Lyle Armstrong

List of Publications by Year
in descending order

103 papers	7,548 citations	76326 40 h-index	54911 84 g-index
108 all docs	108 docs citations	108 times ranked	10284 citing authors

#	Article	IF	Citations
1	Screening ethnically diverse human embryonic stem cells identifies a chromosome 20 minimal amplicon conferring growth advantage. Nature Biotechnology, 2011, 29, 1132-1144.	17.5	509
2	Ethical and Safety Issues of Stem Cell-Based Therapy. International Journal of Medical Sciences, 2018, 15, 36-45.	2.5	507
3	The role of PI3K/AKT, MAPK/ERK and NFÎºÎ² signalling in the maintenance of human embryonic stem cell pluripotency and viability highlighted by transcriptional profiling and functional analysis. Human Molecular Genetics, 2006, 15, 1894-1913.	2.9	355
4	Downregulation of NANOG Induces Differentiation of Human Embryonic Stem Cells to Extraembryonic Lineages. Stem Cells, 2005, 23, 1035-1043.	3.2	333
5	Efficient Hematopoietic Differentiation of Human Embryonic Stem Cells on Stromal Cells Derived from Hematopoietic Niches. Cell Stem Cell, 2008, 3, 85-98.	11.1	276
6	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, 661-673.	3.2	265
7	Stress Defense in Murine Embryonic Stem Cells Is Superior to That of Various Differentiated Murine Cells. Stem Cells, 2004, 22, 962-971.	3.2	253
8	Downregulation of Multiple Stress Defense Mechanisms During Differentiation of Human Embryonic Stem Cells. Stem Cells, 2008, 26, 455-464.	3.2	240
9	Phenotypic Characterization of Murine Primitive Hematopoietic Progenitor Cells Isolated on Basis of Aldehyde Dehydrogenase Activity. Stem Cells, 2004, 22, 1142-1151.	3.2	225
10	An Autogeneic Feeder Cell System That Efficiently Supports Growth of Undifferentiated Human Embryonic Stem Cells. Stem Cells, 2005, 23, 306-314.	3.2	222
11	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, 1145-1155.	3.2	194
12	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.	5.2	177
13	Derivation of Human Embryonic Stem Cells from Developing and Arrested Embryos. Stem Cells, 2006, 24, 2669-2676.	3.2	173
14	Hair follicle dermal cells repopulate the mouse haematopoietic system. Journal of Cell Science, 2002, 115, 3967-3974.	2.0	165
15	Isolation of Primordial Germ Cells from Differentiating Human Embryonic Stem Cells. Stem Cells, 2008, 26, 3075-3085.	3.2	161
16	Derivation of Human Embryonic Stem Cells from Day-8 Blastocysts Recovered after Three-Step In Vitro Culture. Stem Cells, 2004, 22, 790-797.	3.2	158
17	Disrupted alternative splicing for genes implicated in splicing and ciliogenesis causes PRPF31 retinitis pigmentosa. Nature Communications, 2018, 9, 4234.	12.8	158
18	Derivation of a human blastocyst after heterologous nuclear transfer to donated oocytes. Reproductive BioMedicine Online, 2005, 11, 226-231.	2.4	150

