

Richard O C Oreffo

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

343
papers

20,432
citations

74
h-index

133
g-index

355
ext. papers

22,508
ext. citations

7
avg, IF

6.88
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 343 | From hurdle to springboard: The macrophage as target in biomaterial-based bone regeneration strategies.. <i>Bone</i> , 2022 , 116389 | 4.7 | 1 |
| 342 | Cell-controlled dynamic surfaces for skeletal stem cell growth and differentiation.. <i>Scientific Reports</i> , 2022 , 12, 8165 | 4.9 | 0 |
| 341 | Materials-driven fibronectin assembly on nanoscale topography enhances mesenchymal stem cell adhesion, protecting cells from bacterial virulence factors and preventing biofilm formation. <i>Biomaterials</i> , 2021 , 280, 121263 | 15.6 | 2 |
| 340 | Custom 3D-Printed Triflange Implants for Treatment of Severe Acetabular Defects, with and without Pelvic Discontinuity: Early Results of Our First 19 Consecutive Cases. <i>JBJS Open Access</i> , 2021 , 6, | 3.1 | 1 |
| 339 | Synthesis of scaffold-free, three dimensional, osteogenic constructs following culture of skeletal osteoprogenitor cells on glass surfaces. <i>Bone Reports</i> , 2021 , 15, 101143 | 2.6 | 2 |
| 338 | Endothelial Cells: Co-culture Spheroids. <i>Methods in Molecular Biology</i> , 2021 , 2206, 47-56 | 1.4 | |
| 337 | Nanocomposite Clay-Based Bioinks for Skeletal Tissue Engineering. <i>Methods in Molecular Biology</i> , 2021 , 2147, 63-72 | 1.4 | 1 |
| 336 | Pancreas deficiency modifies bone development in the ovine fetus near term. <i>Journal of Endocrinology</i> , 2021 , 252, 71-80 | 4.7 | 1 |
| 335 | Enrichment of Skeletal Stem Cells from Human Bone Marrow Using Spherical Nucleic Acids. <i>ACS Nano</i> , 2021 , 15, 6909-6916 | 16.7 | 3 |
| 334 | Design of Functional Coassembling Organic-Inorganic Hydrogels for Hierarchical Mineralization and Neovascularization. <i>ACS Nano</i> , 2021 , | 16.7 | 5 |
| 333 | Periconception maternal low-protein diet adversely affects male mouse fetal bone growth and mineral density quality in late gestation. <i>Journal of Developmental Origins of Health and Disease</i> , 2021 , 12, 384-395 | 2.4 | 1 |
| 332 | Structured nanofilms comprising Laponite \square and bone extracellular matrix for osteogenic differentiation of skeletal progenitor cells. <i>Materials Science and Engineering C</i> , 2021 , 118, 111440 | 8.3 | 10 |
| 331 | The role of lithium in the osteogenic bioactivity of clay nanoparticles. <i>Biomaterials Science</i> , 2021 , 9, 3150-3161 | 7.4 | 4 |
| 330 | The use of nanovibration to discover specific and potent bioactive metabolites that stimulate osteogenic differentiation in mesenchymal stem cells. <i>Science Advances</i> , 2021 , 7, | 14.3 | 10 |
| 329 | Multiscale molecular profiling of pathological bone resolves sexually dimorphic control of extracellular matrix composition. <i>DMM Disease Models and Mechanisms</i> , 2021 , | 4.1 | 1 |
| 328 | The future of bone regeneration: integrating AI into tissue engineering. <i>Biomedical Physics and Engineering Express</i> , 2021 , 7, | 1.5 | 3 |
| 327 | Harnessing Polyhydroxyalkanoates and Pressurized Gyration for Hard and Soft Tissue Engineering. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 32624-32639 | 9.5 | 13 |

