Myriam Hemberger

List of Publications by Year
in descending order

79 papers	8,935 citations	66343 42 h-index	66911 78 g-index
87 all docs	87 docs citations	87 times ranked	9690 citing authors

#	Article	IF	Citations
1	Placental-specific IGF-II is a major modulator of placental and fetal growth. Nature, 2002, 417, 945-948.	27.8	961
2	Interactions between Trophoblast Cells and the Maternal and Fetal Circulation in the Mouse Placenta. Developmental Biology, 2002, 250, 358-373.	2.0	513
3	Long-term, hormone-responsive organoid cultures of human endometrium in a chemically defined medium. Nature Cell Biology, 2017, 19, 568-577.	10.3	442
4	Epigenetic dynamics of stem cells and cell lineage commitment: digging Waddington's canal. Nature Reviews Molecular Cell Biology, 2009, 10, 526-537.	37.0	441
5	Trophoblast organoids as a model for maternalâ€“fetal interactions during human placentation. Nature, 2018, 564, 263-267.	27.8	436
6	Positional cloning of the gene for X-linked retinitis pigmentosa 2. Nature Genetics, 1998, 19, 327-332.	21.4	371
7	BRACHYURY and CDX2 Mediate BMP-Induced Differentiation of Human and Mouse Pluripotent Stem Cells into Embryonic and Extraembryonic Lineages. Cell Stem Cell, 2011, 9, 144-155.	11.1	340
8	Epigenetic restriction of embryonic cell lineage fate by methylation of Elf5. Nature Cell Biology, 2008, 10, 1280-1290.	10.3	326
9	Global Mapping of DNA Methylation in Mouse Promoters Reveals Epigenetic Reprogramming of Pluripotency Genes. PLoS Genetics, 2008, 4, e1000116.	3.5	317
10	Placentation defects are highly prevalent in embryonic lethal mouse mutants. Nature, 2018, 555, 463-468.	27.8	287
11	Regulation of Placental Development and Its Impact on Fetal Growthâ€"New Insights From Mouse Models. Frontiers in Endocrinology, 2018, 9, 570.	3.5	275
12	Mechanisms of early placental development in mouse and humans. Nature Reviews Genetics, 2020, 21, 27-43.	16.3	274
13	Interactions between Trophoblast Cells and the Maternal and Fetal Circulation in the Mouse Placenta. Developmental Biology, 2002, 250, 358-373.	2.0	241
14	What Is Trophoblast? A Combination of Criteria Define Human First-Trimester Trophoblast. Stem Cell Reports, 2016, 6, 257-272.	4.8	213
15	Clearance of senescent decidual cells by uterine natural killer cells in cycling human endometrium. ELife, 2017, 6, .	6.0	193
16	The RNA-Binding Protein Elavl1/HuR Is Essential for Placental Branching Morphogenesis and Embryonic Development. Molecular and Cellular Biology, 2009, 29, 2762-2776.	2.3	182
17	Genes governing placental development. Trends in Endocrinology and Metabolism, 2001, 12, 162-168.	7.1	174
18	ELF5-enforced transcriptional networks define an epigenetically regulated trophoblast stem cell compartment in the human placenta. Human Molecular Genetics, 2010, 19, 2456-2467.	2.9	167

