Takashi Hiiragi

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Stochastic patterning in the mouse pre-implantation embryo. Development (Cambridge), 2007, 134, 4219-4231.	1.2	440
2	Asymmetric division of contractile domains couples cell positioning and fate specification. Nature, 2016, 536, 344-348.	13.7	303
3	Pulsatile cell-autonomous contractility drives compaction in the mouse embryo. Nature Cell Biology, 2015, 17, 849-855.	4.6	267
4	Cell-to-cell expression variability followed by signal reinforcement progressively segregates early mouse lineages. Nature Cell Biology, 2014, 16, 27-37.	4.6	262
5	Hydraulic control of mammalian embryo size and cell fate. Nature, 2019, 571, 112-116.	13.7	216
6	The Apical Domain Is Required and Sufficient for the First Lineage Segregation in the Mouse Embryo. Developmental Cell, 2017, 40, 235-247.e7.	3.1	183
7	The transition from meiotic to mitotic spindle assembly is gradual during early mammalian development. Journal of Cell Biology, 2012, 198, 357-370.	2.3	182
8	Polarity of the mouse embryo is established at blastocyst and is not prepatterned. Genes and Development, 2005, 19, 1081-1092.	2.7	172
9	Coordination of Morphogenesis and Cell-Fate Specification in Development. Current Biology, 2017, 27, R1024-R1035.	1.8	171
10	Inverted light-sheet microscope for imaging mouse pre-implantation development. Nature Methods, 2016, 13, 139-142.	9.0	153
11	First cleavage plane of the mouse egg is not predetermined but defined by the topology of the two apposing pronuclei. Nature, 2004, 430, 360-364.	13.7	139
12	Dual-spindle formation in zygotes keeps parental genomes apart in early mammalian embryos. Science, 2018, 361, 189-193.	6.0	118
13	A self-organization framework for symmetry breaking in the mammalian embryo. Nature Reviews Molecular Cell Biology, 2013, 14, 452-459.	16.1	109
14	Cell fate coordinates mechano-osmotic forces in intestinal crypt formation. Nature Cell Biology, 2021, 23, 733-744.	4.6	102
15	Confocal multiview light-sheet microscopy. Nature Communications, 2015, 6, 8881.	5.8	88
16	Computer simulation of emerging asymmetry in the mouse blastocyst. Development (Cambridge), 2008, 135, 1407-1414.	1.2	75
17	Lumen Expansion Facilitates Epiblast-Primitive Endoderm Fate Specification during Mouse Blastocyst Formation. Developmental Cell, 2019, 51, 684-697.e4.	3.1	58
18	A Tug-of-War between Cell Shape and Polarity Controls Division Orientation to Ensure Robust Patterning in the Mouse Blastocyst. Developmental Cell, 2019, 51, 564-574.e6.	3.1	54

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19	Symmetry Breaking in the Mammalian Embryo. Annual Review of Cell and Developmental Biology, 2018, 34, 405-426.	4.0	44
20	Inferring cellular forces from image stacks. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160261.	1.8	41
21	Integration of luminal pressure and signalling in tissue self-organization. Development (Cambridge), 2020, 147, .	1.2	38
22	Hypomethylation of paternal DNA in the late mouse zygote is not essential for development. International Journal of Developmental Biology, 2008, 52, 295-298.	0.3	36
23	Does prepatterning occur in the mouse egg?. Nature, 2006, 442, E3-E4.	13.7	35
24	Space Asymmetry Directs Preferential Sperm Entry in the Absence of Polarity in the Mouse Oocyte. PLoS Biology, 2006, 4, e135.	2.6	32
25	Venus trap in the mouse embryo reveals distinct molecular dynamics underlying specification of first embryonic lineages. EMBO Reports, 2015, 16, 1005-1021.	2.0	24
26	Inferring cell junction tension and pressure from cell geometry. Development (Cambridge), 2021, 148, dev192773.	1.2	24
27	Bmi1 facilitates primitive endoderm formation by stabilizing Gata6 during early mouse development. Genes and Development, 2012, 26, 1445-1458.	2.7	21
28	Stochastic Processes during Mouse Blastocyst Patterning. Cells Tissues Organs, 2008, 188, 46-51.	1.3	20
29	Stochastic processes in the development of pluripotency in vivo. Biotechnology Journal, 2012, 7, 737-744.	1.8	18
30	Fatal flaws in the case for prepatterning in the mouse egg. Reproductive BioMedicine Online, 2006, 12, 150-152.	1.1	15
31	The KrÃ¼ppel-associated Box Repressor Domain Can Induce Reversible Heterochromatization of a Mouse Locus in Vivo. Journal of Biological Chemistry, 2012, 287, 25361-25369.	1.6	15
32	An exÂvivo system to study cellular dynamics underlying mouse peri-implantation development. Developmental Cell, 2022, 57, 373-386.e9.	3.1	14
33	Dynamic rearrangement of surface proteins is essential for cytokinesis. Genesis, 2008, 46, 152-162.	0.8	11
34	ECM-integrin signalling instructs cellular position sensing to pattern the early mouse embryo. Development (Cambridge), 2022, 149, .	1.2	6
35	Keeping in Touch to Differentiate. Developmental Cell, 2017, 43, 113-114.	3.1	1