Eben Alsberg

List of Publications by Year
in descending order

153 papers	12,420 citations	18482 62 h-index	26613 107 g-index
162 all docs	162 docs citations	162 times ranked	13992 citing authors

#	ARTICLE	IF	CITATIONS
1	Degradation of Partially Oxidized Alginate and Its Potential Application for Tissue Engineering. Biotechnology Progress, 2001, 17, 945-950.	2.6	573
2	Photocrosslinked alginate hydrogels with tunable biodegradation rates and mechanical properties. Biomaterials, 2009, 30, 2724-2734.	11.4	511
3	Cell-interactive Alginate Hydrogels for Bone Tissue Engineering. Journal of Dental Research, 2001, 80, 2025-2029.	5.2	495
4	Dual growth factor delivery and controlled scaffold degradation enhance in vivo bone formation by transplanted bone marrow stromal cells. Bone, 2004, 35, 562-569.	2.9	376
5	Engineering growing tissues. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12025-12030.	7.1	360
6	Combined microfluidic-micromagnetic separation of living cells in continuous flow. Biomedical Microdevices, 2006, 8, 299-308.	2.8	348
7	Decellularized tissue and cell-derived extracellular matrices as scaffolds for orthopaedic tissue engineering. Biotechnology Advances, 2014, 32, 462-484.	11.7	310
8	Regulating Bone Formation <i>via</i> Controlled Scaffold Degradation. Journal of Dental Research, 2003, 82, 903-908.	5.2	304
9	FRET measurements of cell-traction forces and nano-scale clustering of adhesion ligands varied by substrate stiffness. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4300-4305.	7.1	268
10	Control of basement membrane remodeling and epithelial branching morphogenesis in embryonic lung by Rho and cytoskeletal tension. Developmental Dynamics, 2005, 232, 268-281.	1.8	237
11	Electrospinning alginate-based nanofibers: From blends to crosslinked low molecular weight alginate-only systems. Carbohydrate Polymers, 2011, 85, 111-119.	10.2	231
12	Affinity-based growth factor delivery using biodegradable, photocrosslinked heparin-alginate hydrogels. Journal of Controlled Release, 2011, 154, 258-266.	9.9	221
13	3D Bioprinting of Developmentally Inspired Templates for Whole Bone Organ Engineering. Advanced Healthcare Materials, 2016, 5, 2353-2362.	7.6	209
14	Tissue-Engineered Small Intestine Improves Recovery After Massive Small Bowel Resection. Annals of Surgery, 2004, 240, 748-754.	4.2	208
15	Bioactive factor delivery strategies from engineered polymer hydrogels for therapeutic medicine. Progress in Polymer Science, 2014, 39, 1235-1265.	24.7	193
16	The effect of oxidation on the degradation of photocrosslinkable alginate hydrogels. Biomaterials, 2012, 33, 3503-3514.	11.4	167
17	Craniofacial Tissue Engineering. Critical Reviews in Oral Biology and Medicine, 2001, 12, 64-75.	4.4	166
18	Localized and Sustained Delivery of Silencing RNA from Macroscopic Biopolymer Hydrogels. Journal of the American Chemical Society, 2009, 131, 9204-9206.	13.7	165

#	Article	IF	Citations
19	Nanoscale Adhesion Ligand Organization Regulates Osteoblast Proliferation and Differentiation. Nano Letters, 2004, 4, 1501-1506.	9.1	164
20	Individual cell-only bioink and photocurable supporting medium for 3D printing and generation of engineered tissues with complex geometries. Materials Horizons, 2019, 6, 1625-1631.	12.2	161
21	Nonadhesive Alginate Hydrogels Support Growth of Pluripotent Stem Cell-Derived Intestinal Organoids. Stem Cell Reports, 2019, 12, 381-394.	4.8	160
22	Degradable and injectable poly(aldehyde guluronate) hydrogels for bone tissue engineering. Journal of Biomedical Materials Research Part B, 2001, 56, 228-233.	3.1	157
23	Threeâ€Dimensional Electrospun Alginate Nanofiber Mats via Tailored Charge Repulsions. Small, 2012, 8, 1928-1936.	10.0	155