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| 326 | Modeling adult skeletal stem cell response to laser-machined topographies through deep learning. <i>Tissue and Cell</i> , 2020 , 67, 101442 | 2.7 | 5 |
| 325 | Alternative and complementary therapies in osteoarthritis and cartilage repair. <i>Aging Clinical and Experimental Research</i> , 2020 , 32, 547-560 | 4.8 | 31 |
| 324 | Bisphosphonate nanoclay edge-site interactions facilitate hydrogel self-assembly and sustained growth factor localization. <i>Nature Communications</i> , 2020 , 11, 1365 | 17.4 | 30 |
| 323 | Disordered protein-graphene oxide co-assembly and supramolecular biofabrication of functional fluidic devices. <i>Nature Communications</i> , 2020 , 11, 1182 | 17.4 | 32 |
| 322 | Osteoarthritis treatment with a novel nutraceutical acetylated ligstroside aglycone, a chemically modified extra-virgin olive oil polyphenol. <i>Journal of Tissue Engineering</i> , 2020 , 11, 2041731420922701 | 7.5 | 3 |
| 321 | Skeletal Stem Cells Phenotype and Function 2020 , 9-20 | | |
| 320 | Nanopatterned Titanium Implants Accelerate Bone Formation In Vivo. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 33541-33549 | 9.5 | 20 |
| 319 | Correlative fluorescence and atomic force microscopy to advance the bio-physical characterisation of co-culture of living cells. <i>Biochemical and Biophysical Research Communications</i> , 2020 , 529, 392-397 | 3.4 | 2 |
| 318 | Genetically-programmed, mesenchymal stromal cell-laden & mechanically strong 3D bioprinted scaffolds for bone repair. <i>Journal of Controlled Release</i> , 2020 , 325, 335-346 | 11.7 | 9 |
| 317 | Growth-Factor Free Multicomponent Nanocomposite Hydrogels That Stimulate Bone Formation. <i>Advanced Functional Materials</i> , 2020 , 30, 1906205 | 15.6 | 28 |
| 316 | From mathematical modeling and machine learning to clinical reality 2020 , 37-51 | | 3 |
| 315 | Bone tissue engineering and bone regeneration 2020 , 917-935 | | 8 |
| 314 | Characterisation and evaluation of the regenerative capacity of Stro-4+ enriched bone marrow mesenchymal stromal cells using bovine extracellular matrix hydrogel and a novel biocompatible melt electro-written medical-grade polycaprolactone scaffold. <i>Biomaterials</i> , 2020 , 247, 119998 | 15.6 | 17 |
| 313 | Nanoclay-based 3D printed scaffolds promote vascular ingrowth ex vivo and generate bone mineral tissue in vitro and in vivo. <i>Biofabrication</i> , 2020 , 12, 035010 | 10.5 | 31 |
| 312 | Bone-Marrow-Derived Mesenchymal Stromal Cells: From Basic Biology to Applications in Bone Tissue Engineering and Bone Regeneration 2020 , 1-55 | | |
| 311 | Chondrobags: A high throughput alginate-fibronectin micromass platform for in vitro human cartilage formation. <i>Biofabrication</i> , 2020 , 12, 045034 | 10.5 | 4 |
| 310 | Development of protocols for the first serial block-face scanning electron microscopy (SBF SEM) studies of bone tissue. <i>Bone</i> , 2020 , 131, 115107 | 4.7 | 11 |
| 309 | Exploratory Full-Field Strain Analysis of Regenerated Bone Tissue from Osteoinductive Biomaterials. <i>Materials</i> , 2020 , 13, | 3.5 | 11 |

