

# Guiying Nie

## List of Publications by Year in descending order

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99  
papers

3,469  
citations

136740

32  
h-index

155451

55  
g-index

101  
all docs

101  
docs citations

101  
times ranked

3046  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fertile ground: human endometrial programming and lessons in health and disease. <i>Nature Reviews Endocrinology</i> , 2016, 12, 654-667.	4.3	216
2	Acclimation of photosynthetic proteins to rising atmospheric CO <sub>2</sub> . <i>Photosynthesis Research</i> , 1994, 39, 413-425.	1.6	209
3	Effects of free-air CO <sub>2</sub> enrichment on the development of the photosynthetic apparatus in wheat, as indicated by changes in leaf proteins. <i>Plant, Cell and Environment</i> , 1995, 18, 855-864.	2.8	146
4	Presence of active gelatinases in endometrial carcinoma and correlation of matrix metalloproteinase expression with increasing tumor grade and invasion. <i>Cancer</i> , 2002, 94, 1466-1475.	2.0	136
5	Society for Reproductive Biology Founders' Lecture 2009. Preparing fertile soil: the importance of endometrial receptivity. <i>Reproduction, Fertility and Development</i> , 2009, 21, 923.	0.1	123
6	Photosynthesis and conductance of spring-wheat leaves: field response to continuous free-air atmospheric CO <sub>2</sub> enrichment. <i>Plant, Cell and Environment</i> , 1998, 21, 659-669.	2.8	121
7	Identification and cloning of two isoforms of human high-temperature requirement factor A3 (HtrA3), characterization of its genomic structure and comparison of its tissue distribution with HtrA1 and HtrA2. <i>Biochemical Journal</i> , 2003, 371, 39-48.	1.7	121
8	Progesterone Inhibits Activation of Latent Matrix Metalloproteinase (MMP)-2 by Membrane-Type 1 MMP: Enzymes Coordinately Expressed in Human Endometrium <sup>1</sup> . <i>Biology of Reproduction</i> , 2000, 62, 85-94.	1.2	110
9	Effects of ozone on the photosynthetic apparatus and leaf proteins during leaf development in wheat. <i>Plant, Cell and Environment</i> , 1993, 16, 643-651.	2.8	107
10	Local regulation of implantation at the human fetal-maternal interface. <i>International Journal of Developmental Biology</i> , 2010, 54, 313-322.	0.3	102
11	Modifications to Thylakoid Composition during Development of Maize Leaves at Low Growth Temperatures. <i>Plant Physiology</i> , 1991, 95, 184-191.	2.3	88
12	Serine proteases HTRA1 and HTRA3 are down-regulated with increasing grades of human endometrial cancer. <i>Gynecologic Oncology</i> , 2006, 103, 253-260.	0.6	86
13	Proteomics of the human endometrium and uterine fluid: a pathway to biomarker discovery. <i>Fertility and Sterility</i> , 2013, 99, 1086-1092.	0.5	83
14	Endometrial calbindins are critical for embryo implantation: Evidence from in vivo use of morpholino antisense oligonucleotides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 8028-8033.	3.3	80
15	Response of the photosynthetic apparatus in maize leaves grown at low temperature on transfer to normal growth temperature. <i>Plant, Cell and Environment</i> , 1995, 18, 1-12.	2.8	79
16	Serine Peptidase HTRA3 Is Closely Associated with Human Placental Development and Is Elevated in Pregnancy Serum <sup>1</sup> . <i>Biology of Reproduction</i> , 2006, 74, 366-374.	1.2	59
17	The involvement of the photoinhibition of photosystem II and impaired membrane energization in the reduced quantum yield of carbon assimilation in chilled maize. <i>Planta</i> , 1990, 181, 78-84.	1.6	56
18	Requirement for Proprotein Convertase 5/6 during Decidualization of Human Endometrial Stromal Cells in Vitro. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2005, 90, 1028-1034.	1.8	54

