Donatella Granchi

List of Publications by Citations

118 papers	4,299 citations	38 h-index	60 g-index
125 ext. papers	4,658 ext. citations	7.6 avg, IF	4.91 L-index

#	Paper	IF	Citations
118	Bone regeneration and stem cells. *Journal of Cellular and Molecular Medicine*, **2011**, 15, 718-46	5.6	254
117	Osteoblast growth and function in porous poly epsilon -caprolactone matrices for bone repair: a preliminary study. *Biomaterials*, **2003**, 24, 3815-24	15.6	205
116	MicroRNA expression profiling of human bone marrow mesenchymal stem cells during osteogenic differentiation reveals Osterix regulation by miR-31. *Gene*, **2013**, 527, 321-31	3.8	148
115	Ion release in patients with metal-on-metal hip bearings in total joint replacement: a comparison with metal-on-polyethylene bearings. *Journal of Biomedical Materials Research Part B*, **2002**, 63, 467-74		147
114	Sensitivity to implant materials in patients with total knee arthroplasties. *Biomaterials*, **2008**, 29, 1494-500	15.6	134
113	Cell culture methods for testing biocompatibility. *Clinical Materials*, **1994**, 15, 173-90		128
112	Metal hypersensitivity testing in patients undergoing joint replacement: a systematic review. *Journal of Bone and Joint Surgery: British Volume*, **2012**, 94, 1126-34		118
111	Biocompatibility of poly(D,L-lactide-co-glycolide) nanoparticles conjugated with alendronate. *Biomaterials*, **2008**, 29, 1400-11	15.6	111
110	Serum concentrations of zinc and selenium in elderly people: results in healthy nonagenarians/centenarians. *Experimental Gerontology*, **2001**, 36, 327-39	4.5	104
109	Role of mesenchymal stem cells in osteosarcoma and metabolic reprogramming of tumor cells. *Oncotarget*, **2014**, 5, 7575-88	3.3	99
108	Cytokine release in mononuclear cells of patients with Co-Cr hip prosthesis. *Biomaterials*, **1999**, 20, 1079-86	15.6	95
107	Cytokines and osteolysis around total hip prostheses. *Cytokine*, **2000**, 12, 1575-9	4	92
106	Sensitivity to implant materials in patients undergoing total hip replacement. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2006**, 77, 257-64	3.5	89
105	Application of a combination of neutral red and amido black staining for rapid, reliable cytotoxicity testing of biomaterials. *Biomaterials*, **1996**, 17, 1259-1264	15.6	75
104	Hypoxia enhances proliferation and stemness of human adipose-derived mesenchymal stem cells. *Cytotechnology*, **2015**, 67, 1073-84	2.2	73
103	Silicone breast implants: the role of immune system on capsular contracture formation. *Journal of Biomedical Materials Research Part B*, **1995**, 29, 197-202		68
102	Molecular basis of osteoclastogenesis induced by osteoblasts exposed to wear particles. *Biomaterials*, **2005**, 26, 2371-9	15.6	65

