

# Rudolf Jaenisch

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3612192/publications.pdf>

Version: 2024-02-01

112  
papers

44,993  
citations

9786

73  
h-index

23533

111  
g-index

116  
all docs

116  
docs citations

116  
times ranked

49894  
citing authors

#	ARTICLE	IF	CITATIONS
1	The nuclear receptor THRB facilitates differentiation of human PSCs into more mature hepatocytes. <i>Cell Stem Cell</i> , 2022, 29, 795-809.e11.	11.1	5
2	Development of a physiological insulin resistance model in human stem cell-derived adipocytes. <i>Science Advances</i> , 2022, 8, .	10.3	10
3	Human physiometric model integrating microphysiological systems of the gut, liver, and brain for studies of neurodegenerative diseases. <i>Science Advances</i> , 2021, 7, .	10.3	73
4	In situ genome sequencing resolves DNA sequence and structure in intact biological samples. <i>Science</i> , 2021, 371, .	12.6	141
5	The role of GABAergic signalling in neurodevelopmental disorders. <i>Nature Reviews Neuroscience</i> , 2021, 22, 290-307.	10.2	83
6	Probing the signaling requirements for naive human pluripotency by high-throughput chemical screening. <i>Cell Reports</i> , 2021, 35, 109233.	6.4	28
7	OCT4 cooperates with distinct ATP-dependent chromatin remodelers in naive and primed pluripotent states in human. <i>Nature Communications</i> , 2021, 12, 5123.	12.8	17
8	Whole chromosome loss and genomic instability in mouse embryos after CRISPR-Cas9 genome editing. <i>Nature Communications</i> , 2021, 12, 5855.	12.8	72
9	Partial FMRP expression is sufficient to normalize neuronal hyperactivity in Fragile X neurons. <i>European Journal of Neuroscience</i> , 2020, 51, 2143-2157.	2.6	30
10	Engineered tissues and strategies to overcome challenges in drug development. <i>Advanced Drug Delivery Reviews</i> , 2020, 158, 116-139.	13.7	26
11	MeCP2 links heterochromatin condensates and neurodevelopmental disease. <i>Nature</i> , 2020, 586, 440-444.	27.8	112
12	Formation of Human Neuroblastoma in Mouse-Human Neural Crest Chimeras. <i>Cell Stem Cell</i> , 2020, 26, 579-592.e6.	11.1	32
13	Functional analysis of CX3CR1 in human induced pluripotent stem (iPS) cell-derived microglia-like cells. <i>European Journal of Neuroscience</i> , 2020, 52, 3667-3678.	2.6	14
14	Intravital imaging of mouse embryos. <i>Science</i> , 2020, 368, 181-186.	12.6	70
15	Dynamic Enhancer DNA Methylation as Basis for Transcriptional and Cellular Heterogeneity of ESCs. <i>Molecular Cell</i> , 2019, 75, 905-920.e6.	9.7	73
16	Pharmacological enhancement of <i>KCC2</i> gene expression exerts therapeutic effects on human Rett syndrome neurons and <i>Mecp2</i> mutant mice. <i>Science Translational Medicine</i> , 2019, 11, .	12.4	111
17	Editing the Epigenome to Tackle Brain Disorders. <i>Trends in Neurosciences</i> , 2019, 42, 861-870.	8.6	37
18	Hominoid-Specific Transposable Elements and KZFPs Facilitate Human Embryonic Genome Activation and Control Transcription in Naive Human ESCs. <i>Cell Stem Cell</i> , 2019, 24, 724-735.e5.	11.1	208

