Dietmar Werner Hutmacher

List of Publications by Year
in descending order

501 papers	52,220 citations	1294 109 h-index	1705 213 g-index
536 all docs	536 docs citations	536 times ranked	39543 citing authors

#	Article	IF	Citations
1	A humanised rat model of osteosarcoma reveals ultrastructural differences between bone and mineralised tumour tissue. Bone, 2022, 158, 116018.	1.4	8
2	Biomechanical Principles of Breast Implants and Current State of Research in Soft Tissue Engineering for Cosmetic Breast Augmentation. Aesthetic Plastic Surgery, 2022, 46, 1-10.	0.5	5
3	Technology roadmap for the development of a 3D cell culture workstation for a biomedical industry startup. Technological Forecasting and Social Change, 2022, 174, 121213.	6.2	10
4	An Open Source Technology Platform to Manufacture Hydrogel-Based 3D Culture Models in an Automated and Standardized Fashion. Journal of Visualized Experiments, 2022, , .	0.2	2
5	Pectus excavatum camouflage: a new technique using a tissue engineered scaffold. European Journal of Plastic Surgery, 2022, 45, 177-182.	0.3	4
6	Cognitive Bias and Therapy Choice in Breast Reconstruction Surgery Decision-Making. Plastic and Reconstructive Surgery, 2022, 149, 629e-637e.	0.7	3
7	Engineering mammary tissue microenvironments in vitro. Advances in Stem Cells and Their Niches, 2022, , .	0.1	0
8	Spatially Heterogeneous Tubular Scaffolds for In Situ Heart Valve Tissue Engineering Using Melt Electrowriting. Advanced Functional Materials, 2022, 32, .	7.8	39
9	Bone Regeneration Exploiting Corticoperiosteal Tissue Transfer for Scaffold-Guided Bone Regeneration. Tissue Engineering - Part C: Methods, 2022, 28, 202-213.	1.1	8
10	Regenerative matching axial vascularisation of absorbable 3D-printed scaffold for large bone defects: A first in human series. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2022, 75, 2108-2118.	0.5	26
11	An in silico model predicts the impact of scaffold design in large bone defect regeneration. Acta Biomaterialia, 2022, 145, 329-341.	4.1	16
12	Clinical translation of a patient-specific scaffold-guided bone regeneration concept in four cases with large long bone defects. Journal of Orthopaedic Translation, 2022, 34, 73-84.	1.9	19
13	Exploring Surgeonsâ€™, Nursesâ€™, and Patientsâ€™ Information Seeking Behavior on Medical Innovations. Annals of Surgery Open, 2022, 3, e176.	0.7	1
14	Tissue Engineering Cartilage with Deep Zone Cytoarchitecture by Highâ€Resolution Acoustic Cell Patterning. Advanced Healthcare Materials, 2022, 11, .	3.9	17
15	The Patenting and Technological Trends in Hernia Mesh Implants. Tissue Engineering - Part B: Reviews, 2021, 27, 48-73.	2.5	5
16	Convergence of 3D printed biomimetic wound dressings and adult stem cell therapy. Biomaterials, 2021, 268, 120558.	5.7	52
17	Targeted 2D histology and ultrastructural bone analysis based on 3D microCT anatomical locations. MethodsX, 2021, 8, 101480.	0.7	6
18	Automated 3D Microphysiometry Facilitates High-Content and Highly Reproducible Oxygen Measurements within 3D Cell Culture Models. ACS Sensors, 2021, 6, 1248-1260.	4.0	9

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19	Knowledge, consultation time, and choice in breast reconstruction. British Journal of Surgery, 2021, 108, e168-e169.	0.1	4
20	Antibacterial Albumin-Tannic Acid Coatings for Scaffold-Guided Breast Reconstruction. Frontiers in Bioengineering and Biotechnology, 2021, 9, 638577.	2.0	13
21	Elucidating the Molecular Mechanisms for the Interaction of Water with Polyethylene Glycol-Based Hydrogels: Influence of Ionic Strength and Gel Network Structure. Polymers, 2021, 13, 845.	2.0	17
