

# Rudolf Jaenisch

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

112 papers	37,355 citations	67 h-index	116 g-index
116 ext. papers	41,930 ext. citations	23.9 avg, IF	7.18 L-index

#	Paper	IF	Citations
112	The nuclear receptor THRB facilitates differentiation of human PSCs into more mature hepatocytes. <b>2022</b> ,		1
111	Whole chromosome loss and genomic instability in mouse embryos after CRISPR-Cas9 genome editing. <i>Nature Communications</i> , <b>2021</b> , 12, 5855	17.4	8
110	The role of GABAergic signalling in neurodevelopmental disorders. <i>Nature Reviews Neuroscience</i> , <b>2021</b> , 22, 290-307	13.5	18
109	Probing the signaling requirements for naive human pluripotency by high-throughput chemical screening. <i>Cell Reports</i> , <b>2021</b> , 35, 109233	10.6	8
108	Human physiometric model integrating microphysiological systems of the gut, liver, and brain for studies of neurodegenerative diseases. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	22
107	In situ genome sequencing resolves DNA sequence and structure in intact biological samples. <i>Science</i> , <b>2021</b> , 371,	33.3	50
106	OCT4 cooperates with distinct ATP-dependent chromatin remodelers in naive and primed pluripotent states in human. <i>Nature Communications</i> , <b>2021</b> , 12, 5123	17.4	1
105	Formation of Human Neuroblastoma in Mouse-Human Neural Crest Chimeras. <i>Cell Stem Cell</i> , <b>2020</b> , 26, 579-592.e6	18	11
104	Functional analysis of CX3CR1 in human induced pluripotent stem (iPS) cell-derived microglia-like cells. <i>European Journal of Neuroscience</i> , <b>2020</b> , 52, 3667-3678	3.5	6
103	Intravital imaging of mouse embryos. <i>Science</i> , <b>2020</b> , 368, 181-186	33.3	33
102	Partial FMRP expression is sufficient to normalize neuronal hyperactivity in Fragile X neurons. <i>European Journal of Neuroscience</i> , <b>2020</b> , 51, 2143-2157	3.5	17
101	Engineered tissues and strategies to overcome challenges in drug development. <i>Advanced Drug Delivery Reviews</i> , <b>2020</b> , 158, 116-139	18.5	6
100	MeCP2 links heterochromatin condensates and neurodevelopmental disease. <i>Nature</i> , <b>2020</b> , 586, 440-444.e5	30.4	45
99	Hominoid-Specific Transposable Elements and KZFPs Facilitate Human Embryonic Genome Activation and Control Transcription in Naive Human ESCs. <i>Cell Stem Cell</i> , <b>2019</b> , 24, 724-735.e5	18	92
98	Dynamic Enhancer DNA Methylation as Basis for Transcriptional and Cellular Heterogeneity of ESCs. <i>Molecular Cell</i> , <b>2019</b> , 75, 905-920.e6	17.6	39
97	Pharmacological enhancement of gene expression exerts therapeutic effects on human Rett syndrome neurons and mutant mice. <i>Science Translational Medicine</i> , <b>2019</b> , 11,	17.5	56
96	Editing the Epigenome to Tackle Brain Disorders. <i>Trends in Neurosciences</i> , <b>2019</b> , 42, 861-870	13.3	23

