Gerjo J V M Van Osch

List of Publications by Year
in descending order

96 papers	4,668 citations	87888 38 h-index	110387 64 g-index
110 all docs	110 docs citations	110 times ranked	6133 citing authors

#	Article	IF	Citations
1	Biomimetic Approaches for the Design and Fabrication of Bone-to-Soft Tissue Interfaces. ACS Biomaterials Science and Engineering, 2023, 9, 3810-3831.	5.2	21
2	WNT/beta-catenin signalling interrupts a senescence-induction cascade in human mesenchymal stem cells that restricts their expansion. Cellular and Molecular Life Sciences, 2022, 79, 82.	5.4	16
3	The role of cellâ€“matrix interactions in connective tissue mechanics. Physical Biology, 2022, 19, 021001.	1.8	8
4	Intraâ€articular injection of triamcinolone acetonide sustains macrophage levels and aggravates osteophytosis during degenerative joint disease in mice. British Journal of Pharmacology, 2022, 179, 2771-2784.	5.4	6
5	Modulation of Inflamed Synovium Improves Migration of Mesenchymal Stromal Cells in Vitro Through Anti-Inflammatory Macrophages. Cartilage, 2022, 13, 194760352210851.	2.7	2
6	Intra-articular Administration of Triamcinolone Acetonide in a Murine Cartilage Defect Model Reduces Inflammation but Inhibits Endogenous Cartilage Repair. American Journal of Sports Medicine, 2022, 50, 1668-1678.	4.2	3
7	Site-Directed Immobilization of an Engineered Bone Morphogenetic Protein 2 (BMP2) Variant to Collagen-Based Microspheres Induces Bone Formation In Vivo. International Journal of Molecular Sciences, 2022, 23, 3928.	4.1	3
8	Macrophage phenotypes and monocyte subsets after destabilization of the medial meniscus in mice. Journal of Orthopaedic Research, 2021, 39, 2270-2280.	2.3	14
9	Association between Oncostatin M Expression and Inflammatory Phenotype in Experimental Arthritis Models and Osteoarthritis Patients. Cells, 2021, 10, 508.	4.1	15
10	Macromolecular Interactions in Cartilage Extracellular Matrix Vary According to the Cartilage Type and Location. Cartilage, 2021, 13, 476S-485S.	2.7	1
11	The lower in vitro chondrogenic potential of canine adipose tissue-derived mesenchymal stromal cells (MSC) compared to bone marrow-derived MSC is not improved by BMP-2 or BMP-6. Veterinary Journal, 2021, 269, 105605.	1.7	12
12	Effect of Inflammatory Signaling on Human Articular Chondrocyte Hypertrophy: Potential Involvement of Tissue Repair Macrophages. Cartilage, 2021, 13, 168S-174S.	2.7	11
13	Bioprinting of a Zonal-Specific Cell Density Scaffold: A Biomimetic Approach for Cartilage Tissue Engineering. Applied Sciences (Switzerland), 2021, 11, 7821.	2.5	12
14	The Releasate of Avascular Cartilage Demonstrates Inherent Pro-Angiogenic Properties <i>In Vitro</i> and <i>In Vivo</i>. Cartilage, 2021, 13, 559S-570S.	2.7	4
15	Tyrosine kinases regulate chondrocyte hypertrophy: promising drug targets for Osteoarthritis. Osteoarthritis and Cartilage, 2021, 29, 1389-1398.	1.3	17
16	Synovial Fluid Fatty Acid Profiles Differ between Osteoarthritis and Healthy Patients. Cartilage, 2020, 11, 473-478.	2.7	30
17	Evaluation of biomimetic hyaluronic-based hydrogels with enhanced endogenous cell recruitment and cartilage matrix formation. Acta Biomaterialia, 2020, 101, 293-303.	8.3	66
18	Mechanical Stress Inhibits Early Stages of Endogenous Cell Migration: A Pilot Study in an Ex Vivo Osteochondral Model. Polymers, 2020, 12, 1754.	4.5	5