22	Deciphering the Molecular Mechanism of Water Interaction with Gelatin Methacryloyl Hydrogels: Role of Ionic Strength, pH, Drug Loading and Hydrogel Network Characteristics. Biomedicines, 2021, 9, 574.	1.4	22
23	A Preclinical Animal Model for the Study of Scaffold-Guided Breast Tissue Engineering. Tissue Engineering - Part C: Methods, 2021, 27, 366-377.	1.1	6
24	Convergence of Machine Vision and Melt Electrowriting. Advanced Materials, 2021, 33, e2100519.	11.1	40
25	A Suite of Activity-Based Probes To Dissect the KLK Activome in Drug-Resistant Prostate Cancer. Journal of the American Chemical Society, 2021, 143, 8911-8924.	6.6	14
26	An open-source technology platform to increase reproducibility and enable high-throughput production of tailorable gelatin methacryloyl (GelMA) - based hydrogels. Materials and Design, 2021, 204, 109619.	3.3	10
27	In vitro engineering of a bone metastases model allows for study of the effects of antiandrogen therapies in advanced prostate cancer. Science Advances, 2021, 7, .	4.7	20
28	A humanized orthotopic tumor microenvironment alters the bone metastatic tropism of prostate cancer cells. Communications Biology, 2021, 4, 1014.	2.0	5
29	Tissue engineering of corneal stroma via melt electrowriting. Journal of Tissue Engineering and Regenerative Medicine, 2021, 15, 841-851.	1.3	9
30	MechAnalyze: An Algorithm for Standardization and Automation of Compression Test Analysis. Tissue Engineering - Part C: Methods, 2021, 27, 529-542.	1.1	3
31	Engineering a 3D bone marrow adipose composite tissue loading model suitable for studying mechanobiological questions. Materials Science and Engineering C, 2021, 128, 112313.	3.8	10
32	Scaffold-guided bone regeneration in large volume tibial segmental defects. Bone, 2021, 153, 116163.	1.4	29
33	Ultrafast, miniature soft actuators. Multifunctional Materials, 2021, 4, 045001.	2.4	18
34	10/10/2021 7:17:32 PM. Bio-protocol, 2021, , .	0.2	0
35	Mechanical and geometrical study of 3D printed Voronoi scaffold design for large bone defects. Materials and Design, 2021, 212, 110224.	3.3	26
36	Label-free isolation and cultivation of patient-matched human mammary epithelial and stromal cells from normal breast tissue. European Journal of Cell Biology, 2021, 100, 151187.	1.6	2

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37	Automated melt electrowritting platform with real-time process monitoring. HardwareX, 2021, 10, e00246.	1.1	2
38	Gelatin Methacryloyl Hydrogels for the Localized Delivery of Cefazolin. Polymers, 2021, 13, 3960.	2.0	12
39	The molecular function of kallikreinâ€related peptidase 14 demonstrates a key modulatory role in advanced prostate cancer. Molecular Oncology, 2020, 14, 105-128.	2.1	13
40	The Use of 3D Printed Microporous-Strut Polycaprolactone Scaffolds for Targeted Local Delivery of Chemotherapeutic Agent for Breast Cancer Application. IFMBE Proceedings, 2020, , 153-157.	0.2	2
41	Cancer-associated fibroblasts of the prostate promote a compliant and more invasive phenotype in benign prostate epithelial cells. Materials Today Bio, 2020, 8, 100073.	2.6	7
42	A 3D-printed biomaterials-based platform to advance established therapy avenues against primary bone cancers. Acta Biomaterialia, 2020, 118, 69-82.	4.1	11
43	Personalized, Mechanically Strong, and Biodegradable Coronary Artery Stents via Melt Electrowriting. ACS Macro Letters, 2020, 9, 1732-1739.	2.3	27
44	Stromal fibroblasts regulate microvascular-like network architecture in a bioengineered breast tumour angiogenesis model. Acta Biomaterialia, 2020, 114, 256-269.	4.1	17
45	Melt Electrowriting of Complex 3D Anatomically Relevant Scaffolds. Frontiers in Bioengineering and Biotechnology, 2020, 8, 793.	2.0	55
