

Brendan A C Harley

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146
papers

5,663
citations

39
h-index

72
g-index

182
ext. papers

6,607
ext. citations

7.7
avg, IF

6.23
L-index

#	Paper	IF	Citations
146	Influence of freezing rate on pore structure in freeze-dried collagen-GAG scaffolds. <i>Biomaterials</i> , 2004 , 25, 1077-86	15.6	588
145	Quantitative imaging of haematopoietic stem and progenitor cell localization and hypoxic status in the bone marrow microenvironment. <i>Nature Cell Biology</i> , 2013 , 15, 533-43	23.4	395
144	Mechanical characterization of collagen-glycosaminoglycan scaffolds. <i>Acta Biomaterialia</i> , 2007 , 3, 463-74	10.8	299
143	Microarchitecture of three-dimensional scaffolds influences cell migration behavior via junction interactions. <i>Biophysical Journal</i> , 2008 , 95, 4013-24	2.9	262
142	The effect of pore size on permeability and cell attachment in collagen scaffolds for tissue engineering. <i>Technology and Health Care</i> , 2006 , 15, 3-17	1.1	229
141	A collagen-glycosaminoglycan scaffold supports adult rat mesenchymal stem cell differentiation along osteogenic and chondrogenic routes. <i>Tissue Engineering</i> , 2006 , 12, 459-68		187
140	The effect of anisotropic collagen-GAG scaffolds and growth factor supplementation on tendon cell recruitment, alignment, and metabolic activity. <i>Biomaterials</i> , 2011 , 32, 5330-40	15.6	158
139	Regulation of glioma cell phenotype in 3D matrices by hyaluronic acid. <i>Biomaterials</i> , 2013 , 34, 7408-17	15.6	112
138	Fabricating tubular scaffolds with a radial pore size gradient by a spinning technique. <i>Biomaterials</i> , 2006 , 27, 866-74	15.6	107
137	The development of collagen-GAG scaffold-membrane composites for tendon tissue engineering. <i>Biomaterials</i> , 2011 , 32, 8990-8	15.6	99
136	Design of a multiphase osteochondral scaffold III: Fabrication of layered scaffolds with continuous interfaces. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 92, 1078-93	5.4	96
135	Spatially graded hydrogel platform as a 3D engineered tumor microenvironment. <i>Advanced Materials</i> , 2015 , 27, 1567-72	24	89
134	The combined influence of substrate elasticity and ligand density on the viability and biophysical properties of hematopoietic stem and progenitor cells. <i>Biomaterials</i> , 2012 , 33, 4460-8	15.6	88
133	Microfluidic generation of gradient hydrogels to modulate hematopoietic stem cell culture environment. <i>Advanced Healthcare Materials</i> , 2014 , 3, 449-58	10.1	82
132	The effect of pore size on permeability and cell attachment in collagen scaffolds for tissue engineering. <i>Technology and Health Care</i> , 2007 , 15, 3-17	1.1	82
131	Impact of the biophysical features of a 3D gelatin microenvironment on glioblastoma malignancy. <i>Journal of Biomedical Materials Research - Part A</i> , 2013 , 101, 3404-15	5.4	79
130	Marrow-inspired matrix cues rapidly affect early fate decisions of hematopoietic stem and progenitor cells. <i>Science Advances</i> , 2017 , 3, e1600455	14.3	78