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| 308 | Raman spectroscopy links differentiating osteoblast matrix signatures to pro-angiogenic potential. <i>Matrix Biology Plus</i> , 2020 , 5, 100018 | 5.1 | 6 |
| 307 | Nanovibrational Stimulation of Mesenchymal Stem Cells Induces Therapeutic Reactive Oxygen Species and Inflammation for Three-Dimensional Bone Tissue Engineering. <i>ACS Nano</i> , 2020 , 14, 10027-10044 | 16.7 | 14 |
| 306 | A blueprint for translational regenerative medicine. <i>Science Translational Medicine</i> , 2020 , 12, | 17.5 | 7 |
| 305 | Evolving applications of the egg: chorioallantoic membrane assay and organotypic culture of materials for bone tissue engineering. <i>Journal of Tissue Engineering</i> , 2020 , 11, 2041731420942734 | 7.5 | 8 |
| 304 | Bone-Marrow-Derived Mesenchymal Stromal Cells: From Basic Biology to Applications in Bone Tissue Engineering and Bone Regeneration 2020 , 139-192 | | 2 |
| 303 | Transfer learning efficiently maps bone marrow cell types from mouse to human using single-cell RNA sequencing. <i>Communications Biology</i> , 2020 , 3, 736 | 6.7 | 5 |
| 302 | Nanoclay-Polyamine Composite Hydrogel for Topical Delivery of Nitric Oxide Gas via Innate Gelation Characteristics of Laponite. <i>Biomacromolecules</i> , 2020 , 21, 2096-2103 | 6.9 | 12 |
| 301 | Quantifying intracortical bone microstructure: A critical appraisal of 2D and 3D approaches for assessing vascular canals and osteocyte lacunae. <i>Journal of Anatomy</i> , 2020 , 238, 653 | 2.9 | 3 |
| 300 | Printing bone in a gel: using nanocomposite bioink to print functionalised bone scaffolds. <i>Materials Today Bio</i> , 2019 , 4, 100028 | 9.9 | 31 |
| 299 | Label-free enrichment of primary human skeletal progenitor cells using deterministic lateral displacement. <i>Lab on A Chip</i> , 2019 , 19, 513-523 | 7.2 | 28 |
| 298 | Image-based sorting and negative dielectrophoresis for high purity cell and particle separation. <i>Electrophoresis</i> , 2019 , 40, 2718-2727 | 3.6 | 18 |
| 297 | Osteogenic and angiogenic tissue formation in high fidelity nanocomposite Laponite-gelatin bioinks. <i>Biofabrication</i> , 2019 , 11, 035027 | 10.5 | 85 |
| 296 | Human iPSC-derived MSCs (iMSCs) from aged individuals acquire a rejuvenation signature. <i>Stem Cell Research and Therapy</i> , 2019 , 10, 100 | 8.3 | 46 |
| 295 | Live-imaging of Bioengineered Cartilage Tissue using Multimodal Non-linear Molecular Imaging. <i>Scientific Reports</i> , 2019 , 9, 5561 | 4.9 | 11 |
| 294 | The cell in the ink: Improving biofabrication by printing stem cells for skeletal regenerative medicine. <i>Biomaterials</i> , 2019 , 209, 10-24 | 15.6 | 99 |
| 293 | Isolation, Differentiation, and Characterization of Human Bone Marrow Stem Cells In Vitro and In Vivo. <i>Methods in Molecular Biology</i> , 2019 , 1914, 53-70 | 1.4 | 10 |
| 292 | Harnessing Human Decellularized Blood Vessel Matrices and Cellular Construct Implants to Promote Bone Healing in an Ex Vivo Organotypic Bone Defect Model. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1800088 | 10.1 | 10 |
| 291 | Altered vertebral and femoral bone structure in juvenile offspring of microswine subject to maternal low protein nutritional challenge. <i>Physiological Reports</i> , 2019 , 7, e14081 | 2.6 | |

