Linda G Griffith

List of Publications by Citations

177 papers	19,695 citations	66 h-index	139 g-index
187 ext. papers	21,602 ext. citations	7.9 avg, IF	6.85 L-index

#	Paper	IF	Citations
177	Regulation of transport pathways in tumor vessels: role of tumor type and microenvironment. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 4607-12	11.5	1940
176	Tissue engineering--current challenges and expanding opportunities. *Science*, **2002**, 295, 1009-14	33.3	1876
175	Capturing complex 3D tissue physiology in vitro. *Nature Reviews Molecular Cell Biology*, **2006**, 7, 211-24	48.7	1768
174	Engineering principles of clinical cell-based tissue engineering. *Journal of Bone and Joint Surgery - Series A*, **2004**, 86, 1541-58	5.6	651
173	Effect of pore size and void fraction on cellular adhesion, proliferation, and matrix deposition. *Tissue Engineering*, **2001**, 7, 557-72		646
172	Polymeric biomaterials. *Acta Materialia*, **2000**, 48, 263-277	8.4	596
171	A three-dimensional osteochondral composite scaffold for articular cartilage repair. *Biomaterials*, **2002**, 23, 4739-51	15.6	516
170	A microfabricated array bioreactor for perfused 3D liver culture. *Biotechnology and Bioengineering*, **2002**, 78, 257-69	4.9	388
169	Perfused multiwell plate for 3D liver tissue engineering. *Lab on A Chip*, **2010**, 10, 51-8	7.2	356
168	Survival and function of hepatocytes on a novel three-dimensional synthetic biodegradable polymer scaffold with an intrinsic network of channels. *Annals of Surgery*, **1998**, 228, 8-13	7.8	346
167	Co-regulation of cell adhesion by nanoscale RGD organization and mechanical stimulus. *Journal of Cell Science*, **2002**, 115, 1423-1433	5.3	332
166	Microfluidic shear devices for quantitative analysis of cell adhesion. *Analytical Chemistry*, **2004**, 76, 5257-68	5.8	319
165	models for liver toxicity testing. *Toxicology Research*, **2013**, 2, 23-39	2.6	304
164	Emerging design principles in biomaterials and scaffolds for tissue engineering. *Annals of the New York Academy of Sciences*, **2002**, 961, 83-95	6.5	293
163	Co-regulation of cell adhesion by nanoscale RGD organization and mechanical stimulus. *Journal of Cell Science*, **2002**, 115, 1423-33	5.3	273
162	Integration of surface modification and 3D fabrication techniques to prepare patterned poly(L-lactide) substrates allowing regionally selective cell adhesion. *Journal of Biomaterials Science, Polymer Edition*, **1998**, 9, 89-110	3.5	267
161	A microscale in vitro physiological model of the liver: predictive screens for drug metabolism and enzyme induction. *Current Drug Metabolism*, **2005**, 6, 569-91	3.5	262

160	Tethered epidermal growth factor provides a survival advantage to mesenchymal stem cells. *Stem Cells*, **2007**, 25, 1241-51	5.8	240
159	Interconnected Microphysiological Systems for Quantitative Biology and Pharmacology Studies. *Scientific Reports*, **2018**, 8, 4530	4.9	238
158	Epidermal growth factor (EGF)-like repeats of human tenascin-C as ligands for EGF receptor. *Journal of Cell Biology*, **2001**, 154, 459-68	7.3	229
157	Epidermal growth factor as a candidate for ex vivo expansion of bone marrow-derived mesenchymal stem cells. *Stem Cells*, **2006**, 24, 686-95	5.8	221
156	Growth factor regulation of proliferation and survival of multipotential stromal cells. *Stem Cell Research and Therapy*, **2010**, 1, 32	8.3	210
155	Functional behavior of primary rat liver cells in a three-dimensional perfused microarray bioreactor. *Tissue Engineering*, **2002**, 8, 499-513		197
