Helen Blau

List of Publications by Year
in descending order

92 papers	21,852 citations	43973 48 h-index	48187 88 g-index
99 all docs	99 docs citations	99 times ranked	29746 citing authors

#	Article	IF	Citations
1	Dermatologist-level classification of skin cancer with deep neural networks. Nature, 2017, 542, 115-118.	13.7	8,203
2	Substrate Elasticity Regulates Skeletal Muscle Stem Cell Self-Renewal in Culture. Science, 2010, 329, 1078-1081.	6.0	1,385
3	The Evolving Concept of a Stem Cell. Cell, 2001, 105, 829-841.	13.5	1,031
4	Primary mouse myoblast purification, characterization, and transplantation for cell-mediated gene therapy.. Journal of Cell Biology, 1994, 125, 1275-1287.	2.3	901
5	Objective comparison of particle tracking methods. Nature Methods, 2014, 11, 281-289.	9.0	805
6	Self-renewal and expansion of single transplanted muscle stem cells. Nature, 2008, 456, 502-506.	13.7	760
7	Reprogramming towards pluripotency requires AID-dependent DNA demethylation. Nature, 2010, 463, 1042-1047.	13.7	620
8	Human induced pluripotent stem cellâ€“derived cardiomyocytes recapitulate the predilection of breast cancer patients to doxorubicin-induced cardiotoxicity. Nature Medicine, 2016, 22, 547-556.	15.2	573
9	Rejuvenation of the muscle stem cell population restores strength to injured aged muscles. Nature Medicine, 2014, 20, 255-264.	15.2	545
10	Short Telomeres and Stem Cell Exhaustion Model Duchenne Muscular Dystrophy in mdx/mTR Mice. Cell, 2010, 143, 1059-1071.	13.5	428
11	Normal dystrophin transcripts detected in Duchenne muscular dystrophy patients after myoblast transplantation. Nature, 1992, 356, 435-438.	13.7	406
12	An objective comparison of cell-tracking algorithms. Nature Methods, 2017, 14, 1141-1152.	9.0	399
13	The central role of muscle stem cells in regenerative failure with aging. Nature Medicine, 2015, 21, 854-862.	15.2	340
14	Bioengineering strategies to accelerate stem cell therapeutics. Nature, 2018, 557, 335-342.	13.7	316
15	Localization of muscle gene products in nuclear domains. Nature, 1989, 337, 570-573.	13.7	300
16	The fate of individual myoblasts after transplantation into muscles of DMD patients. Nature Medicine, 1997, 3, 970-977.	15.2	296
17	Differentiation requires continuous regulation.. Journal of Cell Biology, 1991, 112, 781-783.	2.3	265
18	Non-invasive intravital imaging of cellular differentiation with a bright red-excitable fluorescent protein. Nature Methods, 2014, 11, 572-578.	9.0	196

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19	Migration of myoblasts across basal lamina during skeletal muscle development. Nature, 1990, 345, 350-353.	13.7	194
20	A brief history of RNAi: the silence of the genes. FASEB Journal, 2006, 20, 1293-1299.	0.2	191
21	Effect of cell history on response to helixâ€“loopâ€“helix family of myogenic regulators. Nature, 1990, 344, 454-458.	13.7	163
22	Prostaglandin E2 is essential for efficacious skeletal muscle stem-cell function, augmenting regeneration and strength. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 6675-6684.	3.3	160
23	Differentiation Requires Continuous Active Control. Annual Review of Biochemistry, 1992, 61, 1213-1230.	5.0	152
24	Stem Cells in the Treatment of Disease. New England Journal of Medicine, 2019, 380, 1748-1760.	13.9	152
25	Tissue Stem Cells: Architects of Their Niches. Cell Stem Cell, 2020, 27, 532-556.	5.2	137
26	Optimizing Techniques for Tracking Transplanted Stem Cells In Vivo. Stem Cells, 2005, 23, 1251-1265.	1.4	120
27	Tetracycline-regulatable factors with distinct dimerization domains allow reversible growth inhibition by p16. Nature Genetics, 1998, 20, 389-393.	9.4	117
28	Microenvironmental VEGF distribution is critical for stable and functional vessel growth in ischemia. FASEB Journal, 2006, 20, 2657-2659.	0.2	117
29	A home away from home: Challenges and opportunities in engineering in vitro muscle satellite cell niches. Differentiation, 2009, 78, 185-194.	1.0	115
30	Role of telomere dysfunction in cardiac failure in Duchenne muscular dystrophy. Nature Cell Biology, 2013, 15, 895-904.	4.6	114
31	Tet B or not tet B: Advances in tetracycline-inducible gene expression. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 797-799.	3.3	111
32	High-resolution myogenic lineage mapping by single-cell mass cytometry. Nature Cell Biology, 2017, 19, 558-567.	4.6	108
33	Inhibition of prostaglandin-degrading enzyme 15-PGDH rejuvenates aged muscle mass and strength. Science, 2021, 371, .	6.0	107
34	A Human iPSC Double-Reporter System Enables Purification of Cardiac Lineage Subpopulations with Distinct Function and Drug Response Profiles. Cell Stem Cell, 2019, 24, 802-811.e5.	5.2	102
35	Modelling diastolic dysfunction in induced pluripotent stem cell-derived cardiomyocytes from hypertrophic cardiomyopathy patients. European Heart Journal, 2019, 40, 3685-3695.	1.0	100
36	Glucose Metabolism Drives Histone Acetylation Landscape Transitions that Dictate Muscle Stem Cell Function. Cell Reports, 2019, 27, 3939-3955.e6.	2.9	94