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| 290 | Regulation of the Bone Vascular Network is Sexually Dimorphic. <i>Journal of Bone and Mineral Research</i> , 2019 , 34, 2117-2132 | 6.3 | 7 |
| 289 | In vivo delivery of VEGF RNA and protein to increase osteogenesis and intrasosseous angiogenesis. <i>Scientific Reports</i> , 2019 , 9, 17745 | 4.9 | 21 |
| 288 | 3D human bone marrow stromal and endothelial cell spheres promote bone healing in an osteogenic niche. <i>FASEB Journal</i> , 2019 , 33, 3279-3290 | 0.9 | 13 |
| 287 | Spina bifida-predisposing heterozygous mutations in Planar Cell Polarity genes and Zic2 reduce bone mass in young mice. <i>Scientific Reports</i> , 2018 , 8, 3325 | 4.9 | 4 |
| 286 | The influence of a high fat diet on bone and soft tissue formation in Matrix Gla Protein knockout mice. <i>Scientific Reports</i> , 2018 , 8, 3635 | 4.9 | 6 |
| 285 | Clay nanoparticles for regenerative medicine and biomaterial design: A review of clay bioactivity. <i>Biomaterials</i> , 2018 , 159, 204-214 | 15.6 | 131 |
| 284 | Acoustically modulated biomechanical stimulation for human cartilage tissue engineering. <i>Lab on A Chip</i> , 2018 , 18, 473-485 | 7.2 | 27 |
| 283 | Application of 3D-printed patient-specific skeletal implants augmented with autologous skeletal stem cells. <i>Regenerative Medicine</i> , 2018 , 13, 283-294 | 2.5 | 14 |
| 282 | Translation of remote control regenerative technologies for bone repair. <i>Npj Regenerative Medicine</i> , 2018 , 3, 9 | 15.8 | 18 |
| 281 | Polymersome nanoparticles for delivery of Wnt-activating small molecules. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018 , 14, 1267-1277 | 6 | 11 |
| 280 | Human mesenchymal factors induce rat hippocampal- and human neural stem cell dependent oligodendrogenesis. <i>Glia</i> , 2018 , 66, 145-160 | 9 | 18 |
| 279 | Regenerative medicine in lower limb reconstruction. <i>Regenerative Medicine</i> , 2018 , 13, 477-490 | 2.5 | 8 |
| 278 | Harnessing Nanotopography to Enhance Osseointegration of Clinical Orthopedic Titanium Implants-An and Analysis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018 , 6, 44 | 5.8 | 17 |
| 277 | Combinatorial delivery of bioactive molecules by a nanoparticle-decorated and functionalized biodegradable scaffold. <i>Journal of Materials Chemistry B</i> , 2018 , 6, 4437-4445 | 7.3 | 10 |
| 276 | Self-Assembling Nanoclay Diffusion Gels for Bioactive Osteogenic Microenvironments. <i>Advanced Healthcare Materials</i> , 2018 , 7, e1800331 | 10.1 | 18 |
| 275 | Human Skeletal Stem Cell Response to Multiscale Topography Induced by Large Area Electron Beam Irradiation Surface Treatment. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018 , 6, 91 | 5.8 | 12 |
| 274 | Biomimetic oyster shell-replicated topography alters the behaviour of human skeletal stem cells. <i>Journal of Tissue Engineering</i> , 2018 , 9, 2041731418794007 | 7.5 | 13 |
| 273 | Transplanted Human Pluripotent Stem Cell-Derived Mesenchymal Stem Cells Support Liver Regeneration in Gunn Rats. <i>Stem Cells and Development</i> , 2018 , 27, 1702-1714 | 4.4 | 18 |

