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	12597 71 h-index	31191 106 g-index
116 all docs	116 docs citations	116 times ranked	55528 citing authors

#	Article	IF	Citations
1	The nuclear receptor THRB facilitates differentiation of human PSCs into more mature hepatocytes. Cell Stem Cell, 2022, 29, 795-809.e11.	5.2	5
2	Development of a physiological insulin resistance model in human stem cellâ€“derived adipocytes. Science Advances, 2022, 8, .	4.7	10
3	Human physiomimetic model integrating microphysiological systems of the gut, liver, and brain for studies of neurodegenerative diseases. Science Advances, 2021, 7, .	4.7	73
4	In situ genome sequencing resolves DNA sequence and structure in intact biological samples. Science, 2021, 371, .	6.0	141
5	The role of GABAergic signalling in neurodevelopmental disorders. Nature Reviews Neuroscience, 2021, 22, 290-307.	4.9	83
6	Probing the signaling requirements for naive human pluripotency by high-throughput chemical screening. Cell Reports, 2021, 35, 109233.	2.9	28
7	OCT4 cooperates with distinct ATP-dependent chromatin remodelers in naÃ¯ve and primed pluripotent states in human. Nature Communications, 2021, 12, 5123.	5.8	17
8	Whole chromosome loss and genomic instability in mouse embryos after CRISPR-Cas9 genome editing. Nature Communications, 2021, 12, 5855.	5.8	72
9	Partial FMRP expression is sufficient to normalize neuronal hyperactivity in Fragile X neurons. European Journal of Neuroscience, 2020, 51, 2143-2157.	1.2	30
10	Engineered tissues and strategies to overcome challenges in drug development. Advanced Drug Delivery Reviews, 2020, 158, 116-139.	6.6	26
11	MeCP2 links heterochromatin condensates and neurodevelopmental disease. Nature, 2020, 586, 440-444.	13.7	112
12	Formation of Human Neuroblastoma in Mouse-Human Neural Crest Chimeras. Cell Stem Cell, 2020, 26, 579-592.e6.	5.2	32
13	Functional analysis of CX3CR1 in human induced pluripotent stem (iPS) cellâ€derived microgliaâ€like cells. European Journal of Neuroscience, 2020, 52, 3667-3678.	1.2	14
14	Intravital imaging of mouse embryos. Science, 2020, 368, 181-186.	6.0	70
15	Dynamic Enhancer DNA Methylation as Basis for Transcriptional and Cellular Heterogeneity of ESCs. Molecular Cell, 2019, 75, 905-920.e6.	4.5	73
16	Pharmacological enhancement of KCC2 gene expression exerts therapeutic effects on human Rett syndrome neurons and Mecp2 mutant mice. Science Translational Medicine, 2019, 11, .	5.8	111
17	Editing the Epigenome to Tackle Brain Disorders. Trends in Neurosciences, 2019, 42, 861-870.	4.2	37
18	Hominoid-Specific Transposable Elements and KZFPs Facilitate Human Embryonic Genome Activation and Control Transcription in Naive Human ESCs. Cell Stem Cell, 2019, 24, 724-735.e5.	5.2	208

