Heng-Yu Fan

List of Publications by Year
in descending order

100 papers	5,510 citations	70961 41 h-index	91712 69 g-index
102 all docs	102 docs citations	102 times ranked	5637 citing authors

#	Article	IF	Citations
1	Biallelic variants in <i>ZFP36L2</i> cause female infertility characterised by recurrent preimplantation embryo arrest. Journal of Medical Genetics, 2022, 59, 850-857.	1.5	12
2	Five questions toward mRNA degradation in oocytes and preimplantation embryos: when, who, to whom, how, and why?. Biology of Reproduction, 2022, 107, 62-75.	1.2	12
3	Revisiting ZAR proteins: the understudied regulator of female fertility and beyond. Cellular and Molecular Life Sciences, 2022, 79, 92.	2.4	7
4	HMCES safeguards genome integrity and long-term self-renewal of hematopoietic stem cells during stress responses. Leukemia, 2022, 36, 1123-1131.	3.3	5
5	Nuclear poly(A) binding protein 1 (PABPN1) mediates zygotic genome activation-dependent maternal mRNA clearance during mouse early embryonic development. Nucleic Acids Research, 2022, 50, 458-472.	6.5	13
6	USP16-mediated histone H2A lysine-119 deubiquitination during oocyte maturation is a prerequisite for zygotic genome activation. Nucleic Acids Research, 2022, 50, 5599-5616.	6.5	7
7	Biallelic variants in <i>MOS</i> cause large polar body in oocyte and human female infertility. Human Reproduction, 2022, 37, 1932-1944.	0.4	5
8	Dynamic mRNA degradome analyses indicate a role of histone H3K4 trimethylation in association with meiosis-coupled mRNA decay in oocyte aging. Nature Communications, 2022, 13, .	5.8	9
9	Ultrasensitive Ribo-seq reveals translational landscapes during mammalian oocyte-to-embryo transition and pre-implantation development. Nature Cell Biology, 2022, 24, 968-980.	4.6	57
10	NAT10-mediated <i>N</i>4-acetylcytidine modification is required for meiosis entry and progression in male germ cells. Nucleic Acids Research, 2022, 50, 10896-10913.	6.5	20
11	The DDB1-DCAF2 complex is essential for B cell development because it regulates cell cycle progression. Cellular and Molecular Immunology, 2021, 18, 758-760.	4.8	2
12	Role of CxxC-finger protein 1 in establishing mouse oocyte epigenetic landscapes. Nucleic Acids Research, 2021, 49, 2569-2582.	6.5	15
13	The CNOT4 Subunit of the CCR4â€NOT Complex is Involved in mRNA Degradation, Efficient DNA Damage Repair, and XY Chromosome Crossover during Male Germ Cell Meiosis. Advanced Science, 2021, 8, 2003636.	5.6	11
14	Revisiting poly(A)â€binding proteins: Multifaceted regulators during gametogenesis and early embryogenesis. BioEssays, 2021, 43, e2000335.	1.2	14
15	Oocyte meiosis-coupled poly(A) polymerase Î± phosphorylation and activation trigger maternal mRNA translation in mice. Nucleic Acids Research, 2021, 49, 5867-5880.	6.5	18
16	Lysophosphatidic acid improves oocyte quality during IVM by activating the ERK1/2 pathway in cumulus cells and oocytes. Molecular Human Reproduction, 2021, 27, .	1.3	10
17	Metabolic remodelling during early mouse embryo development. Nature Metabolism, 2021, 3, 1372-1384.	5.1	45
18	Biallelic mutations in <i>MOS</i> cause female infertility characterized by human early embryonic arrest and fragmentation. EMBO Molecular Medicine, 2021, 13, e14887.	3.3	27

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19	CNOT6/6L-mediated mRNA degradation in ovarian granulosa cells is a key mechanism of gonadotropin-triggered follicle development. Cell Reports, 2021, 37, 110007.	2.9	11