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| 272 | Quantitative temporal interrogation in 3D of bioengineered human cartilage using multimodal label-free imaging. <i>Integrative Biology (United Kingdom)</i> , 2018 , 10, 635-645 | 3.7 | 7 |
| 271 | Closed-loop corrective beam shaping for laser processing of curved surfaces. <i>Journal of Micromechanics and Microengineering</i> , 2018 , 28, 127001 | 2 | 3 |
| 270 | Sex- and bone-specific responses in bone structure to exogenous leptin and leptin receptor antagonism in the ovine fetus. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2018 , 314, R781-R790 | 3.2 | 4 |
| 269 | Remodelling of human bone on the chorioallantoic membrane of the chicken egg: De novo bone formation and resorption. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, 1877-1890 | 4.4 | 9 |
| 268 | Local Variation in Femoral Neck Cortical Bone: In Vitro Measured Bone Mineral Density, Geometry and Mechanical Properties. <i>Journal of Clinical Densitometry</i> , 2017 , 20, 205-215 | 3.5 | 2 |
| 267 | MiR-146b is down-regulated during the chondrogenic differentiation of human bone marrow derived skeletal stem cells and up-regulated in osteoarthritis. <i>Scientific Reports</i> , 2017 , 7, 46704 | 4.9 | 35 |
| 266 | PEGylated liposomes associate with Wnt3A protein and expand putative stem cells in human bone marrow populations. <i>Nanomedicine</i> , 2017 , 12, 845-863 | 5.6 | 12 |
| 265 | Mesenchymal Stem Cells: Potential Role in the Treatment of Osteochondral Lesions of the Ankle. <i>Biotechnology Journal</i> , 2017 , 12, 1700070 | 5.6 | 5 |
| 264 | DNA methylation of the RUNX2 P1 promoter mediates MMP13 transcription in chondrocytes. <i>Scientific Reports</i> , 2017 , 7, 7771 | 4.9 | 31 |
| 263 | Osteonecrosis following treatment for childhood acute lymphoblastic leukaemia: The Southampton Children's Hospital experience. <i>Journal of Children's Orthopaedics</i> , 2017 , 11, 440-447 | 2.1 | 4 |
| 262 | Size and dielectric properties of skeletal stem cells change critically after enrichment and expansion from human bone marrow: consequences for microfluidic cell sorting. <i>Journal of the Royal Society Interface</i> , 2017 , 14, | 4.1 | 20 |
| 261 | The Chorioallantoic Membrane Assay for Biomaterial Testing in Tissue Engineering: A Short-Term In Vivo Preclinical Model. <i>Tissue Engineering - Part C: Methods</i> , 2017 , 23, 938-952 | 2.9 | 31 |
| 260 | The Potential of microRNAs for Stem Cell-based Therapy for Degenerative Skeletal Diseases. <i>Current Molecular Biology Reports</i> , 2017 , 3, 263-275 | 2 | 12 |
| 259 | Development of a clay based bioink for 3D cell printing for skeletal application. <i>Biofabrication</i> , 2017 , 9, 034103 | 10.5 | 163 |
| 258 | The inferomedial femoral neck is compromised by age but not disease: Fracture toughness and the multifactorial mechanisms comprising reference point microindentation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 75, 399-412 | 4.1 | 10 |
| 257 | Large animal in vivo evaluation of a binary blend polymer scaffold for skeletal tissue-engineering strategies; translational issues. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 1065-1076 | 4.4 | 18 |
| 256 | Nanotopography controls cell cycle changes involved with skeletal stem cell self-renewal and multipotency. <i>Biomaterials</i> , 2017 , 116, 10-20 | 15.6 | 44 |
| 255 | Repositioning Titanium: An Evaluation of Laser-Generated Microporous, Microrough Titanium Templates As a Potential Bridging Interface for Enhanced Osseointegration and Durability of Implants. <i>Frontiers in Bioengineering and Biotechnology</i> , 2017 , 5, 77 | 5.8 | 8 |