46	Human and mouse bones physiologically integrate in a humanized mouse model while maintaining species-specific ultrastructure. Science Advances, 2020, 6, .	4.7	10
47	Threeâ€dimensional printing in a pandemic: panacea or panic?. Medical Journal of Australia, 2020, 213, 267-268.	0.8	0
48	Effects of polydopamine coatings on nucleation modes of surface mineralization from simulated body fluid. Scientific Reports, 2020, 10, 14982.	1.6	22
49	Convergence of scaffold-guided bone regeneration and RIA bone grafting for the treatment of a critical-sized bone defect of the femoral shaft. European Journal of Medical Research, 2020, 25, 70.	0.9	39
50	OpenWorkstation: A modular open-source technology for automated in vitro workflows. HardwareX, 2020, 8, e00152.	1.1	21
51	Hydrogels as Drug Delivery Systems: A Review of Current Characterization and Evaluation Techniques. Pharmaceutics, 2020, 12, 1188.	2.0	196
52	Layered Antimicrobial Selenium Nanoparticleâ€“Calcium Phosphate Coating on 3D Printed Scaffolds Enhanced Bone Formation in Critical Size Defects. ACS Applied Materials & Interfaces, 2020, 12, 55638-55648.	4.0	24
53	Polydopamine coating of uncrosslinked chitosan as an acellular scaffold for full thickness skin grafts. Carbohydrate Polymers, 2020, 245, 116524.	5.1	20
54	Gelatin Methacryloyl Hydrogels Control the Localized Delivery of Albumin-Bound Paclitaxel. Polymers, 2020, 12, 501.	2.0	51

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55	The Current Versatility of Polyurethane Three-Dimensional Printing for Biomedical Applications. Tissue Engineering - Part B: Reviews, 2020, 26, 272-283.	2.5	58
56	A preclinical large-animal model for the assessment of critical-size load-bearing bone defect reconstruction. Nature Protocols, 2020, 15, 877-924.	5.5	75
57	Targeted camptothecin delivery via silicon nanoparticles reduces breast cancer metastasis. Biomaterials, 2020, 240, 119791.	5.7	73
58	Characterisation and evaluation of the regenerative capacity of Stro-4+ enriched bone marrow mesenchymal stromal cells using bovine extracellular matrix hydrogel and a novel biocompatible melt electro-written medical-grade polycaprolactone scaffold. Biomaterials, 2020, 247, 119998.	5.7	29
59	Breast Reconstruction Using Scaffold-Based Tissue Engineering. , 2020, , 279-290.		4
60	The Current State and Future of Regenerative Sports Medicine. Future of Business and Finance, 2020, , 133-149.	0.3	0
61	The Next Frontier in Melt Electrospinning: Taming the Jet. Advanced Functional Materials, 2019, 29, 1904664.	7.8	173
62	Microenvironment engineering of osteoblastic bone metastases reveals osteomimicry of patient-derived prostate cancer xenografts. Biomaterials, 2019, 220, 119402.	5.7	28
63	In vitro disease models 4.0 via automation and high-throughput processing. Biofabrication, 2019, 11, 043002.	3.7	20
64	Selenium nanoparticles as anti-infective implant coatings for trauma orthopedics against methicillin-resistant Staphylococcus aureus and epidermidis: in vitro and in vivo assessment . International Journal of Nanomedicine, 2019, Volume 14, 4613-4624.	3.3	67
65	Investigation of Sustained BMP Delivery in the Prevention of Medicationâ€Related Osteonecrosis of the Jaw (MRONJ) in a Rat Model. Macromolecular Bioscience, 2019, 19, e1900226.	2.1	16
66	Additive biomanufacturing of scaffolds for breast reconstruction. Additive Manufacturing, 2019, 30, 100845.	1.7	24
67	Humanized bone facilitates prostate cancer metastasis and recapitulates therapeutic effects of zoledronic acid in vivo. Bone Research, 2019, 7, 31.	5.4	16
