John T Connelly

List of Publications by Year
in descending order

44 papers	3,739 citations	236925 25 h-index	254184 43 g-index
46 all docs	46 docs citations	46 times ranked	6620 citing authors

#	Article	IF	Citations
1	Extracellular-matrix tethering regulates stem-cell fate. Nature Materials, 2012, 11, 642-649.	27.5	1,346
2	Actin and serum response factor transduce physical cues from the microenvironment to regulate epidermal stem cell fate decisions. Nature Cell Biology, 2010, 12, 711-718.	10.3	414
3	Deconstruction of a Metastatic Tumor Microenvironment Reveals a Common Matrix Response in Human Cancers. Cancer Discovery, 2018, 8, 304-319.	9.4	255
4	Inhibition of in vitro chondrogenesis in RGD-modified three-dimensional alginate gels. Biomaterials, 2007, 28, 1071-1083.	11.4	197
5	Dynamic Compression Regulates the Expression and Synthesis of Chondrocyte-Specific Matrix Molecules in Bone Marrow Stromal Cells. Stem Cells, 2007, 25, 655-663.	3.2	164
6	Exploiting the superior protein resistance of polymer brushes to control single cell adhesion and polarisation at the micron scale. Biomaterials, 2010, 31, 5030-5041.	11.4	99
7	Interactions between integrin ligand density and cytoskeletal integrity regulate BMSC chondrogenesis. Journal of Cellular Physiology, 2008, 217, 145-154.	4.1	91
8	Type VI Collagen Regulates Dermal Matrix Assembly and Fibroblast Motility. Journal of Investigative Dermatology, 2016, 136, 74-83.	0.7	84
9	Single-cell gene expression profiling reveals functional heterogeneity of undifferentiated human epidermal cells. Development (Cambridge), 2013, 140, 1433-1444.	2.5	82
10	Clonal Growth of Dermal Papilla Cells in Hydrogels Reveals Intrinsic Differences between Sox2-Positive and -Negative Cells In Vitro and In Vivo. Journal of Investigative Dermatology, 2012, 132, 1084-1093.	0.7	66
11	Adipogenic Differentiation of hMSCs is Mediated by Recruitment of IGF-1r Onto the Primary Cilium Associated With Cilia Elongation. Stem Cells, 2015, 33, 1952-1961.	3.2	58
12	Characterization of proteoglycan production and processing by chondrocytes and BMSCs in tissue engineered constructs. Osteoarthritis and Cartilage, 2008, 16, 1092-1100.	1.3	57
13	Nuclear actin modulates cell motility via transcriptional regulation of adhesive and cytoskeletal genes. Scientific Reports, 2016, 6, 33893.	3.3	55
14	Shape-Induced Terminal Differentiation of Human Epidermal Stem Cells Requires p38 and Is Regulated by Histone Acetylation. PLoS ONE, 2011, 6, e27259.	2.5	52
15	Tensile Loading Modulates Bone Marrow Stromal Cell Differentiation and the Development of Engineered Fibrocartilage Constructs. Tissue Engineering - Part A, 2010, 16, 1913-1923.	3.1	51
16	The keratin network of intermediate filaments regulates keratinocyte rigidity sensing and nuclear mechanotransduction. Science Advances, 2021, 7, .	10.3	50
17	Fibronectin- and collagen-mimetic ligands regulate bone marrow stromal cell chondrogenesis in three-dimensional hydrogels. , 2011, 22, 168-177.		48
18	Directing cell migration using micropatterned and dynamically adhesive polymer brushes. Acta Biomaterialia, 2014, 10, 2415-2422.	8.3	46