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| 254 | Regulation of osteoblast development by Bcl-2-associated athanogene-1 (BAG-1). <i>Scientific Reports</i> , 2016 , 6, 33504 | 4.9 | 5 |
| 253 | Quantification of intracellular payload release from polymersome nanoparticles. <i>Scientific Reports</i> , 2016 , 6, 29460 | 4.9 | 32 |
| 252 | Transient Canonical Wnt Stimulation Enriches Human Bone Marrow Mononuclear Cell Isolates for Osteoprogenitors. <i>Stem Cells</i> , 2016 , 34, 418-30 | 5.8 | 11 |
| 251 | Demethylation of an NF- κ B enhancer element orchestrates iNOS induction in osteoarthritis and is associated with altered chondrocyte cell cycle. <i>Osteoarthritis and Cartilage</i> , 2016 , 24, 1951-1960 | 6.2 | 22 |
| 250 | Dynamic Surfaces for the Study of Mesenchymal Stem Cell Growth through Adhesion Regulation. <i>ACS Nano</i> , 2016 , 10, 6667-79 | 16.7 | 79 |
| 249 | A review of hydrogel use in fracture healing and bone regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016 , 10, 187-98 | 4.4 | 89 |
| 248 | Human endothelial and foetal femur-derived stem cell co-cultures modulate osteogenesis and angiogenesis. <i>Stem Cell Research and Therapy</i> , 2016 , 7, 13 | 8.3 | 13 |
| 247 | Biofabrication of bone tissue: approaches, challenges and translation for bone regeneration. <i>Biomaterials</i> , 2016 , 83, 363-82 | 15.6 | 374 |
| 246 | Microscale Approaches for Molecular Regulation of Skeletal Development 2016 , 167-193 | | |
| 245 | Skeletal stem cell and bone implant interactions are enhanced by LASER titanium modification. <i>Biochemical and Biophysical Research Communications</i> , 2016 , 473, 719-25 | 3.4 | 16 |
| 244 | High-resolution 3D imaging of osteocytes and computational modelling in mechanobiology: insights on bone development, ageing, health and disease. <i>European Cells and Materials</i> , 2016 , 31, 264-94 | 4.3 | 36 |
| 243 | A surprisingly poor correlation between in vitro and in vivo testing of biomaterials for bone regeneration: results of a multicentre analysis. <i>European Cells and Materials</i> , 2016 , 31, 312-22 | 4.3 | 66 |
| 242 | Characterization of New PEEK/HA Composites with 3D HA Network Fabricated by Extrusion Freeforming. <i>Molecules</i> , 2016 , 21, | 4.8 | 46 |
| 241 | Extracellular Matrix Deposition in Engineered Micromass Cartilage Pellet Cultures: Measurements and Modelling. <i>PLoS ONE</i> , 2016 , 11, e0147302 | 3.7 | 7 |
| 240 | Raman spectroscopy and coherent anti-Stokes Raman scattering imaging: prospective tools for monitoring skeletal cells and skeletal regeneration. <i>Journal of the Royal Society Interface</i> , 2016 , 13, | 4.1 | 25 |
| 239 | The chorioallantoic membrane (CAM) assay for the study of human bone regeneration: a refinement animal model for tissue engineering. <i>Scientific Reports</i> , 2016 , 6, 32168 | 4.9 | 54 |
| 238 | Mechanical phenotyping of primary human skeletal stem cells in heterogeneous populations by real-time deformability cytometry. <i>Integrative Biology (United Kingdom)</i> , 2016 , 8, 616-23 | 3.7 | 33 |
| 237 | Skeletal stem cell isolation: A review on the state-of-the-art microfluidic label-free sorting techniques. <i>Biotechnology Advances</i> , 2016 , 34, 908-923 | 17.8 | 16 |