68	Addressing Patient Specificity in the Engineering of Tumor Models. Frontiers in Bioengineering and Biotechnology, 2019, 7, 217.	2.0	53
69	Effect of gelatin source and photoinitiator type on chondrocyte redifferentiation in gelatin methacryloyl-based tissue-engineered cartilage constructs. Journal of Materials Chemistry B, 2019, 7, 1761-1772.	2.9	92
70	Degradation mechanisms of polycaprolactone in the context of chemistry, geometry and environment. Progress in Polymer Science, 2019, 96, 1-20.	11.8	366
71	Recombinant Human Bone Morphogenetic Protein 7 Exerts Osteo-Catabolic Effects on Bone Grafts That Outweigh Its Osteo-Anabolic Capacity. Calcified Tissue International, 2019, 105, 331-340.	1.5	3
72	Immunogold FIBâ€SEM: Combining Volumetric Ultrastructure Visualization with 3D Biomolecular Analysis to Dissect Cellâ€“Environment Interactions. Advanced Materials, 2019, 31, 1900488.	11.1	16

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73	Biologically Inspired Scaffolds for Heart Valve Tissue Engineering via Melt Electrowriting. Small, 2019, 15, e1900873.	5.2	150
74	A clarion call for understanding regulatory processes for additive manufacturing in the health sector. Expert Review of Medical Devices, 2019, 16, 405-412.	1.4	20
75	Engineering osteoblastic metastases to delineate the adaptive response of androgen-deprived prostate cancer in the bone metastatic microenvironment. Bone Research, 2019, 7, 13.	5.4	27
76	A humanized bone microenvironment uncovers HIF2 alpha as a latent marker for osteosarcoma. Acta Biomaterialia, 2019, 89, 372-381.	4.1	13
77	Periodontal Tissue Engineering with a Multiphasic Construct and Cell Sheets. Journal of Dental Research, 2019, 98, 673-681.	2.5	84
78	3D printed dual macro-, microscale porous network as a tissue engineering scaffold with drug delivering function. Biofabrication, 2019, 11, 035014.	3.7	47
79	A new 3D printed applicator with radioactive gel for conformal brachytherapy of superficial skin tumors. , 2019, 2019, 6979-6982.		2
80	Histomorphometric Evaluation of Critical-Sized Bone Defects Using Osteomeasure and Aperio Image Analysis Systems. Tissue Engineering - Part C: Methods, 2019, 25, 732-741.	1.1	8
81	Melt electrowriting of electroactive poly(vinylidene difluoride) fibers. Polymer International, 2019, 68, 735-745.	1.6	42
82	Design and Development of a Three-Dimensional Printing High-Throughput Melt Electrowriting Technology Platform. 3D Printing and Additive Manufacturing, 2019, 6, 82-90.	1.4	32
83	Printomics: the high-throughput analysis of printing parameters applied to melt electrowriting. Biofabrication, 2019, 11, 025004.	3.7	53
84	Tuning mechanical reinforcement and bioactivity of 3D printed ternary nanocomposites by interfacial peptide-polymer conjugates. Biofabrication, 2019, 11, 035028.	3.7	18
85	Radium 223-Mediated Zonal Cytotoxicity of Prostate Cancer in Bone. Journal of the National Cancer Institute, 2019, 111, 1042-1050.	3.0	20
86	Tissue engineered human prostate microtissues reveal key role of mast cell-derived tryptase in potentiating cancer-associated fibroblast (CAF)-induced morphometric transition in vitro. Biomaterials, 2019, 197, 72-85.	5.7	44
87	Nipple Reconstruction: A Regenerative Medicine Approach Using 3D-Printed Tissue Scaffolds. Tissue Engineering - Part B: Reviews, 2019, 25, 126-134.	2.5	13
88	A 3D tumor microenvironment regulates cell proliferation, peritoneal growth and expression patterns. Biomaterials, 2019, 190-191, 63-75.	5.7	37
89	Convergence of Scaffold-Guided Bone Reconstruction and Surgical Vascularization Strategiesâ€"A Quest for Regenerative Matching Axial Vascularization. Frontiers in Bioengineering and Biotechnology, 2019, 7, 448.	2.0	21