129	The use of covalently immobilized stem cell factor to selectively affect hematopoietic stem cell activity within a gelatin hydrogel. <i>Biomaterials</i> , 2015 , 67, 297-307	15.6	77
128	Structural and biochemical modification of a collagen scaffold to selectively enhance MSC tenogenic, chondrogenic, and osteogenic differentiation. <i>Advanced Healthcare Materials</i> , 2014 , 3, 1086-96	10.1	68
127	Photonic crystal enhanced microscopy for imaging of live cell adhesion. <i>Analyst, The</i> , 2013 , 138, 5886-94	5	68
126	Design of a multiphase osteochondral scaffold. II. Fabrication of a mineralized collagen-glycosaminoglycan scaffold. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 92, 1066-77	5.4	68
125	In vivo and in vitro applications of collagen-GAG scaffolds. <i>Chemical Engineering Journal</i> , 2008 , 137, 102-117	11.7	68
124	The generation of biomolecular patterns in highly porous collagen-GAG scaffolds using direct photolithography. <i>Biomaterials</i> , 2011 , 32, 3949-57	15.6	66
123	The influence of collagen-glycosaminoglycan scaffold relative density and microstructural anisotropy on tenocyte bioactivity and transcriptomic stability. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 11, 27-40	4.1	64
122	Engineering the hematopoietic stem cell niche: Frontiers in biomaterial science. <i>Biotechnology Journal</i> , 2015 , 10, 1529-45	5.6	64
121	Composite growth factor supplementation strategies to enhance tenocyte bioactivity in aligned collagen-GAG scaffolds. <i>Tissue Engineering - Part A</i> , 2013 , 19, 1100-12	3.9	61
120	The use of bioinspired alterations in the glycosaminoglycan content of collagen-GAG scaffolds to regulate cell activity. <i>Biomaterials</i> , 2013 , 34, 7645-52	15.6	58
119	The Combined Influence of Hydrogel Stiffness and Matrix-Bound Hyaluronic Acid Content on Glioblastoma Invasion. <i>Macromolecular Bioscience</i> , 2017 , 17, 1700018	5.5	57
118	The combined effects of matrix stiffness and growth factor immobilization on the bioactivity and differentiation capabilities of adipose-derived stem cells. <i>Biomaterials</i> , 2014 , 35, 8951-9	15.6	57
117	A new technique for calculating individual dermal fibroblast contractile forces generated within collagen-GAG scaffolds. <i>Biophysical Journal</i> , 2007 , 93, 2911-22	2.9	56
116	Nanoparticulate mineralized collagen scaffolds induce in vivo bone regeneration independent of progenitor cell loading or exogenous growth factor stimulation. <i>Biomaterials</i> , 2016 , 89, 67-78	15.6	52
115	Mineralized collagen scaffolds induce hMSC osteogenesis and matrix remodeling. <i>Biomaterials Science</i> , 2015 , 3, 533-42	7.4	52
114	Increasing the strength and bioactivity of collagen scaffolds using customizable arrays of 3D-printed polymer fibers. <i>Acta Biomaterialia</i> , 2016 , 33, 25-33	10.8	51
113	Osteogenesis on nanoparticulate mineralized collagen scaffolds via autogenous activation of the canonical BMP receptor signaling pathway. <i>Biomaterials</i> , 2015 , 50, 107-14	15.6	50
112	SOCS3 protein developmentally regulates the chemokine receptor CXCR4-FAK signaling pathway during B lymphopoiesis. <i>Immunity</i> , 2007 , 27, 811-23	32.3	47