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37	Epidermal growth factor receptor dimerization monitored in live cells. Nature Biotechnology, 2000, 18, 218-222.	9.4	90
38	Significant differences among skeletal muscles in the incorporation of bone marrow-derived cells. Developmental Biology, 2003, 262, 64-74.	0.9	90
39	Early role for IL-6 signalling during generation of induced pluripotent stem cells revealed by heterokaryon RNA-Seq. Nature Cell Biology, 2013, 15, 1244-1252.	4.6	88
40	Humanizing the mdx mouse model of DMD: the long and the short of it. Npj Regenerative Medicine, 2018, 3, 4.	2.5	87
41	Transient delivery of modified mRNA encoding TERT rapidly extends telomeres in human cells. FASEB Journal, 2015, 29, 1930-1939.	0.2	85
42	Fusion Competence of Myoblasts Rendered Genetically Null for N-Cadherin in Culture. Journal of Cell Biology, 1997, 138, 331-336.	2.3	81
43	Injectable biomimetic liquid crystalline scaffolds enhance muscle stem cell transplantation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7919-E7928.	3.3	81
44	High-efficiency retroviral infection of primary myoblasts. Somatic Cell and Molecular Genetics, 1997, 23, 203-209.	0.7	78
45	Induction of muscle stem cell quiescence by the secreted niche factor Oncostatin M. Nature Communications, 2018, 9, 1531.	5.8	73
46	Differential Patterns of Transcript Accumulation during Human Myogenesis. Molecular and Cellular Biology, 1987, 7, 4100-4114.	1.1	61
47	Telomere shortening and metabolic compromise underlie dystrophic cardiomyopathy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13120-13125.	3.3	60
48	A method to codetect introduced genes and their products in gene therapy protocols. Nature Biotechnology, 1996, 14, 1012-1016.	9.4	51
49	Telomere shortening is a hallmark of genetic cardiomyopathies. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9276-9281.	3.3	51
50	Direct Evaluation of Myocardial Viability and Stem Cell Engraftment Demonstrates Salvage of the Injured Myocardium. Circulation Research, 2015, 116, e40-50.	2.0	49
51	Induction of angiogenesis by implantation of encapsulated primary myoblasts expressing vascular endothelial growth factor. Journal of Gene Medicine, 2000, 2, 279-288.	1.4	48
52	Transient production of ?-smooth muscle actin by skeletal myoblasts during differentiation in culture and following intramuscular implantation. Cytoskeleton, 2002, 51, 177-186.	4.4	45
53	Nuclear reprogramming in heterokaryons is rapid, extensive, and bidirectional. FASEB Journal, 2009, 23, 1431-1440.	0.2	45
54	Adult stem cells and regenerative medicineâ€"a symposium report. Annals of the New York Academy of Sciences, 2020, 1462, 27-36.	1.8	43