95	Human iPSC-derived microglia assume a primary microglia-like state after transplantation into the neonatal mouse brain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 25293-25303	11.5	55
94	Lipidomic Analysis of Bsynuclein Neurotoxicity Identifies Stearoyl CoA Desaturase as a Target for Parkinson Treatment. <i>Molecular Cell</i> , <b>2019</b> , 73, 1001-1014.e8	17.6	112
93	Rescue of Fragile X Syndrome Neurons by DNA Methylation Editing of the FMR1 Gene. <i>Cell</i> , <b>2018</b> , 172, 979-992.e6	56.2	239
92	Matched Developmental Timing of Donor Cells with the Host Is Crucial for Chimera Formation. <i>Stem Cell Reports</i> , <b>2018</b> , 10, 1445-1452	8	25
91	JIP2 haploinsufficiency contributes to neurodevelopmental abnormalities in human pluripotent stem cell-derived neural progenitors and cortical neurons. <i>Life Science Alliance</i> , <b>2018</b> , 1, e201800094	5.8	4
90	Microcephaly Modeling of Kinetochore Mutation Reveals a Brain-Specific Phenotype. <i>Cell Reports</i> , <b>2018</b> , 25, 368-382.e5	10.6	23
89	Stem Cells, Genome Editing, and the Path to Translational Medicine. <i>Cell</i> , <b>2018</b> , 175, 615-632	56.2	72
88	Induction of Expansion and Folding in Human Cerebral Organoids. <i>Cell Stem Cell</i> , <b>2017</b> , 20, 385-396.e3	18	227
87	Human Naive Pluripotent Stem Cells Model X Chromosome Dampening and X Inactivation. <i>Cell Stem Cell</i> , <b>2017</b> , 20, 87-101	18	136
86	YY1 Is a Structural Regulator of Enhancer-Promoter Loops. <i>Cell</i> , <b>2017</b> , 171, 1573-1588.e28	56.2	444
85	S-Nitrosylation of PINK1 Attenuates PINK1/Parkin-Dependent Mitophagy in hiPSC-Based Parkinson's Disease Models. <i>Cell Reports</i> , <b>2017</b> , 21, 2171-2182	10.6	70
84	Mechanisms of gene regulation in human embryos and pluripotent stem cells. <i>Development (Cambridge)</i> , <b>2017</b> , 144, 4496-4509	6.6	45
83	Parent-of-Origin DNA Methylation Dynamics during Mouse Development. <i>Cell Reports</i> , <b>2016</b> , 16, 3167-3180.e6	18.6	23
82	Editing DNA Methylation in the Mammalian Genome. <i>Cell</i> , <b>2016</b> , 167, 233-247.e17	56.2	690
81	Molecular Criteria for Defining the Naive Human Pluripotent State. <i>Cell Stem Cell</i> , <b>2016</b> , 19, 502-515	18	291
80	CNS disease models with human pluripotent stem cells in the CRISPR age. <i>Current Opinion in Cell Biology</i> , <b>2016</b> , 43, 96-103	9	17
79	Jointly reduced inhibition and excitation underlies circuit-wide changes in cortical processing in Rett syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E7287-E7296	11.5	97
78	Human neural crest cells contribute to coat pigmentation in interspecies chimeras after in utero injection into mouse embryos. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 1570-5	11.5	37