111	Collagen Scaffolds Incorporating Coincident Gradations of Instructive Structural and Biochemical Cues for Osteotendinous Junction Engineering. <i>Advanced Healthcare Materials</i> , 2015 , 4, 831-7	10.1	44
110	The Influence of Hyaluronic Acid and Glioblastoma Cell Coculture on the Formation of Endothelial Cell Networks in Gelatin Hydrogels. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700687	10.1	43
109	Influence of Hyaluronic Acid Transitions in Tumor Microenvironment on Glioblastoma Malignancy and Invasive Behavior. <i>Frontiers in Materials</i> , 2018 , 5,	4	41
108	Enhanced live cell imaging via photonic crystal enhanced fluorescence microscopy. <i>Analyst, The</i> , 2014 , 139, 5954-63	5	39
107	The influence of pore size and stiffness on tenocyte bioactivity and transcriptomic stability in collagen-GAG scaffolds. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 65, 295-305	4.1	39
106	Focal adhesion kinase regulates the localization and retention of pro-B cells in bone marrow microenvironments. <i>Journal of Immunology</i> , 2013 , 190, 1094-102	5.3	38
105	Design of a multiphase osteochondral scaffold. I. Control of chemical composition. <i>Journal of Biomedical Materials Research - Part A</i> , 2010 , 92, 1057-65	5.4	38
104	The impact of discrete compartments of a multi-compartment collagen-GAG scaffold on overall construct biophysical properties. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013 , 28, 26-36	4.1	37
103	Regulating dynamic signaling between hematopoietic stem cells and niche cells via a hydrogel matrix. <i>Biomaterials</i> , 2017 , 125, 54-64	15.6	36
102	Immunomodulatory effects of amniotic membrane matrix incorporated into collagen scaffolds. <i>Journal of Biomedical Materials Research - Part A</i> , 2016 , 104, 1332-42	5.4	35
101	The inclusion of zinc into mineralized collagen scaffolds for craniofacial bone repair applications. <i>Acta Biomaterialia</i> , 2019 , 93, 86-96	10.8	34
100	Perivascular signals alter global gene expression profile of glioblastoma and response to temozolomide in a gelatin hydrogel. <i>Biomaterials</i> , 2019 , 198, 122-134	15.6	34
99	Optimizing Collagen Scaffolds for Bone Engineering: Effects of Cross-linking and Mineral Content on Structural Contraction and Osteogenesis. <i>Journal of Craniofacial Surgery</i> , 2015 , 26, 1992-6	1.2	34
98	Photopatterning of vascular endothelial growth factor within collagen-glycosaminoglycan scaffolds can induce a spatially confined response in human umbilical vein endothelial cells. <i>Acta Biomaterialia</i> , 2014 , 10, 4715-4722	10.8	33
97	Evaluation of multi-scale mineralized collagen-polycaprolactone composites for bone tissue engineering. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016 , 61, 318-327	4.1	30
96	A gelatin hydrogel to study endometrial angiogenesis and trophoblast invasion. <i>Interface Focus</i> , 2019 , 9, 20190016	3.9	29
95	Collagen-GAG scaffold biophysical properties bias MSC lineage choice in the presence of mixed soluble signals. <i>Tissue Engineering - Part A</i> , 2014 , 20, 2463-72	3.9	29
94	Nanoparticulate Mineralized Collagen Scaffolds and BMP-9 Induce a Long-Term Bone Cartilage Construct in Human Mesenchymal Stem Cells. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1821-30	10.1	29