20	The CRL4-DCAF13 ubiquitin E3 ligase supports oocyte meiotic resumption by targeting PTEN degradation. Cellular and Molecular Life Sciences, 2020, 77, 2181-2197.	2.4	25
21	CFP1-dependent histone H3K4 trimethylation in murine oocytes facilitates ovarian follicle recruitment and ovulation in a cell-nonautonomous manner. Cellular and Molecular Life Sciences, 2020, 77, 2997-3012.	2.4	19
22	Characterization of zygotic genome activation-dependent maternal mRNA clearance in mouse. Nucleic Acids Research, 2020, 48, 879-894.	6.5	75
23	Dynamics and clinical relevance of maternal mRNA clearance during the oocyte-to-embryo transition in humans. Nature Communications, 2020, 11, 4917.	5.8	94
24	Positive Feedback Stimulation of Ccnb1 and Mos mRNA Translation by MAPK Cascade During Mouse Oocyte Maturation. Frontiers in Cell and Developmental Biology, 2020, 8, 609430.	1.8	19
25	ERK/MAPK signaling is essential for intestinal development through Wnt pathway modulation. Development (Cambridge), 2020, 147, .	1.2	17
26	Function and Regulation of Histone H3 Lysine-4 Methylation During Oocyte Meiosis and Maternal-to-Zygotic Transition. Frontiers in Cell and Developmental Biology, 2020, 8, 597498.	1.8	24
27	PABPN1L mediates cytoplasmic mRNA decay as a placeholder during the maternalâ€toâ€zygotic transition. EMBO Reports, 2020, 21, e49956.	2.0	40
28	Homozygous Mutations in BTG4 Cause Zygotic Cleavage Failure and Female Infertility. American Journal of Human Genetics, 2020, 107, 24-33.	2.6	63
29	CxxC finger protein 1-mediated histone H3 lysine-4 trimethylation is essential for proper meiotic crossover formation in mice. Development (Cambridge), 2020, 147, .	1.2	13
30	ZAR1 and ZAR2 are required for oocyte meiotic maturation by regulating the maternal transcriptome and mRNA translational activation. Nucleic Acids Research, 2019, 47, 11387-11402.	6.5	69
31	Selective inhibition of Tmem74 expression in BLA pyramidal neurons. Molecular Psychiatry, 2019, 24, 1399-1399.	4.1	1
32	A story of birth and death: mRNA translation and clearance at the onset of maternal-to-zygotic transition in mammalsâ€. Biology of Reproduction, 2019, 101, 579-590.	1.2	124
33	RNAâ€Binding Protein IGF2BP2/IMP2 is a Critical Maternal Activator in Early Zygotic Genome Activation. Advanced Science, 2019, 6, 1900295.	5.6	57
34	Maternal DCAF13 Regulates Chromatin Tightness to Contribute to Embryonic Development. Scientific Reports, 2019, 9, 6278.	1.6	11
35	Functional coupling of Tmem74 and HCN1 channels regulates anxiety-like behavior in BLA neurons. Molecular Psychiatry, 2019, 24, 1461-1477.	4.1	14
36	A combinatorial code for mRNA 3â€²-UTR-mediated translational control in the mouse oocyte. Nucleic Acids Research, 2019, 47, 328-340.	6.5	54

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37	CRL4DCAF2 is required for mature T-cell expansion via Aurora B-regulated proteasome activity. Journal of Autoimmunity, 2019, 96, 74-85.	3.0	9
38	Oocyte Meiotic Maturation. , 2019, , 181-203.		10
39	Mammalian nucleolar protein DCAF13 is essential for ovarian follicle maintenance and oocyte growth by mediating rRNA processing. Cell Death and Differentiation, 2019, 26, 1251-1266.	5.0	41
40	<scp>CNOT</scp> 6L couples the selective degradation of maternal transcripts to meiotic cell cycle progression in mouse oocyte. EMBO Journal, 2018, 37, .	3.5	97