#	ARTICLE	IF	CITATIONS
19	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> , 2019, 116, 25293-25303.	7.1	115
20	Lipidomic Analysis of $\alpha$ -Synuclein Neurotoxicity Identifies Stearoyl CoA Desaturase as a Target for Parkinson Treatment. <i>Molecular Cell</i> , 2019, 73, 1001-1014.e8.	9.7	173
21	Rescue of Fragile X Syndrome Neurons by DNA Methylation Editing of the FMR1 Gene. <i>Cell</i> , 2018, 172, 979-992.e6.	28.9	351
22	Matched Developmental Timing of Donor Cells with the Host Is Crucial for Chimera Formation. <i>Stem Cell Reports</i> , 2018, 10, 1445-1452.	4.8	33
23	Microcephaly Modeling of Kinetochores Mutation Reveals a Brain-Specific Phenotype. <i>Cell Reports</i> , 2018, 25, 368-382.e5.	6.4	34
24	Stem Cells, Genome Editing, and the Path to Translational Medicine. <i>Cell</i> , 2018, 175, 615-632.	28.9	105
25	JIP2 haploinsufficiency contributes to neurodevelopmental abnormalities in human pluripotent stem cell-derived neural progenitors and cortical neurons. <i>Life Science Alliance</i> , 2018, 1, e201800094.	2.8	6
26	Induction of Expansion and Folding in Human Cerebral Organoids. <i>Cell Stem Cell</i> , 2017, 20, 385-396.e3.	11.1	346
27	Human Naive Pluripotent Stem Cells Model X Chromosome Dampening and X Inactivation. <i>Cell Stem Cell</i> , 2017, 20, 87-101.	11.1	188
28	YY1 Is a Structural Regulator of Enhancer-Promoter Loops. <i>Cell</i> , 2017, 171, 1573-1588.e28.	28.9	749
29	S-Nitrosylation of PINK1 Attenuates PINK1/Parkin-Dependent Mitophagy in hiPSC-Based Parkinson's Disease Models. <i>Cell Reports</i> , 2017, 21, 2171-2182.	6.4	103
30	Mechanisms of gene regulation in human embryos and pluripotent stem cells. <i>Development (Cambridge)</i> , 2017, 144, 4496-4509.	2.5	63
31	Stem cells and interspecies chimaeras. <i>Nature</i> , 2016, 540, 51-59.	27.8	134
32	Parkinson-associated risk variant in distal enhancer of $\alpha$ -synuclein modulates target gene expression. <i>Nature</i> , 2016, 533, 95-99.	27.8	466
33	Induced Pluripotent Stem Cells Meet Genome Editing. <i>Cell Stem Cell</i> , 2016, 18, 573-586.	11.1	398
34	Efficient derivation of microglia-like cells from human pluripotent stem cells. <i>Nature Medicine</i> , 2016, 22, 1358-1367.	30.7	486
35	Parent-of-Origin DNA Methylation Dynamics during Mouse Development. <i>Cell Reports</i> , 2016, 16, 3167-3180.	6.4	40
36	Editing DNA Methylation in the Mammalian Genome. <i>Cell</i> , 2016, 167, 233-247.e17.	28.9	932

#	ARTICLE	IF	CITATIONS
37	Molecular Criteria for Defining the Naive Human Pluripotent State. <i>Cell Stem Cell</i> , 2016, 19, 502-515.	11.1	415
38	CNS disease models with human pluripotent stem cells in the CRISPR age. <i>Current Opinion in Cell Biology</i> , 2016, 43, 96-103.	5.4	19
39	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> , 2016, 113, E7287-E7296.	7.1	148
40	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> , 2016, 113, 1570-1575.	7.1	50
41	3D Chromosome Regulatory Landscape of Human Pluripotent Cells. <i>Cell Stem Cell</i> , 2016, 18, 262-275.	11.1	369
42	Tet1 and Tet2 Protect DNA Methylation Canyons against Hypermethylation. <i>Molecular and Cellular Biology</i> , 2016, 36, 452-461.	2.3	54
43	A Systematic Approach to Identify Candidate Transcription Factors that Control Cell Identity. <i>Stem Cell Reports</i> , 2015, 5, 763-775.	4.8	148
44	Parkinson-causing $\alpha$ -synuclein missense mutations shift native tetramers to monomers as a mechanism for disease initiation. <i>Nature Communications</i> , 2015, 6, 7314.	12.8	245
45	TET1 is a tumor suppressor of hematopoietic malignancy. <i>Nature Immunology</i> , 2015, 16, 653-662.	14.5	173
46	Dissecting Risk Haplotypes in Sporadic Alzheimer's Disease. <i>Cell Stem Cell</i> , 2015, 16, 341-342.	11.1	7
47	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> , 2015, 112, 3841-3846.	7.1	123
48	Tracing Dynamic Changes of DNA Methylation at Single-Cell Resolution. <i>Cell</i> , 2015, 163, 218-229.	28.9	120
49	Monitoring Dynamics of DNA Methylation at Single-Cell Resolution during Development and Disease. <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 2015, 80, 199-206.	1.1	7
50	Induced Pluripotency and Epigenetic Reprogramming. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a019448.	5.5	84
51	Combined Loss of Tet1 and Tet2 Promotes B Cell, but Not Myeloid Malignancies, in Mice. <i>Cell Reports</i> , 2015, 13, 1692-1704.	6.4	83
52	Higher Vulnerability and Stress Sensitivity of Neuronal Precursor Cells Carrying an Alpha-Synuclein Gene Triplication. <i>PLoS ONE</i> , 2014, 9, e112413.	2.5	73
53	Direct Lineage Conversion of Adult Mouse Liver Cells and B Lymphocytes to Neural Stem Cells. <i>Stem Cell Reports</i> , 2014, 3, 948-956.	4.8	57
54	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> , 2014, 2, 866-880.	4.8	180