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19	MSC encapsulation in alginate microcapsules prolongs survival after intra-articular injection, a longitudinal in vivo cell and bead integrity tracking study. Cell Biology and Toxicology, 2020, 36, 553-570.	5.3	25
20	Enhanced Chondrogenic Capacity of Mesenchymal Stem Cells After TNFÎ± Pre-treatment. Frontiers in Bioengineering and Biotechnology, 2020, 8, 658.	4.1	10
21	Angiogenic Potential of Tissue Engineered Cartilage From Human Mesenchymal Stem Cells Is Modulated by Indian Hedgehog and Serpin E1. Frontiers in Bioengineering and Biotechnology, 2020, 8, 327.	4.1	12
22	Hydrogel-based delivery of antimiR-221 enhances cartilage regeneration by endogenous cells. Journal of Controlled Release, 2019, 309, 220-230.	9.9	50
23	Follistatin Effects in Migration, Vascularization, and Osteogenesis in vitro and Bone Repair in vivo. Frontiers in Bioengineering and Biotechnology, 2019, 7, 38.	4.1	16
24	Cell-surface markers identify tissue resident multipotential stem/stromal cell subsets in synovial intimal and sub-intimal compartments with distinct chondrogenic properties. Osteoarthritis and Cartilage, 2019, 27, 1831-1840.	1.3	17
25	Targeting antiâ€chondrogenic factors for the stimulation of chondrogenesis: A new paradigm in cartilage repair. Journal of Orthopaedic Research, 2019, 37, 12-22.	2.3	17
26	Structural and Mechanical Comparison of Human Ear, Alar, and Septal Cartilage. Plastic and Reconstructive Surgery - Global Open, 2018, 6, e1610.	0.6	39
27	NELL-1, HMGB1, and CCN2 Enhance Migration and Vasculogenesis, But Not Osteogenic Differentiation Compared to BMP2. Tissue Engineering - Part A, 2018, 24, 207-218.	3.1	26
28	Bone Marrowâ€"Harvesting Technique Influences Functional Heterogeneity of Mesenchymal Stem/Stromal Cells and Cartilage Regeneration. American Journal of Sports Medicine, 2018, 46, 3521-3531.	4.2	35
29	Mesenchymal stem cell secretome reduces pain and prevents cartilage damage in a murine osteoarthritis model. , 2018, 36, 218-230.		60
30	Mechanically stimulated osteochondral organ culture for evaluation of biomaterials in cartilage repair studies. Acta Biomaterialia, 2018, 81, 256-266.	8.3	40
31	Meniscal extrusion and degeneration during the course of osteoarthritis in the Murine collagenaseâ€induced osteoarthritis model. Journal of Orthopaedic Research, 2018, 36, 2416-2420.	2.3	8
32	Identification of TGFÎ²-related genes regulated in murine osteoarthritis and chondrocyte hypertrophy by comparison of multiple microarray datasets. Bone, 2018, 116, 67-77.	2.9	6
33	Recombinant human type II collagen hydrogel provides a xeno-free 3D micro-environment for chondrogenesis of human bone marrow-derived mesenchymal stromal cells. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 843-854.	2.7	14
34	High fat diet accelerates cartilage repair in DBA/1 mice. Journal of Orthopaedic Research, 2017, 35, 1258-1264.	2.3	4
35	Prolonged inhibition of inflammation in osteoarthritis by triamcinolone acetonide released from a polyester amide microsphere platform. Journal of Controlled Release, 2017, 253, 64-72.	9.9	42
36	Emerging potential of gene silencing approaches targeting anti-chondrogenic factors for cell-based cartilage repair. Cellular and Molecular Life Sciences, 2017, 74, 3451-3465.	5.4	14

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37	Accuracy of magnetic resonance imaging to detect cartilage loss in severe osteoarthritis of the first carpometacarpal joint: comparison with histological evaluation. Arthritis Research and Therapy, 2017, 19, 55.	3.5	11
