

# Jeroen Leijten

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

70  
papers

2,828  
citations

33  
h-index

52  
g-index

80  
ext. papers

3,420  
ext. citations

9.1  
avg. IF

5.19  
L-index

#	Paper	IF	Citations
70	Scalable fabrication, compartmentalization and applications of living microtissues.. <i>Bioactive Materials</i> , <b>2023</b> , 19, 392-405	16.7	0
69	Enzyme-mediated Alleviation of Peroxide Toxicity in Self-oxygenating Biomaterials.. <i>Advanced Healthcare Materials</i> , <b>2022</b> , e2102697	10.1	0
68	Tethering Cells via Enzymatic Oxidative Crosslinking Enables Mechanotransduction in Non-Cell-Adhesive Materials (Adv. Mater. 42/2021). <i>Advanced Materials</i> , <b>2021</b> , 33, 2170333	24	
67	Self-Oxygenation of Tissues Orchestrates Full-Thickness Vascularization of Living Implants.. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2100850	15.6	2
66	In vitro degradation profiles and in vivo biomaterial-tissue interactions of microwell array delivery devices. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , <b>2021</b> , 109, 117-127	3.5	2
65	Oxygen-Releasing Biomaterials: Current Challenges and Future Applications. <i>Trends in Biotechnology</i> , <b>2021</b> , 39, 1144-1159	15.1	12
64	Tethering Cells via Enzymatic Oxidative Crosslinking Enables Mechanotransduction in Non-Cell-Adhesive Materials. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102660	24	3
63	Enzymatic outside-in cross-linking enables single-step microcapsule production for high-throughput three-dimensional cell microaggregate formation. <i>Materials Today Bio</i> , <b>2020</b> , 6, 100047	9.9	6
62	Monolithic microfluidic platform for exerting gradients of compression on cell-laden hydrogels, and application to a model of the articular cartilage. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 315, 127917	8.5	9
61	Engineering 3D parallelized microfluidic droplet generators with equal flow profiles by computational fluid dynamics and stereolithographic printing. <i>Lab on A Chip</i> , <b>2020</b> , 20, 490-495	7.2	14
60	Rapid and cytocompatible cell-laden silk hydrogel formation riboflavin-mediated crosslinking. <i>Journal of Materials Chemistry B</i> , <b>2020</b> , 8, 9566-9575	7.3	14
59	Immune Organs and Immune Cells on a Chip: An Overview of Biomedical Applications. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	21
58	Bioionic Liquid Conjugation as Universal Approach To Engineer Hemostatic Bioadhesives. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 38373-38384	9.5	20
57	Spatiotemporal material functionalization via competitive supramolecular complexation of avidin and biotin analogs. <i>Nature Communications</i> , <b>2019</b> , 10, 4347	17.4	11
56	On-the-fly exchangeable microfluidic nozzles for facile production of various monodisperse micromaterials. <i>Lab on A Chip</i> , <b>2019</b> , 19, 1977-1984	7.2	6
55	Mimicking the Articular Joint with In Vitro Models. <i>Trends in Biotechnology</i> , <b>2019</b> , 37, 1063-1077	15.1	20
54	3D Printed Cartilage-Like Tissue Constructs with Spatially Controlled Mechanical Properties. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1906330	15.6	33