24	Hydrogels for combination delivery of antineoplastic agents. Biomaterials, 2001, 22, 2625-2633.	11.4	150
25	Highly Porous Electrospun Nanofibers Enhanced by Ultrasonication for Improved Cellular Infiltration. Tissue Engineering - Part A, 2011, 17, 2695-2702.	3.1	144
26	Cryopreserved cell-laden alginate microgel bioink for 3D bioprinting of living tissues. Materials Today Chemistry, 2019, 12, 61-70.	3.5	140
27	Alginateâ€“Polyethylene Oxide Blend Nanofibers and the Role of the Carrier Polymer in Electrospinning. Industrial & Engineering Chemistry Research, 2013, 52, 8692-8704.	3.7	133
28	Sustained localized presentation of RNA interfering molecules from in situ forming hydrogels to guide stem cell osteogenic differentiation. Biomaterials, 2014, 35, 6278-6286.	11.4	132
29	Alginates as biomaterials in tissue engineering. Carbohydrate Chemistry, 2011, , 227-258.	0.3	132
30	Electrospun Alginate Nanofibers with Controlled Cell Adhesion for Tissue Engineeringa. Macromolecular Bioscience, 2010, 10, 934-943.	4.1	131
31	3D bioprinting spatiotemporally defined patterns of growth factors to tightly control tissue regeneration. Science Advances, 2020, 6, eabb5093.	10.3	130
32	Recapitulating bone development through engineered mesenchymal condensations and mechanical cues for tissue regeneration. Science Translational Medicine, 2019, 11, .	12.4	126
33	Spatial regulation of controlled bioactive factor delivery for bone tissue engineering. Advanced Drug Delivery Reviews, 2015, 84, 45-67.	13.7	114
34	Controlling Degradation of Hydrogels via the Size of Crosslinked Junctions. Advanced Materials, 2004, 16, 1917-1921.	21.0	112
35	Electrospun Chitosanâ€“Alginate Nanofibers with <i>In Situ</i> Polyelectrolyte Complexation for Use as Tissue Engineering Scaffolds. Tissue Engineering - Part A, 2011, 17, 59-70.	3.1	112
36	Calcium phosphateâ€DNA nanoparticle gene delivery from alginate hydrogels induces <i>in vivo</i> osteogenesis. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1131-1138.	4.0	108

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37	Three-Dimensional Cell and Tissue Patterning in a Strained Fibrin Gel System. PLoS ONE, 2007, 2, e1211.	2.5	104
38	Biodegradable, Photocrosslinked Alginate Hydrogels with Independently Tailorable Physical Properties and Cell Adhesivity. Tissue Engineering - Part A, 2010, 16, 2915-2925.	3.1	101
39	Microcomputed tomography: approaches and applications in bioengineering. Stem Cell Research and Therapy, 2014, 5, 144.	5.5	99
40	Engineered cartilage via self-assembled hMSC sheets with incorporated biodegradable gelatin microspheres releasing transforming growth factor-Î²1. Journal of Controlled Release, 2012, 158, 224-232.	9.9	98
41	Single and dual crosslinked oxidized methacrylated alginate/PEG hydrogels for bioadhesive applications. Acta Biomaterialia, 2014, 10, 47-55.	8.3	98
42	<sup />Three-Dimensional Bioprinting of Polycaprolactone Reinforced Gene Activated Bioinks for Bone Tissue Engineering. Tissue Engineering - Part A, 2017, 23, 891-900.	3.1	98
43	3D printing of fibre-reinforced cartilaginous templates for the regeneration of osteochondral defects. Acta Biomaterialia, 2020, 113, 130-143.	8.3	97
44	Inâ€Situ Formation of Growthâ€Factorâ€Loaded Coacervate Microparticleâ€Embedded Hydrogels for Directing Encapsulated Stem Cell Fate. Advanced Materials, 2015, 27, 2216-2223.	21.0	96
45	Real-time in situ rheology of alginate hydrogel photocrosslinking. Soft Matter, 2011, 7, 11510.	2.7	95
46	Engineered cartilaginous tubes for tracheal tissue replacement via self-assembly and fusion of human mesenchymal stem cell constructs. Biomaterials, 2015, 52, 452-462.	11.4	95