77	3D Chromosome Regulatory Landscape of Human Pluripotent Cells. <i>Cell Stem Cell</i> , <b>2016</b> , 18, 262-75	18	271
76	Tet1 and Tet2 Protect DNA Methylation Canyons against Hypermethylation. <i>Molecular and Cellular Biology</i> , <b>2016</b> , 36, 452-61	4.8	43
75	Stem cells and interspecies chimaeras. <i>Nature</i> , <b>2016</b> , 540, 51-59	50.4	97
74	Parkinson-associated risk variant in distal enhancer of $\beta$ -synuclein modulates target gene expression. <i>Nature</i> , <b>2016</b> , 533, 95-9	50.4	360
73	Induced Pluripotent Stem Cells Meet Genome Editing. <i>Cell Stem Cell</i> , <b>2016</b> , 18, 573-86	18	304
72	Efficient derivation of microglia-like cells from human pluripotent stem cells. <i>Nature Medicine</i> , <b>2016</b> , 22, 1358-1367	50.5	346
71	Parkinson-causing $\beta$ -synuclein missense mutations shift native tetramers to monomers as a mechanism for disease initiation. <i>Nature Communications</i> , <b>2015</b> , 6, 7314	17.4	202
70	TET1 is a tumor suppressor of hematopoietic malignancy. <i>Nature Immunology</i> , <b>2015</b> , 16, 653-62	19.1	139
69	Dissecting risk haplotypes in sporadic Alzheimer's disease. <i>Cell Stem Cell</i> , <b>2015</b> , 16, 341-2	18	6
68	Chromatin proteomic profiling reveals novel proteins associated with histone-marked genomic regions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 3841-6	11.5	86
67	Tracing dynamic changes of DNA methylation at single-cell resolution. <i>Cell</i> , <b>2015</b> , 163, 218-29	56.2	90
66	Monitoring Dynamics of DNA Methylation at Single-Cell Resolution during Development and Disease. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , <b>2015</b> , 80, 199-206	3.9	6
65	Induced Pluripotency and Epigenetic Reprogramming. <i>Cold Spring Harbor Perspectives in Biology</i> , <b>2015</b> , 7,	10.2	55
64	Combined Loss of Tet1 and Tet2 Promotes B Cell, but Not Myeloid Malignancies, in Mice. <i>Cell Reports</i> , <b>2015</b> , 13, 1692-704	10.6	65
63	A Systematic Approach to Identify Candidate Transcription Factors that Control Cell Identity. <i>Stem Cell Reports</i> , <b>2015</b> , 5, 763-775	8	93
62	A stochastic model dissects cell states in biological transition processes. <i>Scientific Reports</i> , <b>2014</b> , 4, 36924	4.9	17
61	Transcriptional profiling of cells sorted by RNA abundance. <i>Nature Methods</i> , <b>2014</b> , 11, 549-551	21.6	30
60	Loss of Tet enzymes compromises proper differentiation of embryonic stem cells. <i>Developmental Cell</i> , <b>2014</b> , 29, 102-11	10.2	224

59	The developmental potential of iPSCs is greatly influenced by reprogramming factor selection. <i>Cell Stem Cell</i> , <b>2014</b> , 15, 295-309	18	112
58	Contrasting roles of histone 3 lysine 27 demethylases in acute lymphoblastic leukaemia. <i>Nature</i> , <b>2014</b> , 514, 513-7	50.4	271
57	Generating genetically modified mice using CRISPR/Cas-mediated genome engineering. <i>Nature Protocols</i> , <b>2014</b> , 9, 1956-68	18.8	352
56	Systematic identification of culture conditions for induction and maintenance of naive human pluripotency. <i>Cell Stem Cell</i> , <b>2014</b> , 15, 471-487	18	506
55	Molecular control of induced pluripotency. <i>Cell Stem Cell</i> , <b>2014</b> , 14, 720-34	18	91
54	Human intestinal tissue with adult stem cell properties derived from pluripotent stem cells. <i>Stem Cell Reports</i> , <b>2014</b> , 2, 838-52	8	72
53	Higher vulnerability and stress sensitivity of neuronal precursor cells carrying an alpha-synuclein gene triplication. <i>PLoS ONE</i> , <b>2014</b> , 9, e112413	3.7	58
52	Direct lineage conversion of adult mouse liver cells and B lymphocytes to neural stem cells. <i>Stem Cell Reports</i> , <b>2014</b> , 3, 948-56	8	50
51	Genetic and chemical correction of cholesterol accumulation and impaired autophagy in hepatic and neural cells derived from Niemann-Pick Type C patient-specific iPS cells. <i>Stem Cell Reports</i> , <b>2014</b> , 2, 866-80	8	150
50	One-step generation of mice carrying reporter and conditional alleles by CRISPR/Cas-mediated genome engineering. <i>Cell</i> , <b>2013</b> , 154, 1370-9	56.2	1194
49	Global transcriptional and translational repression in human-embryonic-stem-cell-derived Rett syndrome neurons. <i>Cell Stem Cell</i> , <b>2013</b> , 13, 446-58	18	217
48	Stem cells, pluripotency and nuclear reprogramming. <i>FASEB Journal</i> , <b>2013</b> , 27, 78.1	0.9	
47	Medicine. iPSC disease modeling. <i>Science</i> , <b>2012</b> , 338, 1155-6	33.3	141
46	Generation of isogenic pluripotent stem cells differing exclusively at two early onset Parkinson point mutations. <i>Cell</i> , <b>2011</b> , 146, 318-31	56.2	603
45	Genetic engineering of human pluripotent cells using TALE nucleases. <i>Nature Biotechnology</i> , <b>2011</b> , 29, 731-4	44.5	955
44	Two-step imprinted X inactivation: repeat versus genic silencing in the mouse. <i>Molecular and Cellular Biology</i> , <b>2010</b> , 30, 3187-205	4.8	98
43	Derivation of pre-X inactivation human embryonic stem cells under physiological oxygen concentrations. <i>Cell</i> , <b>2010</b> , 141, 872-83	56.2	306
42	Human embryonic stem cells with biological and epigenetic characteristics similar to those of mouse ESCs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 9222-7	11.5	662

