Kei Miyamoto

List of Publications by Year
in descending order

49 papers	1,671 citations	304743 22 h-index	302126 39 g-index
50 all docs	50 docs citations	50 times ranked	1889 citing authors

#	Article	IF	Citations
1	A transient pool of nuclear F-actin at mitotic exit controls chromatin organization. Nature Cell Biology, 2017, 19, 1389-1399.	10.3	170
2	Nuclear actin polymerization is required for transcriptional reprogramming of <i>Oct4</i> by oocytes. Genes and Development, 2011, 25, 946-958.	5.9	158
3	Mechanisms of nuclear reprogramming by eggs and oocytes: a deterministic process?. Nature Reviews Molecular Cell Biology, 2011, 12, 453-459.	37.0	109
4	Sperm is epigenetically programmed to regulate gene transcription in embryos. Genome Research, 2016, 26, 1034-1046.	5.5	109
5	Epigenetic factors influencing resistance to nuclear reprogramming. Trends in Genetics, 2011, 27, 516-525.	6.7	92
6	Nuclear Wave1 Is Required for Reprogramming Transcription in Oocytes and for Normal Development. Science, 2013, 341, 1002-1005.	12.6	82
7	Reprogramming events of mammalian somatic cells induced byXenopus laevis egg extracts. Molecular Reproduction and Development, 2007, 74, 1268-1277.	2.0	81
8	Cell-Free Extracts from Mammalian Oocytes Partially Induce Nuclear Reprogramming in Somatic Cells1. Biology of Reproduction, 2009, 80, 935-943.	2.7	70
9	Nuclear Actin in Development and Transcriptional Reprogramming. Frontiers in Genetics, 2017, 8, 27.	2.3	64
10	Transcriptional regulation and nuclear reprogramming: roles of nuclear actin and actin-binding proteins. Cellular and Molecular Life Sciences, 2013, 70, 3289-3302.	5.4	61
11	Reversible Membrane Permeabilization of Mammalian Cells Treated with Digitonin and Its Use for Inducing Nuclear Reprogramming by<i>Xenopus</i>Egg Extracts. Cloning and Stem Cells, 2008, 10, 535-542.	2.6	52
12	Chromatin Accessibility Impacts Transcriptional Reprogramming in Oocytes. Cell Reports, 2018, 24, 304-311.	6.4	50
13	Active Fluctuations of the Nuclear Envelope Shape the Transcriptional Dynamics in Oocytes. Developmental Cell, 2019, 51, 145-157.e10.	7.0	46
14	Hierarchical Molecular Events Driven by Oocyte-Specific Factors Lead to Rapid and Extensive Reprogramming. Molecular Cell, 2014, 55, 524-536.	9.7	39
15	Reprogramming towards totipotency is greatly facilitated by synergistic effects of small molecules. Biology Open, 2017, 6, 415-424.	1.2	39
16	Identification and characterization of an oocyte factor required for development of porcine nuclear transfer embryos. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7040-7045.	7.1	38
17	Gene Resistance to Transcriptional Reprogramming following Nuclear Transfer Is Directly Mediated by Multiple Chromatin-Repressive Pathways. Molecular Cell, 2017, 65, 873-884.e8.	9.7	38
18	Srf destabilizes cellular identity by suppressing cell-type-specific gene expression programs. Nature Communications, 2018, 9, 1387.	12.8	35