38	Lack of high BMI-related features in adipocytes and inflammatory cells in the infrapatellar fat pad (IFP). Arthritis Research and Therapy, 2017, 19, 186.	3.5	19
39	Quantitative inÂvivo CT arthrography of the human osteoarthritic knee to estimate cartilage sulphated glycosaminoglycan content: correlation with ex-vivo reference standards. Osteoarthritis and Cartilage, 2016, 24, 1012-1020.	1.3	20
40	Is T1Ï•Mapping an Alternative to Delayed Gadolinium-enhanced MR Imaging of Cartilage in the Assessment of Sulphated Glycosaminoglycan Content in Human Osteoarthritic Knees? An in Vivo Validation Study. Radiology, 2016, 279, 523-531.	7.3	68
41	Tendinopathy and osteoarthritis: a chance to kill two birds with one stone. British Journal of Sports Medicine, 2016, 50, 1164-1165.	6.7	5
42	Cartilage inflammation and degeneration is enhanced by pro-inflammatory (M1) macrophages inÂvitro , but not inhibited directly by anti-inflammatory (M2) macrophages. Osteoarthritis and Cartilage, 2016, 24, 2162-2170.	1.3	95
43	Differential Effects of Small Molecule WNT Agonists on the Multilineage Differentiation Capacity of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2016, 22, 1264-1273.	3.1	30
44	Guiding synovial inflammation by macrophage phenotype modulation: an inÂvitro study towards a therapy for osteoarthritis. Osteoarthritis and Cartilage, 2016, 24, 1629-1638.	1.3	52
45	Silencing of Antichondrogenic MicroRNA-221 in Human Mesenchymal Stem Cells Promotes Cartilage Repair In Vivo. Stem Cells, 2016, 34, 1801-1811.	3.2	55
46	Expression of CD105 on expanded mesenchymal stem cells does not predict their chondrogenic potential. Osteoarthritis and Cartilage, 2016, 24, 868-872.	1.3	56
47	Association of urinary biomarker COLL2-1NO 2 with incident clinical and radiographic knee OA in overweight and obese women. Osteoarthritis and Cartilage, 2015, 23, 1398-1404.	1.3	6
48	Arthritic and non-arthritic synovial fluids modulate IL10 and IL1RA gene expression in differentially activated primary human monocytes. Osteoarthritis and Cartilage, 2015, 23, 1853-1857.	1.3	47
49	Novel bilayer bacterial nanocellulose scaffold supports neocartilage formation inÂvitro and inÂvivo. Biomaterials, 2015, 44, 122-133.	11.4	130
50	TruFit Plug for Repair of Osteochondral Defectsâ€"Where Is the Evidence? Systematic Review of Literature. Cartilage, 2015, 6, 12-19.	2.7	60
51	Underlying molecular mechanisms of<i>DIO2</i>susceptibility in symptomatic osteoarthritis. Annals of the Rheumatic Diseases, 2015, 74, 1571-1579.	0.9	75
52	Long-Term Expansion, Enhanced Chondrogenic Potential, and Suppression of Endochondral Ossification of Adult Human MSCs via WNT Signaling Modulation. Stem Cell Reports, 2015, 4, 459-472.	4.8	122
53	Î²1 Integrins Mediate Attachment of Mesenchymal Stem Cells to Cartilage Lesions. BioResearch Open Access, 2015, 4, 39-53.	2.6	29
54	FGF, TGF<i>Î²</i>and Wnt crosstalk: embryonic to<i>in vitro</i>cartilage development from mesenchymal stem cells. Journal of Tissue Engineering and Regenerative Medicine, 2015, 9, 332-342.	2.7	55

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55	The infrapatellar fat pad from diseased joints inhibits chondrogenesis of mesenchymal stem cells. , 2015, 30, 303-314.		18
56	Cytokine profiles in the joint depend on pathology, but are different between synovial fluid, cartilage tissue and cultured chondrocytes. Arthritis Research and Therapy, 2014, 16, 441.	3.5	129