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19	Inhibiting Uterine PC6 Blocks Embryo Implantation: An Obligatory Role for a Proprotein Convertase in Fertility <sup>1</sup> . <i>Biology of Reproduction</i> , 2005, 72, 1029-1036.	1.2	50
20	Photosynthetic productivity of an immature maize crop: changes in quantum yield of CO <sub>2</sub> assimilation, conversion efficiency and thylakoid proteins. <i>Plant, Cell and Environment</i> , 1991, 14, 947-954.	2.8	49
21	Proteases at the endometrial-trophoblast interface: their role in implantation. <i>Reviews in Endocrine and Metabolic Disorders</i> , 2002, 3, 133-143.	2.6	45
22	Decidual HtrA3 negatively regulates trophoblast invasion during human placentation. <i>Human Reproduction</i> , 2011, 26, 748-757.	0.4	43
23	Specific and Transient Up-Regulation of Proprotein Convertase 6 at the Site of Embryo Implantation and Identification of a Unique Transcript in Mouse Uterus During Early Pregnancy <sup>1</sup> . <i>Biology of Reproduction</i> , 2003, 68, 439-447.	1.2	40
24	Human HtrA4 Expression Is Restricted to the Placenta, Is Significantly Up-Regulated in Early-Onset Preeclampsia, and High Levels of HtrA4 Cause Endothelial Dysfunction. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2015, 100, E936-E945.	1.8	40
25	Genes involved in implantation. <i>Reproduction, Fertility and Development</i> , 2001, 13, 41.	0.1	38
26	Newly identified endometrial genes of importance for implantation. <i>Journal of Reproductive Immunology</i> , 2002, 53, 215-225.	0.8	35
27	Distinct expression and localization of serine protease HtrA1 in human endometrium and first-trimester placenta. <i>Developmental Dynamics</i> , 2006, 235, 3448-3455.	0.8	35
28	Serine protease HtrA1 is developmentally regulated in trophoblast and uterine decidual cells during placental formation in the mouse. <i>Developmental Dynamics</i> , 2005, 233, 1102-1109.	0.8	34
29	Complex expression patterns support potential roles for maternally derived activins in the establishment of pregnancy in mouse. <i>Reproduction</i> , 2006, 132, 799-810.	1.1	34
30	PC6 levels in uterine lavage are closely associated with uterine receptivity and significantly lower in a subgroup of women with unexplained infertility. <i>Human Reproduction</i> , 2011, 26, 840-846.	0.4	34
31	Placental HtrA3 Is Regulated by Oxygen Tension and Serum Levels Are Altered during Early Pregnancy in Women Destined to Develop Preeclampsia. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2011, 96, 403-411.	1.8	33
32	Inhibition of HTRA3 stimulates trophoblast invasion during human placental development. <i>Placenta</i> , 2010, 31, 1085-1092.	0.7	32
33	Serum levels of GDF15 are reduced in preeclampsia and the reduction is more profound in late-onset than early-onset cases. <i>Cytokine</i> , 2016, 83, 226-230.	1.4	32
34	Posttranslational Activation of Bone Morphogenetic Protein 2 Is Mediated by Proprotein Convertase 6 during Decidualization for Pregnancy Establishment. <i>Endocrinology</i> , 2010, 151, 3909-3917.	1.4	31
35	Proprotein Convertase 5/6 Is Critical for Embryo Implantation in Women: Regulating Receptivity by Cleaving EBP50, Modulating Ezrin Binding, and Membrane-Cytoskeletal Interactions. <i>Endocrinology</i> , 2011, 152, 5041-5052.	1.4	31
36	HtrA3 Is Downregulated in Cancer Cell Lines and Significantly Reduced in Primary Serous and Granulosa Cell Ovarian Tumors. <i>Journal of Cancer</i> , 2013, 4, 152-164.	1.2	31