53	3D Printed Tissues: 3D Printed Cartilage-Like Tissue Constructs with Spatially Controlled Mechanical Properties (Adv. Funct. Mater. 51/2019). <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1970350	15.6	1
52	Ocular adhesives: Design, chemistry, crosslinking mechanisms, and applications. <i>Biomaterials</i> , <b>2019</b> , 197, 345-367	15.6	42
51	Microwell Scaffolds Using Collagen-IV and Laminin-111 Lead to Improved Insulin Secretion of Human Islets. <i>Tissue Engineering - Part C: Methods</i> , <b>2019</b> , 25, 71-81	2.9	10
50	Single-Cell Microgels: Technology, Challenges, and Applications. <i>Trends in Biotechnology</i> , <b>2018</b> , 36, 850-865	15.1	43
49	Dickkopf-related protein 1 and gremlin 1 show different response than frizzled-related protein in human synovial fluid following knee injury and in patients with osteoarthritis. <i>Osteoarthritis and Cartilage</i> , <b>2018</b> , 26, 834-843	6.2	8
48	Interconnectable Dynamic Compression Bioreactors for Combinatorial Screening of Cell Mechanobiology in Three Dimensions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 13293-13303	9.5	25
47	High-throughput approaches for screening and analysis of cell behaviors. <i>Biomaterials</i> , <b>2018</b> , 153, 85-101	15.6	35
46	Fibronectin and Collagen IV Microcontact Printing Improves Insulin Secretion by INS1E Cells. <i>Tissue Engineering - Part C: Methods</i> , <b>2018</b> , 24, 628-636	2.9	5
45	Ultrahigh-Throughput Production of Monodisperse and Multifunctional Janus Microparticles Using in-Air Microfluidics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 23433-23438	9.5	31
44	Oxygen-Generating Photo-Cross-Linkable Hydrogels Support Cardiac Progenitor Cell Survival by Reducing Hypoxia-Induced Necrosis. <i>ACS Biomaterials Science and Engineering</i> , <b>2017</b> , 3, 1964-1971	5.5	51
43	Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605352	15.6	173
42	Healing of a Large Long-Bone Defect through Serum-Free In Vitro Priming of Human Periosteum-Derived Cells. <i>Stem Cell Reports</i> , <b>2017</b> , 8, 758-772	8	32
41	Biomechanical Strain Exacerbates Inflammation on a Progeria-on-a-Chip Model. <i>Small</i> , <b>2017</b> , 13, 1603737	11	48
40	Organ-On-A-Chip: Biomechanical Strain Exacerbates Inflammation on a Progeria-on-a-Chip Model (Small 15/2017). <i>Small</i> , <b>2017</b> , 13,	11	1
39	Trophic Effects of Mesenchymal Stem Cells in Tissue Regeneration. <i>Tissue Engineering - Part B: Reviews</i> , <b>2017</b> , 23, 515-528	7.9	142
38	Nanoemulsion-induced enzymatic crosslinking of tyramine-functionalized polymer droplets. <i>Journal of Materials Chemistry B</i> , <b>2017</b> , 5, 4835-4844	7.3	17
37	Centering Single Cells in Microgels via Delayed Crosslinking Supports Long-Term 3D Culture by Preventing Cell Escape. <i>Small</i> , <b>2017</b> , 13, 1603711	11	36
36	Structural analysis of photocrosslinkable methacryloyl-modified protein derivatives. <i>Biomaterials</i> , <b>2017</b> , 139, 163-171	15.6	96

35	Tissue Engineering: Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs (Adv. Funct. Mater. 12/2017). <i>Advanced Functional Materials</i> , <b>2017</b> , 27,	15.6	2
34	Single Cell Microgel Based Modular Bioinks for Uncoupled Cellular Micro- and Macroenvironments. <i>Advanced Healthcare Materials</i> , <b>2017</b> , 6, 1600913	10.1	51
33	Spatially and Temporally Controlled Hydrogels for Tissue Engineering. <i>Materials Science and Engineering Reports</i> , <b>2017</b> , 119, 1-35	30.9	115
32	Integrin-Mediated Interactions Control Macrophage Polarization in 3D Hydrogels. <i>Advanced Healthcare Materials</i> , <b>2017</b> , 6, 1700289	10.1	101
31	Nanostructured Fibrous Membranes with Rose Spike-Like Architecture. <i>Nano Letters</i> , <b>2017</b> , 17, 6235-6240.	11.5	60
30	Concise Review: Organ Engineering: Design, Technology, and Integration. <i>Stem Cells</i> , <b>2017</b> , 35, 51-60	5.8	43
29	Nitric Oxide Mediates Crosstalk between Interleukin 1 $\beta$ and WNT Signaling in Primary Human Chondrocytes by Reducing DKK1 and FRZB Expression. <i>International Journal of Molecular Sciences</i> , <b>2017</b> , 18,	6.3	24
28	Enzymatic Crosslinking of Polymer Conjugates is Superior over Ionic or UV Crosslinking for the On-Chip Production of Cell-Laden Microgels. <i>Macromolecular Bioscience</i> , <b>2016</b> , 16, 1524-1532	5.5	20
27	Bioinspired seeding of biomaterials using three dimensional microtissues induces chondrogenic stem cell differentiation and cartilage formation under growth factor free conditions. <i>Scientific Reports</i> , <b>2016</b> , 6, 36011	4.9	27
26	Cardiovascular Organ-on-a-Chip Platforms for Drug Discovery and Development. <i>Applied in Vitro Toxicology</i> , <b>2016</b> , 2, 82-96	1.3	95
25	The matrix reloaded: the evolution of regenerative hydrogels. <i>Materials Today</i> , <b>2016</b> , 19, 190-196	21.8	31
24	Platelet-Rich Blood Derivatives for Stem Cell-Based Tissue Engineering and Regeneration. <i>Current Stem Cell Reports</i> , <b>2016</b> , 2, 33-42	1.8	55
23	Chondrocytes Cocultured with Stromal Vascular Fraction of Adipose Tissue Present More Intense Chondrogenic Characteristics Than with Adipose Stem Cells. <i>Tissue Engineering - Part A</i> , <b>2016</b> , 22, 336-48	3.9	19
22	From Nano to Macro: Multiscale Materials for Improved Stem Cell Culturing and Analysis. <i>Cell Stem Cell</i> , <b>2016</b> , 18, 20-4	18	33
21	A Qualitative Model of the Differentiation Network in Chondrocyte Maturation: A Holistic View of Chondrocyte Hypertrophy. <i>PLoS ONE</i> , <b>2016</b> , 11, e0162052	3.7	12
20	Advancing Tissue Engineering: A Tale of Nano-, Micro-, and Macroscale Integration. <i>Small</i> , <b>2016</b> , 12, 2130-45	11.5	49
19	Optimizing cell viability in droplet-based cell deposition. <i>Scientific Reports</i> , <b>2015</b> , 5, 11304	4.9	72
18	Cell based advanced therapeutic medicinal products for bone repair: Keep it simple?. <i>Advanced Drug Delivery Reviews</i> , <b>2015</b> , 84, 30-44	18.5	33