154	Nanoscale clustering of RGD peptides at surfaces using Comb polymers. 1. Synthesis and characterization of Comb thin films. *Biomacromolecules*, **2001**, 2, 85-94	6.9	168
153	A mouse-human phase 1 co-clinical trial of a protease-activated fluorescent probe for imaging cancer. *Science Translational Medicine*, **2016**, 8, 320ra4	17.5	163
152	Synthesis and Characterization of Enzymatically-Cross-Linked Poly(ethylene glycol) Hydrogels. *Macromolecules*, **1997**, 30, 5255-5264	5.5	162
151	Quantitative comparison of polyethylenimine formulations and adenoviral vectors in terms of intracellular gene delivery processes. *Gene Therapy*, **2005**, 12, 1023-32	4	162
150	Transport-mediated angiogenesis in 3D epithelial coculture. *FASEB Journal*, **2009**, 23, 2155-64	0.9	158
149	Extracellular matrix signaling through growth factor receptors during wound healing. *Wound Repair and Regeneration*, **2004**, 12, 262-8	3.6	145
148	Biophysical integration of effects of epidermal growth factor and fibronectin on fibroblast migration. *Biophysical Journal*, **1999**, 76, 2814-23	2.9	138
147	Combinatorial Modification of Degradable Polymers Enables Transfection of Human Cells Comparable to Adenovirus. *Advanced Materials*, **2007**, 19, 2836-2842	24	137
146	Liver tissue engineering in the evaluation of drug safety. *Expert Opinion on Drug Metabolism and Toxicology*, **2009**, 5, 1159-74	5.5	129
145	Simulations of cell-surface integrin binding to nanoscale-clustered adhesion ligands. *Biophysical Journal*, **2002**, 82, 120-32	2.9	128
144	Nanoscale clustering of RGD peptides at surfaces using comb polymers. 2. Surface segregation of comb polymers in polylactide. *Biomacromolecules*, **2001**, 2, 545-56	6.9	127
143	Integrated Gut and Liver Microphysiological Systems for Quantitative In Vitro Pharmacokinetic Studies. *AAPS Journal*, **2017**, 19, 1499-1512	3.7	123

142	Liver Organ on a chip. *Experimental Cell Research*, **2018**, 363, 15-25	4.2	116
141	Synergistic drug-cytokine induction of hepatocellular death as an in vitro approach for the study of inflammation-associated idiosyncratic drug hepatotoxicity. *Toxicology and Applied Pharmacology*, **2009**, 237, 317-30	4.6	115
140	Reduced Proteolytic Shedding of Receptor Tyrosine Kinases Is a Post-Translational Mechanism of Kinase Inhibitor Resistance. *Cancer Discovery*, **2016**, 6, 382-99	24.4	113
139	In vitro organogenesis of liver tissue. *Annals of the New York Academy of Sciences*, **1997**, 831, 382-97	6.5	113
138	Integrated gut/liver microphysiological systems elucidates inflammatory inter-tissue crosstalk. *Biotechnology and Bioengineering*, **2017**, 114, 2648-2659	4.9	107
137	Bioreactor technologies to support liver function in vitro. *Advanced Drug Delivery Reviews*, **2014**, 69-70, 132-57	18.5	102
136	Rat liver sinusoidal endothelial cells survive without exogenous VEGF in 3D perfused co-cultures with hepatocytes. *FASEB Journal*, **2007**, 21, 2564-79	0.9	101
135	Genetically engineering self-organization of human pluripotent stem cells into a liver bud-like tissue using Gata6. *Nature Communications*, **2016**, 7, 10243	17.4	98
134	Microdistribution of substratum-bound ligands affects cell function: hepatocyte spreading on PEO-tethered galactose. *Biomaterials*, **1998**, 19, 979-86	15.6	98
133	Molecular network analysis of endometriosis reveals a role for c-Jun-regulated macrophage activation. *Science Translational Medicine*, **2014**, 6, 222ra16	17.5	96
132	Osteoblast response to PLGA tissue engineering scaffolds with PEO modified surface chemistries and demonstration of patterned cell response. *Biomaterials*, **2004**, 25, 2819-30	15.6	94