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37	Uterine Lavage or Aspirate: Which View of the Intrauterine Environment?. <i>Reproductive Sciences</i> , 2012, 19, 1125-1132.	1.1	30
38	Serum HtrA1 is differentially regulated between early-onset and late-onset preeclampsia. <i>Placenta</i> , 2015, 36, 990-995.	0.7	29
39	A high-throughput in vitro model of human embryo attachment. <i>Fertility and Sterility</i> , 2012, 97, 974-978.	0.5	28
40	Prevalence and risk factors of intrahepatic cholestasis of pregnancy in a Chinese population. <i>Scientific Reports</i> , 2020, 10, 16307.	1.6	28
41	HtrA3 as an Early Marker for Preeclampsia: Specific Monoclonal Antibodies and Sensitive High-Throughput Assays for Serum Screening. <i>PLoS ONE</i> , 2012, 7, e45956.	1.1	28
42	Proteomic Approach Identifies Alterations in Cytoskeletal Remodelling Proteins during Decidualization of Human Endometrial Stromal Cells. <i>Journal of Proteome Research</i> , 2010, 9, 5739-5747.	1.8	26
43	High-temperature requirement factor A3 (Htra3): A novel serine protease and its potential role in ovarian function and ovarian cancers. <i>Molecular and Cellular Endocrinology</i> , 2010, 327, 13-18.	1.6	26
44	Cleavage of endometrial $\alpha$ -integrins into their functional forms is mediated by proprotein convertase 5/6. <i>Human Reproduction</i> , 2012, 27, 2766-2774.	0.4	25
45	MicroRNAs in the Regulation of Endometrial Receptivity for Embryo Implantation. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6210.	1.8	22
46	Identification of novel endometrial targets for contraception. <i>Contraception</i> , 2005, 71, 272-281.	0.8	21
47	HTRA3 expression in non-pregnant rhesus monkey ovary and endometrium, and at the maternal-fetal interface during early pregnancy. <i>Reproductive Biology and Endocrinology</i> , 2008, 6, 22.	1.4	21
48	Application of the wheat-germ cell-free translation system to produce high temperature requirement A3 (HtrA3) proteases. <i>BioTechniques</i> , 2012, 52, 23-28.	0.8	21
49	Endometrial CRISP3 Is Regulated Throughout the Mouse Estrous and Human Menstrual Cycle and Facilitates Adhesion and Proliferation of Endometrial Epithelial Cells. <i>Biology of Reproduction</i> , 2015, 92, 99.	1.2	21
50	Serum podocalyxin is significantly increased in early-onset preeclampsia and may represent a novel marker of maternal endothelial cell dysfunction. <i>Journal of Hypertension</i> , 2017, 35, 2287-2294.	0.3	21
51	HtrA3, a Serine Protease Possessing an IGF-binding Domain, is Selectively Expressed at the Maternal-Fetal Interface During Placentation in the Mouse. <i>Placenta</i> , 2006, 27, 491-501.	0.7	20
52	HtrA3 is negatively correlated with lymph node metastasis in invasive ductal breast cancer. <i>Tumor Biology</i> , 2013, 34, 3611-3617.	0.8	20
53	HtrA4 may play a major role in inhibiting endothelial repair in pregnancy complication preeclampsia. <i>Scientific Reports</i> , 2019, 9, 2728.	1.6	20
54	Proteomic Identification of Caldesmon as a Physiological Substrate of Proprotein Convertase 6 in Human Uterine Decidual Cells Essential for Pregnancy Establishment. <i>Journal of Proteome Research</i> , 2009, 8, 4983-4992.	1.8	19