#	ARTICLE	IF	CITATIONS
55	Transcriptional profiling of cells sorted by RNA abundance. <i>Nature Methods</i> , 2014, 11, 549-551.	19.0	34
56	Loss of Tet Enzymes Compromises Proper Differentiation of Embryonic Stem Cells. <i>Developmental Cell</i> , 2014, 29, 102-111.	7.0	274
57	The Developmental Potential of iPSCs Is Greatly Influenced by Reprogramming Factor Selection. <i>Cell Stem Cell</i> , 2014, 15, 295-309.	11.1	137
58	Contrasting roles of histone 3 lysine 27 demethylases in acute lymphoblastic leukaemia. <i>Nature</i> , 2014, 514, 513-517.	27.8	340
59	Generating genetically modified mice using CRISPR/Cas-mediated genome engineering. <i>Nature Protocols</i> , 2014, 9, 1956-1968.	12.0	477
60	Systematic Identification of Culture Conditions for Induction and Maintenance of Naive Human Pluripotency. <i>Cell Stem Cell</i> , 2014, 15, 471-487.	11.1	702
61	Molecular Control of Induced Pluripotency. <i>Cell Stem Cell</i> , 2014, 14, 720-734.	11.1	121
62	Human Intestinal Tissue with Adult Stem Cell Properties Derived from Pluripotent Stem Cells. <i>Stem Cell Reports</i> , 2014, 2, 838-852.	4.8	83
63	A stochastic model dissects cell states in biological transition processes. <i>Scientific Reports</i> , 2014, 4, 3692.	3.3	24
64	One-Step Generation of Mice Carrying Reporter and Conditional Alleles by CRISPR/Cas-Mediated Genome Engineering. <i>Cell</i> , 2013, 154, 1370-1379.	28.9	1,442
65	Global Transcriptional and Translational Repression in Human-Embryonic-Stem-Cell-Derived Rett Syndrome Neurons. <i>Cell Stem Cell</i> , 2013, 13, 446-458.	11.1	273
66	Stem cells, pluripotency and nuclear reprogramming. <i>FASEB Journal</i> , 2013, 27, 78.1.	0.5	0
67	iPSC Disease Modeling. <i>Science</i> , 2012, 338, 1155-1156.	12.6	166
68	Generation of Isogenic Pluripotent Stem Cells Differing Exclusively at Two Early Onset Parkinson Point Mutations. <i>Cell</i> , 2011, 146, 318-331.	28.9	703
69	Genetic engineering of human pluripotent cells using TALE nucleases. <i>Nature Biotechnology</i> , 2011, 29, 731-734.	17.5	1,082
70	Two-Step Imprinted X Inactivation: Repeat versus Genic Silencing in the Mouse. <i>Molecular and Cellular Biology</i> , 2010, 30, 3187-3205.	2.3	115
71	Derivation of Pre-X Inactivation Human Embryonic Stem Cells under Physiological Oxygen Concentrations. <i>Cell</i> , 2010, 141, 872-883.	28.9	367
72	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> , 2010, 107, 9222-9227.	7.1	755

#	ARTICLE	IF	CITATIONS
73	Efficient targeting of expressed and silent genes in human ESCs and iPSCs using zinc-finger nucleases. <i>Nature Biotechnology</i> , 2009, 27, 851-857.	17.5	990
74	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> , 2009, 106, 2029-2034.	7.1	511
75	Somatic cell nuclear transfer and derivation of embryonic stem cells in the mouse. <i>Methods</i> , 2008, 45, 101-114.	3.8	46
76	A Drug-Inducible System for Direct Reprogramming of Human Somatic Cells to Pluripotency. <i>Cell Stem Cell</i> , 2008, 3, 346-353.	11.1	318
77	Connecting microRNA Genes to the Core Transcriptional Regulatory Circuitry of Embryonic Stem Cells. <i>Cell</i> , 2008, 134, 521-533.	28.9	1,332
78	Nuclear Cloning, Epigenetic Reprogramming and Cellular Differentiation. <i>Novartis Foundation Symposium</i> , 2008, , 107-121.	1.1	15
79	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> , 2007, 104, 1931-1936.	7.1	247
80	A Bivalent Chromatin Structure Marks Key Developmental Genes in Embryonic Stem Cells. <i>Cell</i> , 2006, 125, 315-326.	28.9	4,773
81	Control of Developmental Regulators by Polycomb in Human Embryonic Stem Cells. <i>Cell</i> , 2006, 125, 301-313.	28.9	2,059
82	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> , 2005, 102, 12560-12565.	7.1	558
83	Core Transcriptional Regulatory Circuitry in Human Embryonic Stem Cells. <i>Cell</i> , 2005, 122, 947-956.	28.9	4,000
84	The Role of K-ras Signaling in Erythropoiesis In Vivo.. <i>Blood</i> , 2005, 106, 3136-3136.	1.4	0
85	Epigenetic regulation of gene expression: how the genome integrates intrinsic and environmental signals. <i>Nature Genetics</i> , 2003, 33, 245-254.	21.4	5,434
86	Nuclear Cloning and Epigenetic Reprogramming of the Genome. <i>Science</i> , 2001, 293, 1093-1098.	12.6	704
87	Expression of Xist RNA is sufficient to initiate macrochromatin body formation. <i>Chromosoma</i> , 2001, 110, 411-420.	2.2	40
88	Conditional Deletion Of Brain-Derived Neurotrophic Factor in the Postnatal Brain Leads to Obesity and Hyperactivity. <i>Molecular Endocrinology</i> , 2001, 15, 1748-1757.	3.7	692
89	DEVELOPMENTAL BIOLOGY: Don't Clone Humans!. <i>Science</i> , 2001, 291, 2552-2552.	12.6	103
90	Conditional Deletion Of Brain-Derived Neurotrophic Factor in the Postnatal Brain Leads to Obesity and Hyperactivity. <i>Molecular Endocrinology</i> , 2001, 15, 1748-1757.	3.7	214

