## Hongmei Wang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7948714/publications.pdf

Version: 2024-02-01

88 papers 4,599 citations

30 h-index 64 g-index

91 all docs 91 docs citations

times ranked

91

6144 citing authors

| #  | Article  | IF           | CITATIONS |
|----|--|--------------|-----------|
| 1  | Roadmap to embryo implantation: clues from mouse models. Nature Reviews Genetics, 2006, 7, 185-199.  | 16.3         | 1,070     |
| 2  | Physiological and molecular determinants of embryo implantation. Molecular Aspects of Medicine, 2013, 34, 939-980.   | 6.4          | 395       |
| 3  | Single-cell RNA-seq reveals the diversity of trophoblast subtypes and patterns of differentiation in the human placentaÂ. Cell Research, 2018, 28, 819-832.  | 12.0         | 278       |
| 4  | Genetic basis of cell–cell fusion mechanisms. Trends in Genetics, 2013, 29, 427-437.   | 6.7          | 199       |
| 5  | Circulating microRNAs are elevated in plasma from severe preeclamptic pregnancies. Reproduction, 2012, 143, 389-397.   | 2.6          | 171       |
| 6  | In vitro culture of cynomolgus monkey embryos beyond early gastrulation. Science, 2019, 366, .   | 12.6         | 149       |
| 7  | Differentially expressed plasma microRNAs in premature ovarian failure patients and the potential regulatory function of mir-23a in granulosa cell apoptosis. Reproduction, 2012, 144, 235-244.  | 2.6          | 148       |
| 8  | Reconstitution of $\langle i \rangle$ UCP1 $\langle  i \rangle$ using CRISPR/Cas9 in the white adipose tissue of pigs decreases fat deposition and improves thermogenic capacity. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9474-E9482. | 7.1          | 137       |
| 9  | One-step generation of triple gene-targeted pigs using CRISPR/Cas9 system. Scientific Reports, 2016, 6, 20620.   | 3.3          | 101       |
| 10 | miR-23a and miR-27a Promote Human Granulosa Cell Apoptosis by Targeting SMAD51. Biology of Reproduction, 2015, 93, 98.   | 2.7          | 95        |
| 11 | A single-cell transcriptomic landscape of the lungs of patients with COVID-19. Nature Cell Biology, 2021, 23, 1314-1328.   | 10.3         | 91        |
| 12 | Ubiquitin Ligase Cullin 7 Induces Epithelial-Mesenchymal Transition in Human Choriocarcinoma Cells. Journal of Biological Chemistry, 2010, 285, 10870-10879.   | 3.4          | 79        |
| 13 | Keratins are asymmetrically inherited fate determinants in the mammalian embryo. Nature, 2020, 585, 404-409.   | 27.8         | 69        |
| 14 | Uterine Rbpj is required for embryonic-uterine orientation and decidual remodeling via Notch pathway-independent and -dependent mechanisms. Cell Research, 2014, 24, 925-942.  | 12.0         | 68        |
| 15 | Three macrophage subsets are identified in the uterus during early human pregnancy. Cellular and Molecular Immunology, 2018, 15, 1027-1037.  | 10.5         | 67        |
| 16 | Comparative analysis of mesenchymal stem cells derived from amniotic membrane, umbilical cord, and chorionic plate under serum-free condition. Stem Cell Research and Therapy, 2019, 10, 19.   | 5 <b>.</b> 5 | 65        |
| 17 | Decoding dynamic epigenetic landscapes in human oocytes using single-cell multi-omics sequencing.<br>Cell Stem Cell, 2021, 28, 1641-1656.e7.   | 11.1         | 65        |
| 18 | Efficient CRISPR/Cas9-mediated biallelic gene disruption and site-specific knockin after rapid selection of highly active sgRNAs in pigs. Scientific Reports, 2015, 5, 13348.  | 3.3          | 62        |