131	Enhanced ex vivo expansion of adult mesenchymal stem cells by fetal mesenchymal stem cell ECM. *Biomaterials*, **2014**, 35, 4046-57	15.6	93
130	Comparison of tethered star and linear poly(ethylene oxide) for control of biomaterials surface properties. *Journal of Biomedical Materials Research Part B*, **1998**, 40, 498-509		90
129	Marrow-derived stem cell motility in 3D synthetic scaffold is governed by geometry along with adhesivity and stiffness. *Biotechnology and Bioengineering*, **2011**, 108, 1181-93	4.9	89
128	Control and Prediction of Gelation Kinetics in Enzymatically Cross-Linked Poly(ethylene glycol) Hydrogels. *Macromolecules*, **2000**, 33, 5476-5480	5.5	85
127	Creation of Stable Poly(ethylene oxide) Surfaces on Poly(methyl methacrylate) Using Blends of Branched and Linear Polymers. *Macromolecules*, **1997**, 30, 6947-6956	5.5	83
126	Human vascular tissue models formed from human induced pluripotent stem cell derived endothelial cells. *Stem Cell Reviews and Reports*, **2015**, 11, 511-25	6.4	82
125	Targeting the lymphotoxin-beta receptor with agonist antibodies as a potential cancer therapy. *Cancer Research*, **2006**, 66, 9617-24	10.1	81

124	Alpha4beta1 integrin and erythropoietin mediate temporally distinct steps in erythropoiesis: integrins in red cell development. *Journal of Cell Biology*, **2007**, 177, 871-80	7.3	77
123	Perspective: The promise of multi-cellular engineered living systems. *APL Bioengineering*, **2018**, 2, 040906	6.6	74
122	Quantitative Assessment of Population Variability in Hepatic Drug Metabolism Using a Perfused Three-Dimensional Human Liver Microphysiological System. *Journal of Pharmacology and Experimental Therapeutics*, **2017**, 360, 95-105	4.7	73
121	Research Priorities for Endometriosis. *Reproductive Sciences*, **2017**, 24, 202-226	3	72
120	Cell-substratum adhesion strength as a determinant of hepatocyte aggregate morphology. *Biotechnology and Bioengineering*, **1997**, 53, 415-26	4.9	72
119	ADAM-10 and -17 regulate endometriotic cell migration via concerted ligand and receptor shedding feedback on kinase signaling. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E2074-83	11.5	71
118	An engineered bivalent neuregulin protects against doxorubicin-induced cardiotoxicity with reduced proneoplastic potential. *Circulation*, **2013**, 128, 152-61	16.7	69
117	Covalent Modification of Synthetic Hydrogels with Bioactive Proteins via Sortase-Mediated Ligation. *Biomacromolecules*, **2015**, 16, 2316-26	6.9	68
116	Novel three-dimensional organotypic liver bioreactor to directly visualize early events in metastatic progression. *Advances in Cancer Research*, **2007**, 97, 225-46	5.9	68
115	Multiplexed protease activity assay for low-volume clinical samples using droplet-based microfluidics and its application to endometriosis. *Journal of the American Chemical Society*, **2013**, 135, 1645-8	16.4	67
114	Gene delivery properties of end-modified poly(beta-amino ester)s. *Bioconjugate Chemistry*, **2007**, 18, 1887-96	6.3	67
113	Gut-Liver Physiomimetics Reveal Paradoxical Modulation of IBD-Related Inflammation by Short-Chain Fatty Acids. *Cell Systems*, **2020**, 10, 223-239.e9	10.6	66
112	Spontaneous dormancy of metastatic breast cancer cells in an all human liver microphysiologic system. *British Journal of Cancer*, **2014**, 111, 2342-50	8.7	66
111	Proteolytic Activity Matrix Analysis (PrAMA) for simultaneous determination of multiple protease activities. *Integrative Biology (United Kingdom)*, **2011**, 3, 422-38	3.7	66