47	Formation of Ordered Cellular Structures in Suspension via Label-Free Negative Magnetophoresis. Nano Letters, 2009, 9, 1812-1817.	9.1	93
48	Magnetically-Guided Self-Assembly of Fibrin Matrices with Ordered Nano-Scale Structure for Tissue Engineering. Tissue Engineering, 2006, 12, 3247-3256.	4.6	90
49	Biochemical and Physical Signal Gradients in Hydrogels to Control Stem Cell Behavior. Advanced Materials, 2013, 25, 6366-6372.	21.0	88
50	SHAPE-DEFINING SCAFFOLDS FOR MINIMALLY INVASIVE TISSUE ENGINEERING. Transplantation, 2004, 77, 1798-1803.	1.0	82
51	Multilayered Inorganic Microparticles for Tunable Dual Growth Factor Delivery. Advanced Functional Materials, 2014, 24, 3082-3093.	14.9	81
52	RNA interfering molecule delivery from in situ forming biodegradable hydrogels for enhancement of bone formation in rat calvarial bone defects. Acta Biomaterialia, 2018, 75, 105-114.	8.3	81
53	Controlled Dual Growth Factor Delivery From Microparticles Incorporated Within Human Bone Marrow-Derived Mesenchymal Stem Cell Aggregates for Enhanced Bone Tissue Engineering via Endochondral Ossification. Stem Cells Translational Medicine, 2016, 5, 206-217.	3.3	80
54	Functionalized, biodegradable hydrogels for control over sustained and localized siRNA delivery to incorporated and surrounding cells. Acta Biomaterialia, 2013, 9, 4487-4495.	8.3	78

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55	Tissue engineering and regenerative approaches to improving the healing of large bone defects. , 2016, 32, 87-110.		78
56	Combining Chondrocytes and Smooth Muscle Cells to Engineer Hybrid Soft Tissue Constructs. Tissue Engineering, 2000, 6, 297-305.	4.6	75
57	Spatiotemporal Regulation of Chondrogenic Differentiation with Controlled Delivery of Transforming Growth Factor-Î²1 from Gelatin Microspheres in Mesenchymal Stem Cell Aggregates. Stem Cells Translational Medicine, 2012, 1, 632-639.	3.3	74
58	Chondrogenic differentiation of human mesenchymal stem cell aggregates via controlled release of TGFâ€Î²1 from incorporated polymer microspheres. Journal of Biomedical Materials Research - Part A, 2010, 92A, 1139-1144.	4.0	72
59	Environmental cues to guide stem cell fate decision for tissue engineering applications. Expert Opinion on Biological Therapy, 2006, 6, 847-866.	3.1	70
60	Highly Elastic and Tough Interpenetrating Polymer Network-Structured Hybrid Hydrogels for Cyclic Mechanical Loading-Enhanced Tissue Engineering. Chemistry of Materials, 2017, 29, 8425-8432.	6.7	70
61	Localized, Targeted, and Sustained siRNA Delivery. Chemistry - A European Journal, 2011, 17, 3054-3062.	3.3	69
62	Tracheal Reconstruction Using Tissue-Engineered Cartilage. JAMA Otolaryngology, 2004, 130, 1191.	1.2	67
63	3D Printed Cartilageâ€Like Tissue Constructs with Spatially Controlled Mechanical Properties. Advanced Functional Materials, 2019, 29, 1906330.	14.9	66
64	Tissue-engineered colon exhibits function in vivo. Surgery, 2002, 132, 200-204.	1.9	65
65	Combined Administration of ASCs and BMP-12 Promotes an M2 Macrophage Phenotype and Enhances Tendon Healing. Clinical Orthopaedics and Related Research, 2017, 475, 2318-2331.	1.5	63
66	Photofunctionalization of Alginate Hydrogels to Promote Adhesion and Proliferation of Human Mesenchymal Stem Cells. Tissue Engineering - Part A, 2013, 19, 1424-1432.	3.1	61
67	Dual Ionic and Photo-Crosslinked Alginate Hydrogels for Micropatterned Spatial Control of Material Properties and Cell Behavior. Bioconjugate Chemistry, 2015, 26, 1339-1347.	3.6	60
68	Injectable poly(lactic-co-glycolic) acid scaffolds with in situ pore formation for tissue engineering. Acta Biomaterialia, 2009, 5, 2847-2859.	8.3	56
