Scott J Roberts

List of Publications by Year
in descending order

45 papers	2,462 citations	236925 25 h-index	233421 45 g-index
45 all docs	45 docs citations	45 times ranked	3842 citing authors

#	Article	IF	Citations
1	Tissue engineering: strategies, stem cells and scaffolds. Journal of Anatomy, 2008, 213, 66-72.	1.5	417
2	Uncovering the periosteum for skeletal regeneration: The stem cell that lies beneath. Bone, 2015, 70, 10-18.	2.9	207
3	Differentiation Potential of Human Postnatal Mesenchymal Stem Cells, Mesoangioblasts, and Multipotent Adult Progenitor Cells Reflected in Their Transcriptome and Partially Influenced by the Culture Conditions. Stem Cells, 2011, 29, 871-882.	3.2	155
4	Functional Involvement of PHOSPHO1 in Matrix Vesicle-Mediated Skeletal Mineralization. Journal of Bone and Mineral Research, 2007, 22, 617-627.	2.8	153
5	Human PHOSPHO1 exhibits high specific phosphoethanolamine and phosphocholine phosphatase activities. Biochemical Journal, 2004, 382, 59-65.	3.7	111
6	Engineering Vascularized Bone: Osteogenic and Proangiogenic Potential of Murine Periosteal Cells. Stem Cells, 2012, 30, 2460-2471.	3.2	110
7	Probing the Osteoinductive Effect of Calcium Phosphate by Using an <i>In Vitro</i> Biomimetic Model. Tissue Engineering - Part A, 2011, 17, 1083-1097.	3.1	104
8	Mechanisms of ectopic bone formation by human osteoprogenitor cells on CaP biomaterial carriers. Biomaterials, 2012, 33, 3127-3142.	11.4	103
9	The combined bone forming capacity of human periosteal derived cells and calcium phosphates. Biomaterials, 2011, 32, 4393-4405.	11.4	100
10	The presence of PHOSPHO1 in matrix vesicles and its developmental expression prior to skeletal mineralization. Bone, 2006, 39, 1000-1007.	2.9	79
11	Novel actions of sclerostin on bone. Journal of Molecular Endocrinology, 2019, 62, R167-R185.	2.5	70
12	Ectopic bone formation by 3D porous calcium phosphate-Ti6Al4V hybrids produced by perfusion electrodeposition. Biomaterials, 2012, 33, 4044-4058.	11.4	64
13	¹⁸F-FDG Labeling of Mesenchymal Stem Cells and Multipotent Adult Progenitor Cells for PET Imaging: Effects on Ultrastructure and Differentiation Capacity. Journal of Nuclear Medicine, 2013, 54, 447-454.	5.0	60
14	Mapping calcium phosphate activated gene networks as a strategy forÂtargeted osteoinduction of human progenitors. Biomaterials, 2013, 34, 4612-4621.	11.4	49
15	Early BMP, Wnt and Ca2+/PKC pathway activation predicts the bone forming capacity of periosteal cells in combination with calcium phosphates. Biomaterials, 2016, 86, 106-118.	11.4	49
16	Enhancement of osteogenic gene expression for the differentiation of human periosteal derived cells. Stem Cell Research, 2011, 7, 137-144.	0.7	42
17	Clinical applications of musculoskeletal tissue engineering. British Medical Bulletin, 2008, 86, 7-22.	6.9	39
18	Human pluripotent stem cell-derived cartilaginous organoids promote scaffold-free healing of critical size long bone defects. Stem Cell Research and Therapy, 2021, 12, 513.	5.5	37

