Anja Lode

List of Publications by Year
in descending order

98 papers	4,342 citations	81434 41 h-index	129628 63 g-index
99 all docs	99 docs citations	99 times ranked	5897 citing authors

#	Article	IF	Citations
1	Composites consisting of calcium phosphate cements and mesoporous bioactive glasses as a 3D plottable drug delivery system. Acta Biomaterialia, 2023, 156, 146-157.	4.1	20
2	Coreâ€“shell bioprinting as a strategy to apply differentiation factors in a spatially defined manner inside osteochondral tissue substitutes. Biofabrication, 2022, 14, 014108.	3.7	21
3	Think outside the box: 3D bioprinting concepts for biotechnological applications â€“ recent developments and future perspectives. Biotechnology Advances, 2022, 58, 107930.	6.0	15
4	Addition of High Acyl Gellan Gum to Low Acyl Gellan Gum Enables the Blends 3D Bioprintable. Gels, 2022, 8, 199.	2.1	7
5	Cellâ€“Material Interactions in Direct Contact Culture of Endothelial Cells on Biodegradable Iron-Based Stents Fabricated by Laser Powder Bed Fusion and Impact of Ion Release. ACS Applied Materials & Interfaces, 2022, 14, 439-451.	4.0	17
6	CyMAD bioreactor: A cyclic magnetic actuation device for magnetically mediated mechanical stimulation of 3D bioprinted hydrogel scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 131, 105253.	1.5	5
7	3D Plotting of Calcium Phosphate Cement and Melt Electrowriting of Polycaprolactone Microfibers in One Scaffold: A Hybrid Additive Manufacturing Process. Journal of Functional Biomaterials, 2022, 13, 75.	1.8	8
8	Viability and Functionality of Neonatal Porcine Islet-like Cell Clusters Bioprinted in Alginate-Based Bioinks. Biomedicines, 2022, 10, 1420.	1.4	4
9	Bildgebungsbasiertes individuelles Design und additive Fertigung von osteochondralen Knochenersatzstrukturen. , 2021, , 19-35.		0
10	Bioprinting of Magnetically Deformable Scaffolds. ACS Biomaterials Science and Engineering, 2021, 7, 648-662.	2.6	30
11	Toward Biofabrication of Resorbable Implants Consisting of a Calcium Phosphate Cement and Fibrinâ€"A Characterization In Vitro and In Vivo. International Journal of Molecular Sciences, 2021, 22, 1218.	1.8	20
12	Tailorable Zinc-Substituted Mesoporous Bioactive Glass/Alginate-Methylcellulose Composite Bioinks. Materials, 2021, 14, 1225.	1.3	28
13	3D bioprinting of hepatocytes: coreâ€“shell structured co-cultures with fibroblasts for enhanced functionality. Scientific Reports, 2021, 11, 5130.	1.6	56
14	Chemotactic and Angiogenic Potential of Mineralized Collagen Scaffolds Functionalized with Naturally Occurring Bioactive Factor Mixtures to Stimulate Bone Regeneration. International Journal of Molecular Sciences, 2021, 22, 5836.	1.8	8
15	3D printing of patient-specific implants for osteochondral defects: workflow for an MRI-guided zonal design. Bio-Design and Manufacturing, 2021, 4, 818-832.	3.9	18
16	Using melt-electrowritten microfibres for tailoring scaffold mechanics of 3D bioprinted chondrocyte-laden constructs. Bioprinting, 2021, 23, e00158.	2.9	7
17	Homogeneous and Reproducible Mixing of Highly Viscous Biomaterial Inks and Cell Suspensions to Create Bioinks. Gels, 2021, 7, 227.	2.1	16
18	Composite Bioinks With Mesoporous Bioactive Glassesâ€"A Critical Evaluation of Results Obtained by In Vitro Experiments. Frontiers in Bioengineering and Biotechnology, 2021, 9, 767256.	2.0	3

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19	Controlled and Local Delivery of Antibiotics by 3D Core/Shell Printed Hydrogel Scaffolds to Treat Soft Tissue Infections. Pharmaceutics, 2021, 13, 2151.	2.0	12