93	Naturally derived biomaterials for addressing inflammation in tissue regeneration. <i>Experimental Biology and Medicine</i> , 2016 , 241, 1015-24	3.7	29
92	Osteoprotegerin reduces osteoclast resorption activity without affecting osteogenesis on nanoparticulate mineralized collagen scaffolds. <i>Science Advances</i> , 2019 , 5, eaaw4991	14.3	27
91	Hypoxia activates enhanced invasive potential and endogenous hyaluronic acid production by glioblastoma cells. <i>Biomaterials Science</i> , 2018 , 6, 854-862	7.4	27
90	Soluble Signals and Remodeling in a Synthetic Gelatin-Based Hematopoietic Stem Cell Niche. <i>Advanced Healthcare Materials</i> , 2019 , 8, e1900751	10.1	26
89	Extracellular Hyaluronic Acid Influences the Efficacy of EGFR Tyrosine Kinase Inhibitors in a Biomaterial Model of Glioblastoma. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700529	10.1	26
88	Incorporation of the Amniotic Membrane as an Immunomodulatory Design Element in Collagen Scaffolds for Tendon Repair. <i>ACS Biomaterials Science and Engineering</i> , 2018 , 4, 4367-4377	5.5	26
87	Identifying States along the Hematopoietic Stem Cell Differentiation Hierarchy with Single Cell Specificity via Raman Spectroscopy. <i>Analytical Chemistry</i> , 2015 , 87, 11317-24	7.8	23
86	Modifying the strength and strain concentration profile within collagen scaffolds using customizable arrays of poly-lactic acid fibers. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017 , 66, 28-36	4.1	23
85	Three-dimensional tissue cytometer based on high-speed multiphoton microscopy. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2007 , 71, 991-1002	4.6	23
84	Relationship between permeability and diffusivity in polyethylene glycol hydrogels. <i>AIP Advances</i> , 2018 , 8, 105006	1.5	23
83	Incorporating Cyclodextrin into collagen scaffolds to sequester growth factors and modulate mesenchymal stem cell activity. <i>Acta Biomaterialia</i> , 2018 , 76, 116-125	10.8	23
82	Rheological Analysis of the Gelation Kinetics of an Enzyme Cross-linked PEG Hydrogel. <i>Biomacromolecules</i> , 2019 , 20, 2198-2206	6.9	22
81	The promotion of HL-1 cardiomyocyte beating using anisotropic collagen-GAG scaffolds. <i>Biomaterials</i> , 2012 , 33, 8812-21	15.6	22
80	Hyaluronic acid-functionalized gelatin hydrogels reveal extracellular matrix signals temper the efficacy of erlotinib against patient-derived glioblastoma specimens. <i>Biomaterials</i> , 2019 , 219, 119371	15.6	20
79	Identifying differentiation stage of individual primary hematopoietic cells from mouse bone marrow by multivariate analysis of TOF-secondary ion mass spectrometry data. <i>Analytical Chemistry</i> , 2012 , 84, 4307-13	7.8	20
78	Patterning Three-Dimensional Hydrogel Microenvironments Using Hyperbranched Polyglycerols for Independent Control of Mesh Size and Stiffness. <i>Biomacromolecules</i> , 2017 , 18, 1393-1400	6.9	19
77	Precise control of synthetic hydrogel network structure via linear, independent synthesis-swelling relationships. <i>Science Advances</i> , 2021 , 7,	14.3	19
76	Characterizing Glioblastoma Heterogeneity via Single-Cell Receptor Quantification. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018 , 6, 92	5.8	18

75	Spatially graded hydrogels for preclinical testing of glioblastoma anticancer therapeutics. <i>MRS Communications</i> , 2017 , 7, 442-449	2.7	17
74	Tunable, Photoreactive Hydrogel System To Probe Synergies between Mechanical and Biomolecular Cues on Adipose-Derived Mesenchymal Stem Cell Differentiation. <i>ACS Biomaterials Science and Engineering</i> , 2015 , 1, 718-725	5.5	17
73	Angiogenic biomaterials to promote therapeutic regeneration and investigate disease progression. <i>Biomaterials</i> , 2020 , 255, 120207	15.6	17
72	Shape-fitting collagen-PLA composite promotes osteogenic differentiation of porcine adipose stem cells. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019 , 95, 21-33	4.1	16
71	Collagen scaffold arrays for combinatorial screening of biophysical and biochemical regulators of cell behavior. <i>Advanced Healthcare Materials</i> , 2015 , 4, 58-64	10.1	16
70	Tough and tunable scaffold-hydrogel composite biomaterial for soft-to-hard musculoskeletal tissue interfaces. <i>Science Advances</i> , 2020 , 6, eabb6763	14.3	16
69	Nanoparticulate mineralized collagen glycosaminoglycan materials directly and indirectly inhibit osteoclastogenesis and osteoclast activation. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2019 , 13, 823-834	4.4	15
68	The effect of glycosaminoglycan content on polyethylenimine-based gene delivery within three-dimensional collagen-GAG scaffolds. <i>Biomaterials Science</i> , 2015 , 3, 645-54	7.4	15
67	The induction of pro-angiogenic processes within a collagen scaffold via exogenous estradiol and endometrial epithelial cells. <i>Biotechnology and Bioengineering</i> , 2015 , 112, 2185-94	4.9	15
66	Nanoscale mechanics guides cellular decision making. <i>Integrative Biology (United Kingdom)</i> , 2016 , 8, 929-35	3.7	15
65	Nonmineralized and Mineralized Collagen Scaffolds Induce Differential Osteogenic Signaling Pathways in Human Mesenchymal Stem Cells. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700641	10.1	14
64	The Effect of Gradations in Mineral Content, Matrix Alignment, and Applied Strain on Human Mesenchymal Stem Cell Morphology within Collagen Biomaterials. <i>Advanced Healthcare Materials</i> , 2016 , 5, 1731-9	10.1	14
63	Quantitative analysis of focal adhesion dynamics using photonic resonator outcoupler microscopy (PROM). <i>Light: Science and Applications</i> , 2018 , 7,	16.7	14
62	Challenges and Opportunities to Harnessing the (Hematopoietic) Stem Cell Niche. <i>Current Stem Cell Reports</i> , 2016 , 2, 85-94	1.8	13
61	Award Winner in the Young Investigator Category, 2014 Society for Biomaterials Annual Meeting and Exposition, Denver, Colorado, April 16-19, 2014: Periodically perforated core-shell collagen biomaterials balance cell infiltration, bioactivity, and mechanical properties. <i>Journal of Biomedical Materials Research - Part A</i> , 2014 , 102, 917-27	5.4	13
60	Planar Photonic Crystal Biosensor for Quantitative Label-Free Cell Attachment Microscopy. <i>Advanced Optical Materials</i> , 2015 , 3, 1623-1632	8.1	13
59	The influence of cyclic tensile strain on multi-compartment collagen-GAG scaffolds for tendon-bone junction repair. <i>Connective Tissue Research</i> , 2019 , 60, 530-543	3.3	12
58	Reinforcement of Mono- and Bi-layer Poly(Ethylene Glycol) Hydrogels with a Fibrous Collagen Scaffold. <i>Annals of Biomedical Engineering</i> , 2015 , 43, 2618-29	4.7	12

