Takashi Hiiragi

List of Publications by Citations

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

34 papers	2,463 citations	22 h-index	39 g-index
39 ext. papers	3,100 ext. citations	15.6 avg, IF	5.29 L-index

#	Paper	IF	Citations
34	Stochastic patterning in the mouse pre-implantation embryo. *Development (Cambridge)*, **2007**, 134, 4219-31	6.6	384
33	Cell-to-cell expression variability followed by signal reinforcement progressively segregates early mouse lineages. *Nature Cell Biology*, **2014**, 16, 27-37	23.4	213
32	Asymmetric division of contractile domains couples cell positioning and fate specification. *Nature*, **2016**, 536, 344-348	50.4	209
31	Pulsatile cell-autonomous contractility drives compaction in the mouse embryo. *Nature Cell Biology*, **2015**, 17, 849-55	23.4	184
30	The transition from meiotic to mitotic spindle assembly is gradual during early mammalian development. *Journal of Cell Biology*, **2012**, 198, 357-70	7.3	152
29	Polarity of the mouse embryo is established at blastocyst and is not prepatterned. *Genes and Development*, **2005**, 19, 1081-92	12.6	152
28	First cleavage plane of the mouse egg is not predetermined but defined by the topology of the two apposing pronuclei. *Nature*, **2004**, 430, 360-4	50.4	121
27	The Apical Domain Is Required and Sufficient for the First Lineage Segregation in the Mouse Embryo. *Developmental Cell*, **2017**, 40, 235-247.e7	10.2	120
26	Hydraulic control of mammalian embryo size and cell fate. *Nature*, **2019**, 571, 112-116	50.4	111
25	Inverted light-sheet microscope for imaging mouse pre-implantation development. *Nature Methods* , **2016**, 13, 139-42	21.6	102
24	Coordination of Morphogenesis and Cell-Fate Specification in Development. *Current Biology*, **2017**, 27, R1024-R1035	6.3	93
23	A self-organization framework for symmetry breaking in the mammalian embryo. *Nature Reviews Molecular Cell Biology*, **2013**, 14, 452-9	48.7	88
22	Dual-spindle formation in zygotes keeps parental genomes apart in early mammalian embryos. *Science*, **2018**, 361, 189-193	33.3	72
21	Computer simulation of emerging asymmetry in the mouse blastocyst. *Development (Cambridge)*, **2008**, 135, 1407-14	6.6	61
20	Confocal multiview light-sheet microscopy. *Nature Communications*, **2015**, 6, 8881	17.4	55
19	Hypomethylation of paternal DNA in the late mouse zygote is not essential for development. *International Journal of Developmental Biology*, **2008**, 52, 295-8	1.9	32
18	Lumen Expansion Facilitates Epiblast-Primitive Endoderm Fate Specification during Mouse Blastocyst Formation. *Developmental Cell*, **2019**, 51, 684-697.e4	10.2	30

17	Symmetry Breaking in the Mammalian Embryo. *Annual Review of Cell and Developmental Biology*, **2018**, 34, 405-426	12.6	28
16	Embryology: does prepatterning occur in the mouse egg?. *Nature*, **2006**, 442, E3-4; discussion E4	50.4	28
15	Space asymmetry directs preferential sperm entry in the absence of polarity in the mouse oocyte. *PLoS Biology*, **2006**, 4, e135	9.7	27
14	Cell fate coordinates mechano-osmotic forces in intestinal crypt formation. *Nature Cell Biology*, **2021**, 23, 733-744	23.4	26
13	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	10.2	24
12	Inferring cellular forces from image stacks. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2017**, 372,	5.8	22
11	Venus trap in the mouse embryo reveals distinct molecular dynamics underlying specification of first embryonic lineages. *EMBO Reports*, **2015**, 16, 1005-21	6.5	21
10	Bmi1 facilitates primitive endoderm formation by stabilizing Gata6 during early mouse development. *Genes and Development*, **2012**, 26, 1445-58	12.6	19
9	Integration of luminal pressure and signalling in tissue self-organization. *Development (Cambridge)*, **2020**, 147,	6.6	18
8	Stochastic processes during mouse blastocyst patterning. *Cells Tissues Organs*, **2008**, 188, 46-51	2.1	17
7	Stochastic processes in the development of pluripotency in vivo. *Biotechnology Journal*, **2012**, 7, 737-44	5.6	13
6	Fatal flaws in the case for prepatterning in the mouse egg. *Reproductive BioMedicine Online*, **2006**, 12, 150-2	4	13
5	The Kr□ppel-associated box repressor domain can induce reversible heterochromatization of a mouse locus in vivo. *Journal of Biological Chemistry*, **2012**, 287, 25361-9	5.4	11
4	Dynamic rearrangement of surface proteins is essential for cytokinesis. *Genesis*, **2008**, 46, 152-62	1.9	10
3	An ex□vivo system to study cellular dynamics underlying mouse peri-implantation development.. *Developmental Cell*, **2022**,	10.2	2
2	Inferring cell junction tension and pressure from cell geometry. *Development (Cambridge)*, **2021**, 148,	6.6	2
1	Keeping in Touch to Differentiate. *Developmental Cell*, **2017**, 43, 113-114	10.2	1