20	Evaluation of topographical and chemical modified TiAl6V4 implant surfaces in a weightâ€bearing intramedullary femur model in rabbit. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 1117-1128.	1.6	4
21	Electrodeposition of Sr-substituted hydroxyapatite on low modulus beta-type Ti-45Nb and effect on in vitro Sr release and cell response. Materials Science and Engineering C, 2020, 108, 110425.	3.8	26
22	The Secretome of Hypoxia Conditioned hMSC Loaded in a Central Depot Induces Chemotaxis and Angiogenesis in a Biomimetic Mineralized Collagen Bone Replacement Material. Advanced Healthcare Materials, 2020, 9, e1901426.	3.9	23
23	Characterization of Naturally Occurring Bioactive Factor Mixtures for Bone Regeneration. International Journal of Molecular Sciences, 2020, 21, 1412.	1.8	11
24	A Novel Plasma-Based Bioink Stimulates Cell Proliferation and Differentiation in Bioprinted, Mineralized Constructs. ACS Applied Materials & Interfaces, 2020, 12, 12557-12572.	4.0	72
25	Engineering considerations on extrusion-based bioprinting: interactions of material behavior, mechanical forces and cells in the printing needle. Biofabrication, 2020, 12, 025022.	3.7	93
26	Effect of â€˜in airâ€™ freezing on post-thaw recovery of Callithrix jacchus mesenchymal stromal cells and properties of 3D collagen-hydroxyapatite scaffolds. Cryobiology, 2020, 92, 215-230.	0.3	13
27	Nanoclay-based 3D printed scaffolds promote vascular ingrowth ex vivo and generate bone mineral tissue in vitro and in vivo. Biofabrication, 2020, 12, 035010.	3.7	73
28	3D Printing of Bone Grafts for Cleft Alveolar Osteoplasty â€“ In vivo Evaluation in a Preclinical Model. Frontiers in Bioengineering and Biotechnology, 2020, 8, 217.	2.0	45
29	3D Bioprinting of osteochondral tissue substitutes â€“ in vitro-chondrogenesis in multi-layered mineralized constructs. Scientific Reports, 2020, 10, 8277.	1.6	86
30	Bone Replacement: The Secretome of Hypoxia Conditioned hMSC Loaded in a Central Depot Induces Chemotaxis and Angiogenesis in a Biomimetic Mineralized Collagen Bone Replacement Material (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 T	3.9	0
31	Chitinous Scaffolds from Marine Sponges for Tissue Engineering. Springer Series in Biomaterials Science and Engineering, 2019, , 285-307.	0.7	2
32	Development and Characterization of Composites Consisting of Calcium Phosphate Cements and Mesoporous Bioactive Glass for Extrusion-Based Fabrication. Materials, 2019, 12, 2022.	1.3	25
33	3D Plotted Biphasic Bone Scaffolds for Growth Factor Delivery: Biological Characterization In Vitro and In Vivo. Advanced Healthcare Materials, 2019, 8, e1801512.	3.9	47
34	3D Bioprinting of Functional Islets of Langerhans in an Alginate/Methylcellulose Hydrogel Blend. Advanced Healthcare Materials, 2019, 8, e1801631.	3.9	67
35	Investigating the effect of sterilisation methods on the physical properties and cytocompatibility of methyl cellulose used in combination with alginate for 3D-bioplotting of chondrocytes. Journal of Materials Science: Materials in Medicine, 2019, 30, 10.	1.7	54
36	Endosteal and Perivascular Subniches in a 3D Bone Marrow Model for Multiple Myeloma. Tissue Engineering - Part C: Methods, 2018, 24, 300-312.	1.1	29

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37	Trivalent chromium incorporated in a crystalline calcium phosphate matrix accelerates materials degradation and bone formation in vivo. Acta Biomaterialia, 2018, 69, 332-341.	4.1	19
38	Strontium-modified premixed calcium phosphate cements for the therapy of osteoporotic bone defects. Acta Biomaterialia, 2018, 65, 475-485.	4.1	96