110	Biology-inspired microphysiological systems to advance patient benefit and animal welfare in drug development. *ALTEX: Alternatives To Animal Experimentation*, **2020**, 37, 365-394	4.3	66
109	Enhancing protease activity assay in droplet-based microfluidics using a biomolecule concentrator. *Journal of the American Chemical Society*, **2011**, 133, 10368-71	16.4	65
108	Cell surface restriction of EGFR by a tenascin cytotactin-encoded EGF-like repeat is preferential for motility-related signaling. *Journal of Cellular Physiology*, **2008**, 214, 504-12	7	63
107	An inducible autocrine cascade regulates rat hepatocyte proliferation and apoptosis responses to tumor necrosis factor-alpha. *Hepatology*, **2008**, 48, 276-88	11.2	63

106	Metabolite profiling and pharmacokinetic evaluation of hydrocortisone in a perfused three-dimensional human liver bioreactor. *Drug Metabolism and Disposition*, **2015**, 43, 1091-9	4	62
105	Modeling Therapeutic Antibody-Small Molecule Drug-Drug Interactions Using a Three-Dimensional Perfusable Human Liver Coculture Platform. *Drug Metabolism and Disposition*, **2016**, 44, 1940-1948	4	62
104	Sustained epidermal growth factor receptor levels and activation by tethered ligand binding enhances osteogenic differentiation of multi-potent marrow stromal cells. *Journal of Cellular Physiology*, **2009**, 221, 306-17	7	60
103	Photopatterning of hydrogel scaffolds coupled to filter materials using stereolithography for perfused 3D culture of hepatocytes. *Biotechnology and Bioengineering*, **2015**, 112, 777-87	4.9	59
102	Design, modeling and fabrication of a constant flow pneumatic micropump. *Journal of Micromechanics and Microengineering*, **2007**, 17, 891-899	2	59
101	On-demand dissolution of modular, synthetic extracellular matrix reveals local epithelial-stromal communication networks. *Biomaterials*, **2017**, 130, 90-103	15.6	58
100	Peritoneal fluid cytokines related to endometriosis in patients evaluated for infertility. *Fertility and Sterility*, **2017**, 107, 1191-1199.e2	4.8	57
99	Dual responsiveness of a tunable thermo-sensitive polypeptide. *ACS Macro Letters*, **2012**, 1, 727-731	6.6	57
98	The dormancy dilemma: quiescence versus balanced proliferation. *Cancer Research*, **2013**, 73, 3811-6	10.1	57
97	Interplay between PEO tether length and ligand spacing governs cell spreading on RGD-modified PMMA-g-PEO comb copolymers. *Biomacromolecules*, **2007**, 8, 3206-13	6.9	56
96	Liver metastases: Microenvironments and ex-vivo models. *Experimental Biology and Medicine*, **2016**, 241, 1639-52	3.7	56
95	A Chemoselective Approach to Grafting Biodegradable Polyesters. *Macromolecules*, **2005**, 38, 216-219	5.5	55
94	Clonal expansion of adult rat hepatic stem cell lines by suppression of asymmetric cell kinetics (SACK). *Biotechnology and Bioengineering*, **2003**, 83, 760-71	4.9	54
93	Who got pull around here? Cell organization in development and tissue engineering. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 4282-4	11.5	54
92	Cytokine-associated drug toxicity in human hepatocytes is associated with signaling network dysregulation. *Molecular BioSystems*, **2010**, 6, 1195-206		52
91	Adhesion-guided in vitro morphogenesis in pure and mixed cell cultures. *Microscopy Research and Technique*, **1998**, 43, 379-84	2.8	51
90	Folding artificial mucosa with cell-laden hydrogels guided by mechanics models. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 7503-7508	11.5	49