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55	Turning terminally differentiated skeletal muscle cells into regenerative progenitors. Nature Communications, 2015, 6, 7916.	5.8	41
56	NKX3-1 is required for induced pluripotent stem cell reprogramming and can replace OCT4 in mouse and human iPSC induction. Nature Cell Biology, 2018, 20, 900-908.	4.6	37
57	A universal technology for monitoring Gâ€proteinâ€coupled receptor activation <i>in vitro</i> and noninvasively in live animals. FASEB Journal, 2007, 21, 3819-3826.	0.2	36
58	A novel enzyme complementationâ€based assay for monitoring Gâ€proteinâ€coupled receptor internalization. FASEB Journal, 2007, 21, 3827-3834.	0.2	35
59	Primary cilia on muscle stem cells are critical to maintain regenerative capacity and are lost during aging. Nature Communications, 2022, 13, 1439.	5.8	35
60	Myoblast-mediated gene transfer for therapeutic angiogenesis and arteriogenesis. British Journal of Pharmacology, 2003, 140, 620-626.	2.7	33
61	Letters to the editor. Muscle and Nerve, 1992, 15, 1209-1215.	1.0	28
62	Cell Therapies for Muscular Dystrophy. New England Journal of Medicine, 2008, 359, 1403-1405.	13.9	28
63	Increased tissue stiffness triggers contractile dysfunction and telomere shortening in dystrophic cardiomyocytes. Stem Cell Reports, 2021, 16, 2169-2181.	2.3	23
64	Reâ€œevolutionaryâ€•Regenerative Medicine. JAMA - Journal of the American Medical Association, 2011, 305, 87.	3.8	22
65	A robust Pax7EGFP mouse that enables the visualization of dynamic behaviors of muscle stem cells. Skeletal Muscle, 2018, 8, 27.	1.9	22
66	Reversibility of Defective Hematopoiesis Caused by Telomere Shortening in Telomerase Knockout Mice. PLoS ONE, 2015, 10, e0131722.	1.1	21
67	AP-1 is a temporally regulated dual gatekeeper of reprogramming to pluripotency. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	19
68	Biophysical matrix cues from the regenerating niche direct muscle stem cell fate in engineered microenvironments. Biomaterials, 2021, 275, 120973.	5.7	18
69	Engineered DNA plasmid reduces immunity to dystrophin while improving muscle force in a model of gene therapy of Duchenne dystrophy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9182-E9191.	3.3	17
70	Death of solid tumor cells induced by fas ligand expressing primary myoblasts. Somatic Cell and Molecular Genetics, 1997, 23, 249-257.	0.7	15
71	Short telomeres â€" A hallmark of heritable cardiomyopathies. Differentiation, 2018, 100, 31-36.	1.0	12
72	Expression of Bcl-XS alters cytokinetics and decreases clonogenic survival in K12 rat colon carcinoma cells. Oncogene, 1998, 17, 2981-2991.	2.6	10

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73	Cell lineage in vertebrate development. Current Opinion in Cell Biology, 1990, 2, 981-985.	2.6	9
74	Sir John Gurdon: Father of nuclear reprogramming. Differentiation, 2014, 88, 10-12.	1.0	7
75	Discovery of novel determinants of endothelial lineage using chimeric heterokaryons. ELife, 2017, 6, .	2.8	7
76	Tamoxifen treatment ameliorates contractile dysfunction of Duchenne muscular dystrophy stem cell-derived cardiomyocytes on bioengineered substrates. Npj Regenerative Medicine, 2022, 7, 19.	2.5	7
77	Reversing aging for heart repair. Science, 2021, 373, 1439-1440.	6.0	6
78	Inhibition of Solid Tumor Growth by Fas Ligand-Expressing Myoblasts. Somatic Cell and Molecular Genetics, 1998, 24, 281-289.	0.7	4
79	How cells know their place. Nature, 1992, 358, 284-285.	13.7	3
80	Muscling toward therapy with ERBB3 and NGFR. Nature Cell Biology, 2018, 20, 6-7.	4.6	3
81	Farewell to Professor David Yaffe â€“ A Pillar of the Myogenesis Field. European Journal of Translational Myology, 2020, 30, 9306.	0.8	3
82	Perspective for special Gurdon issue for differentiation: Can cell fusion inform nuclear reprogramming?. Differentiation, 2014, 88, 27-28.	1.0	2
83	Noninvasive Tracking of Quiescent and Activated Muscle Stem Cell (MuSC) Engraftment Dynamics In Vivo. Methods in Molecular Biology, 2016, 1460, 181-189.	0.4	2
84	Redefining differentiation: Reshaping our ends. Nature Cell Biology, 2012, 14, 558-558.	4.6	1
85	Macrophages rescue injured engineered muscle. Nature Biomedical Engineering, 2018, 2, 890-891.	11.6	1
86	Single-Cell Tracking By Time Lapse Imaging Confirms Thrombopoietin Promotes Megakaryocytic-Erythroid Progenitor Self Renewal, but Does Not Instruct Lineage Commitment. Blood, 2021, 138, 3270-3270.	0.6	1
87	Regulating the myogenic regulators. Symposia of the Society for Experimental Biology, 1992, 46, 9-18.	0.0	1
88	Regulating the Regulators. Nature Biotechnology, 1999, 17, 20-20.	9.4	0
89	Anne McLaren (1927â€“2007). Differentiation, 2007, 75, 899-901.	1.0	0
90	Star Polymer Nanoparticles: Nanogel Star Polymer Architectures: A Nanoparticle Platform for Modular Programmable Macromolecular Self-Assembly, Intercellular Transport, and Dual-Mode Cargo Delivery (Adv. Mater. 39/2011). Advanced Materials, 2011, 23, 4464-4464.	11.1	0

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91	Single Cell Phospho-Flow Analysis of Cytokine Stimulation in Human Hematopoietic Progenitors Reveals That G-CSF Acts Directly On Human Hematopoietic Stem Cells.. Blood, 2009, 114, 3617-3617.	0.6	0
92	Developing Single Cell Live Imaging Strategies to Determine MEP Fate and Predict Potential. Blood, 2019, 134, 1190-1190.	0.6	0