#	Article	IF	Citations
19	Paternal MHC expression on mouse trophoblast affects uterine vascularization and fetal growth. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4012-4017.	7.1	138
20	Unique Receptor Repertoire in Mouse Uterine NK cells. Journal of Immunology, 2008, 181, 6140-6147.	0.8	126
21	Maternal DNA Methylation Regulates Early Trophoblast Development. Developmental Cell, 2016, 36, 152-163.	7.0	107
22	Decidualisation and placentation defects are a major cause of age-related reproductive decline. Nature Communications, 2017, 8, 352.	12.8	107
23	Geminin is essential to prevent endoreduplication and to form pluripotent cells during mammalian development. Genes and Development, 2006, 20, 1880-1884.	5.9	106
24	Fgf and Esrrb integrate epigenetic and transcriptional networks that regulate self-renewal of trophoblast stem cells. Nature Communications, 2015, 6, 7776.	12.8	98
25	From the stem of the placental tree: trophoblast stem cells and their progeny. Development (Cambridge), 2016, 143, 3650-3660.	2.5	96
26	Differential expression of angiogenic and vasodilatory factors by invasive trophoblast giant cells depending on depth of invasion. Developmental Dynamics, 2003, 227, 185-191.	1.8	93
27	Elf5-centered transcription factor hub controls trophoblast stem cell self-renewal and differentiation through stoichiometry-sensitive shifts in target gene networks. Genes and Development, 2015, 29, 2435-2448.	5.9	93
28	Direct Induction of Trophoblast Stem Cells from Murine Fibroblasts. Cell Stem Cell, 2015, 17, 557-568.	11.1	93
29	Trophoblast stem cells differentiate in vitro into invasive trophoblast giant cells. Developmental Biology, 2004, 271, 362-371.	2.0	91
30	Derivation and Maintenance of Murine Trophoblast Stem Cells under Defined Conditions. Stem Cell Reports, 2014, 2, 232-242.	4.8	82
31	Endoplasmic reticulum stress disrupts placental morphogenesis: implications for human intrauterine growth restriction. Journal of Pathology, 2012, 228, 554-564.	4.5	79
32	DNA Methylation Profiles Define Stem Cell Identity and Reveal a Tight Embryonicâ€“Extraembryonic Lineage Boundary. Stem Cells, 2012, 30, 2732-2745.	3.2	77
33	A placenta for life. Reproductive BioMedicine Online, 2012, 25, 5-11.	2.4	75
34	Parp1-deficiency induces differentiation of ES cells into trophoblast derivatives. Developmental Biology, 2003, 257, 371-381.	2.0	74
35	ADP-ribosyltransferases Parp1 and Parp7 safeguard pluripotency of ES cells. Nucleic Acids Research, 2014, 42, 8914-8927.	14.5	72
36	Epigenetic memory of the first cell fate decision prevents complete ES cell reprogramming into trophoblast. Nature Communications, 2014, 5, 5538.	12.8	68

#	Article	IF	Citations
37	Activin promotes differentiation of cultured mouse trophoblast stem cells towards a labyrinth cell fate. Developmental Biology, 2009, 335, 120-131.	2.0	66
38	Deciphering the Mechanisms of Developmental Disorders (DMDD): a new programme for phenotyping embryonic lethal mice. DMM Disease Models and Mechanisms, 2013, 6, 562-6.	2.4	65
39	A niche of trophoblast progenitor cells identified by integrin Î±2 is present in first trimester human placentas. Development (Cambridge), 2018, 145, .	2.5	54
40	Divergent wiring of repressive and active chromatin interactions between mouse embryonic and trophoblast lineages. Nature Communications, 2018, 9, 4189.	12.8	51
41	The importance of cysteine cathepsin proteases for placental development. Journal of Molecular Medicine, 2006, 84, 305-317.	3.9	50
42	cDNA subtraction cloning reveals novel genes whose temporal and spatial expression indicates association with trophoblast invasion. Developmental Biology, 2000, 222, 158-169.	2.0	46
43	H19 and Igf2 are expressed and differentially imprinted in neuroectoderm-derived cells in the mouse brain. Development Genes and Evolution, 1998, 208, 393-402.	0.9	44
44	Genetic-epigenetic intersection in trophoblast differentiation: Implications for extraembryonic tissue function. Epigenetics, 2010, 5, 24-29.	2.7	42
45	Lineage-specific function of the noncoding <i>Tsix</i> RNA for <i>Xist</i> repression and Xi reactivation in mice. Genes and Development, 2011, 25, 1702-1715.	5.9	42
46	ZFP57 regulation of transposable elements and gene expression within and beyond imprinted domains. Epigenetics and Chromatin, 2019, 12, 49.	3.9	42
47	PI3K Signaling Through the Dual GTPaseâ€“Activating Protein ARAP3 Is Essential for Developmental Angiogenesis. Science Signaling, 2010, 3, ra76.	3.6	40
48	Immune balance at the foeto-maternal interface as the fulcrum of reproductive success. Journal of Reproductive Immunology, 2013, 97, 36-42.	1.9	40
49	A Critical Role of TET1/2 Proteins in Cell-Cycle Progression of Trophoblast Stem Cells. Stem Cell Reports, 2018, 10, 1355-1368.	4.8	37
50	Cathepsin proteases have distinct roles in trophoblast function and vascular remodelling. Development (Cambridge), 2008, 135, 3311-3320.	2.5	36
51	Plet1 is an epigenetically regulated cell surface protein that provides essential cues to direct trophoblast stem cell differentiation. Scientific Reports, 2016, 6, 25112.	3.3	36
52	Fetal and trophoblast PI3K p110Î± have distinct roles in regulating resource supply to the growing fetus in mice. ELife, 2019, 8, .	6.0	36
53	Defining pathways that enforce cell lineage specification in early development and stem cells. Cell Cycle, 2009, 8, 1515-1525.	2.6	30
54	Genetic and Developmental Analysis of X-Inactivation in Interspecific Hybrid Mice Suggests a Role for the Y Chromosome in Placental Dysplasia. Genetics, 2001, 157, 341-348.	2.9	28