41	Loss of oocyte Rps26 in mice arrests oocyte growth and causes premature ovarian failure. Cell Death and Disease, 2018, 9, 1144.	2.7	34
42	Evolutionarily-conserved MZIP2 is essential for crossover formation in mammalian meiosis. Communications Biology, 2018, 1, 147.	2.0	21
43	CFP1 coordinates histone H3 lysine-4 trimethylation and meiotic cell cycle progression in mouse oocytes. Nature Communications, 2018, 9, 3477.	5.8	51
44	<scp>DCAF</scp> 13 promotes pluripotency by negatively regulating <scp>SUV</scp> 39H1 stability during early embryonic development. EMBO Journal, 2018, 37, .	3.5	39
45	MAPK cascade couples maternal mRNA translation and degradation to meiotic cell cycle progression in mouse oocyte. Development (Cambridge), 2017, 144, 452-463.	1.2	78
46	Histone acetyltransferase KAT8 is essential for mouse oocyte development by regulating ROS levels. Development (Cambridge), 2017, 144, 2165-2174.	1.2	25
47	Maternal Sall4 Is Indispensable for Epigenetic Maturation of Mouse Oocytes. Journal of Biological Chemistry, 2017, 292, 1798-1807.	1.6	37
48	Mitochondrial Function Regulated by Mitoguardin-1/2 Is Crucial for Ovarian Endocrine Functions and Ovulation. Endocrinology, 2017, 158, 3988-3999.	1.4	14
49	CFP1 Regulates Histone H3K4 Trimethylation and Developmental Potential in Mouse Oocytes. Cell Reports, 2017, 20, 1161-1172.	2.9	89
50	The polycystic ovary syndrome-associated gene Yap1 is regulated by gonadotropins and sex steroid hormones in hyperandrogenism-induced oligo-ovulation in mouse. Molecular Human Reproduction, 2017, 23, 698-707.	1.3	41
51	Maternal DCAF2 is crucial for maintenance of genome stability during the first cell cycle in mice. Journal of Cell Science, 2017, 130, 3297-3307.	1.2	16
52	TET1 inhibits cell proliferation by inducing RASSF5 expression. Oncotarget, 2017, 8, 86395-86409.	0.8	12
53	BTG4 is a meiotic cell cycleâ€“coupled maternal-zygotic-transition licensing factor in oocytes. Nature Structural and Molecular Biology, 2016, 23, 387-394.	3.6	209
54	Protein synthesis and degradation are critical to regulate germline stem cell homeostasis in <i>Drosophila</i> testes. Development (Cambridge), 2016, 143, 2930-45.	1.2	37

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55	Oocyte-expressed yes-associated protein is a key activator of the early zygotic genome in mouse. Cell Research, 2016, 26, 275-287.	5.7	108
56	Mitoguardin Regulates Mitochondrial Fusion through MitoPLD and Is Required for Neuronal Homeostasis. Molecular Cell, 2016, 61, 111-124.	4.5	104
57	Development and characterization of a novel long-acting recombinant follicle stimulating hormone agonist by fusing Fc to an FSH-Î² subunit. Human Reproduction, 2016, 31, 169-182.	0.4	15
58	Mitoguardin-1 and -2 promote maturation and the developmental potential of mouse oocytes by maintaining mitochondrial dynamics and functions. Oncotarget, 2016, 7, 1155-1167.	0.8	27
59	CRL4VprBP E3 Ligase Promotes Monoubiquitylation and Chromatin Binding of TET Dioxygenases. Molecular Cell, 2015, 57, 247-260.	4.5	90
60	High salt primes a specific activation state of macrophages, M(Na). Cell Research, 2015, 25, 893-910.	5.7	189
61	ERK1/2 Activities Are Dispensable for Oocyte Growth but Are Required for Meiotic Maturation and Pronuclear Formation in Mouse. Journal of Genetics and Genomics, 2015, 42, 477-485.	1.7	35