90	Bioengineered Microtissue Models of the Human Bone Metastatic Microenvironment: A Novel In Vitro Theranostics Platform for Cancer Research. Methods in Molecular Biology, 2019, 2054, 23-57.	0.4	5

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91	Real-Time and 3D Quantification of Cancer Cell Dynamics: Exploiting a Bioengineered Human Bone Metastatic Microtissue. Methods in Molecular Biology, 2019, 2054, 59-77.	0.4	2
92	Abstract 3747: Radium 223 inhibits prostate cancer in bone via zonal cytotoxicity. , 2019, , .		0
93	Abstract 3747: Radium 223 inhibits prostate cancer in bone via zonal cytotoxicity. , 2019, , .		0
94	3D printed Polycaprolactone scaffolds with dual macro-microporosity for applications in local delivery of antibiotics. Materials Science and Engineering C, 2018, 87, 78-89.	3.8	87
95	Assessment of static and perfusion methods for decellularization of PCL membrane-supported periodontal ligament cell sheet constructs. Archives of Oral Biology, 2018, 88, 67-76.	0.8	27
96	The effect of decellularized tissue engineered constructs on periodontal regeneration. Journal of Clinical Periodontology, 2018, 45, 586-596.	2.3	40
97	Modelomics to Investigate Cancer Bone Metastasis. Current Molecular Biology Reports, 2018, 4, 88-100.	0.8	4
98	Animal models for bone tissue engineering and modelling disease. DMM Disease Models and Mechanisms, 2018, 11, .	1.2	188
99	Melt Electrospinning Writing of Highly Ordered Large Volume Scaffold Architectures. Advanced Materials, 2018, 30, e1706570.	11.1	191
100	Effect of plasma immersion ion implantation on polycaprolactone with various molecular weights and crystallinity. Journal of Materials Science: Materials in Medicine, 2018, 29, 5.	1.7	11
101	Electrospinning writing with molten poly (Îµ-caprolactone) from different directions â€“ Examining the effects of gravity. Materials Letters, 2018, 216, 114-118.	1.3	16
102	Rational Design of Mouse Models for Cancer Research. Trends in Biotechnology, 2018, 36, 242-251.	4.9	61
103	Rational design and fabrication of multiphasic soft network composites for tissue engineering articular cartilage: A numerical model-based approach. Chemical Engineering Journal, 2018, 340, 15-23.	6.6	58
104	Meso-Endothelial Bipotent Progenitors from Human Placenta Display Distinct Molecular and Cellular Identity. Stem Cell Reports, 2018, 10, 890-904.	2.3	27
105	Humanization of bone and bone marrow in an orthotopic site reveals new potential therapeutic targets in osteosarcoma. Biomaterials, 2018, 171, 230-246.	5.7	33
106	A humanised tissueâ€engineered bone model allows speciesâ€specific breast cancerâ€related bone metastasis in vivo. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 494-504.	1.3	18
107	Designification of Neurotechnological Devices through 3D Printed Functional Materials. Advanced Functional Materials, 2018, 28, 1703905.	7.8	3
108	Conceptual design of a personalized radiation therapy patch for skin cancer. Current Directions in Biomedical Engineering, 2018, 4, 607-610.	0.2	6

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109	Humanization of the Prostate Microenvironment Reduces Homing of PC3 Prostate Cancer Cells to Human Tissue-Engineered Bone. Cancers, 2018, 10, 438.	1.7	15
110	Engineering Anisotropic Muscle Tissue using Acoustic Cell Patterning. Advanced Materials, 2018, 30, e1802649.	11.1	140
111	A Method for Prostate and Breast Cancer Cell Spheroid Cultures Using Gelatin Methacryloyl-Based Hydrogels. Methods in Molecular Biology, 2018, 1786, 175-194.	0.4	16