89	Multi-functional scaling methodology for translational pharmacokinetic and pharmacodynamic applications using integrated microphysiological systems (MPS). *Integrative Biology (United Kingdom)*, **2017**, 9, 290-302	3.7	47

88	Intraoperative detection and removal of microscopic residual sarcoma using wide-field imaging. *Cancer*, **2012**, 118, 5320-30	6.4	47
87	Functionalized self-assembling peptide hydrogel enhance maintenance of hepatocyte activity in vitro. *Journal of Cellular and Molecular Medicine*, **2009**, 13, 3387-97	5.6	46
86	A microphysiological system model of therapy for liver micrometastases. *Experimental Biology and Medicine*, **2014**, 239, 1170-9	3.7	45
85	Integrated Assessment of Diclofenac Biotransformation, Pharmacokinetics, and Omics-Based Toxicity in a Three-Dimensional Human Liver-Immunocompetent Coculture System. *Drug Metabolism and Disposition*, **2017**, 45, 855-866	4	43
84	Engineering liver. *Hepatology*, **2014**, 60, 1426-34	11.2	42
83	ADAM9 inhibition increases membrane activity of ADAM10 and controls α-secretase processing of amyloid precursor protein. *Journal of Biological Chemistry*, **2011**, 286, 40443-51	5.4	42
82	Synergistic effects of tethered growth factors and adhesion ligands on DNA synthesis and function of primary hepatocytes cultured on soft synthetic hydrogels. *Biomaterials*, **2010**, 31, 4657-71	15.6	42
81	Local remodeling of synthetic extracellular matrix microenvironments by co-cultured endometrial epithelial and stromal cells enables long-term dynamic physiological function. *Integrative Biology (United Kingdom)*, **2017**, 9, 271-289	3.7	40
80	Fully synthetic matrices for in vitro culture of primary human intestinal enteroids and endometrial organoids. *Biomaterials*, **2020**, 254, 120125	15.6	40
79	Multipathway kinase signatures of multipotent stromal cells are predictive for osteogenic differentiation: tissue-specific stem cells. *Stem Cells*, **2009**, 27, 2804-14	5.8	40
78	A process engineering approach to increase organoid yield. *Development (Cambridge)*, **2017**, 144, 1128-1136	4.6	37
77	Functional modification of biodegradable polyesters through a chemoselective approach: application to biomaterial surfaces. *Polymer International*, **2006**, 55, 1385-1397	3.3	37
76	Carbon dioxide extraction of residual chloroform from biodegradable polymers. *Journal of Biomedical Materials Research Part B*, **2002**, 63, 567-76		36
75	The influence of tethered epidermal growth factor on connective tissue progenitor colony formation. *Biomaterials*, **2009**, 30, 4629-38	15.6	35
74	Approaches to in vitro tissue regeneration with application for human disease modeling and drug development. *Drug Discovery Today*, **2014**, 19, 754-62	8.8	33
73	Autocrine-controlled formation and function of tissue-like aggregates by primary hepatocytes in micropatterned hydrogel arrays. *Tissue Engineering - Part A*, **2011**, 17, 1055-68	3.9	33
72	Production of reactive oxygen species by multipotent stromal cells/mesenchymal stem cells upon exposure to fas ligand. *Cell Transplantation*, **2012**, 21, 2171-87	4	33
71	A Model of Dormant-Emergent Metastatic Breast Cancer Progression Enabling Exploration of Biomarker Signatures. *Molecular and Cellular Proteomics*, **2018**, 17, 619-630	7.6	32

70	Menstruation: science and society. *American Journal of Obstetrics and Gynecology*, **2020**, 223, 624-664	6.4	32
69	Interrogating signaling nodes involved in cellular transformations using kinase activity probes. *Chemistry and Biology*, **2012**, 19, 210-7		31