57	A Mineralized Collagen-Polycaprolactone Composite Promotes Healing of a Porcine Mandibular Defect. <i>Tissue Engineering - Part A</i> , 2018 , 24, 943-954	3.9	12
56	Inclusion of a 3D-printed Hyperelastic Bone mesh improves mechanical and osteogenic performance of a mineralized collagen scaffold. <i>Acta Biomaterialia</i> , 2021 , 121, 224-236	10.8	12
55	Multidimensional hydrogel models reveal endothelial network angiocrine signals increase glioblastoma cell number, invasion, and temozolomide resistance. <i>Integrative Biology (United Kingdom)</i> , 2020 , 12, 139-149	3.7	11
54	Response of neuroglia to hypoxia-induced oxidative stress using enzymatically crosslinked hydrogels. <i>MRS Communications</i> , 2020 , 10, 83-90	2.7	10
53	A computational model of feedback-mediated hematopoietic stem cell differentiation in vitro. <i>PLoS ONE</i> , 2019 , 14, e0212502	3.7	9
52	Mineralized collagen scaffolds fabricated with amniotic membrane matrix increase osteogenesis under inflammatory conditions. <i>International Journal of Energy Production and Management</i> , 2020 , 7, 247-258	5.3	9
51	Tracing Hematopoietic Progenitor Cell Neutrophilic Differentiation via Raman Spectroscopy. <i>Bioconjugate Chemistry</i> , 2018 , 29, 3121-3128	6.3	9
50	Strategies to balance covalent and non-covalent biomolecule attachment within collagen-GAG biomaterials. <i>Biomaterials Science</i> , 2014 , 2, 1296-1304	7.4	9
49	Connecting secretome to hematopoietic stem cell phenotype shifts in an engineered bone marrow niche. <i>Integrative Biology (United Kingdom)</i> , 2020 , 12, 175-187	3.7	8
48	Crosstalk between microglia and patient-derived glioblastoma cells inhibit invasion in a three-dimensional gelatin hydrogel model. <i>Journal of Neuroinflammation</i> , 2020 , 17, 346	10.1	8
47	Perivascular Secretome Influences Hematopoietic Stem Cell Maintenance in a Gelatin Hydrogel. <i>Annals of Biomedical Engineering</i> , 2021 , 49, 780-792	4.7	8
46	Stiffness of Nanoparticulate Mineralized Collagen Scaffolds Triggers Osteogenesis via Mechanotransduction and Canonical Wnt Signaling. <i>Macromolecular Bioscience</i> , 2021 , 21, e2000370	5.5	8
45	Anisotropic mineralized collagen scaffolds accelerate osteogenic response in a glycosaminoglycan-dependent fashion. <i>RSC Advances</i> , 2020 , 10, 15629-15641	3.7	7
44	Quantitative Imaging of Cell Membrane-associated Effective Mass Density Using Photonic Crystal Enhanced Microscopy (PCEM). <i>Progress in Quantum Electronics</i> , 2016 , 50, 1-18	9.1	7
43	The Feasibility of Encapsulated Embryonic Medullary Reticular Cells to Grow and Differentiate Into Neurons in Functionalized Gelatin-Based Hydrogels. <i>Frontiers in Materials</i> , 2018 , 5,	4	7
42	Proangiogenic Activity of Endometrial Epithelial and Stromal Cells in Response to Estradiol in Gelatin Hydrogels. <i>Advanced Biology</i> , 2017 , 1, 1700056	3.5	6
41	Biomaterial design strategies to address obstacles in craniomaxillofacial bone repair. <i>RSC Advances</i> , 2021 , 11, 17809-17827	3.7	6
40	Visualizing Intrapopulation Hematopoietic Cell Heterogeneity with Self-Organizing Maps of SIMS Data. <i>Tissue Engineering - Part C: Methods</i> , 2018 , 24, 322-330	2.9	5