| #  | Article   | IF   | Citations |
|----|---|------|-----------|
| 19 | Fine-Tuned and Cell-Cycle-Restricted Expression of Fusogenic Protein Syncytin-2 Maintains Functional Placental Syncytia. Cell Reports, 2017, 21, 1150-1159.                 | 6.4  | 62        |
| 20 | PLAC8, a new marker for human interstitial extravillous trophoblast cells, promotes their invasion and migration. Development (Cambridge), 2018, 145, .                     | 2.5  | 57        |
| 21 | Formative pluripotent stem cells show features of epiblast cells poised for gastrulation. Cell Research, 2021, 31, 526-541.   | 12.0 | 53        |
| 22 | Nodal signalling and apoptosis. Reproduction, 2007, 133, 847-853.   | 2.6  | 41        |
| 23 | Progress in deciphering trophoblast cell differentiation during human placentation. Current Opinion in Cell Biology, 2020, 67, 86-91.                                       | 5.4  | 41        |
| 24 | Uterine Fluid in Pregnancy: A Biological and Clinical Outlook. Trends in Molecular Medicine, 2017, 23, 604-614.   | 6.7  | 40        |
| 25 | Thyroid hormone regulates hematopoiesis via the TR-KLF9 axis. Blood, 2017, 130, 2161-2170.  | 1.4  | 40        |
| 26 | Role of placenta-specific protein 1 in trophoblast invasion and migration. Reproduction, 2014, 148, 343-352.  | 2.6  | 38        |
| 27 | Live Cell Imaging of In Vitro Human Trophoblast Syncytialization 1. Biology of Reproduction, 2014, 90, 117.   | 2.7  | 38        |
| 28 | Significance of IGFBP-4 in the Development of Fetal Growth Restriction. Journal of Clinical Endocrinology and Metabolism, 2012, 97, E1429-E1439.                            | 3.6  | 37        |
| 29 | The Brain-Uterus Connection: Brain Derived Neurotrophic Factor (BDNF) and Its Receptor (Ntrk2) Are Conserved in the Mammalian Uterus. PLoS ONE, 2014, 9, e94036.            | 2.5  | 36        |
| 30 | Human embryonic development: from peri-implantation to gastrulation. Trends in Cell Biology, 2022, 32, 18-29.   | 7.9  | 35        |
| 31 | Syndecan-4 negatively regulates antiviral signalling by mediating RIG-I deubiquitination via CYLD. Nature Communications, $2016, 7, 11848$ .                                | 12.8 | 34        |
| 32 | Clinical analysis of human umbilical cord mesenchymal stem cell allotransplantation in patients with premature ovarian insufficiency. Cell Proliferation, 2020, 53, e12938. | 5.3  | 33        |
| 33 | Pilot study of large-scale production of mutant pigs by ENU mutagenesis. ELife, 2017, 6, .  | 6.0  | 32        |
| 34 | Twist1 is involved in trophoblast syncytialization by regulating GCM1. Placenta, 2016, 39, 45-54.   | 1.5  | 31        |
| 35 | New insights into the function of Cullin 3 in trophoblast invasion and migration. Reproduction, 2015, 150, 139-149.   | 2.6  | 30        |
| 36 | Protective effects of human umbilical cord mesenchymal stem cell-derived conditioned medium on ovarian damage. Journal of Molecular Cell Biology, 2020, 12, 372-385.        | 3.3  | 30        |