101	Cell death induced by metal ions: necrosis or apoptosis?. *Journal of Materials Science: Materials in Medicine*, **1998**, 9, 31-7	4.5	63
100	In vitro testing of the potential for orthopedic bone cements to cause apoptosis of osteoblast-like cells. *Biomaterials*, **2002**, 23, 617-27	15.6	59
99	Bone-resorbing cytokines in serum of patients with aseptic loosening of hip prostheses. *Journal of Bone and Joint Surgery: British Volume*, **1998**, 80, 912-7		56
98	V-ATPase is a candidate therapeutic target for Ewing sarcoma. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2013**, 1832, 1105-16	6.9	53
97	The combined use of mesenchymal stromal cells and scaffolds for bone repair. *Current Pharmaceutical Design*, **2012**, 18, 1796-820	3.3	53
96	The influence of alumina and ultra-high molecular weight polyethylene particles on osteoblast-osteoclast cooperation. *Biomaterials*, **2004**, 25, 4037-45	15.6	52
95	Assessment of metal extract toxicity on human lymphocytes cultured in vitro. *Journal of Biomedical Materials Research Part B*, **1996**, 31, 183-91		52
94	A novel biomaterial for osteotropic drug nanocarriers: synthesis and biocompatibility evaluation of a PLGA-ALE conjugate. *Nanomedicine*, **2009**, 4, 161-75	5.6	51
93	Adhesive protein expression on endothelial cells after contact in vitro with polyethylene terephthalate coated with pyrolytic carbon. *Biomaterials*, **1995**, 16, 1223-7	15.6	50
92	Gene expression patterns related to osteogenic differentiation of bone marrow-derived mesenchymal stem cells during ex vivo expansion. *Tissue Engineering - Part C: Methods*, **2010**, 16, 511-24	2.9	48
91	Preparation method and growth factor content of platelet concentrate influence the osteogenic differentiation of bone marrow stromal cells. *Cytotherapy*, **2013**, 15, 830-9	4.8	47
90	In vitro blockade of receptor activator of nuclear factor-kappaB ligand prevents osteoclastogenesis induced by neuroblastoma cells. *International Journal of Cancer*, **2004**, 111, 829-38	7.5	44
89	Expression of adhesion molecules on endothelial cells after contact with knitted Dacron. *Biomaterials*, **1997**, 18, 489-94	15.6	43
88	Fluorescent microplate assay for respiratory burst of PMNs challenged in vitro with orthopedic metals. *Journal of Biomedical Materials Research Part B*, **1998**, 41, 455-60		41
87	Asfotase- improves bone growth, mineralization and strength in mouse models of neurofibromatosis type-1. *Nature Medicine*, **2014**, 20, 904-10	50.5	40
86	Expression of cell adhesion receptors in human osteoblasts cultured on biofunctionalized poly-(epsilon-caprolactone) surfaces. *Biomaterials*, **2007**, 28, 3668-78	15.6	40
85	Apoptosis in peri-implant tissue. *Biomaterials*, **2000**, 21, 1393-8	15.6	40
84	Serum levels of osteoprotegerin and receptor activator of nuclear factor-kappaB ligand as markers of periprosthetic osteolysis. *Journal of Bone and Joint Surgery - Series A*, **2006**, 88, 1501-9	5.6	39

83	Expression of the CD69 activation antigen on lymphocytes of patients with hip prosthesis. *Biomaterials*, **2000**, 21, 2059-65	15.6	39
82	In vitro effects of bone cements on the cell cycle of osteoblast-like cells. *Biomaterials*, **1995**, 16, 1187-92	15.6	39
81	Orthoplastic surgical collaboration is required to optimise the treatment of severe limb injuries: A multi-centre, prospective cohort study. *Journal of Plastic, Reconstructive and Aesthetic Surgery*, **2017**, 70, 715-722	1.7	38
80	Impairment of lysosomal activity as a therapeutic modality targeting cancer stem cells of embryonal rhabdomyosarcoma cell line RD. *PLoS ONE*, **2014**, 9, e110340	3.7	37
79	The natural compound Alizarin as an osteotropic drug for the treatment of bone tumors. *Journal of Orthopaedic Research*, **2012**, 30, 1486-92	3.8	36
78	Role of PLLA plasma surface modification in the interaction with human marrow stromal cells. *Journal of Applied Polymer Science*, **2009**, 114, 3602-3611	2.9	36
77	Mesenchymal progenitors expressing TRAIL induce apoptosis in sarcomas. *Stem Cells*, **2015**, 33, 859-69	5.8	35
76	High-performance liquid chromatography assay of N,N-dimethyl-p-toluidine released from bone cements: evidence for toxicity. *Biomaterials*, **1997**, 18, 243-6	15.6	35
75	Cytotoxicity testing of materials with limited in vivo exposure is affected by the duration of cell-material contact. *Journal of Biomedical Materials Research Part B*, **1998**, 42, 485-90		35
74	Enhancing osteoconduction of PLLA-based nanocomposite scaffolds for bone regeneration using different biomimetic signals to MSCs. *International Journal of Molecular Sciences*, **2012**, 13, 2439-58	6.3	33
73	Platelet and coagulation factor variations induced in vitro by polyethylene terephthalate (Dacron) coated with pyrolytic carbon. *Biomaterials*, **1995**, 16, 973-6	15.6	33
72	Ex vivo observation of human intervertebral disc tissue and cells isolated from degenerated intervertebral discs. *European Spine Journal*, **2012**, 21 Suppl 1, S10-9	2.7	32
71	Evaluation of osteoblast-like cell response to Proroot MTA (mineral trioxide aggregate) cement. *Journal of Materials Science: Materials in Medicine*, **2004**, 15, 167-73	4.5	30
70	Endothelial cells incubated with platelet-rich plasma express PDGF-B and ICAM-1 and induce bone marrow stromal cell migration. *Journal of Orthopaedic Research*, **2009**, 27, 1493-8	3.8	29
69	Biological effects of metal degradation in hip arthroplasties. *Critical Reviews in Toxicology*, **2018**, 48, 170-193	5.7	29
68	Effects of chromium extract on cytokine release by mononuclear cells. *Biomaterials*, **1998**, 19, 283-91	15.6	28
67	Bone cement extracts modulate the osteoprotegerin/osteoprotegerin-ligand expression in MG63 osteoblast-like cells. *Biomaterials*, **2002**, 23, 2359-65	15.6	28
66	Association of two gene polymorphisms with osteoarthritis secondary to hip dysplasia. *Clinical Orthopaedics and Related Research*, **2002**, 108-17	2.2	28