39	Benzophenone-based photochemical micropatterning of biomolecules to create model substrates and instructive biomaterials. <i>Methods in Cell Biology</i> , 2014 , 121, 231-42	1.8	5
38	Heterotypic tumor models through freeform printing into photostabilized granular microgels. <i>Biomaterials Science</i> , 2021 , 9, 4496-4509	7.4	5
37	CXCR4/CXCL12 signaling impacts enamel progenitor cell proliferation and motility in the dental stem cell niche. <i>Cell and Tissue Research</i> , 2015 , 362, 633-42	4.2	4
36	In Vivo Synthesis of Tissues and Organs 2014 , 325-355		4
35	Cell-laden hydrogels in integrated microfluidic devices for long-term cell culture and tubulogenesis assays. <i>Small</i> , 2013 , 9, 3076-81	11	3
34	In Vivo Synthesis of Tissues and Organs 2007 , 219-238		3
33	Mesenchymal stromal cell remodeling of a gelatin hydrogel microenvironment defines an artificial hematopoietic stem cell niche		3
32	Sequential sequestrations increase the incorporation and retention of multiple growth factors in mineralized collagen scaffolds. <i>RSC Advances</i> , 2020 , 10, 26982-26996	3.7	3
31	Hydrogels Containing Gradients in Vascular Density Reveal Dose-Dependent Role of Angiocrine Cues on Stem Cell Behavior.. <i>Advanced Functional Materials</i> , 2021 , 31, 2101541	15.6	3
30	Biomaterial Scaffolds for Tendon Tissue Engineering 2015 , 349-380		2
29	Repair of critical-size porcine craniofacial bone defects using a collagen-polycaprolactone composite biomaterial. <i>Biofabrication</i> , 2021 , 14,	10.5	2
28	Multidimensional hydrogel models reveal endothelial network angiocrine signals increase glioblastoma cell number, invasion, and temozolomide resistance		2
27	Connecting secretome to hematopoietic stem cell phenotype shifts in an engineered bone marrow niche		2
26	Tough and Tunable Scaffold-Hydrogel Composite Biomaterial for Soft-to-Hard Musculoskeletal Tissue Interfaces		2
25	Stiffness of Nanoparticulate Mineralized Collagen Scaffolds Triggers Osteogenesis via Mechanotransduction and Canonical Wnt Signaling		2
24	Progress in mimicking brain microenvironments to understand and treat neurological disorders. <i>APL Bioengineering</i> , 2021 , 5, 020902	6.6	2
23	Encapsulation of murine hematopoietic stem and progenitor cells in a thiol-crosslinked maleimide-functionalized gelatin hydrogel. <i>Acta Biomaterialia</i> , 2021 , 131, 138-148	10.8	2
22	Label-free Imaging of Stem Cell Adhesion and Dynamic Tracking of Boundary Evolution Using Photonic Crystal Enhanced Microscopy (PCEM). <i>Microscopy and Microanalysis</i> , 2017 , 23, 1142-1143	0.5	1