39	Strontium-modification of porous scaffolds from mineralized collagen for potential use in bone defect therapy. Materials Science and Engineering C, 2018, 84, 159-167.	3.8	33
40	Functionalized Bioink with Optical Sensor Nanoparticles for O₂ Imaging in 3Dâ€Bioprinted Constructs. Advanced Functional Materials, 2018, 28, 1804411.	7.8	63
41	A Methylcellulose Hydrogel as Support for 3D Plotting of Complex Shaped Calcium Phosphate Scaffolds. Gels, 2018, 4, 68.	2.1	44
42	Bioprinting of mineralized constructs utilizing multichannel plotting of a self-setting calcium phosphate cement and a cell-laden bioink. Biofabrication, 2018, 10, 045002.	3.7	86
43	Monitoring of Plant Cells and Tissues in Bioprocesses. Reference Series in Phytochemistry, 2018, , 433-481.	0.2	3
44	Design and Fabrication of Complex Scaffolds for Bone Defect Healing: Combined 3D Plotting of a Calcium Phosphate Cement and a Growth Factor-Loaded Hydrogel. Annals of Biomedical Engineering, 2017, 45, 224-236.	1.3	87
45	Three-dimensional plotting of a cell-laden alginate/methylcellulose blend: towards biofabrication of tissue engineering constructs with clinically relevant dimensions. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 1574-1587.	1.3	180
46	Calcium phosphate bone cement/mesoporous bioactive glass composites for controlled growth factor delivery. Biomaterials Science, 2017, 5, 578-588.	2.6	67
47	Novel chitin scaffolds derived from marine sponge Ianthella basta for tissue engineering approaches based on human mesenchymal stromal cells: Biocompatibility and cryopreservation. International Journal of Biological Macromolecules, 2017, 104, 1955-1965.	3.6	75
48	<sup />Central Growth Factor Loaded Depots in Bone Tissue Engineering Scaffolds for Enhanced Cell Attraction. Tissue Engineering - Part A, 2017, 23, 762-772.	1.6	12
49	3D chitinous scaffolds derived from cultivated marine demosponge Aplysina aerophoba for tissue engineering approaches based on human mesenchymal stromal cells. International Journal of Biological Macromolecules, 2017, 104, 1966-1974.	3.6	59
50	Cu2+, Co2+ and Cr3+ doping of a calcium phosphate cement influences materials properties and response of human mesenchymal stromal cells. Materials Science and Engineering C, 2017, 73, 99-110.	3.8	41
51	Green bioprinting: extrusion-based fabrication of plant cell-laden biopolymer hydrogel scaffolds. Biofabrication, 2017, 9, 045011.	3.7	63
52	Additive Biotechâ€”Chances, challenges, and recent applications of additive manufacturing technologies in biotechnology. New Biotechnology, 2017, 39, 222-231.	2.4	40
53	Data on TOF-SIMS analysis of Cu2+, Co2+ and Cr3+ doped calcium phosphate cements. Data in Brief, 2017, 13, 353-355.	0.5	1
54	Three-dimensional bioprinting of volumetric tissues and organs. MRS Bulletin, 2017, 42, 585-592.	1.7	39

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55	<i>In situ</i> functionalization of scaffolds during extrusion-based 3D plotting using a piezoelectric nanoliter pipette. Journal of 3D Printing in Medicine, 2017, 1, 25-29.	1.0	6
56	Functionalization of Ti-40Nb implant material with strontium by reactive sputtering. Biomaterials Research, 2017, 21, 18.	3.2	2
57	Cell-laden biphasic scaffolds with anisotropic structure for the regeneration of osteochondral tissue. Journal of Tissue Engineering and Regenerative Medicine, 2016, 10, 404-417.	1.3	21
58	Highly Concentrated Alginate-Gellan Gum Composites for 3D Plotting of Complex Tissue Engineering Scaffolds. Polymers, 2016, 8, 170.	2.0	56
59	A versatile method for combining different biopolymers in a core/shell fashion by 3D plotting to achieve mechanically robust constructs. Biofabrication, 2016, 8, 045001.	3.7	80