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|----|--|-------------------|--------------------|
| 37 | Creation of miniature pig model of human Waardenburg syndrome type 2A by ENU mutagenesis. Human Genetics, 2017, 136, 1463-1475.  | 3.8               | 28                 |
| 38 | Human umbilical cord mesenchymal stem cells restore the ovarian metabolome and rescue premature ovarian insufficiency in mice. Stem Cell Research and Therapy, 2020, 11, 466.                            | 5 <b>.</b> 5      | 28                 |
| 39 | Smurf2 Participates in Human Trophoblast Cell Invasion by Inhibiting TGF-β Type I Receptor. Journal of Histochemistry and Cytochemistry, 2009, 57, 605-612.  | 2.5               | 25                 |
| 40 | De novo generation of macrophage from placenta-derived hemogenic endothelium. Developmental Cell, 2021, 56, 2121-2133.e6.  | 7.0               | 25                 |
| 41 | Wild Fulvous Fruit Bats (Rousettus leschenaulti) Exhibit Human-Like Menstrual Cycle 1. Biology of Reproduction, 2007, 77, 358-364.   | 2.7               | 23                 |
| 42 | High Frequency of <i>SERPINA6 </i> Polymorphisms that Reduce Plasma Corticosteroid-Binding Globulin Activity in Chinese Subjects. Journal of Clinical Endocrinology and Metabolism, 2012, 97, E678-E686. | 3.6               | 23                 |
| 43 | Fbxw8 is involved in the proliferation of human choriocarcinoma JEG-3 cells. Molecular Biology Reports, 2011, 38, 1741-1747.   | 2.3               | 22                 |
| 44 | The roles of ERAS during cell lineage specification of mouse early embryonic development. Open Biology, 2015, 5, 150092.   | 3.6               | 21                 |
| 45 | Impact of Corticosteroid-Binding Globulin Deficiency on Pregnancy and Neonatal Sex. Journal of Clinical Endocrinology and Metabolism, 2015, 100, 1819-1827.  | 3.6               | 21                 |
| 46 | A 2-bp insertion (c.67_68insCC) in MC1R causes recessive white coat color in Bama miniature pigs. Journal of Genetics and Genomics, 2017, 44, 215-217.   | 3.9               | 20                 |
| 47 | Expression of vascular endothelial growth factor and its receptors in the rhesus monkey (Macaca) Tj ETQq1 1 0.7 Development, 2003, 65, 123-131.  | '84314 rgf<br>2.0 | BT /Overlock<br>19 |
| 48 | Protein phosphatase 1A (PPM1A) is involved in human cytotrophoblast cell invasion and migration. Histochemistry and Cell Biology, 2009, 132, 169-179.  | 1.7               | 19                 |
| 49 | Maternal Smad3 deficiency compromises decidualization in mice. Journal of Cellular Biochemistry, 2012, 113, 3266-3275.   | 2.6               | 19                 |
| 50 | Zinc finger E-box–binding homeobox 1 (ZEB1) is required for neural differentiation of human embryonic stem cells. Journal of Biological Chemistry, 2018, 293, 19317-19329.                               | 3.4               | 19                 |
| 51 | Proprotein Convertase Furin Regulates Apoptosis and Proliferation of Granulosa Cells in the Rat<br>Ovary. PLoS ONE, 2013, 8, e50479.   | 2.5               | 18                 |
| 52 | Macrophage subsets at the maternal-fetal interface. Cellular and Molecular Immunology, 2020, 17, 889-891.  | 10.5              | 17                 |
| 53 | Peri-ovulatory putrescine supplementation reduces embryo resorption in older mice. Human Reproduction, 2015, 30, 1867-1875.  | 0.9               | 16                 |
| 54 | Oocyte-specific deletion of furin leads to female infertility by causing early secondary follicle arrest in mice. Cell Death and Disease, 2017, 8, e2846-e2846.  | 6.3               | 15                 |

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|----|--|------|-----------|
| 55 | Can peri-ovulatory putrescine supplementation improve egg quality in older infertile women?. Journal of Assisted Reproduction and Genetics, 2019, 36, 395-402.   | 2.5  | 15        |
| 56 | Effects of individually silenced N-glycosylation sites and non-synonymous single-nucleotide polymorphisms on the fusogenic function of human syncytin-2. Cell Adhesion and Migration, 2016, 10, 39-55. | 2.7  | 14        |
| 57 | Putrescine supplementation during in vitro maturation of aged mouse oocytes improves the quality of blastocysts. Reproduction, Fertility and Development, 2017, 29, 1392.                              | 0.4  | 14        |
| 58 | The zinc finger E-box-binding homeobox 1 (Zeb1) promotes the conversion of mouse fibroblasts into functional neurons. Journal of Biological Chemistry, 2017, 292, 12959-12970.                         | 3.4  | 14        |
| 59 | Tubulin detyrosination promotes human trophoblast syncytium formation. Journal of Molecular Cell Biology, 2019, 11, 967-978.   | 3.3  | 14        |
| 60 | Cooperation-based sperm clusters mediate sperm oviduct entry and fertilization. Protein and Cell, 2021, 12, 810-817.   | 11.0 | 14        |
| 61 | Deep RNA sequencing analysis of syncytialization-related genes during BeWo cell fusion.<br>Reproduction, 2017, 153, 35-48.   | 2.6  | 13        |
| 62 | Molecular evidence suggesting the persistence of residual SARSâ€CoVâ€2 and immune responses in the placentas of pregnant patients recovered from COVIDâ€19. Cell Proliferation, 2021, 54, e13091.      | 5.3  | 12        |
| 63 | Obesity modulates cell-cell interactions during ovarian folliculogenesis. IScience, 2022, 25, 103627.  | 4.1  | 12        |
| 64 | Involvement of nephrin in human placental trophoblast syncytialization. Reproduction, 2015, 149, 339-346.  | 2.6  | 11        |
| 65 | Bioengineered microenvironment to culture early embryos. Cell Proliferation, 2020, 53, e12754.   | 5.3  | 11        |
| 66 | Tracing the origin of the placental trophoblast cells in mouse embryo developmentâ€. Biology of Reproduction, 2020, 102, 598-606.  | 2.7  | 8         |
| 67 | Effects of Different Biomaterials and Cellular Status on Testicular Cell Selfâ€Organization. Advanced Biology, 2020, 4, e1900292.  | 3.0  | 8         |
| 68 | Meiosis I inXenopusoocytes is not error-prone despite lacking spindle assembly checkpoint. Cell Cycle, 2014, 13, 1602-1606.  | 2.6  | 6         |
| 69 | LMNA Determines Nuclear Morphology During Syncytialization of Human Trophoblast Stem Cells. Frontiers in Cell and Developmental Biology, 2022, 10, 836390.   | 3.7  | 6         |
| 70 | A new approach to detection of incomplete antibodies using hydrogel chromatography medium. Transfusion and Apheresis Science, 2015, 53, 337-341.   | 1.0  | 4         |
| 71 | An exonic splicing enhancer mutation in <i>DUOX2</i> causes aberrant alternative splicing and severe congenital hypothyroidism in Bama pigs. DMM Disease Models and Mechanisms, 2019, 12, .            | 2.4  | 4         |
| 72 | A Uterusâ€Inspired Niche Drives Blastocyst Development to the Early Organogenesis. Advanced Science, 2022, 9, .  | 11.2 | 4         |