65	Adhesive protein expression on human endothelial cells after in vitro contact with woven Dacron. *Biomaterials*, **1998**, 19, 93-8	15.6	27
64	Sister chromatid exchanges and ion release in patients wearing fracture fixation devices. *Journal of Biomedical Materials Research Part B*, **2000**, 50, 21-6		27
63	Endodontic cements induce alterations in the cell cycle of in vitro cultured osteoblasts. *Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics*, **1995**, 79, 359-66		27
62	Prolonged exposure to hypoxic milieu improves the osteogenic potential of adipose derived stem cells. *Journal of Cellular Biochemistry*, **2015**, 116, 1442-53	4.7	26
61	Effects of hypoxia on osteogenic differentiation of mesenchymal stromal cells used as a cell therapy for avascular necrosis of the femoral head. *Cytotherapy*, **2016**, 18, 1087-99	4.8	25
60	Establishment and characterization of a primitive neuroectodermal tumor of bone continuous cell line (LAP-35). *International Journal of Cell Cloning*, **1990**, 8, 409-24		24
59	Effects of osteogenic differentiation inducers on in vitro expanded adult mesenchymal stromal cells. *International Journal of Artificial Organs*, **2011**, 34, 998-1011	1.9	23
58	The effect of poly(d,l-lactide-co-glycolide)-alendronate conjugate nanoparticles on human osteoclast precursors. *Journal of Biomaterials Science, Polymer Edition*, **2012**, 23, 1285-300	3.5	23
57	Cytokine production and adhesive protein expression by endothelial cells after contact with polyethylene terephthalate. *Biomaterials*, **1996**, 17, 2071-6	15.6	23
56	Neuroblastoma and bone metastases: clinical significance and prognostic value of Dickkopf 1 plasma levels. *Bone*, **2011**, 48, 152-9	4.7	22
55	Osteogenic properties of late adherent subpopulations of human bone marrow stromal cells. *Histochemistry and Cell Biology*, **2009**, 132, 547-57	2.4	22
54	Role of Citrate in Pathophysiology and Medical Management of Bone Diseases. *Nutrients*, **2019**, 11,	6.7	21
53	In vitro cytokine production by mononuclear cells exposed to bone cement extracts. *Biomaterials*, **2000**, 21, 1789-95	15.6	21
52	Established cell lines and primary cultures in testing medical devices in vitro. *Toxicology in Vitro*, **1999**, 13, 801-10	3.6	21
51	Platelet release of transforming growth factor-beta and beta-thromboglobulin after in vitro contact with acrylic bone cements. *Biomaterials*, **2002**, 23, 1479-84	15.6	20
50	Biological basis for the use of autologous bone marrow stromal cells in the treatment of congenital pseudarthrosis of the tibia. *Bone*, **2010**, 46, 780-8	4.7	19
49	Paracrine inhibition of osteoblast differentiation induced by neuroblastoma cells. *International Journal of Cancer*, **2008**, 123, 1526-35	7.5	19
48	Systemic cross-linked N-terminal telopeptide and procollagen I C-terminal extension peptide as markers of bone turnover after total hip arthroplasty. *Journal of Bone and Joint Surgery: British Volume*, **2005**, 87, 571-6		19

