations to surface motion. <i>Osteoarthritis and Cartilage</i> , 2007, 15, 1034-1041. | 0.6 | 44 |
| 139 | A phenotypic comparison of intervertebral disc and articular cartilage cells in the rat. <i>European Spine Journal</i> , 2007, 16, 2174-2185. | 1.0 | 183 |
| 140 | Effects of Simple and Complex Motion Patterns on Gene Expression of Chondrocytes Seeded in 3D Scaffolds. <i>Tissue Engineering</i> , 2006, 12, 3171-3179. | 4.9 | 81 |
| 141 | Chondrocyte gene expression under applied surface motion. <i>Biorheology</i> , 2006, 43, 259-69. | 1.2 | 52 |
| 142 | Effect of mechanical loading on mRNA levels of common endogenous controls in articular chondrocytes and intervertebral disk. <i>Analytical Biochemistry</i> , 2005, 341, 372-375. | 1.1 | 48 |
| 143 | Surface Motion Upregulates Superficial Zone Protein and Hyaluronan Production in Chondrocyte-Seeded Three-Dimensional Scaffolds. <i>Tissue Engineering</i> , 2005, 11, 249-256. | 4.9 | 133 |
| 144 | Fibrinâ€Polyurethane Composites for Articular Cartilage Tissue Engineering: A Preliminary Analysis. <i>Tissue Engineering</i> , 2005, 11, 1562-1573. | 4.9 | 144 |

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|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 145 | Tribology Approach to the Engineering and Study of Articular Cartilage. Tissue Engineering, 2004, 10, 1436-1445. | 4.9 | 98 |
| 146 | Vascular endothelial growth factor serum level is strongly enhanced after burn injury and correlated with local and general tissue edema. Burns, 2004, 30, 305-311. | 1.1 | 76 |
| 147 | Tribology Approach to the Engineering and Study of Articular Cartilage. Tissue Engineering, 2004, 10, 1436-1445. | 4.9 | 68 |
| 148 | Chondrocytes seeded onto poly (L/DL-lactide) 80%/20% porous scaffolds: A biochemical evaluation. Journal of Biomedical Materials Research Part B, 2003, 66A, 571-579. | 3.0 | 63 |
| 149 | The use of biodegradable polyurethane scaffolds for cartilage tissue engineering: potential and limitations. Biomaterials, 2003, 24, 5163-5171. | 5.7 | 254 |
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