57	Inhibition of TAK1 and/or JAK Can Rescue Impaired Chondrogenic Differentiation of Human Mesenchymal Stem Cells in Osteoarthritis-Like Conditions. Tissue Engineering - Part A, 2014, 20, 2243-2252.	3.1	26
58	Mesenchymal stem cells reduce pain but not degenerative changes in a mono-iodoacetate rat model of osteoarthritis. Journal of Orthopaedic Research, 2014, 32, 1167-1174.	2.3	80
59	Osteoarthritis Year in Review 2014: highlighting innovations in basic research and clinical applications in regenerative medicine. Osteoarthritis and Cartilage, 2014, 22, 2013-2016.	1.3	10
60	Increased physical activity severely induces osteoarthritic changes in knee joints with papain induced sulfate-glycosaminoglycan depleted cartilage. Arthritis Research and Therapy, 2014, 16, R32.	3.5	51
61	Statins and fibrates do not affect development of spontaneous cartilage damage in STR/Ort mice. Osteoarthritis and Cartilage, 2014, 22, 293-301.	1.3	20
62	Degree of synovitis on MRI by comprehensive whole knee semi-quantitative scoring method correlates with histologic and macroscopic features of synovial tissue inflammation in knee osteoarthritis. Osteoarthritis and Cartilage, 2014, 22, 1606-1613.	1.3	51
63	Human osteoarthritic synovium impacts chondrogenic differentiation of mesenchymal stem cells via macrophage polarisation state. Osteoarthritis and Cartilage, 2014, 22, 1167-1175.	1.3	188
64	Quantitative Evaluation of Mechanical Properties in Tissue-Engineered Auricular Cartilage. Tissue Engineering - Part B: Reviews, 2014, 20, 17-27.	4.8	33
65	The in vitro and in vivo capacity of culture-expanded human cells from several sources encapsulated in alginate to form cartilage. , 2014, 27, 264-280.		49
66	An explorative study comparing levels of soluble mediators in control and osteoarthritic synovial fluid. Osteoarthritis and Cartilage, 2013, 21, 918-922.	1.3	108
67	A culture model to analyze the acute biomaterial-dependent reaction of human primary macrophages. Biochemical and Biophysical Research Communications, 2013, 433, 115-120.	2.1	65
68	Monounsaturated and Saturated, but Not n-6 Polyunsaturated Fatty Acids Decrease Cartilage Destruction under Inflammatory Conditions. Cartilage, 2013, 4, 321-328.	2.7	25
69	A4.3â€...Adipocytes Modulate the Phenotype of Macrophages through Secreted Lipids. Annals of the Rheumatic Diseases, 2013, 72, A24.2-A24.	0.9	0
70	Inhibition of oncostatin M in osteoarthritic synovial fluid enhances GAG production in osteoarthritic cartilage repair. , 2013, 26, 80-90.		21
71	An Osteochondral Culture Model to Study Mechanisms Involved in Articular Cartilage Repair. Tissue Engineering - Part C: Methods, 2012, 18, 45-53.	2.1	57
72	Gene activated matrices for bone and cartilage regeneration in arthritis. European Journal of Nanomedicine, 2012, 4, .	0.6	5

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73	Synovial inflammation, immune cells and their cytokines in osteoarthritis: a review. Osteoarthritis and Cartilage, 2012, 20, 1484-1499.	1.3	506
74	Can one generate stable hyaline cartilage from adult mesenchymal stem cells? A developmental approach. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, e1-e11.	2.7	48
75	The infrapatellar fat pad of osteoarthritic patients has an inflammatory phenotype. Annals of the Rheumatic Diseases, 2011, 70, A91-A92.	0.9	0
76	Smad Signaling Determines Chondrogenic Differentiation of Bone-Marrow-Derived Mesenchymal Stem Cells: Inhibition of Smad1/5/8P Prevents Terminal Differentiation and Calcification. Tissue Engineering - Part A, 2011, 17, 1157-1167.	3.1	149
