Lyle Armstrong

List of Publications by Citations

95 papers	5,950 citations	36 h-index	76 g-index
108 ext. papers	6,778 ext. citations	6.3 avg, IF	5.25 L-index

#	Paper	IF	Citations
95	Screening ethnically diverse human embryonic stem cells identifies a chromosome 20 minimal amplicon conferring growth advantage. *Nature Biotechnology*, **2011**, 29, 1132-44	44.5	406
94	The role of PI3K/AKT, MAPK/ERK and NFkappabeta signalling in the maintenance of human embryonic stem cell pluripotency and viability highlighted by transcriptional profiling and functional analysis. *Human Molecular Genetics*, **2006**, 15, 1894-913	5.6	313
93	Downregulation of NANOG induces differentiation of human embryonic stem cells to extraembryonic lineages. *Stem Cells*, **2005**, 23, 1035-43	5.8	304
92	Ethical and Safety Issues of Stem Cell-Based Therapy. *International Journal of Medical Sciences*, **2018**, 15, 36-45	3.7	297
91	Efficient hematopoietic differentiation of human embryonic stem cells on stromal cells derived from hematopoietic niches. *Cell Stem Cell*, **2008**, 3, 85-98	18	252
90	Human induced pluripotent stem cell lines show stress defense mechanisms and mitochondrial regulation similar to those of human embryonic stem cells. *Stem Cells*, **2010**, 28, 661-73	5.8	239
89	Downregulation of multiple stress defense mechanisms during differentiation of human embryonic stem cells. *Stem Cells*, **2008**, 26, 455-64	5.8	217
88	Stress defense in murine embryonic stem cells is superior to that of various differentiated murine cells. *Stem Cells*, **2004**, 22, 962-71	5.8	207
87	Phenotypic characterization of murine primitive hematopoietic progenitor cells isolated on basis of aldehyde dehydrogenase activity. *Stem Cells*, **2004**, 22, 1142-51	5.8	206
86	An autogeneic feeder cell system that efficiently supports growth of undifferentiated human embryonic stem cells. *Stem Cells*, **2005**, 23, 306-14	5.8	203
85	Differentiation of human embryonic stem cells into corneal epithelial-like cells by in vitro replication of the corneal epithelial stem cell niche. *Stem Cells*, **2007**, 25, 1145-55	5.8	167
84	Derivation of human embryonic stem cells from developing and arrested embryos. *Stem Cells*, **2006**, 24, 2669-76	5.8	157
83	A role for NANOG in G1 to S transition in human embryonic stem cells through direct binding of CDK6 and CDC25A. *Journal of Cell Biology*, **2009**, 184, 67-82	7.3	156
82	Hair follicle dermal cells repopulate the mouse haematopoietic system. *Journal of Cell Science*, **2002**, 115, 3967-74	5.3	153
81	Isolation of primordial germ cells from differentiating human embryonic stem cells. *Stem Cells*, **2008**, 26, 3075-85	5.8	140
80	Derivation of human embryonic stem cells from day-8 blastocysts recovered after three-step in vitro culture. *Stem Cells*, **2004**, 22, 790-7	5.8	135
79	Derivation of a human blastocyst after heterologous nuclear transfer to donated oocytes. *Reproductive BioMedicine Online*, **2005**, 11, 226-31	4	128