68	Engineering PEG-based hydrogels to foster efficient endothelial network formation in free-swelling and confined microenvironments. *Biomaterials*, **2020**, 243, 119921	15.6	29
67	Three dimensional human small intestine models for ADME-Tox studies. *Drug Discovery Today*, **2014** , 19, 1587-94	8.8	29
66	Genetic circuit design automation for the gut resident species Bacteroides thetaiotaomicron. *Nature Biotechnology*, **2020**, 38, 962-969	44.5	28
65	Helix coil polypeptide macromers: gel networks with decoupled stiffness and permeability. *Soft Matter*, **2012**, 42, 10887-10895	3.6	26
64	Primary human colonic mucosal barrier crosstalk with super oxygen-sensitive in continuous culture. *Med*, **2021**, 2, 74-98.e9	31.7	25
63	OrgaQuant: Human Intestinal Organoid Localization and Quantification Using Deep Convolutional Neural Networks. *Scientific Reports*, **2019**, 9, 12479	4.9	23
62	Lipids promote survival, proliferation, and maintenance of differentiation of rat liver sinusoidal endothelial cells in vitro. *American Journal of Physiology - Renal Physiology*, **2012**, 302, G375-88	5.1	23
61	Uncharged Helical Modular Polypeptide Hydrogels for Cellular Scaffolds. *Biomacromolecules*, **2015**, 16, 3774-83	6.9	22
60	Targeting autocrine HB-EGF signaling with specific ADAM12 inhibition using recombinant ADAM12 prodomain. *Scientific Reports*, **2015**, 5, 15150	4.9	22
59	Human physiomimetic model integrating microphysiological systems of the gut, liver, and brain for studies of neurodegenerative diseases. *Science Advances*, **2021**, 7,	14.3	22
58	ADAM10 Sheddase Activity is a Potential Lung-Cancer Biomarker. *Journal of Cancer*, **2018**, 9, 2559-2570	4.5	21
57	Tailoring chimeric ligands for studying and biasing ErbB receptor family interactions. *Angewandte Chemie - International Edition*, **2014**, 53, 2662-6	16.4	21
56	Transport and shear in a microfluidic membrane bilayer device for cell culture. *Biomicrofluidics*, **2011**, 5, 22213	3.2	21
55	Adenoviral vector saturates Akt pro-survival signaling and blocks insulin-mediated rescue of tumor necrosis-factor-induced apoptosis. *Journal of Cell Science*, **2006**, 119, 3788-98	5.3	21
54	Engineered bivalent ligands to bias ErbB receptor-mediated signaling and phenotypes. *Journal of Biological Chemistry*, **2011**, 286, 27729-40	5.4	19
53	Chain Conformations at the Surface of a Polydisperse Amphiphilic Comb Copolymer Film. *Macromolecules*, **2006**, 39, 5122-5126	5.5	19

52	Regenerating the cell resistance of micromolded PEG hydrogels. *Lab on A Chip*, **2015**, 15, 2073-89	7.2	18
51	Fusing Tissue Engineering and Systems Biology Toward Fulfilling Their Promise. *Cellular and Molecular Bioengineering*, **2008**, 1, 33-41	3.9	18
50	Analysis of an Integrated Human Multiorgan Microphysiological System for Combined Tolcapone Metabolism and Brain Metabolomics. *Analytical Chemistry*, **2019**, 91, 8667-8675	7.8	17
49	Controlling multipotent stromal cell migration by integrating "course-graining" materials and "fine-tuning" small molecules via decision tree signal-response modeling. *Biomaterials*, **2011**, 32, 7524-31	15.6	17
48	A microenvironment-inspired synthetic three-dimensional model for pancreatic ductal adenocarcinoma organoids. *Nature Materials*, **2021**,	27	17
47	Establishing quasi-steady state operations of microphysiological systems (MPS) using tissue-specific metabolic dependencies. *Scientific Reports*, **2018**, 8, 8015	4.9	16
46	Co-regulation of primary mouse hepatocyte viability and function by oxygen and matrix. *Biotechnology and Bioengineering*, **2014**, 111, 1018-27	4.9	15