60	Additive manufacturing of collagen scaffolds by three-dimensional plotting of highly viscous dispersions. Biofabrication, 2016, 8, 015015.	3.7	48
61	Monitoring of Plant Cells and Tissues in Bioprocesses. Reference Series in Phytochemistry, 2016, , 1-49.	0.2	0
62	Concentrated gelatin/alginate composites for fabrication of predesigned scaffolds with a favorable cell response by 3D plotting. RSC Advances, 2015, 5, 43480-43488.	1.7	79
63	Green bioprinting: Fabrication of photosynthetic algaeâ€laden hydrogel scaffolds for biotechnological and medical applications. Engineering in Life Sciences, 2015, 15, 177-183.	2.0	104
64	Green bioprinting: Viability and growth analysis of microalgae immobilized in 3Dâ€plotted hydrogels versus suspension cultures. Engineering in Life Sciences, 2015, 15, 678-688.	2.0	46
65	Alginate/Nanohydroxyapatite Scaffolds with Designed Core/Shell Structures Fabricated by 3D Plotting and in Situ Mineralization for Bone Tissue Engineering. ACS Applied Materials & Interfaces, 2015, 7, 6541-6549.	4.0	133
66	3D plotting of growth factor loaded calcium phosphate cement scaffolds. Acta Biomaterialia, 2015, 27, 264-274.	4.1	140
67	Heparin modification of a biomimetic bone matrix for controlled release of VEGF. Journal of Biomedical Materials Research - Part A, 2014, 102, 3500-3511.	2.1	49
68	Fabrication of porous scaffolds by three-dimensional plotting of a pasty calcium phosphate bone cement under mild conditions. Journal of Tissue Engineering and Regenerative Medicine, 2014, 8, 682-693.	1.3	108
69	Heparinization of a biomimetic bone matrix: integration of heparin during matrix synthesis versus adsorptive post surface modification. Journal of Materials Science: Materials in Medicine, 2014, 25, 607-621.	1.7	11
70	Jellyfish collagen scaffolds for cartilage tissue engineering. Acta Biomaterialia, 2014, 10, 883-892.	4.1	147
71	Comparative evaluation of different calcium phosphateâ€based bone graft granules â€" an <i>in vitro</i> study with osteoblastâ€like cells. Clinical Oral Implants Research, 2013, 24, 441-449.	1.9	24
72	Direct Plotting of Threeâ€Dimensional Hollow Fiber Scaffolds Based on Concentrated Alginate Pastes for Tissue Engineering. Advanced Healthcare Materials, 2013, 2, 777-783.	3.9	119

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73	Hierarchical mesoporous bioactive glass/alginate composite scaffolds fabricated by three-dimensional plotting for bone tissue engineering. Biofabrication, 2013, 5, 015005.	3.7	138
74	Influence of different modifications of a calcium phosphate cement on resorption and new bone formation: An <i>in vivo</i> study in the minipig. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101, 1410-1418.	1.6	9
75	Well-ordered biphasic calcium phosphateâ€“alginate scaffolds fabricated by multi-channel 3D plotting under mild conditions. Journal of Materials Chemistry B, 2013, 1, 4088.	2.9	88
76	A novel strontium(II)-modified calcium phosphate bone cement stimulates human-bone-marrow-derived mesenchymal stem cell proliferation and osteogenic differentiation in vitro. Acta Biomaterialia, 2013, 9, 9547-9557.	4.1	165
77	Fabrication and characterization of regenerated silk scaffolds reinforced with natural silk fibers for bone tissue engineering. Journal of Biomedical Materials Research - Part A, 2013, 101A, 2392-2404.	2.1	77
78	Nanocrystalline spherical hydroxyapatite granules for bone repair: in vitro evaluation with osteoblast-like cells and osteoclasts. Journal of Materials Science: Materials in Medicine, 2013, 24, 1755-1766.	1.7	34
