Takashi Hiiragi

List of Publications by Year in Descending Order

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	An ex□vivo system to study cellular dynamics underlying mouse peri-implantation development.. *Developmental Cell*, **2022**,	10.2	2
33	Inferring cell junction tension and pressure from cell geometry. *Development (Cambridge)*, **2021**, 148,	6.6	2
32	Cell fate coordinates mechano-osmotic forces in intestinal crypt formation. *Nature Cell Biology*, **2021**, 23, 733-744	23.4	26
31	Integration of luminal pressure and signalling in tissue self-organization. *Development (Cambridge)*, **2020**, 147,	6.6	18
30	Hydraulic control of mammalian embryo size and cell fate. *Nature*, **2019**, 571, 112-116	50.4	111
29	Lumen Expansion Facilitates Epiblast-Primitive Endoderm Fate Specification during Mouse Blastocyst Formation. *Developmental Cell*, **2019**, 51, 684-697.e4	10.2	30
28	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
27	Dual-spindle formation in zygotes keeps parental genomes apart in early mammalian embryos. *Science*, **2018**, 361, 189-193	33.3	72
26	Symmetry Breaking in the Mammalian Embryo. *Annual Review of Cell and Developmental Biology*, **2018**, 34, 405-426	12.6	28
25	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
24	Inferring cellular forces from image stacks. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2017**, 372,	5.8	22
23	Coordination of Morphogenesis and Cell-Fate Specification in Development. *Current Biology*, **2017**, 27, R1024-R1035	6.3	93
22	Keeping in Touch to Differentiate. *Developmental Cell*, **2017**, 43, 113-114	10.2	1
21	Inverted light-sheet microscope for imaging mouse pre-implantation development. *Nature Methods* , **2016**, 13, 139-42	21.6	102
20	Asymmetric division of contractile domains couples cell positioning and fate specification. *Nature*, **2016**, 536, 344-348	50.4	209
19	Pulsatile cell-autonomous contractility drives compaction in the mouse embryo. *Nature Cell Biology*, **2015**, 17, 849-55	23.4	184
18	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

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17	Confocal multiview light-sheet microscopy. *Nature Communications*, **2015**, 6, 8881	17.4	55
16	Cell-to-cell expression variability followed by signal reinforcement progressively segregates early mouse lineages. *Nature Cell Biology*, **2014**, 16, 27-37	23.4	213
15	A self-organization framework for symmetry breaking in the mammalian embryo. *Nature Reviews Molecular Cell Biology*, **2013**, 14, 452-9	48.7	88
14	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
13	Stochastic processes in the development of pluripotency in vivo. *Biotechnology Journal*, **2012**, 7, 737-44	5.6	13
12	The Krüppel-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
11	Bmi1 facilitates primitive endoderm formation by stabilizing Gata6 during early mouse development. *Genes and Development*, **2012**, 26, 1445-58	12.6	19
10	Stochastic processes during mouse blastocyst patterning. *Cells Tissues Organs*, **2008**, 188, 46-51	2.1	17
9	Computer simulation of emerging asymmetry in the mouse blastocyst. *Development (Cambridge)*, **2008**, 135, 1407-14	6.6	61
8	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
7	Dynamic rearrangement of surface proteins is essential for cytokinesis. *Genesis*, **2008**, 46, 152-62	1.9	10
6	Stochastic patterning in the mouse pre-implantation embryo. *Development (Cambridge)*, **2007**, 134, 4219-31	6.6	384
5	Fatal flaws in the case for prepatterning in the mouse egg. *Reproductive BioMedicine Online*, **2006**, 12, 150-2	4	13
4	Embryology: does prepatterning occur in the mouse egg?. *Nature*, **2006**, 442, E3-4; discussion E4	50.4	28
3	Space asymmetry directs preferential sperm entry in the absence of polarity in the mouse oocyte. *PLoS Biology*, **2006**, 4, e135	9.7	27
2	Polarity of the mouse embryo is established at blastocyst and is not prepatterned. *Genes and Development*, **2005**, 19, 1081-92	12.6	152
1	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