21	CHCHD2 Knockout Alters Mitochondrial Metabolism, Increases Sensitivity to Sulfasalazine, and Decreases Proliferation and Invasive Potential of Glioblastoma Cells Expressing EGFRvIII. <i>FASEB Journal</i> , 2018 , 32, 40.9	0.9	1
20	Perivascular Secretome Influences Hematopoietic Stem Cell Maintenance in a Gelatin Hydrogel		1
19	Perivascular signals alter global gene expression profile of glioblastoma and response to temozolomide in a gelatin hydrogel		1
18	A Gelatin Hydrogel to Study Endometrial Angiogenesis and Trophoblast Invasion		1
17	Response of neuroglia to hypoxia-induced oxidative stress using enzymatically crosslinked hydrogels		1
16	Tuning trophoblast motility in a gelatin hydrogel via soluble cues from the maternal-fetal interface. <i>Tissue Engineering - Part A</i> , 2020 ,	3.9	1
15	Development of an inexpensive Raman-compatible substrate for the construction of a microarray screening platform. <i>Analyst, The</i> , 2020 , 145, 7030-7039	5	1
14	Tuning Trophoblast Motility in a Gelatin Hydrogel via Soluble Cues from the Maternal-Fetal Interface. <i>Tissue Engineering - Part A</i> , 2021 , 27, 1064-1073	3.9	1
13	Hydrogels Containing Gradients in Vascular Density Reveal Dose-Dependent Role of Angiocrine Cues on Stem Cell Behavior		1
12	Glycosaminoglycan content of a mineralized collagen scaffold promotes mesenchymal stem cell secretion of factors to modulate angiogenesis and monocyte differentiation. <i>Materialia</i> , 2021 , 18, 101149-101149	3.2	1
11	ECatenin Limits Osteogenesis on Regenerative Materials in a Stiffness-Dependent Manner. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2101467	10.1	1
10	Microphysiological systems to study tumor-stroma interactions in brain cancer. <i>Brain Research Bulletin</i> , 2021 , 174, 220-229	3.9	1
9	Engineered tissue models to replicate dynamic interactions within the hematopoietic stem cell niche.. <i>Advanced Healthcare Materials</i> , 2021 , e2102130	10.1	0
8	Effects of Pregnancy-Specific Glycoproteins on Trophoblast Motility in Three-Dimensional Gelatin Hydrogels.. <i>Cellular and Molecular Bioengineering</i> , 2022 , 15, 175-191	3.9	0
7	Hydrogels: Spatially Graded Hydrogel Platform as a 3D Engineered Tumor Microenvironment (Adv. Mater. 9/2015). <i>Advanced Materials</i> , 2015 , 27, 1635-1635	24	
6	Spatial Analysis of Hematopoietic Stem and Progenitor Cells in the Bone Marrow. <i>Blood</i> , 2008 , 112, 3570-3570	2.2	
5	Quantitative Imaging of Femoral Bone Marrow Microenvironments Reveals a Heterogenous Distribution of Hematopoietic Stem and Progenitor Cells.. <i>Blood</i> , 2009 , 114, 1455-1455	2.2	
4	Hypoxic Hematopoietic Stem and Progenitor Cells Reside in Structurally Diverse Perivascular Niches in the Bone Marrow,. <i>Blood</i> , 2011 , 118, 3417-3417	2.2	

- 3 Identification of the Differentiation Status of Individual Hematopoietic Cells from Mouse Bone Marrow using Secondary Ion Mass Spectrometry. *FASEB Journal*, **2012**, 26, 579.5 0.9
- 2 Synthesis of Layered, Graded Bioscaffolds **2013**, 351-371
- 1 Biomaterial Design Principles to Accelerate Bone Tissue Engineering **2022**, 37-69