69	Endochondral Ossification in Critical-Sized Bone Defects via Readily Implantable Scaffold-Free Stem Cell Constructs. Stem Cells Translational Medicine, 2017, 6, 1644-1659.	3.3	53
70	Ionically Gelled Alginate Foams: Physical Properties Controlled by Operational and Macromolecular Parameters. Biomacromolecules, 2012, 13, 3703-3710.	5.4	52
71	High-throughput approaches for screening and analysis of cell behaviors. Biomaterials, 2018, 153, 85-101.	11.4	52
72	Novel dynamic rheological behavior of individual focal adhesions measured within single cells using electromagnetic pulling cytometry. Acta Biomaterialia, 2005, 1, 295-303.	8.3	49

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73	Biodegradable photo-crosslinked alginate nanofibre scaffolds with tuneable physical properties, cell adhesivity and growth factor release. , 2012, 24, 331-343.		49
74	Jammed Microâ€Flake Hydrogel for Fourâ€Dimensional Living Cell Bioprinting. Advanced Materials, 2022, 34, e2109394.	21.0	49
75	SHAPE RETAINING INJECTABLE HYDROGELS FOR MINIMALLY INVASIVE BULKING. Journal of Urology, 2004, 172, 763-768.	0.4	48
76	Dual non-viral gene delivery from microparticles within 3D high-density stem cell constructs for enhanced bone tissue engineering. Biomaterials, 2018, 161, 240-255.	11.4	46
77	Bone Morphogenetic Proteinâ€2 Promotes Human Mesenchymal Stem Cell Survival and Resultant Bone Formation When Entrapped in Photocrosslinked Alginate Hydrogels. Advanced Healthcare Materials, 2016, 5, 2501-2509.	7.6	45
78	Combinatorial morphogenetic and mechanical cues to mimic bone development for defect repair. Science Advances, 2019, 5, eaax2476.	10.3	45
79	4D biofabrication via instantly generated graded hydrogel scaffolds. Bioactive Materials, 2022, 7, 324-332.	15.6	45
80	Photocleavable Hydrogels for Lightâ€Triggered siRNA Release. Advanced Healthcare Materials, 2016, 5, 305-310.	7.6	44
81	Combinatorial screening of biochemical and physical signals for phenotypic regulation of stem cellâ€“based cartilage tissue engineering. Science Advances, 2020, 6, eaaz5913.	10.3	42
82	Stromal-cell-derived factor (SDF) 1-alpha in combination with BMP-2 and TGF-Î²1 induces site-directed cell homing and osteogenic and chondrogenic differentiation for tissue engineering without the requirement for cell seeding. Cell and Tissue Research, 2012, 350, 89-94.	2.9	41
83	Gelatin microspheres releasing transforming growth factor drive in vitro chondrogenesis of human periosteum derived cells in micromass culture. Acta Biomaterialia, 2019, 90, 287-299.	8.3	41
84	Guiding Chondrogenesis and Osteogenesis with Mineral-Coated Hydroxyapatite and BMP-2 Incorporated within High-Density hMSC Aggregates for Bone Regeneration. ACS Biomaterials Science and Engineering, 2016, 2, 30-42.	5.2	40
85	Cellâ€Laden Multipleâ€Step and Reversible 4D Hydrogel Actuators to Mimic Dynamic Tissue Morphogenesis. Advanced Science, 2021, 8, 2004616.	11.2	40
86	Spatial Micropatterning of Growth Factors in 3D Hydrogels for Locationâ€Specific Regulation of Cellular Behaviors. Small, 2018, 14, e1800579.	10.0	39
87	Induction of Fourâ€Dimensional Spatiotemporal Geometric Transformations in High Cell Density Tissues via Shapeâ€Changing Hydrogels. Advanced Functional Materials, 2021, 31, 2010104.	14.9	39
88	Thiol-Epoxy â€œClickâ€• Chemistry to Engineer Cytocompatible PEG-Based Hydrogel for siRNA-Mediated Osteogenesis of hMSCs. ACS Applied Materials & Interfaces, 2018, 10, 25936-25942.	8.0	38
89	Fabrication of Three-Dimensional Cell Constructs Using Temperature-Responsive Hydrogel. Tissue Engineering - Part A, 2010, 16, 2497-2504.	3.1	37
90	High-Density Cell Systems Incorporating Polymer Microspheres as Microenvironmental Regulators in Engineered Cartilage Tissues. Tissue Engineering - Part B: Reviews, 2013, 19, 209-220.	4.8	37