#	ARTICLE	IF	CITATIONS
91	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> , 2000, 218, 94-101.	1.8	44
92	Mutations in the WRN Gene in Mice Accelerate Mortality in a p53-Null Background. <i>Molecular and Cellular Biology</i> , 2000, 20, 3286-3291.	2.3	179
93	X-Chromosome Inactivation in Cloned Mouse Embryos. <i>Science</i> , 2000, 290, 1578-1581.	12.6	240
94	Initial differentiation of the metanephric mesenchyme is independent of WT1 and the ureteric bud. <i>Genesis</i> , 1999, 24, 252-262.	2.1	89
95	DNA hypomethylation leads to elevated mutation rates. <i>Nature</i> , 1998, 395, 89-93.	27.8	859
96	Sequence-specific methylation of the mouse H19 gene in embryonic cells deficient in the Dnmt-1 gene. <i>Genesis</i> , 1998, 22, 111-121.	2.1	37
97	Mammalian X Chromosome Inactivation. <i>Novartis Foundation Symposium</i> , 1998, 214, 200-213.	1.1	19
98	Long-range cis effects of ectopic X-inactivation centres on a mouse autosome. <i>Nature</i> , 1997, 386, 275-279.	27.8	269
99	Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission. <i>Developmental Dynamics</i> , 1997, 209, 85-91.	1.8	186
100	Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission. <i>Developmental Dynamics</i> , 1997, 209, 85-91.	1.8	1
101	THE ROLE OF DNA METHYLATION IN CANCER GENETICS AND EPIGENETICS. <i>Annual Review of Genetics</i> , 1996, 30, 441-464.	7.6	455
102	Functional redundancy of the muscle-specific transcription factors Myf5 and myogenin. <i>Nature</i> , 1996, 379, 823-825.	27.8	158
103	Sensory but not motor neuron deficits in mice lacking NT4 and BDNF. <i>Nature</i> , 1995, 375, 238-241.	27.8	357
104	Mice lacking brain-derived neurotrophic factor develop with sensory deficits. <i>Nature</i> , 1994, 368, 147-150.	27.8	1,023
105	Stimulation of the collagen $\alpha 1(I)$ endogenous gene and transgene in carbon tetrachloride-induced hepatic fibrosis. <i>Hepatology</i> , 1993, 17, 287-292.	7.3	44
106	Role for DNA methylation in genomic imprinting. <i>Nature</i> , 1993, 366, 362-365.	27.8	2,001
107	Control of gamma delta T-Cell Development. <i>Immunological Reviews</i> , 1991, 120, 185-204.	6.0	93
108	$\beta 2$ -Microglobulin deficient mice lack CD4 <sup>+</sup> cytolytic T cells. <i>Nature</i> , 1990, 344, 742-746.	27.8	1,026

#	ARTICLE	IF	CITATIONS
109	Role of abortive retroviral infection of neurons in spongiform CNS degeneration. Nature, 1990, 346, 181-183.	27.8	67
110	Perinatal lethal osteogenesis imperfecta in transgenic mice bearing an engineered mutant pro- $\alpha 1(I)$ collagen gene. Nature, 1988, 332, 131-136.	27.8	240
111	High frequency of unequal recombination in pseudoautosomal region shown by proviral insertion in transgenic mouse. Nature, 1986, 324, 682-685.	27.8	74
112	Mammalian neural crest cells participate in normal embryonic development on microinjection into post-implantation mouse embryos. Nature, 1985, 318, 181-183.	27.8	88