Alain Guignandon

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2751798/publications.pdf

Version: 2024-02-01

48	2,582	236912	254170
papers	citations	25 h-index	43 g-index

50	50	50	3247
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effects of long-term microgravity exposure on cancellous and cortical weight-bearing bones of cosmonauts. Lancet, The, 2000, 355, 1607-1611.	13.7	641
2	Mechanical Loading Down-Regulates Peroxisome Proliferator-Activated Receptor Î³ in Bone Marrow Stromal Cells and Favors Osteoblastogenesis at the Expense of Adipogenesis. Endocrinology, 2007, 148, 2553-2562.	2.8	281
3	Curvotaxis directs cell migration through cell-scale curvature landscapes. Nature Communications, 2018, 9, 3995.	12.8	190
4	Mechanical Strain on Osteoblasts Activates Autophosphorylation of Focal Adhesion Kinase and Proline-rich Tyrosine Kinase 2 Tyrosine Sites Involved in ERK Activation. Journal of Biological Chemistry, 2004, 279, 30588-30599.	3.4	166
5	The effect of RGD density on osteoblast and endothelial cell behavior on RGD-grafted polyethylene terephthalate surfaces. Biomaterials, 2009, 30, 711-720.	11.4	150
6	Femtosecond laser nano/micro patterning of titanium influences mesenchymal stem cell adhesion and commitment. Biomedical Materials (Bristol), 2015, 10, 055002.	3.3	102
7	Intermittent PTH(1â€“84) is osteoanabolic but not osteoangiogenic and relocates bone marrow blood vessels closer to bone-forming sites. Journal of Bone and Mineral Research, 2011, 26, 2583-2596.	2.8	96
8	Ex Vivo Bone Formation in Bovine Trabecular Bone Cultured in a Dynamic 3D Bioreactor Is Enhanced by Compressive Mechanical Strain. Tissue Engineering - Part A, 2008, 14, 117-126.	3.1	69
9	Effects of Intermittent or Continuous Gravitational Stresses on Cellâ€“Matrix Adhesion: Quantitative Analysis of Focal Contacts in Osteoblastic ROS 17/2.8 Cells. Experimental Cell Research, 1997, 236, 66-75.	2.6	56
10	Evidence for Ca2+â€•and ATPâ€sensitive peripheral channels in nuclear pore complexes. FASEB Journal, 2001, 15, 2036-2038.	0.5	56
11	Physiological strains induce differentiation in human osteoblasts cultured on orthopaedic biomaterial. Biomaterials, 2003, 24, 3139-3151.	11.4	50
12	Mechanical signals modulated vascular endothelial growth factor-A (VEGF-A) alternative splicing in osteoblastic cells through actin polymerisation. Bone, 2008, 42, 1092-1101.	2.9	48
13	The effect of dual frequency cyclic compression on matrix deposition by osteoblast-like cells grown in 3D scaffolds and on modulation of VEGF variant expression. Biomaterials, 2009, 30, 3279-3288.	11.4	46
14	Extracellular Matrix Produced by Osteoblasts Cultured Under Low-Magnitude, High-Frequency Stimulation is Favourable to Osteogenic Differentiation of Mesenchymal Stem Cells. Calcified Tissue International, 2010, 87, 351-364.	3.1	44
15	Reduction by strontium of the bone marrow adiposity in mice and repression of the adipogenic commitment of multipotent C3H10T1/2 cells. Bone, 2012, 50, 499-509.	2.9	43
16	Bone sialoprotein deficiency impairs osteoclastogenesis and mineral resorption in vitro. Journal of Bone and Mineral Research, 2010, 25, 2669-2679.	2.8	39
17	TNAP stimulates vascular smooth muscle cell trans-differentiation into chondrocytes through calcium deposition and BMP-2 activation: Possible implication in atherosclerotic plaque stability. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 643-653.	3.8	38
18	Shape Changes of Osteoblastic Cells Under Gravitational Variations during Parabolic Flight. Relationship with PGE2 Synthesis.. Cell Structure and Function, 1995, 20, 369-375.	1.1	37