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91	Improved conduction and increased cell retention in healed MI using mesenchymal stem cells suspended in alginate hydrogel. Journal of Interventional Cardiac Electrophysiology, 2014, 41, 117-127.	1.3	37
92	Regulation of Stem Cell Fate in a Threeâ€Dimensional Micropatterned Dualâ€Crosslinked Hydrogel System. Advanced Functional Materials, 2013, 23, 4765-4775.	14.9	36
93	Improved cell infiltration of highly porous 3D nanofibrous scaffolds formed by combined fiberâ€“fiber charge repulsions and ultra-sonication. Journal of Materials Chemistry B, 2014, 2, 8116-8122.	5.8	36
94	Sustained presentation of <scp>BMP</scp>â€2 enhances osteogenic differentiation of human adiposeâ€derived stem cells in gelatin hydrogels. Journal of Biomedical Materials Research - Part A, 2016, 104, 1387-1397.	4.0	36
95	Interconnectable Dynamic Compression Bioreactors for Combinatorial Screening of Cell Mechanobiology in Three Dimensions. ACS Applied Materials & Interfaces, 2018, 10, 13293-13303.	8.0	36
96	Light-triggered RNA release and induction of hMSC osteogenesis via photodegradable, dual-crosslinked hydrogels. Nanomedicine, 2016, 11, 1535-1550.	3.3	35
97	A Modular Strategy to Engineer Complex Tissues and Organs. Advanced Science, 2018, 5, 1700402.	11.2	34
98	Dual-crosslinked hydrogel microwell system for formation and culture of multicellular human adipose tissue-derived stem cell spheroids. Journal of Materials Chemistry B, 2016, 4, 3526-3533.	5.8	31
99	Hypoxia mimicking hydrogels to regulate the fate of transplanted stem cells. Acta Biomaterialia, 2019, 88, 314-324.	8.3	31
100	Micropatterning: Regulation of Stem Cell Fate in a Three-Dimensional Micropatterned Dual-Crosslinked Hydrogel System (Adv. Funct. Mater. 38/2013). Advanced Functional Materials, 2013, 23, 4764-4764.	14.9	30
101	Ionically gelled alginate foams: Physical properties controlled by type, amount and source of gelling ions. Carbohydrate Polymers, 2014, 99, 249-256.	10.2	30
102	Driving Cartilage Formation in High-Density Human Adipose-Derived Stem Cell Aggregate and Sheet Constructs Without Exogenous Growth Factor Delivery. Tissue Engineering - Part A, 2014, 20, 3163-3175.	3.1	30
103	Microenvironmental Regulation of Chondrocyte Plasticity in Endochondral Repairâ€"A New Frontier for Developmental Engineering. Frontiers in Bioengineering and Biotechnology, 2018, 6, 58.	4.1	30
104	Spatially Organized Differentiation of Mesenchymal Stem Cells within Biphasic Microparticleâ€Incorporated High Cell Density Osteochondral Tissues. Advanced Healthcare Materials, 2015, 4, 2306-2313.	7.6	29
105	Controlled and sustained gene delivery from injectable, porous PLGA scaffolds. Journal of Biomedical Materials Research - Part A, 2011, 98A, 72-79.	4.0	27
106	Covalently tethering siRNA to hydrogels for localized, controlled release and gene silencing. Science Advances, 2019, 5, eaax0801.	10.3	27
107	Multi-peptide presentation and hydrogel mechanics jointly enhance therapeutic duo-potential of entrapped stromal cells. Biomaterials, 2020, 245, 119973.	11.4	27
108	Cytocompatible Catalyst-Free Photodegradable Hydrogels for Light-Mediated RNA Release To Induce hMSC Osteogenesis. ACS Biomaterials Science and Engineering, 2017, 3, 2011-2023.	5.2	26

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109	Spatial Control of Cell Gene Expression by siRNA Gradients in Biodegradable Hydrogels. Advanced Healthcare Materials, 2015, 4, 714-722.	7.6	25
110	A Lightâ€Curable and Tunable Extracellular Matrix Hydrogel for In Situ Sutureâ€Free Corneal Repair. Advanced Functional Materials, 2022, 32, .	14.9	25