78	Human-serum matrix supports undifferentiated growth of human embryonic stem cells. *Stem Cells*, **2005**, 23, 895-902	5.8	104
77	An important role for CDK2 in G1 to S checkpoint activation and DNA damage response in human embryonic stem cells. *Stem Cells*, **2011**, 29, 651-9	5.8	103
76	Epigenetic modification is central to genome reprogramming in somatic cell nuclear transfer. *Stem Cells*, **2006**, 24, 805-14	5.8	100
75	A key role for telomerase reverse transcriptase unit in modulating human embryonic stem cell proliferation, cell cycle dynamics, and in vitro differentiation. *Stem Cells*, **2008**, 26, 850-63	5.8	99
74	mTert expression correlates with telomerase activity during the differentiation of murine embryonic stem cells. *Mechanisms of Development*, **2000**, 97, 109-16	1.7	98
73	Human-Induced Pluripotent Stem Cells Generate Light Responsive Retinal Organoids with Variable and Nutrient-Dependent Efficiency. *Stem Cells*, **2018**, 36, 1535-1551	5.8	86
72	Disrupted alternative splicing for genes implicated in splicing and ciliogenesis causes PRPF31 retinitis pigmentosa. *Nature Communications*, **2018**, 9, 4234	17.4	85
71	Reproducibility of Molecular Phenotypes after Long-Term Differentiation to Human iPSC-Derived Neurons: A Multi-Site Omics Study. *Stem Cell Reports*, **2018**, 11, 897-911	8	84
70	Co-expression of SARS-CoV-2 entry genes in the superficial adult human conjunctival, limbal and corneal epithelium suggests an additional route of entry via the ocular surface. *Ocular Surface*, **2021**, 19, 190-200	6.5	71
69	Characterisation of Wnt gene expression during the differentiation of murine embryonic stem cells in vitro: role of Wnt3 in enhancing haematopoietic differentiation. *Mechanisms of Development*, **2001**, 103, 49-59	1.7	69
68	Epigenetic landscaping during hESC differentiation to neural cells. *Stem Cells*, **2009**, 27, 1298-308	5.8	63
67	Derivation and functional analysis of patient-specific induced pluripotent stem cells as an in vitro model of chronic granulomatous disease. *Stem Cells*, **2012**, 30, 599-611	5.8	58
66	An induced pluripotent stem cell model of hypoplastic left heart syndrome (HLHS) reveals multiple expression and functional differences in HLHS-derived cardiac myocytes. *Stem Cells Translational Medicine*, **2014**, 3, 416-23	6.9	57
65	A novel model of urinary tract differentiation, tissue regeneration, and disease: reprogramming human prostate and bladder cells into induced pluripotent stem cells. *European Urology*, **2013**, 64, 753-61	10.2	57
64	Primordial Germ Cells: Current Knowledge and Perspectives. *Stem Cells International*, **2016**, 2016, 1741072	3.2	48
63	Rapid establishment of the European Bank for induced Pluripotent Stem Cells (EBiSC) - the Hot Start experience. *Stem Cell Research*, **2017**, 20, 105-114	1.6	45
62	Brief report: human pluripotent stem cell models of fanconi anemia deficiency reveal an important role for fanconi anemia proteins in cellular reprogramming and survival of hematopoietic progenitors. *Stem Cells*, **2013**, 31, 1022-9	5.8	44
61	Epigenetics in embryonic stem cells: regulation of pluripotency and differentiation. *Cell and Tissue Research*, **2008**, 331, 23-9	4.2	40

60	An Induced Pluripotent Stem Cell Patient Specific Model of Complement Factor H (Y402H) Polymorphism Displays Characteristic Features of Age-Related Macular Degeneration and Indicates a Beneficial Role for UV Light Exposure. *Stem Cells*, **2017**, 35, 2305-2320	5.8	38
59	CRX Expression in Pluripotent Stem Cell-Derived Photoreceptors Marks a Transplantable Subpopulation of Early Cones. *Stem Cells*, **2019**, 37, 609-622	5.8	36
58	A putative role for RHAMM/HMMR as a negative marker of stem cell-containing population of human limbal epithelial cells. *Stem Cells*, **2008**, 26, 1609-19	5.8	36
57	Concise Review: Cardiac Disease Modeling Using Induced Pluripotent Stem Cells. *Stem Cells*, **2015**, 33, 2643-51	5.8	35
56	Expression of GFP under the control of the RNA helicase VASA permits fluorescence-activated cell sorting isolation of human primordial germ cells. *Stem Cells*, **2010**, 28, 84-92	5.8	34
55	Epigenetic marking prepares the human HOXA cluster for activation during differentiation of pluripotent cells. *Stem Cells*, **2008**, 26, 1174-85	5.8	34
54	Human embryonic stem cells: biology and clinical implications. *Expert Reviews in Molecular Medicine*, **2005**, 7, 1-21	6.7	34
53	Generating inner ear organoids containing putative cochlear hair cells from human pluripotent stem cells. *Cell Death and Disease*, **2018**, 9, 922	9.8	34
52	Induced pluripotent stem cell modelling of HLHS underlines the contribution of dysfunctional NOTCH signalling to impaired cardiogenesis. *Human Molecular Genetics*, **2017**, 26, 3031-3045	5.6	31
51	Opposing putative roles for canonical and noncanonical NFB signaling on the survival, proliferation, and differentiation potential of human embryonic stem cells. *Stem Cells*, **2010**, 28, 1970-80	5.8	30
50	Brief Report: Inhibition of miR-145 Enhances Reprogramming of Human Dermal Fibroblasts to Induced Pluripotent Stem Cells. *Stem Cells*, **2016**, 34, 246-51	5.8	29
49	Hepatic differentiation of human iPSCs in different 3D models: A comparative study. *International Journal of Molecular Medicine*, **2017**, 40, 1759-1771	4.4	27
48	The mitochondrial protein CHCHD2 primes the differentiation potential of human induced pluripotent stem cells to neuroectodermal lineages. *Journal of Cell Biology*, **2016**, 215, 187-202	7.3	27
47	A putative role for the immunoproteasome in the maintenance of pluripotency in human embryonic stem cells. *Stem Cells*, **2012**, 30, 1373-84	5.8	27
46	Aging of Stem and Progenitor Cells: Mechanisms, Impact on Therapeutic Potential, and Rejuvenation. *Rejuvenation Research*, **2016**, 19, 3-12	2.6	26
45	Human iPSC differentiation to retinal organoids in response to IGF1 and BMP4 activation is line- and method-dependent. *Stem Cells*, **2020**, 38, 195-201	5.8	22
44	Differences in the Activity of Endogenous Bone Morphogenetic Protein Signaling Impact on the Ability of Induced Pluripotent Stem Cells to Differentiate to Corneal Epithelial-Like Cells. *Stem Cells* , **2018**, 36, 337-348	5.8	21
43	Non-invasive imaging of stem cells by scanning ion conductance microscopy: future perspective. *Tissue Engineering - Part C: Methods*, **2008**, 14, 311-8	2.9	20