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55	High levels of HtrA4 observed in preeclamptic circulation drastically alter endothelial gene expression and induce inflammation in human umbilical vein endothelial cells. <i>Placenta</i> , 2016, 47, 46-55.	0.7	19
56	Posttranslational removal of $\beta$ -dystroglycan N terminus by PC5/6 cleavage is important for uterine preparation for embryo implantation in women. <i>FASEB Journal</i> , 2015, 29, 4011-4022.	0.2	18
57	Podocalyxin in Normal Tissue and Epithelial Cancer. <i>Cancers</i> , 2021, 13, 2863.	1.7	18
58	Hypoxia is involved in the reduction of HtrA3 in patients with endometrial hyperplasia and cancer. <i>Biochemical and Biophysical Research Communications</i> , 2018, 503, 2918-2923.	1.0	17
59	Elevated circulating HtrA4 in preeclampsia may alter endothelial expression of senescence genes. <i>Placenta</i> , 2020, 90, 71-81.	0.7	17
60	Podocalyxin is a key negative regulator of human endometrial epithelial receptivity for embryo implantation. <i>Human Reproduction</i> , 2021, 36, 1353-1366.	0.4	17
61	Hormonal and non-hormonal agents at implantation as targets for contraception. <i>Reproduction, Fertility and Development</i> , 1997, 9, 65.	0.1	17
62	HTRA3 is Reduced in Ovarian Cancers Regardless of Stage. <i>Cancer Investigation</i> , 2014, 32, 464-469.	0.6	15
63	Construction and application of a multispecific competitor to quantify mRNA of matrix metalloproteinases and their tissue inhibitors in small human biopsies. <i>Journal of Proteomics</i> , 1999, 40, 81-99.	2.4	14
64	Activity-Modulating Monoclonal Antibodies to the Human Serine Protease HtrA3 Provide Novel Insights into Regulating HtrA Proteolytic Activities. <i>PLoS ONE</i> , 2014, 9, e108235.	1.1	13
65	Proprotein convertase 5/6 cleaves platelet-derived growth factor A in the human endometrium in preparation for embryo implantation. <i>Molecular Human Reproduction</i> , 2015, 21, 262-270.	1.3	13
66	Multiple Soluble TGF- $\beta$ 2 Receptors in Addition to Soluble Endoglin Are Elevated in Preeclamptic Serum and They Synergistically Inhibit TGF- $\beta$ 2 Signaling. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2017, 102, 3065-3074.	1.8	13
67	HtrA3 Isoform-Specific ELISAs for Early Detection of Preeclampsia. <i>SLAS Discovery</i> , 2018, 23, 1092-1099.	1.4	13
68	Evolutionary conservation of mammalian HTRA3 and its developmental regulation in the rat ovary. <i>Journal of Experimental Zoology Part B: Molecular and Developmental Evolution</i> , 2009, 312B, 701-713.	0.6	12
69	Second- and third-trimester serum levels of growth-differentiation factor-15 in prediction of pre-eclampsia. <i>Ultrasound in Obstetrics and Gynecology</i> , 2020, 56, 879-884.	0.9	12
70	HtrA4 is up-regulated during trophoblast syncytialization and BeWo cells fail to syncytialize without HtrA4. <i>Scientific Reports</i> , 2021, 11, 14363.	1.6	12
71	Enzyme activity assays within microstructured optical fibers enabled by automated alignment. <i>Biomedical Optics Express</i> , 2012, 3, 3304.	1.5	11
72	Elevated protease HtrA4 in the maternal circulation of preeclampsia may contribute to endothelial barrier disruption by cleaving key junctional protein VE-cadherin. <i>Placenta</i> , 2019, 76, 51-53.	0.7	11

