Nissim Benvenisty

List of Publications by Year
in descending order

102 papers	13,281 citations	50170 46 h-index	29081 104 g-index
107 all docs	107 docs citations	107 times ranked	14666 citing authors

#	Article	IF	Citations
1	Differentiation of Human Embryonic Stem Cells into Embryoid Bodies Comprising the Three Embryonic Germ Layers. Molecular Medicine, 2000, 6, 88-95.	1.9	1,377
2	Characterization of human embryonic stem cell lines by the International Stem Cell Initiative. Nature Biotechnology, 2007, 25, 803-816.	9.4	983
3	Induced Pluripotent Stem Cells and Embryonic Stem Cells Are Distinguished by Gene Expression Signatures. Cell Stem Cell, 2009, 5, 111-123.	5.2	915
4	The tumorigenicity of human embryonic and induced pluripotent stem cells. Nature Reviews Cancer, 2011, 11, 268-277.	12.8	785
5	Identification and Classification of Chromosomal Aberrations in Human Induced Pluripotent Stem Cells. Cell Stem Cell, 2010, 7, 521-531.	5.2	695
6	Epigenetic Memory and Preferential Lineage-Specific Differentiation in Induced Pluripotent Stem Cells Derived from Human Pancreatic Islet Beta Cells. Cell Stem Cell, 2011, 9, 17-23.	5.2	563
7	Screening ethnically diverse human embryonic stem cells identifies a chromosome 20 minimal amplicon conferring growth advantage. Nature Biotechnology, 2011, 29, 1132-1144.	9.4	509
8	Pluripotent stem cells in disease modelling and drug discovery. Nature Reviews Molecular Cell Biology, 2016, 17, 170-182.	16.1	488
9	Human pluripotent stem cells recurrently acquire and expand dominant negative P53 mutations. Nature, 2017, 545, 229-233.	13.7	409
10	Genomic Imprinting and Physiological Processes in Mammals. Cell, 2019, 176, 952-965.	13.5	395
11	Differential Modeling of Fragile X Syndrome by Human Embryonic Stem Cells and Induced Pluripotent Stem Cells. Cell Stem Cell, 2010, 6, 407-411.	5.2	380
12	Establishment of human embryonic stem cell-transfected clones carrying a marker for undifferentiated cells. Current Biology, 2001, 11, 514-518.	1.8	360
13	Hallmarks of pluripotency. Nature, 2015, 525, 469-478.	13.7	338
14	Selective Elimination of Human Pluripotent Stem Cells by an Oleate Synthesis Inhibitor Discovered in a High-Throughput Screen. Cell Stem Cell, 2013, 12, 167-179.	5.2	277
15	Developmental Study of Fragile X Syndrome Using Human Embryonic Stem Cells Derived from Preimplantation Genetically Diagnosed Embryos. Cell Stem Cell, 2007, 1, 568-577.	5.2	263
16	High-resolution DNA analysis of human embryonic stem cell lines reveals culture-induced copy number changes and loss of heterozygosity. Nature Biotechnology, 2010, 28, 371-377.	9.4	258
17	Large-Scale Analysis Reveals Acquisition of Lineage-Specific Chromosomal Aberrations in Human Adult Stem Cells. Cell Stem Cell, 2011, 9, 97-102.	5.2	218
18	Assessing the Safety of Stem Cell Therapeutics. Cell Stem Cell, 2011, 8, 618-628.	5.2	205