42	Epigenetic control of embryonic stem cell differentiation. *Stem Cell Reviews and Reports*, **2012**, 8, 67-77	6.4	19
41	Nanog regulates primordial germ cell migration through Cxcr4b. *Stem Cells*, **2010**, 28, 1457-64	5.8	19
40	Silencing of the expression of pluripotent driven-reporter genes stably transfected into human pluripotent cells. *Regenerative Medicine*, **2008**, 3, 505-22	2.5	19
39	Complement modulation reverses pathology in Y402H-retinal pigment epithelium cell model of age-related macular degeneration by restoring lysosomal function. *Stem Cells Translational Medicine*, **2020**, 9, 1585-1603	6.9	19
38	A Novel Role for miR-1305 in Regulation of Pluripotency-Differentiation Balance, Cell Cycle, and Apoptosis in Human Pluripotent Stem Cells. *Stem Cells*, **2016**, 34, 2306-17	5.8	19
37	A single cell atlas of human cornea that defines its development, limbal progenitor cells and their interactions with the immune cells. *Ocular Surface*, **2021**, 21, 279-298	6.5	19
36	iPSC modeling of severe aplastic anemia reveals impaired differentiation and telomere shortening in blood progenitors. *Cell Death and Disease*, **2018**, 9, 128	9.8	18
35	A role for nucleoprotein Zap3 in the reduction of telomerase activity during embryonic stem cell differentiation. *Mechanisms of Development*, **2004**, 121, 1509-22	1.7	18
34	Differentiation of Retinal Organoids from Human Pluripotent Stem Cells. *Current Protocols in Stem Cell Biology*, **2019**, 50, e95	2.8	17
33	Intercalating TOP2 Poisons Attenuate Topoisomerase Action at Higher Concentrations. *Molecular Pharmacology*, **2019**, 96, 475-484	4.3	16
32	Brief report: a human induced pluripotent stem cell model of cernunnos deficiency reveals an important role for XLF in the survival of the primitive hematopoietic progenitors. *Stem Cells*, **2013**, 31, 2015-23	5.8	14
31	Transplanted pluripotent stem cell-derived photoreceptor precursors elicit conventional and unusual light responses in mice with advanced retinal degeneration. *Stem Cells*, **2021**, 39, 882-896	5.8	14
30	JNK/SAPK Signaling Is Essential for Efficient Reprogramming of Human Fibroblasts to Induced Pluripotent Stem Cells. *Stem Cells*, **2016**, 34, 1198-212	5.8	14
29	Large-scale transcriptional profiling and functional assays reveal important roles for Rho-GTPase signalling and SCL during haematopoietic differentiation of human embryonic stem cells. *Human Molecular Genetics*, **2011**, 20, 4932-46	5.6	13
28	Human iPSC disease modelling reveals functional and structural defects in retinal pigment epithelial cells harbouring the m.3243A > G mitochondrial DNA mutation. *Scientific Reports*, **2017**, 7, 12320	4.9	12
27	Multiplex High-Throughput Targeted Proteomic Assay To Identify Induced Pluripotent Stem Cells. *Analytical Chemistry*, **2017**, 89, 2440-2448	7.8	10
26	Reprogramming of Human Huntington Fibroblasts Using mRNA **2012**, 2012, 1-12		10
25	Potential for pharmacological manipulation of human embryonic stem cells. *British Journal of Pharmacology*, **2013**, 169, 269-89	8.6	9