17	Metabolic programming of mesenchymal stromal cells by oxygen tension directs chondrogenic cell fate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 13954-9	11.5	85
16	Boosting angiogenesis and functional vascularization in injectable dextran-hyaluronic acid hydrogels by endothelial-like mesenchymal stromal cells. <i>Tissue Engineering - Part A</i> , <b>2014</b> , 20, 819-29	3.9	13
15	Cell sources for articular cartilage repair strategies: shifting from monocultures to cocultures. <i>Tissue Engineering - Part B: Reviews</i> , <b>2013</b> , 19, 31-40	7.9	61
14	GREM1, FRZB and DKK1 mRNA levels correlate with osteoarthritis and are regulated by osteoarthritis-associated factors. <i>Arthritis Research and Therapy</i> , <b>2013</b> , 15, R126	5.7	51
13	Gene expression profiling of dedifferentiated human articular chondrocytes in monolayer culture. <i>Osteoarthritis and Cartilage</i> , <b>2013</b> , 21, 599-603	6.2	122
12	Fibroblast growth factor-1 is a mesenchymal stromal cell-secreted factor stimulating proliferation of osteoarthritic chondrocytes in co-culture. <i>Stem Cells and Development</i> , <b>2013</b> , 22, 2356-67	4.4	54
11	In vivo screening of extracellular matrix components produced under multiple experimental conditions implanted in one animal. <i>Integrative Biology (United Kingdom)</i> , <b>2013</b> , 5, 889-98	3.7	27
10	A dual flow bioreactor with controlled mechanical stimulation for cartilage tissue engineering. <i>Tissue Engineering - Part C: Methods</i> , <b>2013</b> , 19, 774-83	2.9	26
9	The effect of platelet lysate supplementation of a dextran-based hydrogel on cartilage formation. <i>Biomaterials</i> , <b>2012</b> , 33, 3651-61	15.6	64
8	Nanomaterials for the Local and Targeted Delivery of Osteoarthritis Drugs. <i>Journal of Nanomaterials</i> , <b>2012</b> , 2012, 1-13	3.2	12
7	Gremlin 1, frizzled-related protein, and Dkk-1 are key regulators of human articular cartilage homeostasis. <i>Arthritis and Rheumatism</i> , <b>2012</b> , 64, 3302-12		101
6	Hypoxia inhibits hypertrophic differentiation and endochondral ossification in explanted tibiae. <i>PLoS ONE</i> , <b>2012</b> , 7, e49896	3.7	33
5	Recognizing different tissues in human fetal femur cartilage by label-free Raman microspectroscopy. <i>Journal of Biomedical Optics</i> , <b>2012</b> , 17, 116012	3.5	34
4	Fetal mesenchymal stromal cells differentiating towards chondrocytes acquire a gene expression profile resembling human growth plate cartilage. <i>PLoS ONE</i> , <b>2012</b> , 7, e44561	3.7	13
3	High throughput generated micro-aggregates of chondrocytes stimulate cartilage formation in vitro and in vivo. <i>European Cells and Materials</i> , <b>2012</b> , 23, 387-99	4.3	70
2	Cartilage tissue engineering. <i>Endocrine Development</i> , <b>2011</b> , 21, 102-115		34
1	Trophic effects of mesenchymal stem cells increase chondrocyte proliferation and matrix formation. <i>Tissue Engineering - Part A</i> , <b>2011</b> , 17, 1425-36	3.9	212