47	Plasma levels of receptor activator of nuclear factor-kappaB ligand and osteoprotegerin in patients with neuroblastoma. *International Journal of Cancer*, **2006**, 119, 146-51	7.5	17
46	A regenerative approach for bone repair in congenital pseudarthrosis of the tibia associated or not associated with type 1 neurofibromatosis: correlation between laboratory findings and clinical outcome. *Cytotherapy*, **2012**, 14, 306-14	4.8	16
45	Low toxicity and unprecedented anti-osteoclast activity of a simple sulfur-containing gem-bisphosphonate: a comparative study. *European Journal of Medicinal Chemistry*, **2013**, 65, 448-55	6.8	16
44	Circulating levels of VCAM and MMP-2 may help identify patients with more aggressive prostate cancer. *Current Cancer Drug Targets*, **2008**, 8, 199-206	2.8	16
43	Nitric oxide synthase in tissues around failed hip prostheses. *Biomaterials*, **2002**, 23, 4833-8	15.6	16
42	Synthesis, characterization and biological activity of hydroxyl-bisphosphonic analogs of bile acids. *European Journal of Medicinal Chemistry*, **2012**, 52, 221-9	6.8	15
41	Increased osteoclast activity is associated with aggressiveness of osteosarcoma **1992**, 33, 1231		15
40	Comparative "in vitro" evaluation of the antiresorptive activity residing in four Ayurvedic medicinal plants. Hemidesmus indicus emerges for its potential in the treatment of bone loss diseases. *Journal of Ethnopharmacology*, **2014**, 154, 462-70	5	14
39	In vitro assessment of phagocytosis of bovine collagen by human monocytes/macrophages using a spectrophotometric method. *Biomaterials*, **1996**, 17, 1703-7	15.6	14
38	Potassium citrate prevents increased osteoclastogenesis resulting from acidic conditions: Implication for the treatment of postmenopausal bone loss. *PLoS ONE*, **2017**, 12, e0181230	3.7	14
37	X-ray diffraction of bone at the interface with hydroxyapatite-coated versus uncoated metal implants. *Journal of Materials Science: Materials in Medicine*, **1998**, 9, 109-15	4.5	13
36	Cytokine expression in vitro by cultured human endothelial cells in contact with polyethylene terephthalate coated with pyrolytic carbon and collagen. *Journal of Biomedical Materials Research Part B*, **2000**, 50, 483-9		13
35	Modulation of pro- and anti-apoptotic genes in lymphocytes exposed to bone cements. *Journal of Biomaterials Science, Polymer Edition*, **2000**, 11, 633-46	3.5	13
34	Effects of bone cement extracts on the cell-mediated immune response. *Biomaterials*, **2002**, 23, 1033-41	15.6	12
33	Sister chromatid exchange in patients with joint prostheses. *Journal of Arthroplasty*, **2000**, 15, 772-7	4.4	12
32	Alpha-lipoic Acid After Median Nerve Decompression at the Carpal Tunnel: A Randomized Controlled Trial. *Journal of Hand Surgery*, **2017**, 42, 236-242	2.6	11
31	Serum levels of fibroblast growth factor 2 in children with orthopedic diseases: potential role in predicting bone healing. *Journal of Orthopaedic Research*, **2013**, 31, 249-56	3.8	11
30	IGF2 derived from SH-SY5Y neuroblastoma cells induces the osteoclastogenesis of human monocytic precursors. *Experimental Cell Research*, **2011**, 317, 2147-58	4.2	11