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|----|--|------------|-----------------|
| 73 | Expression of vascular endothelial growth factor in rat uterus during peri-implantation. Science Bulletin, 2001, 46, 1178-1181.  | 1.7        | 3               |
| 74 | Comments on †In vitro culture of cynomolgus monkey embryos beyond early gastrulationâ€. Journal of Molecular Cell Biology, 2020, 12, 400-402.  | 3.3        | 3               |
| 75 | Current understanding in deciphering trophoblast cell differentiation during human placentation. Biology of Reproduction, 2022, 107, 317-326.  | 2.7        | 3               |
| 76 | Expression of gelatinases and tissue inhibitors of metalloproteinases in the rhesus monkey (Macaca) Tj ETQq0 0   | 0 rgBT /Ov | verlock 10 Tf 5 |
| 77 | Successful derivation of human trophoblast stem cellsâ€. Biology of Reproduction, 2018, 99, 271-272.   | 2.7        | 2               |
| 78 | Convolutional neural network-based automatic classification for incomplete antibody reaction intensity in solid phase anti-human globulin test image. Medical and Biological Engineering and Computing, 2022, 60, 1211-1222. | 2.8        | 2               |
| 79 | Expression of Smad2 and Smad4 in rhesus monkey endometrium during the menstrual cycle and early pregnancy *. Progress in Natural Science: Materials International, 2003, 13, 584-589.  | 4.4        | 1               |
| 80 | Single nucleotide polymorphisms in the human corticosteroid-binding globulin promoter alter transcriptional activity. Science China Life Sciences, 2012, 55, 699-708.  | 4.9        | 1               |
| 81 | Variations in mesenchymal-epithelial transition-related transcription factors during reprogramming of somatic cells from different germ layers into iPSCs. Journal of Genetics and Genomics, 2016, 43, 609-612.              | 3.9        | 1               |
| 82 | Expression profile and potential functional differentiation of the Speedy/RINGO family in mice. Gene, 2019, 683, 80-86.  | 2.2        | 1               |
| 83 | Expression and regulation of metalloproteinases-2, -9 and tissue inhibitors of metalloproteinases in rat corpus luteum. Science Bulletin, 2002, 47, 1011-1014.   | 1.7        | O               |
| 84 | Effect of UPP on the expression of VEGF and its receptors in mouse uterus during peri-implantation. Science Bulletin, 2003, 48, 338-342.   | 1.7        | 0               |
| 85 | Characterization of a Novel Microcarrier Using Magnetized Red Blood Cells with Terminal Aldehydes.<br>Analytical Letters, 2016, 49, 768-777.   | 1.8        | O               |
| 86 | HUMAN-LIKE MENSTRUAL CYCLE EXHIBITED BY WILD FULVOUS BATS (Rousettus leschenaultia). Biology of Reproduction, 2007, 77, 157-157.   | 2.7        | 0               |
| 87 | Ubiquitin Ligase Cullin 7 Induces Epithelial-Mesenchymal Transition and Promotes Migration and Invasion of Human Choriocarcinoma Cells Biology of Reproduction, 2009, 81, 423-423.   | 2.7        | 0               |
| 88 | A CNN-LASSO ensemble classification model for incomplete antibody reactants screening in coombs test. Technology and Health Care, 2022, , 1-12.  | 1.2        | O               |