41	Efficient targeting of expressed and silent genes in human ESCs and iPSCs using zinc-finger nucleases. <i>Nature Biotechnology</i> , <b>2009</b> , 27, 851-7	44.5	855
40	Partial reversal of Rett Syndrome-like symptoms in MeCP2 mutant mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 2029-34	11.5	425
39	Somatic cell nuclear transfer and derivation of embryonic stem cells in the mouse. <i>Methods</i> , <b>2008</b> , 45, 101-14	4.6	40
38	A drug-inducible system for direct reprogramming of human somatic cells to pluripotency. <i>Cell Stem Cell</i> , <b>2008</b> , 3, 346-353	18	266
37	Connecting microRNA genes to the core transcriptional regulatory circuitry of embryonic stem cells. <i>Cell</i> , <b>2008</b> , 134, 521-33	56.2	1228
36	Nuclear Cloning, Epigenetic Reprogramming and Cellular Differentiation. <i>Novartis Foundation Symposium</i> , <b>2008</b> , 107-121		11
35	Partial rescue of MeCP2 deficiency by postnatal activation of MeCP2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 1931-6	11.5	223
34	A bivalent chromatin structure marks key developmental genes in embryonic stem cells. <i>Cell</i> , <b>2006</b> , 125, 315-26	56.2	4097
33	Control of developmental regulators by Polycomb in human embryonic stem cells. <i>Cell</i> , <b>2006</b> , 125, 301-13	56.2	1882
32	Core transcriptional regulatory circuitry in human embryonic stem cells. <i>Cell</i> , <b>2005</b> , 122, 947-56	56.2	3494
31	Reduced cortical activity due to a shift in the balance between excitation and inhibition in a mouse model of Rett syndrome. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 12560-5	11.5	495
30	The Role of K-ras Signaling in Erythropoiesis In Vivo.. <i>Blood</i> , <b>2005</b> , 106, 3136-3136	2.2	
29	Epigenetic regulation of gene expression: how the genome integrates intrinsic and environmental signals. <i>Nature Genetics</i> , <b>2003</b> , 33 Suppl, 245-54	36.3	4561
28	Expression of Xist RNA is sufficient to initiate macrochromatin body formation. <i>Chromosoma</i> , <b>2001</b> , 110, 411-20	2.8	38
27	Conditional deletion of brain-derived neurotrophic factor in the postnatal brain leads to obesity and hyperactivity. <i>Molecular Endocrinology</i> , <b>2001</b> , 15, 1748-57		620
26	Nuclear cloning and epigenetic reprogramming of the genome. <i>Science</i> , <b>2001</b> , 293, 1093-8	33.3	627
25	Developmental biology. Don't clone humans!. <i>Science</i> , <b>2001</b> , 291, 2552	33.3	75
24	Severe peripheral sensory neuron loss and modest motor neuron reduction in mice with combined deficiency of brain-derived neurotrophic factor, neurotrophin 3 and neurotrophin 4/5. <i>Developmental Dynamics</i> , <b>2000</b> , 218, 94-101	2.9	42