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19	Integrin-mediated adhesion and mechano-sensing in cutaneous wound healing. Cell and Tissue Research, 2015, 360, 571-582.	2.9	45
20	The cytolinker plectin regulates nuclear mechanotransduction in keratinocytes. Journal of Cell Science, 2015, 128, 4475-86.	2.0	37
21	Tissue stiffening promotes keratinocyte proliferation via activation of epidermal growth factor signaling. Journal of Cell Science, 2018, 131, .	2.0	36
22	Highly Stable RNA Capture by Dense Cationic Polymer Brushes for the Design of Cytocompatible, Serum-Stable SiRNA Delivery Vectors. Biomacromolecules, 2018, 19, 606-615.	5.4	36
23	Biophysical signals controlling cell fate decisions: How do stem cells really feel?. International Journal of Biochemistry and Cell Biology, 2012, 44, 2233-2237.	2.8	33
24	The influence of cyclic tension amplitude on chondrocyte matrix synthesis: experimental and finite element analyses. Biorheology, 2004, 41, 377-87.	0.4	31
25	Subpopulations of dermal skin fibroblasts secrete distinct extracellular matrix: implications for using skin substitutes in the clinic. British Journal of Dermatology, 2018, 179, 381-393.	1.5	30
26	Epidermal grafting for wound healing: a review on the harvesting systems, the ultrastructure of the graft and the mechanism of wound healing. International Wound Journal, 2017, 14, 16-23.	2.9	28
27	3D nanomechanical evaluations of dermal structures in skin. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 57, 14-23.	3.1	27
28	Differential integrin expression regulates cell sensing of the matrix nanoscale geometry. Acta Biomaterialia, 2017, 50, 280-292.	8.3	24
29	Evidence for the Desmosomal Cadherin Desmoglein-3 in Regulating YAP and Phospho-YAP in Keratinocyte Responses to Mechanical Forces. International Journal of Molecular Sciences, 2019, 20, 6221.	4.1	21
30	Minor collagens of the skin with not so minor functions. Journal of Anatomy, 2019, 235, 418-429.	1.5	20
31	Nucleocytoplasmic shuttling: a common theme in mechanotransduction. Biochemical Society Transactions, 2014, 42, 645-649.	3.4	19
32	An interfacial self-assembling bioink for the manufacturing of capillary-like structures with tuneable and anisotropic permeability. Biofabrication, 2021, 13, 035027.	7.1	16
33	Contractile myosin rings and cofilin-mediated actin disassembly orchestrate ECM nanotopography sensing. Biomaterials, 2020, 232, 119683.	11.4	15
34	Fabrication of Human Skin Equivalents Using Decellularized Extracellular Matrix. Current Protocols, 2022, 2, e393.	2.9	9
35	Multi-Scale Analysis of the Composition, Structure, and Function of Decellularized Extracellular Matrix for Human Skin and Wound Healing Models. Biomolecules, 2022, 12, 837.	4.0	9
36	Regulation of collective cell polarity and migration using dynamically adhesive micropatterned substrates. Acta Biomaterialia, 2021, 126, 291-300.	8.3	8

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37	Extracellular Adhesive Cues Physically Define Nucleolar Structure and Function. Advanced Science, 2022, 9, e2105545.	11.2	8
38	Design of an Integrated Microvascularized Human Skin-on-a-Chip Tissue Equivalent Model. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	8
39	Towards More Predictive, Physiological and Animal-free <i>In Vitro</i> Models: Advances in Cell and Tissue Culture 2020 Conference Proceedings. ATLA Alternatives To Laboratory Animals, 2021, 49, 93-110.	1.0	6
40	Research Techniques Made Simple: Analysis of Skin Cell and Tissue Mechanics Using Atomic Force Microscopy. Journal of Investigative Dermatology, 2021, 141, 1867-1871.e1.	0.7	5
41	Terminal Differentiation of Human Epidermal Stem Cells on Micro-patterned Substrates. Methods in Molecular Biology, 2012, 916, 15-22.	0.9	2
42	Highâ€Content Analysis of Cell Migration Dynamics within a Micropatterned Screening Platform. Advanced Biology, 2019, 3, 1900011.	3.0	2
43	Biophysical regulation of epidermal fate and function. Advances in Stem Cells and Their Niches, 2019, 3, 1-30.	0.1	1
44	Investigating the Fibrillar Ultrastructure and Mechanics in Keloid Scars Using In Situ Synchrotron X-ray Nanomechanical Imaging. Materials, 2022, 15, 1836.	2.9	1