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19	A Semi-Autonomous Model of Endochondral Ossification for Developmental Tissue Engineering. Tissue Engineering - Part A, 2012, 18, 1334-1343.	3.1	35
20	Combinatorial Analysis of Growth Factors Reveals the Contribution of Bone Morphogenetic Proteins to Chondrogenic Differentiation of Human Periosteal Cells. Tissue Engineering - Part C: Methods, 2016, 22, 473-486.	2.1	35
21	Probing the substrate specificities of human PHOSPHO1 and PHOSPHO2. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1752, 73-82.	2.3	32
22	Validation of a PicoGreen-Based DNA Quantification Integrated in an RNA Extraction Method for Two-Dimensional and Three-Dimensional Cell Cultures. Tissue Engineering - Part C: Methods, 2012, 18, 444-452.	2.1	32
23	Optimization of Multimodal Imaging of Mesenchymal Stem Cells Using the Human Sodium Iodide Symporter for PET and Cerenkov Luminescence Imaging. PLoS ONE, 2014, 9, e94833.	2.5	32
24	Dual neutralisation of IL-17F and IL-17A with bimekizumab blocks inflammation-driven osteogenic differentiation of human periosteal cells. RMD Open, 2020, 6, e001306.	3.8	32
25	Humanized Culture of Periosteal Progenitors in Allogeneic Serum Enhances Osteogenic Differentiation and In Vivo Bone Formation. Stem Cells Translational Medicine, 2014, 3, 218-228.	3.3	27
26	Relating the Chondrocyte Gene Network to Growth Plate Morphology: From Genes to Phenotype. PLoS ONE, 2012, 7, e34729.	2.5	24
27	Fluorescent oxygen sensitive microbead incorporation for measuring oxygen tension in cell aggregates. Biomaterials, 2013, 34, 922-929.	11.4	24
28	Multi-Level Factorial Analysis of Ca²⁺/P_i Supplementation as Bio-Instructive Media for <i>In Vitro</i> Biomimetic Engineering of Three-Dimensional Osteogenic Hybrids. Tissue Engineering - Part C: Methods, 2012, 18, 90-103.	2.1	23
29	Controlled embryoid body formation via surface modification and avidinâ€“biotin cross-linking. Cytotechnology, 2009, 61, 135-144.	1.6	22
30	Critical illness-related bone loss is associated with osteoclastic and angiogenic abnormalities. Journal of Bone and Mineral Research, 2012, 27, 1541-1552.	2.8	20
31	Engineering Embryonic Stem-Cell Aggregation Allows an Enhanced Osteogenic Differentiation In Vitro. Tissue Engineering - Part C: Methods, 2010, 16, 583-595.	2.1	19
32	Manipulation of live mouse embryonic stem cells using holographic optical tweezers. Journal of Modern Optics, 2009, 56, 448-452.	1.3	18
33	Folic Acid Exposure Rescues Spina Bifida Aperta Phenotypes in Human Induced Pluripotent Stem Cell Model. Scientific Reports, 2018, 8, 2942.	3.3	18
34	ZJU-6, a novel derivative of Erianin, shows potent anti-tubulin polymerisation and anti-angiogenic activities. Investigational New Drugs, 2012, 30, 1899-1907.	2.6	16
35	Sox9 Reprogrammed Dermal Fibroblasts Undergo Hypertrophic Differentiation In Vitro and Trigger Endochondral Ossification In Vivo. Cellular Reprogramming, 2014, 16, 29-39.	0.9	16
36	Anabolic Strategies to Augment Bone Fracture Healing. Current Osteoporosis Reports, 2018, 16, 289-298.	3.6	15

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37	Decellularized Cartilage Directs Chondrogenic Differentiation: Creation of a Fracture Callus Mimetic. Tissue Engineering - Part A, 2018, 24, 1364-1376.	3.1	15
38	From skeletal development to the creation of pluripotent stem cell-derived bone-forming progenitors. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170218.	4.0	11
39	Assay design considerations for use of affinity aptamer amplification in ultra-sensitive protein assays using capillary electrophoresis. Analytical Methods, 2011, 3, 2156.	2.7	10
40	Identification of a novel class of mammalian phosphoinositol-specific phospholipase C enzymes. International Journal of Molecular Medicine, 2005, 15, 117.	4.0	9
41	Mapping human serumâ€"induced gene networks as a basis for the creation of biomimetic periosteum for bone repair. Cytotherapy, 2020, 22, 424-435.	0.7	7
42	Biomimetic strategies for fracture repair: Engineering the cell microenvironment for directed tissue formation. Journal of Tissue Engineering, 2017, 8, 204173141770479.	5.5	6
43	Close to the bone â€" in search of the skeletal stem cell. Nature Reviews Rheumatology, 2018, 14, 687-688.	8.0	6
44	Identification of a novel splice variant of the haloacid dehalogenase: PHOSPHO1. Biochemical and Biophysical Research Communications, 2008, 371, 872-876.	2.1	5
45	Reprogramming bone progenitor identity and potency through control of collagen density and oxygen tension. IScience, 2022, 25, 104059.	4.1	4