29	Assessment of viability and proliferation of in vivo silicone-primed lymphocytes after in vitro re-exposure to silicone. *Journal of Biomedical Materials Research Part B*, **1995**, 29, 583-90		11
28	Changes of Bone Turnover Markers in Long Bone Nonunions Treated with a Regenerative Approach. *Stem Cells International*, **2017**, 2017, 3674045	5	9
27	In vitro complement activation after contact with pyrolytic carbon-coated and uncoated polyethylene terephthalate. *Journal of Materials Science: Materials in Medicine*, **1997**, 8, 771-4	4.5	9
26	Effects of antisense mediated inhibition of cathepsin K on human osteoclasts obtained from peripheral blood. *Journal of Orthopaedic Research*, **2006**, 24, 1699-708	3.8	9
25	Gene expression of bone-associated cytokines in MG63 osteoblast-like cells incubated with acrylic bone cement extracts in minimum essential medium. *Journal of Biomaterials Science, Polymer Edition*, **2002**, 13, 1283-94	3.5	9
24	Platelet activation after in vitro contact with seven acrylic bone cements. *Journal of Biomaterials Science, Polymer Edition*, **2002**, 13, 17-25	3.5	9
23	Biomarkers of bone healing induced by a regenerative approach based on expanded bone marrow-derived mesenchymal stromal cells. *Cytotherapy*, **2019**, 21, 870-885	4.8	8
22	Flow-cytometric analysis of leukocyte activation induced by polyethylene-terephthalate with and without pyrolytic carbon coating. *Journal of Biomedical Materials Research Part B*, **1998**, 39, 549-53		8
21	Effect of four acrylic bone cements on transforming growth factor-beta1 expression by osteoblast-like cells MG63. *Biomaterials*, **2002**, 23, 305-11	15.6	7
20	Evaluation of the effect of seven acrylic bone cements on erythrocytes and plasmatic phase of coagulation. *Biomaterials*, **2001**, 22, 1321-6	15.6	7
19	Evaluation of endothelial cell integrins after in vitro contact with polyethylene terephthalate. *Journal of Materials Science: Materials in Medicine*, **2001**, 12, 345-9	4.5	6
18	Interleukin-6 expression by osteoblast-like MG63 cells challenged with four acrylic bone cements. *Journal of Biomaterials Science, Polymer Edition*, **2001**, 12, 243-53	3.5	6
17	Influence of polyethylene terephthalate on the release of growth factors by human endothelial cells. *Journal of Biomaterials Science, Polymer Edition*, **1999**, 10, 891-900	3.5	6
16	Synthesis of a Novel Class of gem-Phosphonate-Phosphates by Reductive Cleavage of the Isoxazolidine Ring. *Current Organic Synthesis*, **2014**, 11, 461-465	1.9	6
15	Potassium Citrate Supplementation Decreases the Biochemical Markers of Bone Loss in a Group of Osteopenic Women: The Results of a Randomized, Double-Blind, Placebo-Controlled Pilot Study. *Nutrients*, **2018**, 10,	6.7	6
14	Evaluation of tissue-factor production by human endothelial cells incubated with three acrylic bone cements. *Journal of Biomedical Materials Research Part B*, **2001**, 55, 131-6		5
13	No effect of methacrylate-based bone cement CMW 1 on the plasmatic phase of coagulation, red blood cells and endothelial cells in vitro. *Acta Orthopaedica*, **2001**, 72, 86-93		5
12	Isolation and characterization of a new cell line from a renal carcinoma bone metastasis. *Anticancer Research*, **2004**, 24, 1705-11	2.3	5

11	Bone repair and regeneration **2009**, 69-105		4
10	Inflammatory Response to Metals and Ceramics **2002**, 735-791		4
9	SERUM LEVELS OF OSTEOPROTEGERIN AND RECEPTOR ACTIVATOR OF NUCLEAR FACTOR-B LIGAND AS MARKERS OF PERIPROSTHETIC OSTEOLYSIS. *Journal of Bone and Joint Surgery - Series A* , **2006**, 88, 1501-1509	5.6	4
8	Is the high superior tension technique an equivalent substitute for progressive tension sutures in postbariatric abdominoplasty? A comparison prospective study. *Plastic and Reconstructive Surgery*, **2014**, 133, 544-549	2.7	3
7	In vitro assessment of lymphocytes response following re-exposure to silicone. *Journal of Materials Science: Materials in Medicine*, **1994**, 5, 640-643	4.5	3
6	Cell-based Assay System for Predicting Bone Regeneration in Patient Affected by Aseptic Nonunion and Treated with Platelet Rich Fibrin. *Current Pharmaceutical Biotechnology*, **2016**, 17, 1079-1088	2.6	3
5	Epineurotomy of the median nerve in carpal tunnel release: a systematic review and an attempt of metanalysis. *European Orthopaedics and Traumatology*, **2012**, 3, 257-260		2
4	Interleukin-6 expression by cultured human endothelial cells in contact with carbon coated polyethylene terephthalate. *Journal of Materials Science: Materials in Medicine*, **2001**, 12, 365-9	4.5	2
3	Thrombomodulin expression in endothelial cells after contact with bone cement. *Biomaterials*, **2002**, 23, 2159-65	15.6	1
2	Effect of CMW 1 bone cement on transforming growth factor-beta 1 expression by endothelial cells. *Journal of Biomaterials Science, Polymer Edition*, **2001**, 12, 1011-25	3.5	1
1	X-ray diffraction analysis of bone-cement interface in failed hip arthroplasties. *Journal of Materials Science: Materials in Medicine*, **1994**, 5, 644-646	4.5	