Jeroen Leijten

List of Publications by Year
in descending order

75 papers	4,024 citations	101543 36 h-index	123424 61 g-index
80 all docs	80 docs citations	80 times ranked	6467 citing authors

#	Article	IF	Citations
1	Scalable fabrication, compartmentalization and applications of living microtissues. Bioactive Materials, 2023, 19, 392-405.	15.6	4
2	Enzymeâ€Mediated Alleviation of Peroxide Toxicity in Selfâ€Oxygenating Biomaterials. Advanced Healthcare Materials, 2022, 11, e2102697.	7.6	3
3	OSMOLARITY-INDUCED ALTERED INTRACELLULAR MOLECULAR CROWDING DRIVES OSTEOARTHRITIS PATHOLOGY. Osteoarthritis and Cartilage, 2022, 30, S24-S25.	1.3	0
4	Embedded 3D Printing in Selfâ€Healing Annealable Composites for Precise Patterning of Functionally Mature Human Neural Constructs. Advanced Science, 2022, 9, .	11.2	21
5	In vitro degradation profiles and in vivo biomaterialâ€“tissue interactions of microwell array delivery devices. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, 109, 117-127.	3.4	7
6	Oxygen-Releasing Biomaterials: Current Challenges and Future Applications. Trends in Biotechnology, 2021, 39, 1144-1159.	9.3	44
7	Injectable hydrogels functionalized with antibody fragments as intra-articular cytokine sinks neutralizing pro-catabolic cytokines. Osteoarthritis and Cartilage, 2021, 29, S50.	1.3	0
8	Selfâ€Oxygenation of Tissues Orchestrates Fullâ€Thickness Vascularization of Living Implants. Advanced Functional Materials, 2021, 31, 2100850.	14.9	16
9	Tethering Cells via Enzymatic Oxidative Crosslinking Enables Mechanotransduction in Nonâ€Cellâ€Adhesive Materials. Advanced Materials, 2021, 33, e2102660.	21.0	10
10	Tethering Cells via Enzymatic Oxidative Crosslinking Enables Mechanotransduction in Nonâ€Cellâ€Adhesive Materials (Adv. Mater. 42/2021). Advanced Materials, 2021, 33, 2170333.	21.0	0
11	Crosslink bio-adhesives for bronchoscopic lung volume reduction: current status and future direction. European Respiratory Review, 2021, 30, 210142.	7.1	7
12	Engineering 3D parallelized microfluidic droplet generators with equal flow profiles by computational fluid dynamics and stereolithographic printing. Lab on A Chip, 2020, 20, 490-495.	6.0	31
13	Rapid and cytocompatible cell-laden silk hydrogel formation <i>via</i> riboflavin-mediated crosslinking. Journal of Materials Chemistry B, 2020, 8, 9566-9575.	5.8	47
14	Immune Organs and Immune Cells on a Chip: An Overview of Biomedical Applications. Micromachines, 2020, 11, 849.	2.9	37
15	Enzymatic outside-in cross-linking enables single-step microcapsule production for high-throughput three-dimensional cell microaggregate formation. Materials Today Bio, 2020, 6, 100047.	5.5	14
16	Monolithic microfluidic platform for exerting gradients of compression on cell-laden hydrogels, and application to a model of the articular cartilage. Sensors and Actuators B: Chemical, 2020, 315, 127917.	7.8	27
17	3D Printed Cartilageâ€Like Tissue Constructs with Spatially Controlled Mechanical Properties. Advanced Functional Materials, 2019, 29, 1906330.	14.9	66
18	Prolonged intra-articular retention of mesenchymal stem cells by advanced microencapsulation. Osteoarthritis and Cartilage, 2019, 27, S434.	1.3	0