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19	Human-Induced Pluripotent Stem Cells Generate Light Responsive Retinal Organoids with Variable and Nutrient-Dependent Efficiency. Stem Cells, 2018, 36, 1535-1551.	3.2	149
20	Reproducibility of Molecular Phenotypes after Long-Term Differentiation toÂHuman iPSC-Derived Neurons: A Multi-Site Omics Study. Stem Cell Reports, 2018, 11, 897-911.	4.8	135
21	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.	4.4	122
22	An Important Role for CDK2 in G1 to S Checkpoint Activation and DNA Damage Response in Human Embryonic Stem Cells. Stem Cells, 2011, 29, 651-659.	3.2	119
23	mTert expression correlates with telomerase activity during the differentiation of murine embryonic stem cells. Mechanisms of Development, 2000, 97, 109-116.	1.7	111
24	Human-Serum Matrix Supports Undifferentiated Growth of Human Embryonic Stem Cells. Stem Cells, 2005, 23, 895-902.	3.2	110
25	Epigenetic Modification Is Central to Genome Reprogramming in Somatic Cell Nuclear Transfer. Stem Cells, 2006, 24, 805-814.	3.2	109
26	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, 850-863.	3.2	109
27	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.	4.4	102
28	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	78
29	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, 753-761.	1.9	73
30	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, 416-423.	3.3	72
31	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.	3.2	69
32	Primordial Germ Cells: Current Knowledge and Perspectives. Stem Cells International, 2016, 2016, 1-8.	2.5	66
33	Epigenetic Landscaping During hESC Differentiation to Neural Cells. Stem Cells, 2009, 27, 1298-1308.	3.2	64
34	Generating inner ear organoids containing putative cochlear hair cells from human pluripotent stem cells. Cell Death and Disease, 2018, 9, 922.	6.3	62
35	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.	3.2	58
36	Induced pluripotent stem cell modelling of HLHS underlines the contribution of dysfunctional NOTCH signalling to impaired cardiogenesis. Human Molecular Genetics, 2017, 26, 3031-3045.	2.9	56

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37	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, 1022-1029.	3.2	51
38	Rapid establishment of the European Bank for induced Pluripotent Stem Cells (EBiSC) - the Hot Start experience. Stem Cell Research, 2017, 20, 105-114.	0.7	51
39	CRX Expression in Pluripotent Stem Cell-Derived Photoreceptors Marks a Transplantable Subpopulation of Early Cones. Stem Cells, 2019, 37, 609-622.	3.2	51
40	Epigenetics in embryonic stem cells: regulation of pluripotency and differentiation. Cell and Tissue Research, 2008, 331, 23-29.	2.9	47
41	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.	5.2	41
42	Human embryonic stem cells: biology and clinical implications. Expert Reviews in Molecular Medicine, 2005, 7, 1-21.	3.9	40
43	Concise Review: Cardiac Disease Modeling Using Induced Pluripotent Stem Cells. Stem Cells, 2015, 33, 2643-2651.	3.2	39
44	Hepatic differentiation of human iPSCs in different 3D models: A comparative study. International Journal of Molecular Medicine, 2017, 40, 1759-1771.	4.0	39
45	A Putative Role for RHAMM/HMMR as a Negative Marker of Stem Cell-Containing Population of Human Limbal Epithelial Cells. Stem Cells, 2008, 26, 1609-1619.	3.2	38
46	Expression of GFP Under the Control of the RNA Helicase <i>VASA</i> Permits Fluorescence-Activated Cell Sorting Isolation of Human Primordial Germ Cells Â. Stem Cells, 2010, 28, 84-92.	3.2	38
47	Epigenetic Marking Prepares the Human <i>HOXA</i> Cluster for Activation During Differentiation of Pluripotent Cells. Stem Cells, 2008, 26, 1174-1185.	3.2	36
48	Human iPSC differentiation to retinal organoids in response to IGF1 and BMP4 activation is line- and method-dependent. Stem Cells, 2020, 38, 195-201.	3.2	36
49	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.	3.3	36
50	A Putative Role for the Immunoproteasome in the Maintenance of Pluripotency in Human Embryonic Stem Cells. Stem Cells, 2012, 30, 1373-1384.	3.2	34
51	Intercalating TOP2 Poisons Attenuate Topoisomerase Action at Higher Concentrations. Molecular Pharmacology, 2019, 96, 475-484.	2.3	34
52	Opposing Putative Roles for Canonical and Noncanonical NFÎºB Signaling on the Survival, Proliferation, and Differentiation Potential of Human Embryonic Stem Cells. Stem Cells, 2010, 28, 1970-1980.	3.2	33
53	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.	3.2	33
54	Brief Report: Inhibition of miR-145 Enhances Reprogramming of Human Dermal Fibroblasts to Induced Pluripotent Stem Cells. Stem Cells, 2016, 34, 246-251.	3.2	32