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|-----|--|------|-----|
| 236 | Episomal plasmid-based generation of induced pluripotent stem cells from fetal femur-derived human mesenchymal stromal cells. <i>Stem Cell Research</i> , 2016 , 16, 128-32 | 1.6 | 7 |
| 235 | Bone induction at physiological doses of BMP through localization by clay nanoparticle gels. <i>Biomaterials</i> , 2016 , 99, 16-23 | 15.6 | 51 |
| 234 | Site-Dependent Reference Point Microindentation Complements Clinical Measures for Improved Fracture Risk Assessment at the Human Femoral Neck. <i>Journal of Bone and Mineral Research</i> , 2016 , 31, 196-203 | 6.3 | 15 |
| 233 | Variability in reference point microindentation and recommendations for testing cortical bone: location, thickness and orientation heterogeneity. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 46, 292-304 | 4.1 | 13 |
| 232 | Tracking adipogenic differentiation of skeletal stem cells by label-free chemically selective imaging. <i>Chemical Science</i> , 2015 , 6, 7089-7096 | 9.4 | 17 |
| 231 | Skeletal Stem Cell Niche of the Bone Marrow. <i>Pancreatic Islet Biology</i> , 2015 , 245-279 | 0.4 | 1 |
| 230 | Bone Tissue Engineering. <i>Current Molecular Biology Reports</i> , 2015 , 1, 132-140 | 2 | 147 |
| 229 | Cold water cleaning of brain proteins, biofilm and bone - harnessing an ultrasonically activated stream. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 20574-9 | 3.6 | 22 |
| 228 | Characterization of human skeletal stem and bone cell populations using dielectrophoresis. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015 , 9, 162-8 | 4.4 | 27 |
| 227 | The scale-up of a tissue engineered porous hydroxyapatite polymer composite scaffold for use in bone repair: an ovine femoral condyle defect study. <i>Journal of Biomedical Materials Research - Part A</i> , 2015 , 103, 1346-56 | 5.4 | 10 |
| 226 | Chondrogenic potential of human articular chondrocytes and skeletal stem cells: a comparative study. <i>Journal of Biomaterials Applications</i> , 2015 , 29, 824-36 | 2.9 | 23 |
| 225 | Epigenetic regulation of interleukin-8, an inflammatory chemokine, in osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2015 , 23, 1946-54 | 6.2 | 52 |
| 224 | Regionally-derived cell populations and skeletal stem cells from human foetal femora exhibit specific osteochondral and multi-lineage differentiation capacity in vitro and ex vivo. <i>Stem Cell Research and Therapy</i> , 2015 , 6, 251 | 8.3 | 7 |
| 223 | In Vivo Assessment of Bone Regeneration in Alginate/Bone ECM Hydrogels with Incorporated Skeletal Stem Cells and Single Growth Factors. <i>PLoS ONE</i> , 2015 , 10, e0145080 | 3.7 | 53 |
| 222 | Maternal High Fat Diet Affects Offspring Vitamin K-Dependent Proteins Expression Levels. <i>PLoS ONE</i> , 2015 , 10, e0138730 | 3.7 | 5 |
| 221 | Angiogenic Potential of Human Neonatal Foreskin Stromal Cells in the Chick Embryo Chorioallantoic Membrane Model. <i>Stem Cells International</i> , 2015 , 2015, 257019 | 5 | 4 |
| 220 | Cartilage and Bone Regeneration 2015 , 529-582 | | 6 |
| 219 | Variability in reference point microindentation and recommendations for testing cortical bone: maximum load, sample orientation, mode of use, sample preparation and measurement spacing. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2015 , 42, 311-24 | 4.1 | 15 |