#	Article	IF	Citations
19	Human iPSC-derived microglia assume a primary microglia-like state after transplantation into the neonatal mouse brain. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25293-25303.	3.3	115
20	Lipidomic Analysis of Î±-Synuclein Neurotoxicity Identifies Stearoyl CoA Desaturase as a Target for Parkinson Treatment. Molecular Cell, 2019, 73, 1001-1014.e8.	4.5	173
21	Rescue of Fragile X Syndrome Neurons by DNA Methylation Editing of the FMR1 Gene. Cell, 2018, 172, 979-992.e6.	13.5	351
22	Matched Developmental Timing of Donor Cells with the Host Is Crucial for Chimera Formation. Stem Cell Reports, 2018, 10, 1445-1452.	2.3	33
23	Microcephaly Modeling of Kinetochore Mutation Reveals a Brain-Specific Phenotype. Cell Reports, 2018, 25, 368-382.e5.	2.9	34
24	Stem Cells, Genome Editing, and the Path to Translational Medicine. Cell, 2018, 175, 615-632.	13.5	105
25	JIP2 haploinsufficiency contributes to neurodevelopmental abnormalities in human pluripotent stem cellâ€“derived neural progenitors and cortical neurons. Life Science Alliance, 2018, 1, e201800094.	1.3	6
26	Induction of Expansion and Folding in Human Cerebral Organoids. Cell Stem Cell, 2017, 20, 385-396.e3.	5.2	346
27	Human Naive Pluripotent Stem Cells Model X Chromosome Dampening and X Inactivation. Cell Stem Cell, 2017, 20, 87-101.	5.2	188
28	YY1 Is a Structural Regulator of Enhancer-Promoter Loops. Cell, 2017, 171, 1573-1588.e28.	13.5	749
29	S-Nitrosylation of PINK1 Attenuates PINK1/Parkin-Dependent Mitophagy in hiPSC-Based Parkinsonâ€™s Disease Models. Cell Reports, 2017, 21, 2171-2182.	2.9	103
30	Mechanisms of gene regulation in human embryos and pluripotent stem cells. Development (Cambridge), 2017, 144, 4496-4509.	1.2	63
31	Stem cells and interspecies chimaeras. Nature, 2016, 540, 51-59.	13.7	134
32	Parkinson-associated risk variant in distal enhancer of Î±-synuclein modulates target gene expression. Nature, 2016, 533, 95-99.	13.7	466
33	Induced Pluripotent Stem Cells Meet Genome Editing. Cell Stem Cell, 2016, 18, 573-586.	5.2	398
34	Efficient derivation of microglia-like cells from human pluripotent stem cells. Nature Medicine, 2016, 22, 1358-1367.	15.2	486
35	Parent-of-Origin DNA Methylation Dynamics during Mouse Development. Cell Reports, 2016, 16, 3167-3180.	2.9	40
36	Editing DNA Methylation in the Mammalian Genome. Cell, 2016, 167, 233-247.e17.	13.5	932

#	Article	IF	Citations
37	Molecular Criteria for Defining the Naive Human Pluripotent State. Cell Stem Cell, 2016, 19, 502-515.	5.2	415
38	CNS disease models with human pluripotent stem cells in the CRISPR age. Current Opinion in Cell Biology, 2016, 43, 96-103.	2.6	19
39	Jointly reduced inhibition and excitation underlies circuit-wide changes in cortical processing in Rett syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7287-E7296.	3.3	148
40	Human neural crest cells contribute to coat pigmentation in interspecies chimeras after in utero injection into mouse embryos. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1570-1575.	3.3	50
41	3D Chromosome Regulatory Landscape of Human Pluripotent Cells. Cell Stem Cell, 2016, 18, 262-275.	5.2	369
42	Tet1 and Tet2 Protect DNA Methylation Canyons against Hypermethylation. Molecular and Cellular Biology, 2016, 36, 452-461.	1.1	54
43	A Systematic Approach to Identify Candidate Transcription Factors that Control Cell Identity. Stem Cell Reports, 2015, 5, 763-775.	2.3	148
44	Parkinson-causing Î±-synuclein missense mutations shift native tetramers to monomers as a mechanism for disease initiation. Nature Communications, 2015, 6, 7314.	5.8	245
45	TET1 is a tumor suppressor of hematopoietic malignancy. Nature Immunology, 2015, 16, 653-662.	7.0	173
46	Dissecting Risk Haplotypes in Sporadic Alzheimer's Disease. Cell Stem Cell, 2015, 16, 341-342.	5.2	7
47	Chromatin proteomic profiling reveals novel proteins associated with histone-marked genomic regions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3841-3846.	3.3	123
48	Tracing Dynamic Changes of DNA Methylation at Single-Cell Resolution. Cell, 2015, 163, 218-229.	13.5	120
49	Monitoring Dynamics of DNA Methylation at Single-Cell Resolution during Development and Disease. Cold Spring Harbor Symposia on Quantitative Biology, 2015, 80, 199-206.	2.0	7
50	Induced Pluripotency and Epigenetic Reprogramming. Cold Spring Harbor Perspectives in Biology, 2015, 7, a019448.	2.3	84
51	Combined Loss of Tet1 and Tet2 Promotes B Cell, but Not Myeloid Malignancies, in Mice. Cell Reports, 2015, 13, 1692-1704.	2.9	83
52	Higher Vulnerability and Stress Sensitivity of Neuronal Precursor Cells Carrying an Alpha-Synuclein Gene Triplication. PLoS ONE, 2014, 9, e112413.	1.1	73
53	Direct Lineage Conversion of Adult Mouse Liver Cells and B Lymphocytes to Neural Stem Cells. Stem Cell Reports, 2014, 3, 948-956.	2.3	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. Stem Cell Reports, 2014, 2, 866-880.	2.3	180