112	Intravital microscopy of osteolytic progression and therapy response of cancer lesions in the bone. Science Translational Medicine, 2018, 10, .	5.8	42
113	Non-linear optical microscopy and histological analysis of collagen, elastin and lysyl oxidase expression in breast capsular contracture. European Journal of Medical Research, 2018, 23, 30.	0.9	9
114	Mineralization of plasma treated polymer surfaces from super-saturated simulated body fluids. Materials Letters, 2018, 230, 12-15.	1.3	9
115	The quest for mechanically and biologically functional soft biomaterials via soft network composites. Advanced Drug Delivery Reviews, 2018, 132, 214-234.	6.6	35
116	Independent Evaluation of Medical-Grade Bioresorbable Filaments for Fused Deposition Modelling/Fused Filament Fabrication of Tissue Engineered Constructs. Polymers, 2018, 10, 40.	2.0	41
117	SpheroidSimâ€"Preliminary evaluation of a new computational tool to predict the influence of cell cycle time and phase fraction on spheroid growth. Biotechnology Progress, 2018, 34, 1335-1343.	1.3	0
118	Immune system augmentation via humanization using stem/progenitor cells and bioengineering in a breast cancer model study. International Journal of Cancer, 2018, 143, 1470-1482.	2.3	27
119	Tissue Engineered Constructs for Periodontal Regeneration: Current Status and Future Perspectives. Advanced Healthcare Materials, 2018, 7, e1800457.	3.9	96
120	Abstract 1165: A tissue-engineered bone mimetic in vitro model for monitoring metastatic PCa growth and therapy response. , 2018, , .		0
121	Evaluation of polycaprolactoneâ€‰â€"â€‰poly-D,L-lactide copolymer as biomaterial for breast tissue engineering. Polymer International, 2017, 66, 77-84.	1.6	17
122	Scaffold-cell bone engineering in a validated preclinical animal model: precursors vs differentiated cell source. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 2081-2089.	1.3	39
123	Breast Augmentation and Reconstruction from a Regenerative Medicine Point of View: State of the Art and Future Perspectives. Tissue Engineering - Part B: Reviews, 2017, 23, 281-293.	2.5	44
124	Antimicrobial and Immunomodulatory Surfaceâ€Functionalized Electrospun Membranes for Bone Regeneration. Advanced Healthcare Materials, 2017, 6, 1601345.	3.9	66
125	Engineering a humanized bone organ model in mice to study bone metastases. Nature Protocols, 2017, 12, 639-663.	5.5	91
126	Kallikreinâ€related peptidase 4 induces cancerâ€associated fibroblast features in prostateâ€derived stromal cells. Molecular Oncology, 2017, 11, 1307-1329.	2.1	17

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127	Current developments in multifunctional smart materials for 3D/4D bioprinting. Current Opinion in Biomedical Engineering, 2017, 2, 67-75.	1.8	70
128	3D printed lattices as an activation and expansion platform for T cell therapy. Biomaterials, 2017, 140, 58-68.	5.7	32
129	Via precise interface engineering towards bioinspired composites with improved 3D printing processability and mechanical properties. Journal of Materials Chemistry B, 2017, 5, 5037-5047.	2.9	23
130	Structural analysis of photocrosslinkable methacryloyl-modified protein derivatives. Biomaterials, 2017, 139, 163-171.	5.7	140
131	Biofabricated soft network composites for cartilage tissue engineering. Biofabrication, 2017, 9, 025014.	3.7	135
132	Endosteal-like extracellular matrix expression on melt electrospun written scaffolds. Acta Biomaterialia, 2017, 52, 145-158.	4.1	58
133	3â€Dimensional functionalized polycaprolactoneâ€hyaluronic acid hydrogel constructs for bone tissue engineering. Journal of Clinical Periodontology, 2017, 44, 428-437.	2.3	47
