

# Nick van Gastel

## List of Publications by Year in descending order

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Version: 2024-02-01

36  
papers

2,081  
citations

361413

20  
h-index

395702

33  
g-index

37  
all docs

37  
docs citations

37  
times ranked

3438  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bringing new life to damaged bone: The importance of angiogenesis in bone repair and regeneration. <i>Bone</i> , 2015, 70, 19-27.	2.9	337
2	Uncovering the periosteum for skeletal regeneration: The stem cell that lies beneath. <i>Bone</i> , 2015, 70, 10-18.	2.9	207
3	C9orf72 suppresses systemic and neural inflammation induced by gut bacteria. <i>Nature</i> , 2020, 582, 89-94.	27.8	182
4	HIF-1 $\alpha$ Promotes Glutamine-Mediated Redox Homeostasis and Glycogen-Dependent Bioenergetics to Support Postimplantation Bone Cell Survival. <i>Cell Metabolism</i> , 2016, 23, 265-279.	16.2	142
5	Lipid availability determines fate of skeletal progenitor cells via SOX9. <i>Nature</i> , 2020, 579, 111-117.	27.8	140
6	Engineering Vascularized Bone: Osteogenic and Proangiogenic Potential of Murine Periosteal Cells. <i>Stem Cells</i> , 2012, 30, 2460-2471.	3.2	110
7	Mechanisms of ectopic bone formation by human osteoprogenitor cells on CaP biomaterial carriers. <i>Biomaterials</i> , 2012, 33, 3127-3142.	11.4	103
8	Development of micro-CT protocols for in vivo follow-up of mouse bone architecture without major radiation side effects. <i>Bone</i> , 2011, 49, 613-622.	2.9	82
9	Oxygen as a critical determinant of bone fracture healing—A multiscale model. <i>Journal of Theoretical Biology</i> , 2015, 365, 247-264.	1.7	80
10	Induction of a Timed Metabolic Collapse to Overcome Cancer Chemoresistance. <i>Cell Metabolism</i> , 2020, 32, 391-403.e6.	16.2	79
11	Simultaneous three-dimensional visualization of mineralized and soft skeletal tissues by a novel microCT contrast agent with polyoxometalate structure. <i>Biomaterials</i> , 2018, 159, 1-12.	11.4	70
12	Aldehyde dehydrogenase 3a2 protects AML cells from oxidative death and the synthetic lethality of ferroptosis inducers. <i>Blood</i> , 2020, 136, 1303-1316.	1.4	68
13	Expansion of Murine Periosteal Progenitor Cells with Fibroblast Growth Factor 2 Reveals an Intrinsic Endochondral Ossification Program Mediated by Bone Morphogenetic Protein 2. <i>Stem Cells</i> , 2014, 32, 2407-2418.	3.2	63
14	Highly proliferative primitive fetal liver hematopoietic stem cells are fueled by oxidative metabolic pathways. <i>Stem Cell Research</i> , 2015, 15, 715-721.	0.7	59
15	Metabolic regulation of skeletal cell fate and function in physiology and disease. <i>Nature Metabolism</i> , 2021, 3, 11-20.	11.9	59
16	Size Does Matter: An Integrative In Vivo-In Silico Approach for the Treatment of Critical Size Bone Defects. <i>PLoS Computational Biology</i> , 2014, 10, e1003888.	3.2	51
17	The vasculature: a vessel for bone metastasis. <i>BoneKEY Reports</i> , 2015, 4, 742.	2.7	34
18	Malic enzyme 2 connects the Krebs cycle intermediate fumarate to mitochondrial biogenesis. <i>Cell Metabolism</i> , 2021, 33, 1027-1041.e8.	16.2	30

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19	Nestin-GFP transgene labels skeletal progenitors in the periosteum. <i>Bone</i> , 2020, 133, 115259.	2.9	29
20	Targeting the hypoxic response in bone tissue engineering: A balance between supply and consumption to improve bone regeneration. <i>Molecular and Cellular Endocrinology</i> , 2016, 432, 96-105.	3.2	25
21	Neovascularization Potential of Blood Outgrowth Endothelial Cells From Patients With Stable Ischemic Heart Failure Is Preserved. <i>Journal of the American Heart Association</i> , 2016, 5, e002288.	3.7	19
22	Fine-tuning pro-angiogenic effects of cobalt for simultaneous enhancement of vascular endothelial growth factor secretion and implant neovascularization. <i>Acta Biomaterialia</i> , 2018, 72, 447-460.	8.3	18
23	Imaging dynamic mTORC1 pathway activity in vivo reveals marked shifts that support time-specific inhibitor therapy in AML. <i>Nature Communications</i> , 2021, 12, 245.	12.8	18
24	Endothelial Msx1 transduces hemodynamic changes into an arteriogenic remodeling response. <i>Journal of Cell Biology</i> , 2015, 210, 1239-1256.	5.2	17
25	Inhibition of the Oxygen Sensor PHD2 Enhances Tissue-Engineered Endochondral Bone Formation. <i>Journal of Bone and Mineral Research</i> , 2019, 34, 333-348.	2.8	15
26	Metabolic perturbations sensitize triple-negative breast cancers to apoptosis induced by BH3 mimetics. <i>Science Signaling</i> , 2021, 14, .	3.6	10
27	A new murine model of Barth syndrome neutropenia links TAFAZZIN deficiency to increased ER stress-induced apoptosis. <i>Blood Advances</i> , 2022, 6, 2557-2577.	5.2	10
28	An Ectopic Imaging Window for Intravital Imaging of Engineered Bone Tissue. <i>JBMR Plus</i> , 2018, 2, 92-102.	2.7	9
29	An iterative dual energy CT reconstruction method for a K-edge contrast material. <i>Proceedings of SPIE</i> , 2011, , .	0.8	7
30	Regulatory elements driving the expression of skeletal lineage reporters differ during bone development and adulthood. <i>Bone</i> , 2017, 105, 154-162.	2.9	5
31	HIF-1 $\beta$ stabilization in Phd1/3 <sup>-/-</sup> mice results in increase in hematopoietic stem cell number and enhanced HSC maintenance in BM niche. <i>Experimental Hematology</i> , 2013, 41, S36.	0.4	1
32	Analysis of Leukemia Cell Metabolism through Stable Isotope Tracing in Mice. <i>Bio-protocol</i> , 2021, 11, e4171.	0.4	1
33	Young haematopoietic stem cells are picky eaters. <i>Cell Research</i> , 2021, 31, 377-378.	12.0	1
34	Periostin regulates murine adult hematopoiesis by affecting hematopoietic stem cells directly as well through bone formation. <i>Experimental Hematology</i> , 2014, 42, S42.	0.4	0
35	The Distinctive Metabolic Environment of the Bone Marrow Niche Drives Leukemia Chemoresistance. <i>Blood</i> , 2019, 134, 3725-3725.	1.4	0
36	Induction of a Timed Metabolic Collapse to Overcome Cancer Chemoresistance. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0