

Gabor Forgacs

List of Publications by Year in descending order

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67
papers

9,695
citations

109321

35
h-index

214800

47
g-index

70
all docs

70
docs citations

70
times ranked

8900
citing authors

#	ARTICLE	IF	CITATIONS
1	Physics of bioprinting. Applied Physics Reviews, 2019, 6, .	11.3	32
2	Biofabrication: A Guide to Technology and Terminology. Trends in Biotechnology, 2018, 36, 384-402.	9.3	465
3	Advanced Cell and Tissue Biomanufacturing. ACS Biomaterials Science and Engineering, 2018, 4, 2292-2307.	5.2	14
4	Self-assembly of tissue spheroids on polymeric membranes. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 2090-2103.	2.7	12
5	Biofabrication: reappraising the definition of an evolving field. Biofabrication, 2016, 8, 013001.	7.1	523
6	Post-deposition bioink self-assembly: a quantitative study. Biofabrication, 2015, 7, 045005.	7.1	53
7	Bioprinting of Nerve. , 2015, , 379-394.		3
8	Predictive modeling of post bioprinting structure formation. Soft Matter, 2014, 10, 1790-1800.	2.7	52
9	Biofabrication and testing of a fully cellular nerve graft. Biofabrication, 2013, 5, 045007.	7.1	174
10	How cholesterol regulates endothelial biomechanics. Frontiers in Physiology, 2012, 3, 426.	2.8	22
11	Colloquium: Modeling the dynamics of multicellular systems: Application to tissue engineering. Reviews of Modern Physics, 2012, 84, 1791-1805.	45.6	39
12	Kinetic Monte Carlo and cellular particle dynamics simulations of multicellular systems. Physical Review E, 2012, 85, 031907.	2.1	51
13	Perfusable vascular networks. Nature Materials, 2012, 11, 746-747.	27.5	19
14	Computational Modeling of Tissue Self-Assembly. , 2012, , 251-272.		6
15	Fusion of uniluminal vascular spheroids: A model for assembly of blood vessels. Developmental Dynamics, 2010, 239, 398-406.	1.8	108
16	Fusion of uniluminal vascular spheroids: A model for assembly of blood vessels. Developmental Dynamics, 2010, 239, spcone-spcone.	1.8	0
17	Fusion of uniluminal vascular spheroids: A model for assembly of blood vessels. Developmental Dynamics, 2010, 239, spcone-spcone.	1.8	0
18	Computational modeling of epithelialâ€“mesenchymal transformations. BioSystems, 2010, 100, 23-30.	2.0	21

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19	Tissue engineering by self-assembly and bio-printing of living cells. <i>Biofabrication</i> , 2010, 2, 022001.	7.1	492
20	Organ printing: Tissue spheroids as building blocks. <i>Biomaterials</i> , 2009, 30, 2164-2174.	11.4	1,106
21	Scaffold-free vascular tissue engineering using bioprinting. <i>Biomaterials</i> , 2009, 30, 5910-5917.	11.4	1,193
22	Microenvironmental Regulation of Ovarian Cancer Metastasis. <i>Cancer Treatment and Research</i> , 2009, 149, 319-334.	0.5	46
23	Relating cell and tissue mechanics: Implications and applications. <i>Developmental Dynamics</i> , 2008, 237, 2438-2449.	1.8	72
24	Limb bud and flank mesoderm have distinct biophysical phenotypes that may contribute to limb budding. <i>Developmental Biology</i> , 2008, 321, 319-330.	2.0	38
25	Tissue Engineering by Self-Assembly of Cells Printed into Topologically Defined Structures. <i>Tissue Engineering - Part A</i> , 2008, 14, 413-421.	3.1	337
26	Relating Biophysical Properties Across Scales. <i>Current Topics in Developmental Biology</i> , 2008, 81, 461-483.	2.2	38
27	Cell Spreading Analysis with Directed Edge Profile-Guided Level Set Active Contours. <i>Lecture Notes in Computer Science</i> , 2008, 11, 376-383.	1.3	15
28	Reversible Disassembly of the Actin Cytoskeleton Improves the Survival Rate and Developmental Competence of Cryopreserved Mouse Oocytes. <i>PLoS ONE</i> , 2008, 3, e2787.	2.5	29
29	Eukaryotic membrane tethers revisited using magnetic tweezers. <i>Physical Biology</i> , 2007, 4, 67-78.	1.8	44
30	The effect of cellular cholesterol on membrane-cytoskeleton adhesion. <i>Journal of Cell Science</i> , 2007, 120, 2223-2231.	2.0	170
31	Developmental biology and tissue engineering. <i>Birth Defects Research Part C: Embryo Today Reviews</i> , 2007, 81, 320-328.	3.6	94
32	Periostin regulates collagen fibrillogenesis and the biomechanical properties of connective tissues. <i>Journal of Cellular Biochemistry</i> , 2007, 101, 695-711.	2.6	530
33	Bioprinting living structures. <i>Journal of Materials Chemistry</i> , 2007, 17, 2054.	6.7	114
34	The Interplay of Cell-Cell and Cell-Matrix Interactions in the Invasive Properties of Brain Tumors. <i>Biophysical Journal</i> , 2006, 91, 2708-2716.	0.5	110
35	Before programs: The physical origination of multicellular forms. <i>International Journal of Developmental Biology</i> , 2006, 50, 289-299.	0.6	149
36	COMPUTATIONAL MODELING OF TISSUE SELF-ASSEMBLY. <i>Modern Physics Letters B</i> , 2006, 20, 1217-1231.	1.9	37