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19	Human oocytes reprogram adult somatic nuclei of a type 1 diabetic to diploid pluripotent stem cells. Nature, 2014, 510, 533-536.	13.7	189
20	Setting Global Standards for Stem Cell Research and Clinical Translation: TheÂ2016 ISSCR Guidelines. Stem Cell Reports, 2016, 6, 787-797.	2.3	172
21	Clone- and Gene-Specific Aberrations of Parental Imprinting in Human Induced Pluripotent Stem Cells. Stem Cells, 2009, 27, 2686-2690.	1.4	171
22	Genome maintenance in pluripotent stem cells. Journal of Cell Biology, 2014, 204, 153-163.	2.3	157
23	Reversion of FMR1 Methylation and Silencing by Editing the Triplet Repeats in Fragile X iPSC-Derived Neurons. Cell Reports, 2015, 13, 234-241.	2.9	157
24	Aneuploidy induces profound changes in gene expression, proliferation and tumorigenicity of human pluripotent stem cells. Nature Communications, 2014, 5, 4825.	5.8	148
25	The noncoding RNA IPW regulates the imprinted DLK1-DIO3 locus in an induced pluripotent stem cell model of Prader-Willi syndrome. Nature Genetics, 2014, 46, 551-557.	9.4	129
26	Derivation and differentiation of haploid human embryonic stem cells. Nature, 2016, 532, 107-111.	13.7	124
27	Comparable Frequencies of Coding Mutations and Loss of Imprinting in Human Pluripotent Cells Derived by Nuclear Transfer and Defined Factors. Cell Stem Cell, 2014, 15, 634-642.	5.2	113
28	Defining essential genes for human pluripotent stem cells by CRISPRâ€"Cas9 screening in haploid cells. Nature Cell Biology, 2018, 20, 610-619.	4.6	107
29	Genomic Instability in Human Pluripotent Stem Cells Arises from Replicative Stress and Chromosome Condensation Defects. Cell Stem Cell, 2016, 18, 253-261.	5.2	106
30	Involvement of Myc targets in c-myc and N-myc induced human tumors. Oncogene, 1998, 17, 165-171.	2.6	87
31	Epigenetic aberrations in human pluripotent stem cells. EMBO Journal, 2019, 38, .	3.5	86
32	Human Embryonic Stem Cells as Models for Aneuploid Chromosomal Syndromes. Stem Cells, 2010, 28, 1530-1540.	1.4	81
33	Molecular Mechanisms Regulating the Defects in Fragile X Syndrome Neurons Derived from Human Pluripotent Stem Cells. Stem Cell Reports, 2015, 4, 37-46.	2.3	81
34	Creating Patient-Specific Neural Cells for the InÂVitro Study of Brain Disorders. Stem Cell Reports, 2015, 5, 933-945.	2.3	72
35	Analysis of chromosomal aberrations and recombination by allelic bias in RNA-Seq. Nature Communications, 2016, 7, 12144.	5.8	72
36	Molecular analysis of FMR1 reactivation in fragile-X induced pluripotent stem cells and their neuronal derivatives. Journal of Molecular Cell Biology, 2012, 4, 180-183.	1.5	71

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37	Large-Scale Analysis of Loss of Imprinting in Human Pluripotent Stem Cells. Cell Reports, 2017, 19, 957-968.	2.9	71
38	Derivation of Euploid Human Embryonic Stem Cells from Aneuploid Embryos. Stem Cells, 2008, 26, 1874-1882.	1.4	69
39	Meta-analysis of the heterogeneity of X chromosome inactivation in human pluripotent stem cells. Stem Cell Research, 2011, 6, 187-193.	0.3	67
40	Defining Human Pluripotency. Cell Stem Cell, 2019, 25, 9-22.	5.2	67
41	A DNA microarray screen for genes involved in c-MYC and N-MYC oncogenesis in human tumors. Oncogene, 2001, 20, 4984-4994.	2.6	60
42	Expanding the Boundaries of Embryonic Stem Cells. Cell Stem Cell, 2012, 10, 666-677.	5.2	58
43	Sex-Dependent Gene Expression in Human Pluripotent Stem Cells. Cell Reports, 2014, 8, 923-932.	2.9	57
44	Human embryonic stem cells as a model for early human development. Best Practice and Research in Clinical Obstetrics and Gynaecology, 2004, 18, 929-940.	1.4	56
45	Clonal Analysis of Human Embryonic Stem Cell Differentiation into Teratomas. Stem Cells, 2007, 25, 1924-1930.	1.4	55
46	TeratoScore: Assessing the Differentiation Potential of Human Pluripotent Stem Cells by Quantitative Expression Analysis of Teratomas. Stem Cell Reports, 2015, 4, 967-974.	2.3	50
47	Global Characterization of X Chromosome Inactivation in Human Pluripotent Stem Cells. Cell Reports, 2019, 27, 20-29.e3.	2.9	47
48	Chemical ablation of tumor-initiating human pluripotent stem cells. Nature Protocols, 2014, 9, 729-740.	5.5	46
49	Involvement of branched-chain amino acid aminotransferase (Bcat1/Eca39) in apoptosis. FEBS Letters, 1999, 457, 255-261.	1.3	45
50	Virtual karyotyping of pluripotent stem cells on the basis of their global gene expression profiles. Nature Protocols, 2013, 8, 989-997.	5.5	44
51	Cell Lines Derived from Human Parthenogenetic Embryos Can Display Aberrant Centriole Distribution and Altered Expression Levels of Mitotic Spindle Check-point Transcripts. Stem Cell Reviews and Reports, 2009, 5, 340-352.	5.6	40
52	Global analysis of parental imprinting in human parthenogenetic induced pluripotent stem cells. Nature Structural and Molecular Biology, 2011, 18, 735-741.	3.6	38
53	Culture-induced recurrent epigenetic aberrations in human pluripotent stem cells. PLoS Genetics, 2017, 13, e1006979.	1.5	38
54	Cancer-Related Mutations Identified in Primed Human Pluripotent Stem Cells. Cell Stem Cell, 2021, 28, 10-11.	5.2	35