45	Multilayer thin film coatings capable of extended programmable drug release: application to human mesenchymal stem cell differentiation. *Drug Delivery and Translational Research*, **2012**, 2, 375-83	6.2	15
44	Three-kinase inhibitor combination recreates multipathway effects of a geldanamycin analogue on hepatocellular carcinoma cell death. *Molecular Cancer Therapeutics*, **2009**, 8, 2183-92	6.1	15
43	Formation of osteogenic colonies on well-defined adhesion peptides by freshly isolated human marrow cells. *Biomaterials*, **2007**, 28, 1847-61	15.6	15
42	Advances in biomedical engineering. *JAMA - Journal of the American Medical Association*, **2001**, 285, 556-61	27.4	15
41	The Vaginal Microbiome as a Tool to Predict rASRM Stage of Disease in Endometriosis: a Pilot Study. *Reproductive Sciences*, **2020**, 27, 1064-1073	3	13
40	Tethering of Epidermal Growth Factor (EGF) to Beta Tricalcium Phosphate (βTCP) via Fusion to a High Affinity, Multimeric βTCP-Binding Peptide: Effects on Human Multipotent Stromal Cells/Connective Tissue Progenitors. *PLoS ONE*, **2015**, 10, e0129600	3.7	13
39	Engineering Helical Modular Polypeptide-Based Hydrogels as Synthetic Extracellular Matrices for Cell Culture. *Biomacromolecules*, **2020**, 21, 566-580	6.9	13
38	Tresyl-mediated synthesis: kinetics of competing coupling and hydrolysis reactions as a function of pH, temperature, and steric factors. *Bioconjugate Chemistry*, **1999**, 10, 213-20	6.3	12
37	Quantitative Label-Free Imaging of 3D Vascular Networks Self-Assembled in Synthetic Hydrogels. *Advanced Healthcare Materials*, **2019**, 8, e1801186	10.1	10
36	Chemoproteomics of matrix metalloproteases in a model of cartilage degeneration suggests functional biomarkers associated with posttraumatic osteoarthritis. *Journal of Biological Chemistry*, **2018**, 293, 11459-11469	5.4	10
35	Design Principles for SuCESsFul Biosensors: Specific Fluorophore/Analyte Binding and Minimization of Fluorophore/Scaffold Interactions. *Journal of Molecular Biology*, **2016**, 428, 4228-4241	6.5	8

34	Endometrioma, the follicular fluid inflammatory network and its association with oocyte and embryo characteristics. *Reproductive BioMedicine Online*, **2020**, 40, 399-408	4	7
33	Application of a gut-immune co-culture system for the study of N-glycan-dependent host-pathogen interactions of Campylobacter jejuni. *Glycobiology*, **2020**, 30, 374-381	5.8	6
32	Tailoring Chimeric Ligands for Studying and Biasing ErbB Receptor Family Interactions. *Angewandte Chemie*, **2014**, 126, 2700-2704	3.6	6
31	Development and Application of the Metalloprotease Activity Multiplexed Bead-Based Immunoassay (MAMBI). *Biochemistry*, **2019**, 58, 3938-3942	3.2	5
30	Equilibrium and dynamic design principles for binding molecules engineered for reagentless biosensors. *Analytical Biochemistry*, **2014**, 460, 9-15	3.1	5
29	A multipathway phosphoproteomic signaling network model of idiosyncratic drug- and inflammatory cytokine-induced toxicity in human hepatocytes. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 5452-5	0.9	5
28	A modular polymer microbead angiogenesis scaffold to characterize the effects of adhesion ligand density on angiogenic sprouting. *Biomaterials*, **2021**, 264, 120231	15.6	5
27	PiFlow: A biocompatible low-cost programmable dynamic flow pumping system utilizing a Raspberry Pi Zero and commercial piezoelectric pumps. *HardwareX*, **2018**, 4, e00034	2.7	5
26	-Associated Antibiotics Alter Human Mucosal Barrier Functions by Microbiome-Independent Mechanisms. *Antimicrobial Agents and Chemotherapy*, **2020**, 64,	5.9	4