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37	Engineering Blood Vessels from Lumenized Vascular Tissue Spheroids. FASEB Journal, 2006, 20, A436.	0.5	0
38	Three-dimensional tissue constructs built by bioprinting. Biorheology, 2006, 43, 509-13.	0.4	80
39	The cell: fundamental unit of developmental systems. , 2005, , 6-23.		0
40	Fertilization: generating one living dynamical system from two. , 2005, , 223-247.		0
41	Cell states: stability, oscillation, differentiation. , 2005, , 51-76.		0
42	Pattern formation: segmentation, axes, and asymmetry. , 2005, , 155-187.		0
43	Evolution of developmental mechanisms. , 2005, , 248-272.		0
44	Introduction: Biology and physics. , 2005, , 1-5.		0
45	Cleavage and blastula formation. , 2005, , 24-50.		2
46	Cell adhesion, compartmentalization, and lumen formation. , 2005, , 77-98.		0
47	Epithelial morphogenesis: gastrulation and neurulation. , 2005, , 99-130.		0
48	Mesenchymal morphogenesis. , 2005, , 131-154.		0
49	Organogenesis. , 2005, , 188-222.		0
50	Role of Physical Mechanisms in Biological Self-Organization. Physical Review Letters, 2005, 95, 178104.	7.8	69
51	Multiple Membrane Tethers Probed by Atomic Force Microscopy. Biophysical Journal, 2005, 89, 4320-4329.	0.5	182
52	Role of the cytoskeleton in signaling networks. Journal of Cell Science, 2004, 117, 2769-2775.	2.0	75
53	Phase transformations in a model mesenchymal tissue. Physical Biology, 2004, 1, 100-109.	1.8	24
54	Engineering biological structures of prescribed shape using self-assembling multicellular systems. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2864-2869.	7.1	344

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55	Biological Relevance of Tissue Liquidity and Viscoelasticity. , 2004, , 269-277.		5
56	Organ printing: computer-aided jet-based 3D tissue engineering. Trends in Biotechnology, 2003, 21, 157-161.	9.3	1,127
57	Assembly of Collagen Matrices as a Phase Transition Revealed by Structural and Rheologic Studies. Biophysical Journal, 2003, 84, 1272-1280.	0.5	129
58	Magnetic tweezers for intracellular applications. Review of Scientific Instruments, 2003, 74, 4158-4163.	1.3	112
59	Mechanotransduction through the cytoskeleton. American Journal of Physiology - Cell Physiology, 2002, 282, C479-C486.	4.6	90
60	Modeling the interplay of generic and genetic mechanisms in cleavage, blastulation, and gastrulation. , 2000, 219, 182.		3
61	Modeling the interplay of generic and genetic mechanisms in cleavage, blastulation, and gastrulation. Developmental Dynamics, 2000, 219, 182-191.	1.8	89
62	Viscoelastic Properties of Living Embryonic Tissues: a Quantitative Study. Biophysical Journal, 1998, 74, 2227-2234.	0.5	432
63	Liquid properties of embryonic tissues: Measurement of interfacial tensions. Physical Review Letters, 1994, 72, 2298-2301.	7.8	256
64	Phase Transitions, Interfaces, and Morphogenesis in a Network of Protein Fibers. International Review of Cytology, 1994, 150, 139-148.	6.2	21
65	Wetting, percolation and morphogenesis in a model tissue system. Journal of Theoretical Biology, 1989, 140, 417-430.	1.7	32
66	Cellular aggregates under pressure. Physics Magazine, 0, 3, .	0.1	4
67	Tissue Engineering by Self-Assembly of Cells Printed into Topologically Defined Structures. Tissue Engineering, 0, , 110306233438005.	4.6	200