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19	Zygotic Nuclear F-Actin Safeguards Embryonic Development. Cell Reports, 2020, 31, 107824.	6.4	34
20	Reprogramming and development in nuclear transfer embryos and in interspecific systems. Current Opinion in Genetics and Development, 2012, 22, 450-458.	3.3	33
21	Nuclear reprogramming of sperm and somatic nuclei in eggs and oocytes. Reproductive Medicine and Biology, 2013, 12, 133-149.	2.4	31
22	Efficiencies and Mechanisms of Nuclear Reprogramming. Cold Spring Harbor Symposia on Quantitative Biology, 2010, 75, 189-200.	1.1	25
23	Signs of biological activities of 28,000-year-old mammoth nuclei in mouse oocytes visualized by live-cell imaging. Scientific Reports, 2019, 9, 4050.	3.3	25
24	Effects of Synchronization of Donor Cell Cycle on Embryonic Development and DNA Synthesis in Porcine Nuclear Transfer Embryos. Journal of Reproduction and Development, 2007, 53, 237-246.	1.4	15
25	The Expression of TALEN before Fertilization Provides a Rapid Knock-Out Phenotype in Xenopus laevis Founder Embryos. PLoS ONE, 2015, 10, e0142946.	2.5	15
26	Nuclear actin and transcriptional activation. Communicative and Integrative Biology, 2011, 4, 582-583.	1.4	14
27	Ubiquitin-proteasome system modulates zygotic genome activation in early mouse embryos and influences full-term development. Journal of Reproduction and Development, 2018, 64, 65-74.	1.4	14
28	Perturbation of maternal PIASy abundance disrupts zygotic genome activation and embryonic development via SUMOylation pathway. Biology Open, 2019, 8, .	1.2	13
29	Nuclear actin and transcriptional activation. Communicative and Integrative Biology, 2011, 4, 582-3.	1.4	12
30	Combinational Treatment of Trichostatin A and Vitamin C Improves the Efficiency of Cloning Mice by Somatic Cell Nuclear Transfer. Journal of Visualized Experiments, 2018, , .	0.3	10
31	The Actin-Family Protein Arp4 Is a Novel Suppressor for the Formation and Functions of Nuclear F-Actin. Cells, 2020, 9, 758.	4.1	10
32	Manipulation and In Vitro Maturation of Xenopus laevis Oocytes, Followed by Intracytoplasmic Sperm Injection, to Study Embryonic Development. Journal of Visualized Experiments, 2015, , e52496.	0.3	9
33	Histone H3 lysine 9 trimethylation is required for suppressing the expression of an embryonically activated retrotransposon in Xenopus laevis. Scientific Reports, 2015, 5, 14236.	3.3	8
34	Impairment of nuclear F-actin formation and its relevance to cellular phenotypes in Hutchinson-Gilford progeria syndrome. Nucleus, 2020, 11, 250-263.	2.2	8
35	Improved development of mouse somatic cell nuclear transfer embryos by chlamydocin analogues, class I and IIa histone deacetylase inhibitorsâ€. Biology of Reproduction, 2021, 105, 543-553.	2.7	8
36	Singleâ€cell profiling of transcriptomic changes during <i>in vitro</i> maturation of human oocytes. Reproductive Medicine and Biology, 2022, 21, e12464.	2.4	8

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37	Symmetrically dimethylated histone H3R2 promotes global transcription during minor zygotic genome activation in mouse pronuclei. Scientific Reports, 2021, 11, 10146.	3.3	6
38	Cell division- and DNA replication-free reprogramming of somatic nuclei for embryonic transcription. IScience, 2021, 24, 103290.	4.1	6
39	Actin nucleoskeleton in embryonic development and cellular differentiation. Current Opinion in Cell Biology, 2022, 76, 102100.	5.4	6
40	Structural alteration of the nucleus for the reprogramming of gene expression. FEBS Journal, 2022, 289, 7221-7233.	4.7	5
41	Nuclear actin in transcriptional reprogramming by oocytes. Cell Cycle, 2011, 10, 3040-3041.	2.6	4
42	Peroxiredoxin as a functional endogenous antioxidant enzyme in pronuclei of mouse zygotes. Journal of Reproduction and Development, 2018, 64, 161-171.	1.4	4
43	Nucleoskeleton proteins for nuclear dynamics. Journal of Biochemistry, 2021, 169, 237-241.	1.7	4
44	Sperm and Spermatids Contain Different Proteins and Bind Distinct Egg Factors. International Journal of Molecular Sciences, 2014, 15, 16719-16740.	4.1	3
45	Visualization of endogenous nuclear F-actin in mouse embryos reveals abnormal actin assembly after somatic cell nuclear transfer. Journal of Biochemistry, 2021, 169, 303-311.	1.7	3
46	Maternal Factors Involved in Nuclear Reprogramming by Eggs and Oocytes. Journal of Mammalian Ova Research, 2013, 30, 68-78.	0.1	2
47	Various nuclear reprogramming systems using egg and oocyte materials. Journal of Reproduction and Development, 2019, 65, 203-208.	1.4	2
48	Insights into the amphibian egg to understand the mammalian oocyte. , 2013, , 1-11.		1
49	Nuclear transfer system for the direct induction of embryonic transcripts from intra- and cross-species nuclei using mouse 4-cell embryos. STAR Protocols, 2022, 3, 101284.	1.2	0