25	Integration of systems biology with organs-on-chips to humanize therapeutic development **2017**,		3
24	Modification of proteolytic activity matrix analysis (PrAMA) to measure ADAM10 and ADAM17 sheddase activities in cell and tissue lysates. *Journal of Cancer*, **2017**, 8, 3916-3932	4.5	3
23	Macromonomer Purification Strategy for Well-Defined Polymer Amphiphiles Incorporating Poly(ethylene glycol) Monomethacrylate. *Macromolecular Rapid Communications*, **2006**, 27, 631-636	4.8	3
22	PiFlow: A Biocompatible Low-Cost Programmable Dynamic Flow Pumping System Utilizing a Raspberry Pi Zero and Commercial Piezoelectric Pumps		3
21	Gut-Liver physiomimetics reveal paradoxical modulation of IBD-related inflammation by short-chain fatty acids		3
20	IP-10 (CXCL10) Can Trigger Emergence of Dormant Breast Cancer Cells in a Metastatic Liver Microenvironment. *Frontiers in Oncology*, **2021**, 11, 676135	5.3	3
19	41 integrin and erythropoietin mediate temporally distinct steps in erythropoiesis: integrins in red cell development. *Journal of Cell Biology*, **2008**, 181, 395-395	7.3	2
18	Micromachined Bioreactor for in Vitro Cell Self-Assembly and 3D Tissue Formation **2004**, 319-346		2
17	A phase I study of the safety and activation of a cathepsin-activatable fluorescent cancer-specific probe LUM015.. *Journal of Clinical Oncology*, **2014**, 32, TPS11135-TPS11135	2.2	2

List of Publications

16	Niche-inspired synthetic matrices for epithelial organoid culture		2
15	Flux-Biased, Energy-Efficient Electromagnetic Micropumps Utilizing Bistable Magnetic Latching and Energy-Storage Springs. *IEEE/ASME Transactions on Mechatronics*, **2020**, 1-1	5.5	2
14	Coculture of primary human colon monolayer with human gut bacteria. *Nature Protocols*, **2021**, 16, 3874-3890	13.8	2
13	Comparison of cytokines in the peritoneal fluid and conditioned medium of adolescents and adults with and without endometriosis. *American Journal of Reproductive Immunology*, **2021**, 85, e13347	3.8	2
12	Physiomimetic Models of Adenomyosis. *Seminars in Reproductive Medicine*, **2020**, 38, 179-196	1.4	1
11	Engineering the Niche for Intestinal Regeneration **2017**, 601-615		1
10	Multiwell cell culture plate format with integrated microfluidic perfusion system **2006**, 6112, 111		1
9	Engineering Modular 3D Liver Culture Microenvironments In Vitro to Parse the Interplay between Biophysical and Biochemical Microenvironment Cues on Hepatic Phenotypes. *Advanced NanoBiomed Research*,2100049	0	1
8	Closed-loop feedback control for microfluidic systems through automated capacitive fluid height sensing		1
7	Novel Technology to Capture Objective Data from PatientsRRecovery from Laparoscopic Endometriosis Surgery. *Journal of Minimally Invasive Gynecology*, **2021**, 28, 325-331	2.2	1
6	High resolution stereolithography fabrication of perfusable scaffolds to enable long-term meso-scale hepatic culture for disease modeling. *Biofabrication*, **2021**, 13,	10.5	1
5	Cell-substratum adhesion strength as a determinant of hepatocyte aggregate morphology **1997**, 53, 415		1
4	The nuclear receptor THRB facilitates differentiation of human PSCs into more mature hepatocytes. **2022**,		1
3	Transport Models for Three-Dimensional Cell Culture Systems **2013**, 137-172		
2	Role of Integrins in Adhesion of Hematopoietic Progenitor Cells.. *Blood*, **2004**, 104, 4263-4263	2.2	
1	Synergistic Action of Diclofenac with Endotoxin-Mediated Inflammation Exacerbates Intestinal Injury. *ACS Infectious Diseases*, **2021**, 7, 838-848	5.5	