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55	Molecular Characterization of Down Syndrome Embryonic Stem Cells Reveals a Role for RUNX1 in Neural Differentiation. Stem Cell Reports, 2016, 7, 777-786.	2.3	33
56	Distinct Imprinting Signatures and Biased Differentiation of Human Androgenetic and Parthenogenetic Embryonic Stem Cells. Cell Stem Cell, 2019, 25, 419-432.e9.	5.2	31
57	Characterization of Gastrulation-Stage Progenitor Cells and Their Inhibitory Crosstalk in Human Embryoid Bodies Â. Stem Cells, 2010, 28, 75-83.	1.4	28
58	Identification of Novel Imprinted Differentially Methylated Regions by Global Analysis of Human-Parthenogenetic-Induced Pluripotent Stem Cells. Stem Cell Reports, 2013, 1, 79-89.	2.3	27
59	Human Pluripotent Stem Cells with Distinct X Inactivation Status Show Molecular and Cellular Differences Controlled by the X-Linked ELK-1 Gene. Cell Reports, 2013, 4, 262-270.	2.9	27
60	Haploid Human Embryonic Stem Cells: Half the Genome, Double the Value. Cell Stem Cell, 2016, 19, 569-572.	5.2	27
61	FMR1 Reactivating Treatments in Fragile X iPSC-Derived Neural Progenitors InÂVitro and InÂVivo. Cell Reports, 2019, 26, 2531-2539.e4.	2.9	27
62	Modeling Developmental and Tumorigenic Aspects of Trilateral Retinoblastoma via Human Embryonic Stem Cells. Stem Cell Reports, 2017, 8, 1354-1365.	2.3	25
63	Virtual Karyotyping Reveals Greater Chromosomal Stability in Neural Cells Derived by Transdifferentiation than Those from Stem Cells. Cell Stem Cell, 2014, 15, 687-691.	5.2	24
64	Mapping Gene Circuits Essential for Germ Layer Differentiation via Loss-of-Function Screens in Haploid Human Embryonic Stem Cells. Cell Stem Cell, 2020, 27, 679-691.e6.	5.2	24
65	Haploidy in Humans: An Evolutionary and Developmental Perspective. Developmental Cell, 2017, 41, 581-589.	3.1	23
66	Derivation and molecular characterization of pancreatic differentiated MODY1-iPSCs. Stem Cell Research, 2018, 31, 16-26.	0.3	22
67	The in vitro survival of human monosomies and trisomies as embryonic stem cells. Stem Cell Research, 2012, 9, 218-224.	0.3	21
68	Human embryonic stem cells from aneuploid blastocysts identified by pre-implantation genetic screening. In Vitro Cellular and Developmental Biology - Animal, 2010, 46, 309-316.	0.7	20
69	Differentiation of Human Parthenogenetic Pluripotent Stem Cells Reveals Multiple Tissue- and Isoform-Specific Imprinted Transcripts. Cell Reports, 2015, 11, 308-320.	2.9	20
70	Characterization of a branched-chain amino-acid aminotransferase fromSchizosaccharomyces pombe. , 1998, 14, 189-194.		18
71	Involvement of parental imprinting in the antisense regulation of onco-miR-372-373. Nature Communications, 2013, 4, 2724.	5.8	16
72	Stepwise differentiation of human embryonic stem cells into early endoderm derivatives and their molecular characterization. Stem Cell Research, 2012, 8, 335-345.	0.3	15