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73	Overview of Human HtrA Family Proteases and Their Distinctive Physiological Roles and Unique Involvement in Diseases, Especially Cancer and Pregnancy Complications. <i>International Journal of Molecular Sciences</i> , 2021, 22, 10756.	1.8	11
74	Cytoskeletal remodelling proteins identified in fetal-maternal interface in pregnant women and rhesus monkeys. <i>Journal of Molecular Histology</i> , 2011, 42, 161-166.	1.0	10
75	Maternal HtrA3 optimizes placental development to influence offspring birth weight and subsequent white fat gain in adulthood. <i>Scientific Reports</i> , 2017, 7, 4627.	1.6	10
76	High levels of HtrA4 detected in preeclamptic circulation may disrupt endothelial cell function by cleaving the main VEGFA receptor KDR. <i>FASEB Journal</i> , 2019, 33, 5058-5066.	0.2	10
77	Proprotein convertases in post-menopausal endometrial cancer: Distinctive regulation and non-invasive diagnosis. <i>Biochemical and Biophysical Research Communications</i> , 2012, 419, 809-814.	1.0	9
78	Serum podocalyxin for early detection of preeclampsia at 11-13 weeks of gestation. <i>Placenta</i> , 2018, 71, 13-15.	0.7	9
79	Measuring PC activity in endocervical swab may provide a simple and non-invasive method to detect endometrial cancer in post-menopausal women. <i>Oncotarget</i> , 2016, 7, 46573-46578.	0.8	9
80	Embryo implantation is closely associated with dynamic expression of proprotein convertase 5/6 in the rabbit uterus. <i>Reproductive Biology and Endocrinology</i> , 2011, 9, 43.	1.4	8
81	Podocalyxin inhibits human embryo implantation <i>in vitro</i> and luminal podocalyxin in putative receptive endometrium is associated with implantation failure in fertility treatment. <i>Fertility and Sterility</i> , 2021, 116, 1391-1401.	0.5	8
82	Combination of hydrogel nanoparticles and proteomics to reveal secreted proteins associated with decidualization of human uterine stromal cells. <i>Proteome Science</i> , 2011, 9, 50.	0.7	6
83	Low Serum Levels of HtrA3 at 15 Weeks of Gestation Are Associated with Late-Onset Preeclampsia Development and Small for Gestational Age Birth. <i>Fetal Diagnosis and Therapy</i> , 2019, 46, 392-401.	0.6	6
84	PEGylation of a proprotein convertase peptide inhibitor for vaginal route of drug delivery: <i>In vitro</i> bioactivity, stability and <i>in vivo</i> pharmacokinetics. <i>Peptides</i> , 2012, 38, 266-274.	1.2	5
85	Development of a high-throughput assay for human proprotein convertase 5/6 for detecting uterine receptivity. <i>Analytical Biochemistry</i> , 2015, 475, 14-21.	1.1	5
86	Molecular and Cellular Basis of Human Embryo Implantation. , 2019, , 10-18.		5
87	Small Molecule Proprotein Convertase Inhibitors for Inhibition of Embryo Implantation. <i>PLoS ONE</i> , 2013, 8, e81380.	1.1	3
88	Total PC Activity Is Increased in Uterine Lavage of Post-Menopausal Endometrial but Not Ovarian Cancer Patients. <i>Journal of Cancer</i> , 2016, 7, 1812-1814.	1.2	3
89	A High-Throughput Assay for the Detection of $\beta$ -Dystroglycan N-Terminus in Human Uterine Fluid to Determine Uterine Receptivity. <i>Journal of Biomolecular Screening</i> , 2016, 21, 408-413.	2.6	3
90	Proteomic Identification of Proprotein Convertase 6 Substrates in Human Endometrial Stromal Cells During Decidualization.. <i>Biology of Reproduction</i> , 2008, 78, 57-57.	1.2	3

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91	The significance of post-translational removal of $\beta$ -DC-N in early stage endometrial cancer development. <i>Oncotarget</i> , 2017, 8, 81942-81952.	0.8	3
92	Podocalyxin promotes an impermeable epithelium and inhibits pro-implantation factors to negatively regulate endometrial receptivity. <i>Scientific Reports</i> , 2021, 11, 24016.	1.6	3
93	Inhibition of proprotein convertase 5/6 activity: potential for nonhormonal women-centered contraception. <i>Contraception</i> , 2012, 85, 602-610.	0.8	2
94	Second and third trimester serum levels of HtrA1 in pregnancies affected by pre-eclampsia. <i>Placenta</i> , 2021, 106, 1-6.	0.7	2
95	Inhibition of embryo implantation in mice through vaginal administration of a proprotein convertase 6 inhibitor. <i>Reproductive Biology</i> , 2014, 14, 155-159.	0.9	1
96	Serum podocalyxin at 11-13 weeks of gestation in the prediction of small for gestational age neonates. <i>Journal of Perinatology</i> , 2019, 39, 784-790.	0.9	1
97	A Proteomic Protocol to Identify Physiological Substrates of Pro-protein Convertases. <i>Methods in Molecular Biology</i> , 2011, 768, 325-341.	0.4	1
98	HTRA3 Expression in Non-pregnant Rhesus Monkey Ovary and Endometrium, and at the Maternal-Fetal Interface During Early Pregnancy. <i>Biology of Reproduction</i> , 2008, 78, 61-61.	1.2	1
99	Podocalyxin molecular characteristics and endometrial expression: high conservation between humans and macaques but divergence in mice. <i>Biology of Reproduction</i> , 2022, , .	1.2	1