79	Osteoblast responses to novel titanium-based surfaces produced by plasma- and ion beam technologies. RSC Advances, 2013, 3, 11205.	1.7	4
80	Characterization of the osseointegration of Algipore and Algipore modified with mineralized collagen type I. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, 2012, 114, S160-S166.	0.2	2
81	Novel ceramic bone replacement material OsboneÂ® in a comparative in vitro study with osteoblasts. Clinical Oral Implants Research, 2011, 22, 651-657.	1.9	30
82	Optimization of culture conditions for osteogenically-induced mesenchymal stem cells in Î²-tricalcium phosphate ceramics with large interconnected channels. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 444-453.	1.3	23
83	Stem Cell Engineering for Regeneration of Bone Tissue. , 2011, , 383-399.		3
84	Influence of different modifications of a calcium phosphate bone cement on adhesion, proliferation, and osteogenic differentiation of human bone marrow stromal cells. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1452-1460.	2.1	15
85	Modifications of a calcium phosphate cement with biomoleculesâ€"Influence on nanostructure, material, and biological properties. Journal of Biomedical Materials Research - Part A, 2010, 95A, 912-923.	2.1	21
86	A bioactive triphasic ceramicâ€coated hydroxyapatite promotes proliferation and osteogenic differentiation of human bone marrow stromal cells. Journal of Biomedical Materials Research - Part A, 2009, 90A, 533-542.	2.1	28
87	Proliferation and osteogenic differentiation of human bone marrow stromal cells on alginate-gelatine-hydroxyapatite scaffolds with anisotropic pore structure. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 54-62.	1.3	72
88	Development of a mechanically stable support for the osteoinductive biomaterial COLLOSS^{Â®}E. Journal of Tissue Engineering and Regenerative Medicine, 2009, 3, 149-152.	1.3	6
89	In Vitro Evaluation of Textile Chitosan Scaffolds for Tissue Engineering using Human Bone Marrow Stromal Cells. Biomacromolecules, 2009, 10, 1305-1310.	2.6	50
90	Mineralised collagenâ€"an artificial, extracellular bone matrixâ€"improves osteogenic differentiation of bone marrow stromal cells. Journal of Materials Science: Materials in Medicine, 2008, 19, 269-275.	1.7	85

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91	Cultivation of human bone marrow stromal cells on three-dimensional scaffolds of mineralized collagen: influence of seeding density on colonization, proliferation and osteogenic differentiation. Journal of Tissue Engineering and Regenerative Medicine, 2008, 2, 400-407.	1.3	70
92	Heparin modification of calcium phosphate bone cements for VEGF functionalization. Journal of Biomedical Materials Research - Part A, 2008, 86A, 749-759.	2.1	47
93	Biomaterials based on mineralised collagenâ€"an artificial extracellular bone matrix. , 2007, , 323-328.		2
94	Influence of modified extracellular matrices on TI6AL4V implants on binding and release of VEGF. Journal of Biomedical Materials Research - Part A, 2006, 79A, 882-894.	2.1	33
95	Molecular characterization ofSaccharomyces cerevisiaeSco2p reveals a high degree of redundancy with Sco1p. Yeast, 2002, 19, 909-922.	0.8	33
96	Plastidic (Pho1-type) phosphorylase isoforms in potato (Solanum tuberosum L.) plants: expression analysis and immunochemical characterization. Planta, 2001, 213, 602-613.	1.6	46
97	The P(174)L Mutation in the Human hSCO1 Gene Affects the Assembly of Cytochrome c Oxidase. Biochemical and Biophysical Research Communications, 2000, 279, 341-347.	1.0	19
98	Mitochondrial copper metabolism in yeast: interaction between Sco1p and Cox2p. FEBS Letters, 2000, 485, 19-24.	1.3	95