24	Towards optimisation of induced pluripotent cell culture: Extracellular acidification results in growth arrest of iPSC prior to nutrient exhaustion. *Toxicology in Vitro*, **2017**, 45, 445-454	3.6	9
23	Generation of Human Induced Pluripotent Stem Cells Using RNA-Based Sendai Virus System and Pluripotency Validation of the Resulting Cell Population. *Methods in Molecular Biology*, **2016**, 1353, 285-307	1.4	8
22	Concise Review: Getting to the Core of Inherited Bone Marrow Failures. *Stem Cells*, **2017**, 35, 284-298	5.8	8
21	In the eye of the storm: SARS-CoV-2 infection and replication at the ocular surface?. *Stem Cells Translational Medicine*, **2021**, 10, 976-986	6.9	8
20	A critical role for p38MAPK signalling pathway during reprogramming of human fibroblasts to iPSCs. *Scientific Reports*, **2017**, 7, 41693	4.9	7
19	Concise review: the epigenetic contribution to stem cell ageing: can we rejuvenate our older cells?. *Stem Cells*, **2014**, 32, 2291-8	5.8	7
18	Triphenylmethane dyes containing the N-methyl-N-2,2,2-trifluoroethyl group. *Dyes and Pigments*, **1999**, 42, 65-70	4.6	7
17	Room temperature shipment does not affect the biological activity of pluripotent stem cell-derived retinal organoids. *PLoS ONE*, **2020**, 15, e0233860	3.7	6
16	Platform to study intracellular polystyrene nanoplastic pollution and clinical outcomes. *Stem Cells*, **2020**, 38, 1321-1325	5.8	6
15	G1 to S transition and pluripotency: Two sides of the same coin?. *Cell Cycle*, **2009**, 8, 1105-1111	4.7	6
14	SARS-CoV-2 infects an upper airway model derived from induced pluripotent stem cells. *Stem Cells*, **2021**, 39, 1310-1321	5.8	5
13	Pluripotent Stem Cell-Derived Hematopoietic Progenitors Are Unable to Downregulate Key Epithelial-Mesenchymal Transition-Associated miRNAs. *Stem Cells*, **2018**, 36, 55-64	5.8	3
12	Law should recognize value of interspecies embryos. *Nature*, **2008**, 451, 627	50.4	3
11	The future of human nuclear transfer?. *Stem Cell Reviews and Reports*, **2006**, 2, 351-8	6.4	3
10	Endothelial Differentiation G Protein-Coupled Receptor 5 Plays an Important Role in Induction and Maintenance of Pluripotency. *Stem Cells*, **2019**, 37, 318-331	5.8	3
9	Pre-mRNA Processing Factors and Retinitis Pigmentosa: RNA Splicing and Beyond. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 700276	5.7	2
8	Activation of autophagy reverses progressive and deleterious protein aggregation in PRPF31 patient-induced pluripotent stem cell-derived retinal pigment epithelium cells.. *Clinical and Translational Medicine*, **2022**, 12, e759	5.7	2
7	Expression of serine/threonine protein kinase SGK1F promotes an hepatoblast state in stem cells directed to differentiate into hepatocytes. *PLoS ONE*, **2019**, 14, e0218135	3.7	1

6	Engraftment's Holy Grail: is one signal enough?. *Blood*, **2014**, 124, 3035-6	2.2	1
5	Human Retinal Organoids Provide a Suitable Tool for Toxicological Investigations: A Comprehensive Validation Using Drugs and Compounds Affecting the Retina.. *Stem Cells Translational Medicine*, **2022**, 11, 159-177	6.9	1
4	In Reply to the Letter to the Editor from Anderson et al.: An Induced Pluripotent Stem Cell Patient Specific Model of Complement Factor H (Y402H) Polymorphism Displays Characteristic Features of Age-Related Macular Degeneration and Indicates a Beneficial Role for UV Light Exposure. *Stem Cells*, **2018**, 36, 627-629	5.8	
3	Epigenetic Reprogramming During Somatic Cell Nuclear Transfer and the Development of Primordial Germ Cells **2011**, 25-44		
2	Epigenetic Control of Cellular Differentiation **2020**, 171-180		
1	Extraembryonic Cell Differentiation. *Human Cell Culture*, **2007**, 173-188		