#	Article	IF	Citations
55	Increased transcriptome variation and localised DNA methylation changes in oocytes from aged mice revealed by parallel singleâ€cell analysis. Aging Cell, 2020, 19, e13278.	6.7	27
56	BAP1/ASXL complex modulation regulates epithelial-mesenchymal transition during trophoblast differentiation and invasion. ELife, 2021, 10, .	6.0	27
57	Down-regulation of Cdx2 in colorectal carcinoma cells by the Rafâ€"MEKâ€"ERK 1/2 pathway. Cellular Signalling, 2009, 21, 1846-1856.	3.6	23
58	Identification and characterization of G90, a novel mouse RNA that lacks an extensive open reading frame. Gene, 1999, 232, 35-42.	2.2	18
59	Health during pregnancy and beyond: Fetal trophoblast cells as chief co-ordinators of intrauterine growth and reproductive success. Annals of Medicine, 2012, 44, 325-337.	3.8	16
60	Common and distinct transcriptional signatures of mammalian embryonic lethality. Nature Communications, 2019, 10, 2792.	12.8	16
61	OFCD syndrome and extraembryonic defects are revealed by conditional mutation of the Polycomb-group repressive complex 1.1 (PRC1.1) gene BCOR. Developmental Biology, 2020, 468, 110-132.	2.0	16
62	Silencing of the Y-chromosomal gene tspy during murine evolution. Mammalian Genome, 2000, 11, 288-291.	2.2	15
63	The mouse sino-atrial node expresses both the type 2 and type 3 Ca2+ release channels/ryanodine receptors. FEBS Letters, 2003, 553, 141-144.	2.8	15
64	Phases and Mechanisms of Embryonic Cardiomyocyte Proliferation and Ventricular Wall Morphogenesis. Pediatric Cardiology, 2019, 40, 1359-1366.	1.3	15
65	Diverse species-specific phenotypic consequences of loss of function sorting nexin 14 mutations. Scientific Reports, 2020, 10, 13763.	3.3	15
66	DNA Methylation in Placentas of Interspecies Mouse Hybrids. Genetics, 2003, 165, 223-228.	2.9	15
67	The H19 induction triggers trophoblast lineage commitment in mouse ES cells. Biochemical and Biophysical Research Communications, 2013, 436, 313-318.	2.1	14
68	TET1 and 5-Hydroxymethylation Preserve the Stem Cell State of Mouse Trophoblast. Stem Cell Reports, 2020, 15, 1301-1316.	4.8	14
69	Inhibition of Phosphoinositide-3-Kinase Signaling Promotes the Stem Cell State of Trophoblast. Stem Cells, 2019, 37, 1307-1318.	3.2	10
70	Epigenetic changes occur at decidualisation genes as a function of reproductive ageing in mice. Development (Cambridge), 2020, 147, .	2.5	10
71	Excessive endoplasmic reticulum stress drives aberrant mouse trophoblast differentiation and placental development leading to pregnancy loss. Journal of Physiology, 2021, 599, 4153-4181.	2.9	10
72	Molecular cloning and characterization of murine. Differentiation, 1998, 63, 285.	1.9	9

#	Article	IF	Citations
73	Uterine-specific SIRT1 deficiency confers premature uterine aging and impairs invasion and spacing of blastocyst, and stromal cell decidualization, in mice. Molecular Human Reproduction, 2022, 28, .	2.8	9
74	Carboxypeptidase E in the mouse placenta. Differentiation, 2006, 74, 648-660.	1.9	8
75	Epigenome Disruptors. Science, 2010, 330, 598-599.	12.6	7
76	Epigenetic Arbitration of Cell Fate Decisions: Tipping the Bias. Developmental Cell, 2007, 12, 176-178.	7.0	6
77	MusMorph, a database of standardized mouse morphology data for morphometric meta-analyses. Scientific Data, 2022, 9, .	5.3	3
78	cDNA Subtraction and Cloning in the Field of Trophoblast/Placental Development. , 2004, 254, 049-066.		0
79	First Cell Fate Decisions in Early Development. , 2014, , 95-106.		0