111	Tissue-Engineered Spleen Protects Against Overwhelming Pneumococcal Sepsis in a Rodent Model. Journal of Surgical Research, 2008, 149, 214-218.	1.6	24
112	Cellular Self-Assembly with Microsphere Incorporation for Growth Factor Delivery Within Engineered Vascular Tissue Rings. Tissue Engineering - Part A, 2017, 23, 143-155.	3.1	24
113	Photocrosslinkable, biodegradable hydrogels with controlled cell adhesivity for prolonged siRNA delivery to hMSCs to enhance their osteogenic differentiation. Journal of Materials Chemistry B, 2017, 5, 485-495.	5.8	22
114	Hydrogel microspheres for spatiotemporally controlled delivery of RNA and silencing gene expression within scaffold-free tissue engineered constructs. Acta Biomaterialia, 2021, 124, 315-326.	8.3	21
115	Reverse engineering development: Crosstalk opportunities between developmental biology and tissue engineering. Journal of Orthopaedic Research, 2017, 35, 2356-2368.	2.3	20
116	Viscoelastic Characterization of Mesenchymal Gap Tissue and Consequences for Tension Accumulation During Distraction. Journal of Biomechanical Engineering, 1999, 121, 116-123.	1.3	19
117	RALA complexed Î±-TCP nanoparticle delivery to mesenchymal stem cells induces bone formation in tissue engineered constructs in vitro and in vivo. Journal of Materials Chemistry B, 2017, 5, 1753-1764.	5.8	19
118	Targeted Delivery of Bioactive Molecules for Vascular Intervention and Tissue Engineering. Frontiers in Pharmacology, 2018, 9, 1329.	3.5	19
119	Assembly of Tissue-Engineered Blood Vessels with Spatially Controlled Heterogeneities. Tissue Engineering - Part A, 2018, 24, 1492-1503.	3.1	19
120	Imaging early stage osteogenic differentiation of mesenchymal stem cells. Journal of Orthopaedic Research, 2013, 31, 871-879.	2.3	18
121	Stem cell-laden hydrogel bioink for generation of high resolution and fidelity engineered tissues with complex geometries. Bioactive Materials, 2022, 15, 185-193.	15.6	17
122	<i>In Situ</i>Gelation for Cell Immobilization and Culture in Alginate Foam Scaffolds. Tissue Engineering - Part A, 2014, 20, 131128071850006.	3.1	16
123	Human Cardiac Mesenchymal Stem Cells Remodel in Disease and Can Regulate Arrhythmia Substrates. Circulation: Arrhythmia and Electrophysiology, 2020, 13, e008740.	4.8	15
124	Beyond diffusion-limited aggregation kinetics in microparticle suspensions. Physical Review E, 2009, 80, 051402.	2.1	14
125	Scaffolds Derived from ECM Produced by Chondrogenically Induced Human MSC Condensates Support Human MSC Chondrogenesis. ACS Biomaterials Science and Engineering, 2017, 3, 1426-1436.	5.2	14
126	Porous Scaffolds Derived from Devitalized Tissue Engineered Cartilaginous Matrix Support Chondrogenesis of Adult Stem Cells. ACS Biomaterials Science and Engineering, 2017, 3, 1075-1082.	5.2	13

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127	An <i>in-situ</i> photocrosslinking microfluidic technique to generate non-spherical, cytocompatible, degradable, monodisperse alginate microgels for chondrocyte encapsulation. Biomicrofluidics, 2018, 12, 014106.	2.4	13
128	A microparticle approach for non-viral gene delivery within 3D human mesenchymal stromal cell aggregates. Acta Biomaterialia, 2019, 95, 408-417.	8.3	13
129	Magnetic field application or mechanical stimulation via magnetic microparticles does not enhance chondrogenesis in mesenchymal stem cell sheets. Biomaterials Science, 2017, 5, 1241-1245.	5.4	12
130	Regeneration of Osteochondral Defects Using Developmentally Inspired Cartilaginous Templates. Tissue Engineering - Part A, 2019, 25, 159-171.	3.1	12
131	<i>In-situ</i> photopolymerization of monodisperse and discoid oxidized methacrylated alginate microgels in a microfluidic channel. Biomicrofluidics, 2016, 10, 011101.	2.4	11