#	Article	IF	Citations
19	Ultrafast Laser Processing of Nanostructured Patterns for the Control of Cell Adhesion and Migration on Titanium Alloy. Nanomaterials, 2020, 10, 864.	4.1	35
20	RhoGTPases as Key Players in Mammalian Cell Adaptation to Microgravity. BioMed Research International, 2015, 2015, 1-17.	1.9	34
21	Demonstration of feasibility of automated osteoblastic line culture in space flight. Bone, 1997, 20, 109-116.	2.9	32
22	Cyclic strain promotes shuttling of PYK2/Hic-5 complex from focal contacts in osteoblast-like cells. Biochemical and Biophysical Research Communications, 2006, 343, 407-414.	2.1	30
23	Rac1 GTPase silencing counteracts microgravityâ€induced effects on osteoblastic cells. FASEB Journal, 2014, 28, 4077-4087.	0.5	27
24	Stimulation of Bone Repair with Ultrasound. Advances in Experimental Medicine and Biology, 2016, 880, 385-427.	1.6	27
25	Modulation of the responses of human osteoblast-like cells to physiologic mechanical strains by biomaterial surfaces. Biomaterials, 2005, 26, 4249-4257.	11.4	26
26	Effects of chronic hypergravity: from adaptive to deleterious responses in growing mouse skeleton. Journal of Applied Physiology, 2015, 119, 908-917.	2.5	22
27	Quantitation of cell-matrix adhesion using confocal image analysis of focal contact associated proteins and interference reflection microscopy. , 1997, 28, 298-304.		21
28	High-acceleration whole body vibration stimulates cortical bone accrual and increases bone mineral content in growing mice. Journal of Biomechanics, 2016, 49, 1899-1908.	2.1	18
29	Focal Contact Clustering in Osteoblastic Cells under Mechanical Stresses: Microgravity and Cyclic Deformation. Cell Communication and Adhesion, 2003, 10, 69-83.	1.0	17
30	Simultaneous 3D Imaging of Bone and Vessel Microstructure in a Rat Model. IEEE Transactions on Nuclear Science, 2011, 58, 139-145.	2.0	17
31	Laser-Based Hybrid Manufacturing of Endosseous Implants: Optimized Titanium Surfaces for Enhancing Osteogenic Differentiation of Human Mesenchymal Stem Cells. ACS Biomaterials Science and Engineering, 2019, 5, 4376-4385.	5.2	16
32	RGDS and DGEA-induced [Ca2+]i signalling in human dermal fibroblasts. Biochimica Et Biophysica Acta - Molecular Cell Research, 2005, 1746, 28-37.	4.1	14
33	Osteocytes and Weightlessness. Current Osteoporosis Reports, 2021, 19, 626-636.	3.6	14
34	Polarization of Femtosecond Laser for Titanium Alloy Nanopatterning Influences Osteoblastic Differentiation. Nanomaterials, 2022, 12, 1619.	4.1	13
35	Focal contacts organization in osteoblastic cells under microgravity and cyclic deformation conditions. Advances in Space Research, 2003, 32, 1561-1567.	2.6	10
36	Apatite content of collagen materials dose-dependently increases pre-osteoblastic cell deposition of a cement line-like matrix. Bone, 2010, 47, 23-33.	2.9	10

#	Article	IF	Citations
37	Impact of Peptide Micropatterning on Endothelial Cell Actin Remodeling for Cell Alignment under Shear Stress. Macromolecular Bioscience, 2012, 12, 1648-1659.	4.1	10
38	RhoGTPase stimulation is associated with strontium chloride treatment to counter simulated microgravity-induced changes in multipotent cell commitment. Npj Microgravity, 2017, 3, 7.	3.7	10
39	Functionalization of matrices by cyclically stretched osteoblasts through matrix targeting of VEGF. Biomaterials, 2010, 31, 6477-6484.	11.4	9
40	Plasticity of osteoprogenitor cells. Joint Bone Spine, 2007, 74, 536-539.	1.6	6
41	Regulation of SMC traction forces in human aortic thoracic aneurysms. Biomechanics and Modeling in Mechanobiology, 2021, 20, 717-731.	2.8	6
42	Multiparametric investigation of non functionalized-AGuIX nanoparticles in 3D human airway epithelium models demonstrates preferential targeting of tumor cells. Journal of Nanobiotechnology, 2020, 18, 129.	9.1	3
43	Focal Contact Clustering in Osteoblastic Cells under Mechanical Stresses: Microgravity and Cyclic Deformation. Cell Communication and Adhesion, 2003, 10, 69-83.	1.0	2
44	PlasticitÃ© desÂcellules ostÃ©oprogÃ©nitrices. Revue Du Rhumatisme (Edition Francaise), 2007, 74, 934-937.	0.0	0
45	Simultaneous 3D imaging of bone and vessel microstructure in a rat model: Measurement of vascular-trabecular interdistance. , 2009, , .		0
46	Autophagy and differentiation of bone-forming cells. IBMS BoneKEy, 2013, 10, .	0.0	0
47	Ultrafast laser processing of nanostructured patterns for the control of cell adhesion and migration on titanium alloy. , 2021, , .		0
48	Regulation of adipo- and osteo-genesis of multipotent cells by strontium through stimulation of small Rho GTPases: A 3D bioreactor study. Bone Abstracts, 0, , .	0.0	0