134	Fabrication and Characterization of Decellularized Periodontal Ligament Cell Sheet Constructs. Methods in Molecular Biology, 2017, 1537, 403-412.	0.4	11
135	Biomimic Design of Periosteum: Construction Strategies, Scaffold Design and Cell Sources. Springer Series in Biomaterials Science and Engineering, 2017, , 303-318.	0.7	1
136	Examination of the foreign body response to biomaterials by nonlinear intravital microscopy. Nature Biomedical Engineering, 2017, 1, .	11.6	147
137	A Novel 3D Cultured Model for Studying Early Changes in Ageâ€Related Macular Degeneration. Macromolecular Bioscience, 2017, 17, 1700221.	2.1	22
138	Mesenchymal stem/stromal cells enhance engraftment, vasculogenic and pro-angiogenic activities of endothelial colony forming cells in immunocompetent hosts. Scientific Reports, 2017, 7, 13558.	1.6	33
139	5.13 Electrospinning With Polymer Melts â€“ State of the Art and Future Perspectives. , 2017, , 217-235.		10
140	Fetal Bone Marrowâ€Derived Mesenchymal Stem/Stromal Cells Enhance Humanization and Bone Formation of BMP7 Loaded Scaffolds. Biotechnology Journal, 2017, 12, 1700414.	1.8	9
141	Scaffold curvature-mediated novel biomineralization process originates a continuous soft tissue-to-bone interface. Acta Biomaterialia, 2017, 60, 64-80.	4.1	62
142	An Integrated Design, Material, and Fabrication Platform for Engineering Biomechanically and Biologically Functional Soft Tissues. ACS Applied Materials & Interfaces, 2017, 9, 29430-29437.	4.0	98
143	Challenges and opportunities in the manufacture and expansion of cells for therapy. Expert Opinion on Biological Therapy, 2017, 17, 1221-1233.	1.4	13
144	A novel bioreactor system for biaxial mechanical loading enhances the properties of tissue-engineered human cartilage. Scientific Reports, 2017, 7, 16997.	1.6	87

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145	6.3 Engineering the Organ Bone. , 2017, , 54-74.		1
146	6.25 Breast Tissue Engineering. , 2017, , 435-454.		0
147	Priming of endothelial colonyâ€forming cells in a mesenchymal niche improves engraftment and vasculogenic potential by initiating mesenchymal transition orchestrated by NOTCH signaling. FASEB Journal, 2017, 31, 610-624.	0.2	40
148	Periosteum tissue engineering in an orthotopic inÂvivo platform. Biomaterials, 2017, 121, 193-204.	5.7	80
149	Vascularised bone transfer: History, blood supply and contemporary problems. Journal of Plastic, Reconstructive and Aesthetic Surgery, 2017, 70, 1-11.	0.5	27
150	Additive Biomanufacturing: An Advanced Approach for Periodontal Tissue Regeneration. Annals of Biomedical Engineering, 2017, 45, 12-22.	1.3	87
151	Comparison of early osseointegration of SLA^{Â®} and SLActive^{Â®} implants in maxillary sinus augmentation: a pilot study. Clinical Oral Implants Research, 2017, 28, 1325-1333.	1.9	25
152	Melt Electrospinning Writing of Three-dimensional Poly(ε-caprolactone) Scaffolds with Controllable Morphologies for Tissue Engineering Applications. Journal of Visualized Experiments, 2017, , .	0.2	36
153	5.11 Engineering the Haematopoietic Stem Cell Niche In Vitro. , 2017, , 187-199.		1
154	Electrospinning Technology: Cellulose and Cellulose Derivatives. , 2017, , 506-546.		0
155	Lycopene reduces ovarian tumor growth and intraperitoneal metastatic load. American Journal of Cancer Research, 2017, 7, 1322-1336.	1.4	11
156	Microparticles for Sustained Growth Factor Delivery in the Regeneration of Critically-Sized Segmental Tibial Bone Defects. Materials, 2016, 9, 259.	1.3	25
157	A histomorphometric assessment of collagenâ€stabilized anorganic bovine bone mineral in maxillary sinus augmentation â€“ a randomized controlled trial in sheep. Clinical Oral Implants Research, 2016, 27, 734-743.	1.9	19