#	Article	IF	Citations
55	Transcriptional profiling of cells sorted by RNA abundance. Nature Methods, 2014, 11, 549-551.	9.0	34
56	Loss of Tet Enzymes Compromises Proper Differentiation of Embryonic Stem Cells. Developmental Cell, 2014, 29, 102-111.	3.1	274
57	The Developmental Potential of iPSCs Is Greatly Influenced by Reprogramming Factor Selection. Cell Stem Cell, 2014, 15, 295-309.	5.2	137
58	Contrasting roles of histone 3 lysine 27 demethylases in acute lymphoblastic leukaemia. Nature, 2014, 514, 513-517.	13.7	340
59	Generating genetically modified mice using CRISPR/Cas-mediated genome engineering. Nature Protocols, 2014, 9, 1956-1968.	5.5	477
60	Systematic Identification of Culture Conditions for Induction and Maintenance of Naive Human Pluripotency. Cell Stem Cell, 2014, 15, 471-487.	5.2	702
61	Molecular Control of Induced Pluripotency. Cell Stem Cell, 2014, 14, 720-734.	5.2	121
62	Human Intestinal Tissue with Adult Stem Cell Properties Derived from Pluripotent Stem Cells. Stem Cell Reports, 2014, 2, 838-852.	2.3	83
63	A stochastic model dissects cell states in biological transition processes. Scientific Reports, 2014, 4, 3692.	1.6	24
64	One-Step Generation of Mice Carrying Reporter and Conditional Alleles by CRISPR/Cas-Mediated Genome Engineering. Cell, 2013, 154, 1370-1379.	13.5	1,442
65	Global Transcriptional and Translational Repression in Human-Embryonic-Stem-Cell-Derived Rett Syndrome Neurons. Cell Stem Cell, 2013, 13, 446-458.	5.2	273
66	Stem cells, pluripotency and nuclear reprogramming. FASEB Journal, 2013, 27, 78.1.	0.2	0
67	iPSC Disease Modeling. Science, 2012, 338, 1155-1156.	6.0	166
68	Generation of Isogenic Pluripotent Stem Cells Differing Exclusively at Two Early Onset Parkinson Point Mutations. Cell, 2011, 146, 318-331.	13.5	703
69	Genetic engineering of human pluripotent cells using TALE nucleases. Nature Biotechnology, 2011, 29, 731-734.	9.4	1,082
70	Two-Step Imprinted X Inactivation: Repeat versus Genic Silencing in the Mouse. Molecular and Cellular Biology, 2010, 30, 3187-3205.	1.1	115
71	Derivation of Pre-X Inactivation Human Embryonic Stem Cells under Physiological Oxygen Concentrations. Cell, 2010, 141, 872-883.	13.5	367
72	Human embryonic stem cells with biological and epigenetic characteristics similar to those of mouse ESCs. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9222-9227.	3.3	755

#	Article	IF	Citations
73	Efficient targeting of expressed and silent genes in human ESCs and iPSCs using zinc-finger nucleases. Nature Biotechnology, 2009, 27, 851-857.	9.4	990
74	Partial reversal of Rett Syndrome-like symptoms in MeCP2 mutant mice. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2029-2034.	3.3	511
75	Somatic cell nuclear transfer and derivation of embryonic stem cells in the mouse. Methods, 2008, 45, 101-114.	1.9	46
76	A Drug-Inducible System for Direct Reprogramming of Human Somatic Cells to Pluripotency. Cell Stem Cell, 2008, 3, 346-353.	5.2	318
77	Connecting microRNA Genes to the Core Transcriptional Regulatory Circuitry of Embryonic Stem Cells. Cell, 2008, 134, 521-533.	13.5	1,332
78	Nuclear Cloning, Epigenetic Reprogramming and Cellular Differentiation. Novartis Foundation Symposium, 2008, , 107-121.	1.2	15
79	Partial rescue of MeCP2 deficiency by postnatal activation of MeCP2. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1931-1936.	3.3	247
80	A Bivalent Chromatin Structure Marks Key Developmental Genes in Embryonic Stem Cells. Cell, 2006, 125, 315-326.	13.5	4,773
81	Control of Developmental Regulators by Polycomb in Human Embryonic Stem Cells. Cell, 2006, 125, 301-313.	13.5	2,059
82	Reduced cortical activity due to a shift in the balance between excitation and inhibition in a mouse model of Rett Syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12560-12565.	3.3	558
83	Core Transcriptional Regulatory Circuitry in Human Embryonic Stem Cells. Cell, 2005, 122, 947-956.	13.5	4,000
84	The Role of K-ras Signaling in Erythropoiesis In Vivo.. Blood, 2005, 106, 3136-3136.	0.6	0
85	Epigenetic regulation of gene expression: how the genome integrates intrinsic and environmental signals. Nature Genetics, 2003, 33, 245-254.	9.4	5,434
86	Nuclear Cloning and Epigenetic Reprogramming of the Genome. Science, 2001, 293, 1093-1098.	6.0	704
87	Expression of Xist RNA is sufficient to initiate macrochromatin body formation. Chromosoma, 2001, 110, 411-420.	1.0	40
88	Conditional Deletion Of Brain-Derived Neurotrophic Factor in the Postnatal Brain Leads to Obesity and Hyperactivity. Molecular Endocrinology, 2001, 15, 1748-1757.	3.7	692
89	DEVELOPMENTAL BIOLOGY: Don't Clone Humans!. Science, 2001, 291, 2552-2552.	6.0	103
90	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. , 2000, 218, 94-101.		44