#	Article	IF	Citations
19	Bioionic Liquid Conjugation as Universal Approach To Engineer Hemostatic Bioadhesives. ACS Applied Materials & Interfaces, 2019, 11, 38373-38384.	8.0	36
20	Spatiotemporal material functionalization via competitive supramolecular complexation of avidin and biotin analogs. Nature Communications, 2019, 10, 4347.	12.8	21
21	On-the-fly exchangeable microfluidic nozzles for facile production of various monodisperse micromaterials. Lab on A Chip, 2019, 19, 1977-1984.	6.0	9
22	Mimicking the Articular Joint with In Vitro Models. Trends in Biotechnology, 2019, 37, 1063-1077.	9.3	27
23	3D Printed Tissues: 3D Printed Cartilageâ€Like Tissue Constructs with Spatially Controlled Mechanical Properties (Adv. Funct. Mater. 51/2019). Advanced Functional Materials, 2019, 29, 1970350.	14.9	3
24	Ocular adhesives: Design, chemistry, crosslinking mechanisms, and applications. Biomaterials, 2019, 197, 345-367.	11.4	84
25	Microwell Scaffolds Using Collagen-IV and Laminin-111 Lead to Improved Insulin Secretion of Human Islets. Tissue Engineering - Part C: Methods, 2019, 25, 71-81.	2.1	14
26	Single-Cell Microgels: Technology, Challenges, and Applications. Trends in Biotechnology, 2018, 36, 850-865.	9.3	64
27	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. Osteoarthritis and Cartilage, 2018, 26, 834-843.	1.3	15
28	Interconnectable Dynamic Compression Bioreactors for Combinatorial Screening of Cell Mechanobiology in Three Dimensions. ACS Applied Materials & Interfaces, 2018, 10, 13293-13303.	8.0	36
29	High-throughput approaches for screening and analysis of cell behaviors. Biomaterials, 2018, 153, 85-101.	11.4	52
30	Fibronectin and Collagen IV Microcontact Printing Improves Insulin Secretion by INS1E Cells. Tissue Engineering - Part C: Methods, 2018, 24, 628-636.	2.1	12
31	Ultrahigh-Throughput Production of Monodisperse and Multifunctional Janus Microparticles Using in-Air Microfluidics. ACS Applied Materials & Interfaces, 2018, 10, 23433-23438.	8.0	56
32	Oxygen-Generating Photo-Cross-Linkable Hydrogels Support Cardiac Progenitor Cell Survival by Reducing Hypoxia-Induced Necrosis. ACS Biomaterials Science and Engineering, 2017, 3, 1964-1971.	5.2	82
33	Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs. Advanced Functional Materials, 2017, 27, 1605352.	14.9	278
34	Healing of a Large Long-Bone Defect through Serum-Free InÂVitro Priming ofÂHuman Periosteum-Derived Cells. Stem Cell Reports, 2017, 8, 758-772.	4.8	44
35	Biomechanical Strain Exacerbates Inflammation on a Progeriaâ€onâ€aâ€Chip Model. Small, 2017, 13, 1603737.	10.0	75
36	Organâ€Onâ€Aâ€Chip: Biomechanical Strain Exacerbates Inflammation on a Progeriaâ€onâ€aâ€Chip Model (Small) Tj ETQq0 0 0 rgBT /O	10.0	1

#	Article	IF	Citations
37	Trophic Effects of Mesenchymal Stem Cells in Tissue Regeneration. Tissue Engineering - Part B: Reviews, 2017, 23, 515-528.	4.8	196
38	Nanoemulsion-induced enzymatic crosslinking of tyramine-functionalized polymer droplets. Journal of Materials Chemistry B, 2017, 5, 4835-4844.	5.8	23
39	Centering Single Cells in Microgels via Delayed Crosslinking Supports Long-Term 3D Culture by Preventing Cell Escape. Small, 2017, 13, 1603711.	10.0	49
40	Structural analysis of photocrosslinkable methacryloyl-modified protein derivatives. Biomaterials, 2017, 139, 163-171.	11.4	140
41	Tissue Engineering: Gold Nanocomposite Bioink for Printing 3D Cardiac Constructs (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock 1	14.9	3
42	Single Cell Microgel Based Modular Bioinks for Uncoupled Cellular Microâ€•and Macroenvironments. Advanced Healthcare Materials, 2017, 6, 1600913.	7.6	84
43	Spatially and temporally controlled hydrogels for tissue engineering. Materials Science and Engineering Reports, 2017, 119, 1-35.	31.8	151
44	Integrinâ€Mediated Interactions Control Macrophage Polarization in 3D Hydrogels. Advanced Healthcare Materials, 2017, 6, 1700289.	7.6	169
45	Nanostructured Fibrous Membranes with Rose Spike-Like Architecture. Nano Letters, 2017, 17, 6235-6240.	9.1	72
46	Concise Review: Organ Engineering: Design, Technology, and Integration. Stem Cells, 2017, 35, 51-60.	3.2	48
47	Nitric Oxide Mediates Crosstalk between Interleukin 1Î² and WNT Signaling in Primary Human Chondrocytes by Reducing DKK1 and FRZB Expression. International Journal of Molecular Sciences, 2017, 18, 2491.	4.1	28
48	Advancing Tissue Engineering: A Tale of Nanoâ€, Microâ€, and Macroscale Integration. Small, 2016, 12, 2130-2145.	10.0	62
49	Enzymatic Crosslinking of Polymer Conjugates is Superior over Ionic or UV Crosslinking for the Onâ€Chip Production of Cellâ€Laden Microgels. Macromolecular Bioscience, 2016, 16, 1524-1532.	4.1	25
50	Bioinspired seeding of biomaterials using three dimensional microtissues induces chondrogenic stem cell differentiation and cartilage formation under growth factor free conditions. Scientific Reports, 2016, 6, 36011.	3.3	40
51	Cardiovascular Organ-on-a-Chip Platforms for Drug Discovery and Development. Applied in Vitro Toxicology, 2016, 2, 82-96.	1.1	124
52	The matrix reloaded: the evolution of regenerative hydrogels. Materials Today, 2016, 19, 190-196.	14.2	39
53	Platelet-Rich Blood Derivatives for Stem Cell-Based Tissue Engineering and Regeneration. Current Stem Cell Reports, 2016, 2, 33-42.	1.6	82
54	Chondrocytes Cocultured with Stromal Vascular Fraction of Adipose Tissue Present More Intense Chondrogenic Characteristics Than with Adipose Stem Cells. Tissue Engineering - Part A, 2016, 22, 336-348.	3.1	24