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|-----|---|------|-----|
| 218 | The effects of 1 α ,25-dihydroxyvitamin D3 and transforming growth factor- β on bone development in an ex vivo organotypic culture system of embryonic chick femora. <i>PLoS ONE</i> , 2015 , 10, e0121653 | 3.7 | 7 |
| 217 | Harnessing nanotopography and integrin-matrix interactions to influence stem cell fate. <i>Nature Materials</i> , 2014 , 13, 558-69 | 27 | 736 |
| 216 | From Mathematical Models to Clinical Reality 2014 , 25-39 | | |
| 215 | Application of an acoustofluidic perfusion bioreactor for cartilage tissue engineering. <i>Lab on A Chip</i> , 2014 , 14, 4475-85 | 7.2 | 67 |
| 214 | Concise review: bridging the gap: bone regeneration using skeletal stem cell-based strategies - where are we now?. <i>Stem Cells</i> , 2014 , 32, 35-44 | 5.8 | 93 |
| 213 | Nanotopographical effects on mesenchymal stem cell morphology and phenotype. <i>Journal of Cellular Biochemistry</i> , 2014 , 115, 380-90 | 4.7 | 86 |
| 212 | Bone and metal: an orthopaedic perspective on osseointegration of metals. <i>Acta Biomaterialia</i> , 2014 , 10, 4043-57 | 10.8 | 141 |
| 211 | Evaluation of skeletal tissue repair, part 1: assessment of novel growth-factor-releasing hydrogels in an ex vivo chick femur defect model. <i>Acta Biomaterialia</i> , 2014 , 10, 4186-96 | 10.8 | 46 |
| 210 | Evaluation of skeletal tissue repair, part 2: enhancement of skeletal tissue repair through dual-growth-factor-releasing hydrogels within an ex vivo chick femur defect model. <i>Acta Biomaterialia</i> , 2014 , 10, 4197-205 | 10.8 | 43 |
| 209 | Prospective isolation of human bone marrow stromal cell subsets: A comparative study between Stro-1-, CD146- and CD105-enriched populations. <i>Journal of Tissue Engineering</i> , 2014 , 5, 2041731414551763 | 7.5 | 32 |
| 208 | MicroRNA-146a regulates human foetal femur derived skeletal stem cell differentiation by down-regulating SMAD2 and SMAD3. <i>PLoS ONE</i> , 2014 , 9, e98063 | 3.7 | 39 |
| 207 | Hope versus hype: what can additive manufacturing realistically offer trauma and orthopedic surgery?. <i>Regenerative Medicine</i> , 2014 , 9, 535-49 | 2.5 | 55 |
| 206 | From bench to clinic and back: skeletal stem cells and impaction bone grafting for regeneration of bone defects. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014 , 8, 779-86 | 4.4 | 12 |
| 205 | Effects of hypoxia on anabolic and catabolic gene expression and DNA methylation in OA chondrocytes. <i>BMC Musculoskeletal Disorders</i> , 2014 , 15, 431 | 2.8 | 10 |
| 204 | Maternal high-fat diet and offspring expression levels of vitamin K-dependent proteins. <i>Endocrinology</i> , 2014 , 155, 4749-61 | 4.8 | 7 |
| 203 | A comparison of polymer and polymer-hydroxyapatite composite tissue engineered scaffolds for use in bone regeneration. An in vitro and in vivo study. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 2613-24 | 5.4 | 40 |
| 202 | The effect of oxygen tension on human articular chondrocyte matrix synthesis: integration of experimental and computational approaches. <i>Biotechnology and Bioengineering</i> , 2014 , 111, 1876-85 | 4.9 | 22 |
| 201 | Centre for human development, stem cells & regeneration. <i>Regenerative Medicine</i> , 2014 , 9, 563-7 | 2.5 | 1 |

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|-----|---|------|-----|
| 200 | Association of reduced type IX collagen gene expression in human osteoarthritic chondrocytes with epigenetic silencing by DNA hypermethylation. <i>Arthritis and Rheumatology</i> , 2014 , 66, 3040-51 | 9.5 | 53 |
| 199 | Tantalum trabecular metal - addition of human skeletal cells to enhance bone implant interface strength and clinical application. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014 , 8, 304-13 | 4.4 | 11 |
| 198 | Osteogenic lineage restriction by osteoprogenitors cultured on nanometric grooved surfaces: the role of focal adhesion maturation. <i>Acta Biomaterialia</i> , 2014 , 10, 651-60 | 10.8 | 51 |
| 197 | Tissue engineered bone using select growth factors: A comprehensive review of animal studies and clinical translation studies in man. <i>European Cells and Materials</i> , 2014 , 28, 166-207; discussion 207-8 | 4.3 | 124 |
| 196 | The osteoarthritic niche and modulation of skeletal stem cell function for regenerative medicine. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2013 , 7, 589-608 | 4.4 | 2 |
| 195 | Quality of life in sarcopenia and frailty. <i>Calcified Tissue International</i> , 2013 , 93, 101-20 | 3.9 | 235 |
| 194 | A genomics approach in determining nanotopographical effects on MSC phenotype. <i>Biomaterials</i> , 2013 , 34, 2177-84 | 15.6 | 53 |
| 193 | Nanotopographical cues augment mesenchymal differentiation of human embryonic stem cells. <i>Small</i> , 2013 , 9, 2140-51 | 11 | 73 |
| 192 | A tissue engineering strategy for the treatment of avascular necrosis of the femoral head. <i>Journal of the Royal College of Surgeons of Edinburgh</i> , 2013 , 11, 319-25 | 2.5 | 13 |
| 191 | Assessing the potential of colony morphology for dissecting the CFU-F population from human bone marrow stromal cells. <i>Cell and Tissue Research</i> , 2013 , 352, 237-47 | 4.2 | 26 |
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