#	Article	IF	Citations
91	Mutations in the WRN Gene in Mice Accelerate Mortality in a p53-Null Background. Molecular and Cellular Biology, 2000, 20, 3286-3291.	1.1	179
92	X-Chromosome Inactivation in Cloned Mouse Embryos. , 2000, 290, 1578-1581.		240
93	Initial differentiation of the metanephric mesenchyme is independent of WT1 and the ureteric bud. Genesis, 1999, 24, 252-262.	3.1	89
94	DNA hypomethylation leads to elevated mutation rates. Nature, 1998, 395, 89-93.	13.7	859
95	Sequence-specific methylation of the mouseH19 gene in embryonic cells deficient in theDnmt-1 gene. , 1998, 22, 111-121.		37
96	Mammalian X Chromosome Inactivation. Novartis Foundation Symposium, 1998, 214, 200-213.	1.2	19
97	Long-range cis effects of ectopic X-inactivation centres on a mouse autosome. Nature, 1997, 386, 275-279.	13.7	269
98	Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission. Developmental Dynamics, 1997, 209, 85-91.	0.8	186
99	Trisomy eight in ES cells is a common potential problem in gene targeting and interferes with germ line transmission. , 1997, 209, 85.		1
100	THE ROLE OF DNA METHYLATION IN CANCER GENETICS AND EPIGENETICS. Annual Review of Genetics, 1996, 30, 441-464.	3.2	455
101	Functional redundancy of the muscle-specific transcription factors Myf5 and myogenin. Nature, 1996, 379, 823-825.	13.7	158
102	Sensory but not motor neuron deficits in mice lacking NT4 and BDNF. Nature, 1995, 375, 238-241.	13.7	357
103	Mice lacking brain-derived neurotrophic factor develop with sensory deficits. Nature, 1994, 368, 147-150.	13.7	1,023
104	Stimulation of the collagen Î±1(I) endogenous gene and transgene in carbon tetrachlorideâ€“induced hepatic fibrosis. Hepatology, 1993, 17, 287-292.	3.6	44
105	Role for DNA methylation in genomic imprinting. Nature, 1993, 366, 362-365.	13.7	2,001
106	Control of gammadelta T-Cell Development. Immunological Reviews, 1991, 120, 185-204.	2.8	93
107	Î²2-Microglobulin deficient mice lack CD4â^'8+ cytolytic T cells. Nature, 1990, 344, 742-746.	13.7	1,026
108	Role of abortive retroviral infection of neurons in spongiform CNS degeneration. Nature, 1990, 346, 181-183.	13.7	67

#	Article	IF	Citations
109	Perinatal lethal osteogenesis imperfecta in transgenic mice bearing an engineered mutant pro-Î±1(I) collagen gene. Nature, 1988, 332, 131-136.	13.7	240
110	High frequency of unequal recombination in pseudoautosomal region shown by proviral insertion in transgenic mouse. Nature, 1986, 324, 682-685.	13.7	74
111	Mammalian neural crest cells participate in normal embryonic development on microinjection into post-implantation mouse embryos. Nature, 1985, 318, 181-183.	13.7	88
112	Conditional Deletion Of Brain-Derived Neurotrophic Factor in the Postnatal Brain Leads to Obesity and Hyperactivity. , 0, .		214