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55	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.	3.2	32
56	Aging of Stem and Progenitor Cells: Mechanisms, Impact on Therapeutic Potential, and Rejuvenation. Rejuvenation Research, 2016, 19, 3-12.	1.8	31
57	Editorial: Our Top 10 Developments in Stem Cell Biology over the Last 30 Years. Stem Cells, 2012, 30, 2-9.	3.2	29
58	In the eye of the storm: <scp>SARSâ€CoVâ€2</scp> infection and replication at the ocular surface?. Stem Cells Translational Medicine, 2021, 10, 976-986.	3.3	28
59	Nanog Regulates Primordial Germ Cell Migration Through <i>Cxcr4b</i>. Stem Cells, 2010, 28, 1457-1464.	3.2	26
60	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, 2306-2317.	3.2	26
61	iPSC modeling of severe aplastic anemia reveals impaired differentiation and telomere shortening in blood progenitors. Cell Death and Disease, 2018, 9, 128.	6.3	26
62	Differentiation of Retinal Organoids from Human Pluripotent Stem Cells. Current Protocols in Stem Cell Biology, 2019, 50, e95.	3.0	26
63	Non-invasive Imaging of Stem Cells by Scanning Ion Conductance Microscopy: Future Perspective. Tissue Engineering - Part C: Methods, 2008, 14, 311-318.	2.1	23
64	Platform to study intracellular polystyrene nanoplastic pollution and clinical outcomes. Stem Cells, 2020, 38, 1321-1325.	3.2	23
65	Silencing of the expression of pluripotent driven-reporter genes stably transfected into human pluripotent cells. Regenerative Medicine, 2008, 3, 505-522.	1.7	21
66	JNK/SAPK Signaling Is Essential for Efficient Reprogramming of Human Fibroblasts to Induced Pluripotent Stem Cells. Stem Cells, 2016, 34, 1198-1212.	3.2	21
67	A role for nucleoprotein Zap3 in the reduction of telomerase activity during embryonic stem cell differentiation. Mechanisms of Development, 2004, 121, 1509-1522.	1.7	20
68	Epigenetic Control of Embryonic Stem Cell Differentiation. Stem Cell Reviews and Reports, 2012, 8, 67-77.	5.6	20
69	Sars-Cov-2 Infects an Upper Airway Model Derived from Induced Pluripotent Stem Cells. Stem Cells, 2021, 39, 1310-1321.	3.2	19
70	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.	3.3	18
71	A critical role for p38MAPK signalling pathway during reprogramming of human fibroblasts to iPSCs. Scientific Reports, 2017, 7, 41693.	3.3	17
72	Human iPSC disease modelling reveals functional and structural defects in retinal pigment epithelial cells harbouring the m.3243Aâ€‰>â€‰G mitochondrial DNA mutation. Scientific Reports, 2017, 7, 12320.	3.3	17