62	A Voltage-Gated Calcium Channel Regulates Lysosomal Fusion with Endosomes and Autophagosomes and Is Required for Neuronal Homeostasis. PLoS Biology, 2015, 13, e1002103.	2.6	85
63	CRL4DCAF1 is required in activated oocytes for follicle maintenance and ovulation. Molecular Human Reproduction, 2015, 21, 195-205.	1.3	21
64	CRL4â€“DCAF1 ubiquitin E3 ligase directs protein phosphatase 2A degradation to control oocyte meiotic maturation. Nature Communications, 2015, 6, 8017.	5.8	62
65	YAP Promotes Ovarian Cancer Cell Tumorigenesis and Is Indicative of a Poor Prognosis for Ovarian Cancer Patients. PLoS ONE, 2014, 9, e91770.	1.1	130
66	YAP/TEAD Co-Activator Regulated Pluripotency and Chemoresistance in Ovarian Cancer Initiated Cells. PLoS ONE, 2014, 9, e109575.	1.1	68
67	CBP-CITED4 is required for luteinizing hormone-triggered target gene expression during ovulation. Molecular Human Reproduction, 2014, 20, 850-860.	1.3	26
68	Ubiquitin E3 Ligase CRL4CDT2/DCAF2 as a Potential Chemotherapeutic Target for Ovarian Surface Epithelial Cancer. Journal of Biological Chemistry, 2013, 288, 29680-29691.	1.6	67
69	CRL4 Complex Regulates Mammalian Oocyte Survival and Reprogramming by Activation of TET Proteins. Science, 2013, 342, 1518-1521.	6.0	100
70	Selective Smad4 Knockout in Ovarian Preovulatory Follicles Results in Multiple Defects in Ovulation. Molecular Endocrinology, 2013, 27, 966-978.	3.7	50
71	DNA Topoisomerase II Is Dispensable for Oocyte Meiotic Resumption but Is Essential for Meiotic Chromosome Condensation and Separation in Mice1. Biology of Reproduction, 2013, 89, 118.	1.2	35
72	TOP2Î² Is Essential for Ovarian Follicles That Are Hypersensitive to Chemotherapeutic Drugs. Molecular Endocrinology, 2013, 27, 1678-1691.	3.7	20

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73	Laser microbeam-induced DNA damage inhibits cell division in fertilized eggs and early embryos. Cell Cycle, 2013, 12, 3336-3344.	1.3	31
74	High-efficiency and heritable gene targeting in mouse by transcription activator-like effector nucleases. Nucleic Acids Research, 2013, 41, e120-e120.	6.5	81
75	Phosphoinositide 3-Kinase p110Î´ Mediates Estrogen- and FSH-Stimulated Ovarian Follicle Growth. Molecular Endocrinology, 2013, 27, 1468-1482.	3.7	44
76	Consequences of RAS and MAPK activation in the ovary: The good, the bad and the ugly. Molecular and Cellular Endocrinology, 2012, 356, 74-79.	1.6	53
77	CCAAT/Enhancer-Binding Proteins (C/EBP)-Î± and -Î² Are Essential for Ovulation, Luteinization, and the Expression of Key Target Genes. Molecular Endocrinology, 2011, 25, 253-268.	3.7	135
78	Î²-Catenin (CTNNB1) Promotes Preovulatory Follicular Development but Represses LH-Mediated Ovulation and Luteinization. Molecular Endocrinology, 2010, 24, 1529-1542.	3.7	152
79	Minireview: Physiological and Pathological Actions of RAS in the Ovary. Molecular Endocrinology, 2010, 24, 286-298.	3.7	43
80	CCAAT/Enhancer Binding Protein (C/EBP)-alpha and -beta Are Essential for Ovulation and Luteinization by Regulating the Expression of Novel Target Genes.. Biology of Reproduction, 2010, 83, 151-151.	1.2	1
81	FSH and FOXO1 Regulate Genes in the Sterol/Steroid and Lipid Biosynthetic Pathways in Granulosa Cells. Molecular Endocrinology, 2009, 23, 649-661.	3.7	134
