George R Beck Jr

List of Publications by Citations

39 papers	6,438 citations	26 h-index	40 g-index
40 ext. papers	7,716 ext. citations	6.3 avg, IF	4.89 L-index

#	Paper	IF	Citations
39	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). *Autophagy*, **2016**, 12, 1-222	10.2	3838
38	Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). *Autophagy*, **2021**, 17, 1-382	10.2	440
37	Inorganic phosphate as a signaling molecule in osteoblast differentiation. *Journal of Cellular Biochemistry*, **2003**, 90, 234-43	4.7	230
36	Relationship between alkaline phosphatase levels, osteopontin expression, and mineralization in differentiating MC3T3-E1 osteoblasts. *Journal of Cellular Biochemistry*, **1998**, 68, 269-80	4.7	175
35	Bioactive silica-based nanoparticles stimulate bone-forming osteoblasts, suppress bone-resorbing osteoclasts, and enhance bone mineral density in vivo. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2012**, 8, 793-803	6	160
34	Inorganic phosphate regulates multiple genes during osteoblast differentiation, including Nrf2. *Experimental Cell Research*, **2003**, 288, 288-300	4.2	155
33	Analysis of the extracellular matrix vesicle proteome in mineralizing osteoblasts. *Journal of Cellular Physiology*, **2007**, 210, 325-35	7	137
32	Bioactive silica nanoparticles promote osteoblast differentiation through stimulation of autophagy and direct association with LC3 and p62. *ACS Nano*, **2014**, 8, 5898-910	16.7	135
31	Osteopontin regulation by inorganic phosphate is ERK1/2-, protein kinase C-, and proteasome-dependent. *Journal of Biological Chemistry*, **2003**, 278, 41921-9	5.4	123
30	A combined proteome and microarray investigation of inorganic phosphate-induced pre-osteoblast cells. *Molecular and Cellular Proteomics*, **2005**, 4, 1284-96	7.6	101
29	Nano-hydroxyapatite modulates osteoblast lineage commitment by stimulation of DNA methylation and regulation of gene expression. *Biomaterials*, **2015**, 65, 32-42	15.6	86
28	High dietary inorganic phosphate increases lung tumorigenesis and alters Akt signaling. *American Journal of Respiratory and Critical Care Medicine*, **2009**, 179, 59-68	10.2	82
27	An integrated understanding of the physiological response to elevated extracellular phosphate. *Journal of Cellular Physiology*, **2013**, 228, 1536-50	7	77
26	New method to prepare very stable and biocompatible fluorescent silica nanoparticles. *Chemical Communications*, **2009**, 2881-3	5.8	77
25	Elevated phosphate activates N-ras and promotes cell transformation and skin tumorigenesis. *Cancer Prevention Research*, **2010**, 3, 359-70	3.2	57
24	Toxicity and clearance of intratracheally administered multiwalled carbon nanotubes from murine lung. *Journal of Toxicology and Environmental Health - Part A: Current Issues*, **2010**, 73, 1530-43	3.2	45
23	Elevated inorganic phosphate stimulates Akt-ERK1/2-Mnk1 signaling in human lung cells. *American Journal of Respiratory Cell and Molecular Biology*, **2006**, 35, 528-39	5.7	44

22	Quantitative proteomic analysis of inorganic phosphate-induced murine MC3T3-E1 osteoblast cells. *Electrophoresis*, **2004**, 25, 1342-52	3.6	43
21	The effects of thiazolidinediones on human bone marrow stromal cell differentiation in vitro and in thiazolidinedione-treated patients with type 2 diabetes. *Translational Research*, **2013**, 161, 145-55	11	42
20	Identification of the homeobox protein Prx1 (MHox, Prrx-1) as a regulator of osterix expression and mediator of tumor necrosis factor action in osteoblast differentiation. *Journal of Bone and Mineral Research*, **2011**, 26, 209-19	6.3	42
19	Inorganic phosphate induces cancer cell mediated angiogenesis dependent on forkhead box protein C2 (FOXC2) regulated osteopontin expression. *Molecular Carcinogenesis*, **2015**, 54, 926-34	5	39
18	Impact of Phosphorus-Based Food Additives on Bone and Mineral Metabolism. *Journal of Clinical Endocrinology and Metabolism*, **2015**, 100, 4264-71	5.6	37
17	Bio-active engineered 50 nm silica nanoparticles with bone anabolic activity: therapeutic index, effective concentration, and cytotoxicity profile in vitro. *Toxicology in Vitro*, **2014**, 28, 354-64	3.6	34
16	Knockdown of the sodium-dependent phosphate co-transporter 2b (NPT2b) suppresses lung tumorigenesis. *PLoS ONE*, **2013**, 8, e77121	3.7	29
15	Bioactive silica nanoparticles reverse age-associated bone loss in mice. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2015**, 11, 959-967	6	28
14	A high inorganic phosphate diet perturbs brain growth, alters Akt-ERK signaling, and results in changes in cap-dependent translation. *Toxicological Sciences*, **2006**, 90, 221-9	4.4	27
13	Nano-Hydroxyapatite Stimulation of Gene Expression Requires Fgf Receptor, Phosphate Transporter, and Erk1/2 Signaling. *ACS Applied Materials & Interfaces*, **2017**, 9, 39185-39196	9.5	26
12	Suppression of lung tumorigenesis by leucine zipper/EF hand-containing transmembrane-1. *PLoS ONE*, **2010**, 5, e12535	3.7	25
11	Bioactive effects of silica nanoparticles on bone cells are size, surface, and composition dependent. *Acta Biomaterialia*, **2018**, 82, 184-196	10.8	25
10	Aerosol delivery of small hairpin osteopontin blocks pulmonary metastasis of breast cancer in mice. *PLoS ONE*, **2010**, 5, e15623	3.7	22
9	Probing early growth response 1 interacting proteins at the active promoter in osteoblast cells using oligoprecipitation and mass spectrometry. *Journal of Proteome Research*, **2006**, 5, 1931-9	5.6	16
8	LONG-TERM MONITORING OF THE PHYSICOCHEMICAL PROPERTIES OF SILICA-BASED NANOPARTICLES ON THE RATE OF ENDOCYTOSIS AND EXOCYTOSIS AND CONSEQUENCES OF CELL DIVISION. *Soft Materials*, **2013**, 11, 195-203	1.7	14
7	Analysis of the extracellular matrix and secreted vesicle proteomes by mass spectrometry. *Methods in Molecular Biology*, **2008**, 428, 231-44	1.4	7
6	CTLA-4Ig (abatacept) balances bone anabolic effects of T cells and Wnt-10b with antianabolic effects of osteoblastic sclerostin. *Annals of the New York Academy of Sciences*, **2018**, 1415, 21-33	6.5	6
5	Effects of phosphorus and calcium to phosphorus consumption ratio on mineral metabolism and cardiometabolic health. *Journal of Nutritional Biochemistry*, **2020**, 80, 108374	6.3	5

4	Applications of silica-based nanomaterials in dental and skeletal biology **2019**, 77-112		4
3	Modulating phosphate consumption, a novel therapeutic approach for the control of cancer cell proliferation and tumorigenesis. *Biochemical Pharmacology*, **2021**, 183, 114305	6	3
2	Synthesis of pH stable, blue light-emitting diode-excited, fluorescent silica nanoparticles and effects on cell behavior. *International Journal of Nanomedicine*, **2017**, 12, 8699-8710	7.3	2
1	Phosphorus and Malignancies **2017**, 241-260		