132	Reversible dynamic mechanics of hydrogels for regulation of cellular behavior. Acta Biomaterialia, 2021, 136, 88-98.	8.3	11
133	Scaffold-free human mesenchymal stem cell construct geometry regulates long bone regeneration. Communications Biology, 2021, 4, 89.	4.4	9
134	High-density human mesenchymal stem cell rings with spatiotemporally-controlled morphogen presentation as building blocks for engineering bone diaphyseal tissue. Nanotheranostics, 2018, 2, 128-143.	5.2	8
135	Title is missing!. Annals of Surgery, 2003, 238, 35-41.	4.2	6
136	Bifunctional Nanoparticleâ€Stabilized Hydrogel Colloidosomes Serve as both Extracellular Matrix and Bioactive Factor Delivery Vehicles. Advanced Therapeutics, 2020, 3, 2000156.	3.2	5
137	Modeling and experimental methods to predict oxygen distribution in bone defects following cell transplantation. Medical and Biological Engineering and Computing, 2014, 52, 321-330.	2.8	4
138	Special Issue on Tissue Engineering. ACS Biomaterials Science and Engineering, 2017, 3, 1880-1883.	5.2	4
139	3D Bioprinting: 3D Bioprinting of Developmentally Inspired Templates for Whole Bone Organ Engineering (Adv. Healthcare Mater. 18/2016). Advanced Healthcare Materials, 2016, 5, 2352-2352.	7.6	3
140	Mathematical modelling of glycosaminoglycan production by stem cell aggregates incorporated with growth factor-releasing polymer microspheres. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 481-488.	2.7	3
141	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
142	Development of a 3D Bioprinted Scaffold with Spatio-temporally Defined Patterns of BMP-2 and VEGF for the Regeneration of Large Bone Defects. Bio-protocol, 2021, 11, e4219.	0.4	3
143	Technologies for Enhancing Tissue Engineering: Materials and Environments for Guiding Stem Cell Function. Tissue Engineering - Part A, 2009, 15, 203-204.	3.1	2
144	Harnessing Topographical Cues for Tissue Engineering. Tissue Engineering - Part A, 2016, 22, 995-996.	3.1	2

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145	Tissue Engineering: A Modular Strategy to Engineer Complex Tissues and Organs (Adv. Sci. 5/2018). Advanced Science, 2018, 5, 1870028.	11.2	2
146	Fourâ€Dimensional Materials: Induction of Fourâ€Dimensional Spatiotemporal Geometric Transformations in High Cell Density Tissues via Shapeâ€Changing Hydrogels (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	14.9	2
147	Jammed Microâ€Flake Hydrogel for Fourâ€Dimensional Living Cell Bioprinting (Adv. Mater. 15/2022). Advanced Materials, 2022, 34, .	21.0	1
148	Controlled degradation of peptide modified hydrogels improves rate, quality, and quantity of in vivo bone formation. , 0, , .		0
149	Nanoscale RGD Peptide Organization Regulates Cell Proliferation and Differentiation. Materials Research Society Symposia Proceedings, 2004, 845, 59.	0.1	0
150	FTIR imaging analysis of bioactive microsphere incorporated stem cell sheets for osteochondral defect repair. , 2014, , .		0
151	Tissue Regeneration: Spatial Control of Cell Gene Expression by siRNA Gradients in Biodegradable Hydrogels (Adv. Healthcare Mater. 5/2015). Advanced Healthcare Materials, 2015, 4, 784-784.	7.6	0
152	Hydrogels: In-Situ Formation of Growth-Factor-Loaded Coacervate Microparticle-Embedded Hydrogels for Directing Encapsulated Stem Cell Fate (Adv. Mater. 13/2015). Advanced Materials, 2015, 27, 2215-2215.	21.0	0
153	Osteogenesis: Bone Morphogenetic Proteinâ€2 Promotes Human Mesenchymal Stem Cell Survival and Resultant Bone Formation When Entrapped in Photocrosslinked Alginate Hydrogels (Adv. Healthcare) Tj ETQq1 1 0.784314 rgBT /Overlo	7.6	0