#	Article	IF	Citations
55	From Nano to Macro: Multiscale Materials for Improved Stem Cell Culturing and Analysis. Cell Stem Cell, 2016, 18, 20-24.	11.1	43
56	A Qualitative Model of the Differentiation Network in Chondrocyte Maturation: A Holistic View of Chondrocyte Hypertrophy. PLoS ONE, 2016, 11, e0162052.	2.5	19
57	Cell based advanced therapeutic medicinal products for bone repair: Keep it simple?. Advanced Drug Delivery Reviews, 2015, 84, 30-44.	13.7	45
58	Optimizing cell viability in droplet-based cell deposition. Scientific Reports, 2015, 5, 11304.	3.3	87
59	Metabolic programming of mesenchymal stromal cells by oxygen tension directs chondrogenic cell fate. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 13954-13959.	7.1	104
60	Cell Sources for Articular Cartilage Repair Strategies: Shifting from Monocultures to Cocultures. Tissue Engineering - Part B: Reviews, 2013, 19, 31-40.	4.8	65
61	GREM1, FRZB and DKK1 mRNA levels correlate with osteoarthritis and are regulated by osteoarthritis-associated factors. Arthritis Research and Therapy, 2013, 15, R126.	3.5	74
62	Gene expression profiling of dedifferentiated human articular chondrocytes inÂmonolayer culture. Osteoarthritis and Cartilage, 2013, 21, 599-603.	1.3	147
63	Fibroblast Growth Factor-1 Is a Mesenchymal Stromal Cell-Secreted Factor Stimulating Proliferation of Osteoarthritic Chondrocytes in Co-Culture. Stem Cells and Development, 2013, 22, 2356-2367.	2.1	64
64	<i>In vivo</i>screening of extracellular matrix components produced under multiple experimental conditions implanted in one animal. Integrative Biology (United Kingdom), 2013, 5, 889-898.	1.3	31
65	A Dual Flow Bioreactor with Controlled Mechanical Stimulation for Cartilage Tissue Engineering. Tissue Engineering - Part C: Methods, 2013, 19, 774-783.	2.1	29
66	Boosting Angiogenesis and Functional Vascularization in Injectable Dextranâ€“Hyaluronic Acid Hydrogels by Endothelial-Like Mesenchymal Stromal Cells. Tissue Engineering - Part A, 2013, 20, 131112094536009.	3.1	16
67	Recognizing different tissues in human fetal femur cartilage by label-free Raman microspectroscopy. Journal of Biomedical Optics, 2012, 17, 116012.	2.6	38
68	Nanomaterials for the Local and Targeted Delivery of Osteoarthritis Drugs. Journal of Nanomaterials, 2012, 2012, 1-13.	2.7	18
69	Gremlin 1, Frizzledâ€related protein, and Dkkâ€1 are key regulators of human articular cartilage homeostasis. Arthritis and Rheumatism, 2012, 64, 3302-3312.	6.7	119
70	Hypoxia Inhibits Hypertrophic Differentiation and Endochondral Ossification in Explanted Tibiae. PLoS ONE, 2012, 7, e49896.	2.5	36
71	The effect of platelet lysate supplementation of a dextran-based hydrogel on cartilage formation. Biomaterials, 2012, 33, 3651-3661.	11.4	76
72	Fetal Mesenchymal Stromal Cells Differentiating towards Chondrocytes Acquire a Gene Expression Profile Resembling Human Growth Plate Cartilage. PLoS ONE, 2012, 7, e44561.	2.5	17

#	Article	IF	Citations
73	High throughput generated micro-aggregates of chondrocytes stimulate cartilage formation in vitro and in vivo. , 2012, 23, 387-399.		85
74	Cartilage Tissue Engineering. Endocrine Development, 2011, 21, 102-115.	1.3	43
75	Trophic Effects of Mesenchymal Stem Cells Increase Chondrocyte Proliferation and Matrix Formation. Tissue Engineering - Part A, 2011, 17, 1425-1436.	3.1	259