23	Mutations in the WRN gene in mice accelerate mortality in a p53-null background. <i>Molecular and Cellular Biology</i> , <b>2000</b> , 20, 3286-91	4.8	158
22	X-Chromosome inactivation in cloned mouse embryos. <i>Science</i> , <b>2000</b> , 290, 1578-81	33.3	203
21	Initial differentiation of the metanephric mesenchyme is independent of WT1 and the ureteric bud. <i>Genesis</i> , <b>1999</b> , 24, 252-62		82
20	DNA hypomethylation leads to elevated mutation rates. <i>Nature</i> , <b>1998</b> , 395, 89-93	50.4	768
19	Sequence-specific methylation of the mouse H19 gene in embryonic cells deficient in the Dnmt-1 gene. <i>Genesis</i> , <b>1998</b> , 22, 111-21		35
18	Mammalian X chromosome inactivation. <i>Novartis Foundation Symposium</i> , <b>1998</b> , 214, 200-9; discussion 209-13, 228-32		16
17	Long-range cis effects of ectopic X-inactivation centres on a mouse autosome. <i>Nature</i> , <b>1997</b> , 386, 275-9	50.4	245
16	Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission. <i>Developmental Dynamics</i> , <b>1997</b> , 209, 85-91	2.9	173
15	Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission <b>1997</b> , 209, 85		1
14	The role of DNA methylation in cancer genetic and epigenetics. <i>Annual Review of Genetics</i> , <b>1996</b> , 30, 441-64	14.5	419
13	Functional redundancy of the muscle-specific transcription factors Myf5 and myogenin. <i>Nature</i> , <b>1996</b> , 379, 823-5	50.4	139
12	Sensory but not motor neuron deficits in mice lacking NT4 and BDNF. <i>Nature</i> , <b>1995</b> , 375, 238-41	50.4	340
11	Mice lacking brain-derived neurotrophic factor develop with sensory deficits. <i>Nature</i> , <b>1994</b> , 368, 147-50	50.4	933
10	Stimulation of the collagen $\alpha$ (I) endogenous gene and transgene in carbon tetrachloride-induced hepatic fibrosis. <i>Hepatology</i> , <b>1993</b> , 17, 287-292	11.2	39
9	Role for DNA methylation in genomic imprinting. <i>Nature</i> , <b>1993</b> , 366, 362-5	50.4	1816
8	Control of gamma delta T-cell development. <i>Immunological Reviews</i> , <b>1991</b> , 120, 185-204	11.3	88
7	Beta 2-microglobulin deficient mice lack CD4-8+ cytolytic T cells. <i>Nature</i> , <b>1990</b> , 344, 742-6	50.4	927
6	Role of abortive retroviral infection of neurons in spongiform CNS degeneration. <i>Nature</i> , <b>1990</b> , 346, 181-3	50.4	59

5	Perinatal lethal osteogenesis imperfecta in transgenic mice bearing an engineered mutant pro-alpha 1(I) collagen gene. <i>Nature</i> , <b>1988</b> , 332, 131-6	50.4	212
4	High frequency of unequal recombination in pseudoautosomal region shown by proviral insertion in transgenic mouse. <i>Nature</i> , <b>1986</b> , 324, 682-5	50.4	68
3	Mammalian neural crest cells participate in normal embryonic development on microinjection into post-implantation mouse embryos. <i>Nature</i> , <b>1985</b> , 318, 181-3	50.4	79
2	Conditional Deletion Of Brain-Derived Neurotrophic Factor in the Postnatal Brain Leads to Obesity and Hyperactivity		198
1	A Possible Role Of Microglia In Zika Virus Infection Of The Fetal Human Brain		1