77	Effects of individual control of pH and hypoxia in chondrocyte culture. Journal of Orthopaedic Research, 2010, 28, 537-545.	2.3	50
78	Estrogen modulates iodoacetateâ€induced gene expression in bovine cartilage explants. Journal of Orthopaedic Research, 2010, 28, 607-615.	2.3	10
79	Calcineurin Inhibitors Promote Chondrogenic Marker Expression of Dedifferentiated Human Adult Chondrocytes via Stimulation of Endogenous TGFÎ²1 Production. Tissue Engineering - Part A, 2010, 16, 1-10.	3.1	23
80	Fibroblast Growth Factor Receptors in<i>In Vitro</i>and<i>In Vivo</i>Chondrogenesis: Relating Tissue Engineering Using Adult Mesenchymal Stem Cells to Embryonic Development. Tissue Engineering - Part A, 2010, 16, 545-556.	3.1	75
81	Localization of the Potential Zonal Marker Clusterin in Native Cartilage and in Tissue-Engineered Constructs. Tissue Engineering - Part A, 2010, 16, 897-904.	3.1	21
82	Cartilage repair: past and future â€" lessons for regenerative medicine. Journal of Cellular and Molecular Medicine, 2009, 13, 792-810.	3.6	142
83	Autoâ€crosslinked hyaluronic acid gel accelerates healing of rabbit flexor tendons in vivo. Journal of Orthopaedic Research, 2009, 27, 408-415.	2.3	39
84	Tendon degeneration is not mediated by regulation of Tollâ€like receptors 2 and 4 in human tenocytes. Journal of Orthopaedic Research, 2009, 27, 1043-1047.	2.3	19
85	Chondrogenic Priming of Human Bone Marrow Stromal Cells: A Better Route to Bone Repair?. Tissue Engineering - Part C: Methods, 2009, 15, 285-295.	2.1	121
86	Angiogenic Capacity of Human Adipose-Derived Stromal Cells During Adipogenic Differentiation: An In Vitro Study. Tissue Engineering - Part A, 2009, 15, 445-452.	3.1	43
87	TGFÎ² Affects Collagen Cross-Linking Independent of Chondrocyte Phenotype but Strongly Depending on Physical Environment. Tissue Engineering - Part A, 2008, 14, 1059-1066.	3.1	15
88	Hard Tissue Formation in a Porous HA/TCP Ceramic Scaffold Loaded with Stromal Cells Derived from Dental Pulp and Bone Marrow. Tissue Engineering - Part A, 2008, 14, 285-294.	3.1	113
89	Fibroblasts Accelerate Culturing of Mucosal Substitutes. Tissue Engineering, 2006, 12, 2321-2331.	4.6	17
90	Fibroblast growth factor-2 in serum-free medium is a potent mitogen and reduces dedifferentiation of human ear chondrocytes in monolayer culture. Matrix Biology, 2004, 23, 231-241.	3.6	109

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91	Considerations on the use of ear chondrocytes as donor chondrocytes for cartilage tissue engineering. Biorheology, 2004, 41, 411-21.	0.4	50
92	Alginate as a chondrocyte-delivery substance in combination with a non-woven scaffold for cartilage tissue engineering. Biomaterials, 2002, 23, 1511-1517.	11.4	183
93	The Potency of Culture-Expanded Nasal Septum Chondrocytes for Tissue Engineering of Cartilage. American Journal of Rhinology & Allergy, 2001, 15, 187-192.	2.2	42
94	Optimization of chondrocyte expansion in culture : Effect of TGFÎ²-2, bFGF and L-ascorbic acid on bovine articular chondrocytes. Acta Orthopaedica, 1999, 70, 55-61.	1.4	66
95	Differential effects of IGF-1 ans TGFÎ²-2 on the assembly of proteoglycans in pericellular and territorial matrix by cultured bovine articular chondrocytes. Osteoarthritis and Cartilage, 1998, 6, 187-195.	1.3	105
96	Culture of chondrocytes in alginate and collagen carrier gels. Acta Orthopaedica, 1995, 66, 549-556.	1.4	168