82	Cell Typeâ€“Specific Targeted Mutations of <i>Kras</i> and <i>Pten</i> Document Proliferation Arrest in Granulosa Cells versus Oncogenic Insult to Ovarian Surface Epithelial Cells. Cancer Research, 2009, 69, 6463-6472.	0.4	76
83	MAPK3/1 (ERK1/2) in Ovarian Granulosa Cells Are Essential for Female Fertility. Science, 2009, 324, 938-941.	6.0	559
84	Targeted Disruption of Pten in Ovarian Granulosa Cells Enhances Ovulation and Extends the Life Span of Luteal Cells. Molecular Endocrinology, 2008, 22, 2128-2140.	3.7	162
85	Selective expression of<i>KrasG12D</i>in granulosa cells of the mouse ovary causes defects in follicle development and ovulation. Development (Cambridge), 2008, 135, 2127-2137.	1.2	129
86	Selective Expression of Constitutively Active KrasG12D in Granulosa Cells of the Mouse Ovary Causes Defects in Follicle Development and Ovulation.. Biology of Reproduction, 2008, 78, 127-127.	1.2	1
87	Mechanisms Regulating Oocyte Meiotic Resumption: Roles of Mitogen-Activated Protein Kinase. Molecular Endocrinology, 2007, 21, 2037-2055.	3.7	161
88	In Vitro Maturation and Fertilization of Pig Oocytes. , 2004, 253, 227-234.		9
89	Protein Kinase C and Mitogen-Activated Protein Kinase Cascade in Mouse Cumulus Cells: Cross Talk and Effect on Meiotic Resumption of Oocyte1. Biology of Reproduction, 2004, 70, 1178-1187.	1.2	63
90	Regulation of Ubiquitin-Proteasome Pathway on Pig Oocyte Meiotic Maturation and Fertilization1. Biology of Reproduction, 2004, 71, 853-862.	1.2	37

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91	Involvement of Mitogen-Activated Protein Kinase Cascade During Oocyte Maturation and Fertilization in Mammals1. Biology of Reproduction, 2004, 70, 535-547.	1.2	277
92	Function and interaction of maturation-promoting factor and mitogen-activated protein kinase during meiotic maturation and fertilization of oocyte*. Progress in Natural Science: Materials International, 2004, 14, 562-567.	1.8	0
93	Characterization of polo-like kinase-1 in rat oocytes and early embryos implies its functional roles in the regulation of meiotic maturation, fertilization, and cleavage. Molecular Reproduction and Development, 2003, 65, 318-329.	1.0	28
94	Characterization of Ribosomal S6 Protein Kinase p90rsk During Meiotic Maturation and Fertilization in Pig Oocytes: Mitogen-Activated Protein Kinase-Associated Activation and Localization1. Biology of Reproduction, 2003, 68, 968-977.	1.2	50
95	Involvement of Calcium/Calmodulin-Dependent Protein Kinase II (CaMKII) in Meiotic Maturation and Activation of Pig Oocytes1. Biology of Reproduction, 2003, 69, 1552-1564.	1.2	60
96	Roles of protein kinase C in oocyte meiotic maturation and fertilization*. Progress in Natural Science: Materials International, 2003, 13, 401-406.	1.8	3
97	Regulation of Cytoskeletal Functions in Pig Oocytes. Microscopy and Microanalysis, 2003, 9, 1200-1201.	0.2	0
98	Translocation of the Classic Protein Kinase C Isoforms in Porcine Oocytes: Implications of Protein Kinase C Involvement in the Regulation of Nuclear Activity and Cortical Granule Exocytosis. Experimental Cell Research, 2002, 277, 183-191.	1.2	45
99	Roles of MAP kinase signaling pathway in oocyte meiosis. Science Bulletin, 2002, 47, 1157-1162.	1.7	16
100	Inhibitory effects of cAMP and protein kinase C on meiotic maturation and MAP kinase phosphorylation in porcine oocytes. Molecular Reproduction and Development, 2002, 63, 480-487.	1.0	43