158	Quo Vadis Breast Tissue Engineering?. EBioMedicine, 2016, 6, 24-25.	2.7	3
159	Lycopene's Effects on Cancer Cell Functions within Monolayer and Spheroid Cultures. Nutrition and Cancer, 2016, 68, 350-363.	0.9	7
160	Polylactides in additive biomanufacturing. Advanced Drug Delivery Reviews, 2016, 107, 228-246.	6.6	63
161	Tissue engineered periodontal products. Journal of Periodontal Research, 2016, 51, 1-15.	1.4	94
162	Tissue engineering and regenerative medicine in musculoskeletal oncology. Cancer and Metastasis Reviews, 2016, 35, 475-487.	2.7	25

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163	Transformation of Breast Reconstruction via Additive Biomanufacturing. Scientific Reports, 2016, 6, 28030.	1.6	67
164	A Validated Preclinical Animal Model for Primary Bone Tumor Research. Journal of Bone and Joint Surgery - Series A, 2016, 98, 916-925.	1.4	22
165	Cost-Effective Creation of Biofunctionalised Scaffolds, Tailored to Function as Stem Cell Niches for Expansion, Transport and Delivery. Cytotherapy, 2016, 18, S60.	0.3	1
166	Insight into characteristic features of cartilage growth plate as a physiological template for bone formation. Journal of Biomedical Materials Research - Part A, 2016, 104, 357-366.	2.1	11
167	Melt electrospinning today: An opportune time for an emerging polymer process. Progress in Polymer Science, 2016, 56, 116-166.	11.8	381
168	Functionalization, preparation and use of cell-laden gelatin methacryloylâ€“based hydrogels as modular tissue culture platforms. Nature Protocols, 2016, 11, 727-746.	5.5	581
169	Data for accelerated degradation of calcium phosphate surface-coated polycaprolactone and polycaprolactone/bioactive glass composite scaffolds. Data in Brief, 2016, 7, 923-926.	0.5	7
170	In vitro and in vivo bone formation potential of surface calcium phosphate-coated polycaprolactone and polycaprolactone/bioactive glass composite scaffolds. Acta Biomaterialia, 2016, 30, 319-333.	4.1	137
171	Monitoring Healing Progression and Characterizing the Mechanical Environment in Preclinical Models for Bone Tissue Engineering. Tissue Engineering - Part B: Reviews, 2016, 22, 47-57.	2.5	15
172	Growth Factor-Loaded Microparticles for Tissue Engineering: The Discrepancies of In Vitro Characterization Assays. Tissue Engineering - Part C: Methods, 2016, 22, 142-154.	1.1	8
173	Differential osteogenicity of multiple donor-derived human mesenchymal stem cells and osteoblasts in monolayer, scaffold-based 3D culture and in vivo. Biomedizinische Technik, 2016, 61, 253-266.	0.9	7
174	Tie-2 regulates the stemness and metastatic properties of prostate cancer cells. Oncotarget, 2016, 7, 2572-2584.	0.8	21
175	Data on in vitro and in vivo cell orientation on substrates with different topographies. Data in Brief, 2015, 5, 379-382.	0.5	2
176	Delayed Minimally Invasive Injection of Allogenic Bone Marrow Stromal Cell Sheets Regenerates Large Bone Defects in an Ovine Preclinical Animal Model. Stem Cells Translational Medicine, 2015, 4, 503-512.	1.6	61
177	Neurological heterotopic ossification following spinal cord injury is triggered by macrophageâ€mediated inflammation in muscle. Journal of Pathology, 2015, 236, 229-240.	2.1	131
178	Melt electrospinning onto cylinders: effects of rotational velocity and collector diameter on morphology of tubular structures. Polymer International, 2015, 64, 1086-1095.	1.6	86
179	Bacterial comparison of preoperative rinsing and swabbing for oral surgery using 0.2% chlorhexidine. Journal of Investigative and Clinical Dentistry, 2015, 6, 193-196.	1.8	6
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