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73	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.	1.6	15
74	The essentiality landscape of cell cycle related genes in human pluripotent and cancer cells. Cell Division, 2019, 14, 15.	1.1	13
75	The Chromatin Regulator ZMYM2 Restricts Human Pluripotent Stem Cell Growth and Is Essential for Teratoma Formation. Stem Cell Reports, 2020, 15, 1275-1286.	2.3	13
76	Elimination of undifferentiated cancer cells by pluripotent stem cell inhibitors. Journal of Molecular Cell Biology, 2014, 6, 267-269.	1.5	12
77	Identifying regulators of parental imprinting by CRISPR/Cas9 screening in haploid human embryonic stem cells. Nature Communications, 2021, 12, 6718.	5.8	12
78	Global Indiscriminate Methylation in Cell-Specific Gene Promoters following Reprogramming into Human Induced Pluripotent Stem Cells. Stem Cell Reports, 2013, 1, 509-517.	2.3	11
79	Efficient Generation of Viral and Integrationâ€Free Human Induced Pluripotent Stem Cellâ€Derived Oligodendrocytes. Current Protocols in Stem Cell Biology, 2016, 39, 2D.18.1-2D.18.28.	3.0	11
80	Large-scale analysis of imprinting in naive human pluripotent stem cells reveals recurrent aberrations and a potential link to FGF signaling. Stem Cell Reports, 2021, 16, 2520-2533.	2.3	11
81	Aberrant DNA Methylation in ES Cells. PLoS ONE, 2014, 9, e96090.	1.1	11
82	Chromosomal Instability and Molecular Defects in Induced Pluripotent Stem Cells from Nijmegen Breakage Syndrome Patients. Cell Reports, 2016, 16, 2499-2511.	2.9	10
83	Efficient Generation of Viral and Integrationâ€Free Human Induced Pluripotent Stem Cellâ€Derived Oligodendrocytes. Current Protocols in Stem Cell Biology, 2016, 38, 2D.18.1-2D.18.27.	3.0	10
84	Identification and propagation of haploid human pluripotent stem cells. Nature Protocols, 2016, 11, 2274-2286.	5.5	9
85	Identification of cancer-related mutations in human pluripotent stem cells using RNA-seq analysis. Nature Protocols, 2021, 16, 4522-4537.	5.5	8
86	The Tumorigenic Potential of Human Pluripotent Stem Cells. Stem Cells Translational Medicine, 2022, 11, 791-796.	1.6	8
87	Genome-wide Screen for Culture Adaptation and Tumorigenicity-Related Genes in Human Pluripotent Stem Cells. IScience, 2019, 11, 398-408.	1.9	7
88	Aspiring to naivety. Nature, 2016, 540, 211-212.	13.7	6
89	Comprehensive analysis of DNA replication timing across 184 cell lines suggests a role for <i>MCM10</i> in replication timing regulation. Human Molecular Genetics, 2022, 31, 2899-2917.	1.4	6
90	Genome-wide screening for genes involved in the epigenetic basis of fragile X syndrome. Stem Cell Reports, 2022, 17, 1048-1058.	2.3	6

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91	BK1: An FGF-Responsive Central Nervous System-Derived Cell Line. Growth Factors, 1995, 12, 49-55.	0.5	5
92	Human pluripotent stem cells: derivation and applications. Nature Reviews Molecular Cell Biology, 2020, , .	16.1	5
93	Delayed DNA replication in haploid human embryonic stem cells. Genome Research, 2021, 31, 2155-2169.	2.4	5
94	Human pluripotent stem cells in modeling human disorders: the case of fragile X syndrome. Regenerative Medicine, 2017, 12, 53-68.	0.8	4
95	Modeling Maturity Onset Diabetes of the Young in Pluripotent Stem Cells: Challenges and Achievements. Frontiers in Endocrinology, 2021, 12, 622940.	1.5	4
96	Genome-wide analysis of haploinsufficiency in human embryonic stem cells. Cell Reports, 2022, 38, 110573.	2.9	4
97	Europe and the stem cell debate. Trends in Biotechnology, 2002, 20, 183.	4.9	2
98	Large-Scale Analysis of X Inactivation Variations between Primed and NaÃ¯ve Human Embryonic Stem Cells. Cells, 2022, 11, 1729.	1.8	2
99	Identification of Differentially Expressed Genes During Hepatocytes Development and Characterization of their Prenatal Hormonal Induction. FEBS Journal, 1996, 242, 550-556.	0.2	1
100	rsPSCs: A new type of pluripotent stem cells. Cell Research, 2015, 25, 889-890.	5.7	1
101	Mice from Same-Sex Parents: CRISPRing Out the Barriers for Unisexual Reproduction. Cell Stem Cell, 2018, 23, 625-627.	5.2	1
102	Part B: Directed Differentiation of Human Embryonic Stem Cells into Hepatic Cells. , 0, , 187-194.		0