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73	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, 4932-4946.	2.9	16
74	Induced Pluripotent Stem Cells : It Looks Simple but Can Looks Deceive?. Stem Cells, 2010, 28, 845-850.	3.2	15
75	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, 2015-2023.	3.2	15
76	Multiplex High-Throughput Targeted Proteomic Assay To Identify Induced Pluripotent Stem Cells. Analytical Chemistry, 2017, 89, 2440-2448.	6.5	15
77	pRB-Depleted Pluripotent Stem Cell Retinal Organoids Recapitulate Cell State Transitions of Retinoblastoma Development and Suggest an Important Role for pRB in Retinal Cell Differentiation. Stem Cells Translational Medicine, 2022, 11, 415-433.	3.3	15
78	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.	2.4	14
79	Room temperature shipment does not affect the biological activity of pluripotent stem cell-derived retinal organoids. PLoS ONE, 2020, 15, e0233860.	2.5	14
80	Pre-mRNA Processing Factors and Retinitis Pigmentosa: RNA Splicing and Beyond. Frontiers in Cell and Developmental Biology, 2021, 9, 700276.	3.7	14
81	Reprogramming of Human Huntington Fibroblasts Using mRNA. , 2012, 2012, 1-12.		13
82	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, 2015, 1353, 285-307.	0.9	13
83	Activation of autophagy reverses progressive and deleterious protein aggregation in PRPF31 patientâ€induced pluripotent stem cellâ€derived retinal pigment epithelium cells. Clinical and Translational Medicine, 2022, 12, e759.	4.0	12
84	Potential for pharmacological manipulation of human embryonic stem cells. British Journal of Pharmacology, 2013, 169, 269-289.	5.4	11
85	Concise Review: Getting to the Core of Inherited Bone Marrow Failures. Stem Cells, 2017, 35, 284-298.	3.2	11
86	Concise Review: The Epigenetic Contribution to Stem Cell Ageing: Can We Rejuvenate Our Older Cells?. Stem Cells, 2014, 32, 2291-2298.	3.2	8
87	Triphenylmethane dyes containing the N-methyl-N-2,2,2-trifluoroethyl group. Dyes and Pigments, 1999, 42, 65-70.	3.7	7
88	G₁to S transition and pluripotency: Two sides of the same coin?. Cell Cycle, 2009, 8, 1105-1111.	2.6	6
89	Conjunctival epithelial cells resist productive SARS-CoV-2 infection. Stem Cell Reports, 2022, 17, 1699-1713.	4.8	5
90	The future of human nuclear transfer?. Stem Cell Reviews and Reports, 2006, 2, 351-358.	5.6	4

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91	Law should recognize value of interspecies embryos. Nature, 2008, 451, 627-627.	27.8	4
92	Endothelial Differentiation G Protein-Coupled Receptor 5 Plays an Important Role in Induction and Maintenance of Pluripotency. Stem Cells, 2019, 37, 318-331.	3.2	4
93	G1 to S transition and pluripotency: two sides of the same coin?. Cell Cycle, 2009, 8, 1108-9.	2.6	4
94	Pluripotent Stem Cell-Derived Hematopoietic Progenitors Are Unable to Downregulate Key Epithelial-Mesenchymal Transition-Associated miRNAs. Stem Cells, 2018, 36, 55-64.	3.2	3
95	Direct transcriptomic comparison of xenobiotic metabolism and toxicity pathway induction of airway epithelium models at an airâ€"liquid interface generated from induced pluripotent stem cells and primary bronchial epithelial cells. Cell Biology and Toxicology, 2023, 39, 1-18.	5.3	3
96	Engraftmentâ€™s Holy Grail: is one signal enough?. Blood, 2014, 124, 3035-3036.	1.4	2
97	Expression of serine/threonine protein kinase SGK1F promotes an hepatoblast state in stem cells directed to differentiate into hepatocytes. PLoS ONE, 2019, 14, e0218135.	2.5	2
98	Launch of the New Stem Cells Portal. Stem Cells, 2010, 28, 635-635.	3.2	0
99	Epigenetic Reprogramming During Somatic Cell Nuclear Transfer and the Development of Primordial Germ Cells. , 2011, , 25-44.		0
100	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. Stem Cells, 2018, 36, 627-629.	3.2	0
101	Extraembryonic Cell Differentiation. Human Cell Culture, 2007, , 173-188.	0.1	0
102	Generation of somatic cells by direct conversion: Do we need pluripotent cells?. Serbian Journal of Experimental and Clinical Research, 2011, 12, 91-96.	0.1	0
103	Epigenetic Control of Cellular Differentiation. , 2020, , 171-180.		0