Martin M Matzuk

List of Publications by Citations

278 papers	29,507 citations	85 h-index	167 g-index
290 ext. papers	32,345 ext. citations	9.8 avg, IF	6.85 L-index

#	Paper	IF	Citations
278	Growth differentiation factor-9 is required during early ovarian folliculogenesis. *Nature*, **1996**, 383, 531-5	50.4	1272
277	Follicle stimulating hormone is required for ovarian follicle maturation but not male fertility. *Nature Genetics*, **1997**, 15, 201-4	36.3	1064
276	Social amnesia in mice lacking the oxytocin gene. *Nature Genetics*, **2000**, 25, 284-8	36.3	815
275	Alpha-inhibin is a tumour-suppressor gene with gonadal specificity in mice. *Nature*, **1992**, 360, 313-9	50.4	815
274	Continuous fatty acid oxidation and reduced fat storage in mice lacking acetyl-CoA carboxylase 2. *Science*, **2001**, 291, 2613-6	33.3	733
273	Intercellular communication in the mammalian ovary: oocytes carry the conversation. *Science*, **2002**, 296, 2178-80	33.3	684
272	The biology of infertility: research advances and clinical challenges. *Nature Medicine*, **2008**, 14, 1197-213	50.5	671
271	Synergistic roles of bone morphogenetic protein 15 and growth differentiation factor 9 in ovarian function. *Molecular Endocrinology*, **2001**, 15, 854-66		613
270	Math1 is essential for genesis of cerebellar granule neurons. *Nature*, **1997**, 390, 169-72	50.4	564
269	Pervasive social deficits, but normal parturition, in oxytocin receptor-deficient mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 16096-101	11.5	553
268	Anti-Müllerian hormone attenuates the effects of FSH on follicle development in the mouse ovary. *Endocrinology*, **2001**, 142, 4891-9	4.8	518
267	Different phenotypes for mice deficient in either activins or activin receptor type II. *Nature*, **1995**, 374, 356-60	50.4	499
266	Multiple defects and perinatal death in mice deficient in follistatin. *Nature*, **1995**, 374, 360-3	50.4	499
265	Functional analysis of activins during mammalian development. *Nature*, **1995**, 374, 354-6	50.4	496
264	Paracrine actions of growth differentiation factor-9 in the mammalian ovary. *Molecular Endocrinology*, **1999**, 13, 1035-48		492
263	NOBOX deficiency disrupts early folliculogenesis and oocyte-specific gene expression. *Science*, **2004**, 305, 1157-9	33.3	402
262	Regulation of muscle growth by multiple ligands signaling through activin type II receptors. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 18117-22	11.5	396

261	The bone morphogenetic protein 15 gene is X-linked and expressed in oocytes. *Molecular Endocrinology*, **1998**, 12, 1809-17		373
260	Cardiac defects and altered ryanodine receptor function in mice lacking FKBP12. *Nature*, **1998**, 391, 489-92	32.4	365
259	Molecular characterization of the follicle defects in the growth differentiation factor 9-deficient ovary. *Molecular Endocrinology*, **1999**, 13, 1018-34		364
258	Disruption of gastrulation and heparan sulfate biosynthesis in EXT1-deficient mice. *Developmental Biology*, **2000**, 224, 299-311	3.1	342
257	Zygote arrest 1 (Zar1) is a novel maternal-effect gene critical for the oocyte-to-embryo transition. *Nature Genetics*, **2003**, 33, 187-91	36.3	333
256	Cyclin A1 is required for meiosis in the male mouse. *Nature Genetics*, **1998**, 20, 377-80	36.3	318
255	Genetic dissection of mammalian fertility pathways. *Nature Cell Biology*, **2002**, 4 Suppl, s41-9	23.4	318
254	Knockout of pentraxin 3, a downstream target of growth differentiation factor-9, causes female subfertility. *Molecular Endocrinology*, **2002**, 16, 1154-67		311
253	Roles of NPM2 in chromatin and nucleolar organization in oocytes and embryos. *Science*, **2003**, 300, 633-6	33.3	291
252	Infant vocalization, adult aggression, and fear behavior of an oxytocin null mutant mouse. *Hormones and Behavior*, **2000**, 37, 145-55	3.7	288
251	Small-molecule inhibition of BRDT for male contraception. *Cell*, **2012**, 150, 673-84	56.2	277
250	Synergistic roles of BMP15 and GDF9 in the development and function of the oocyte-cumulus cell complex in mice: genetic evidence for an oocyte-granulosa cell regulatory loop. *Developmental Biology*, **2004**, 276, 64-73	3.1	272
249	High-grade serous ovarian cancer arises from fallopian tube in a mouse model. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 3921-6	11.5	270
248	Characterization of oocyte and follicle development in growth differentiation factor-9-deficient mice. *Developmental Biology*, **1998**, 204, 373-84	3.1	262
247	Targeted disruption of luteinizing hormone beta-subunit leads to hypogonadism, defects in gonadal steroidogenesis, and infertility. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 17294-9	11.5	249
246	Oocyte-expressed TGF-beta superfamily members in female fertility. *Molecular and Cellular Endocrinology*, **2000**, 159, 1-5	4.4	231
245	Deletion of Dicer in somatic cells of the female reproductive tract causes sterility. *Molecular Endocrinology*, **2008**, 22, 2336-52		223
244	Oogenesis requires germ cell-specific transcriptional regulators Sohlh1 and Lhx8. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 8090-5	11.5	213

243	Molecular profiling uncovers a p53-associated role for microRNA-31 in inhibiting the proliferation of serous ovarian carcinomas and other cancers. *Cancer Research*, **2010**, 70, 1906-15	10.1	209
242	A link between mir-100 and FRAP1/mTOR in clear cell ovarian cancer. *Molecular Endocrinology*, **2010**, 24, 447-63		198
241	Insulin-like growth factor I regulates gonadotropin responsiveness in the murine ovary. *Molecular Endocrinology*, **1997**, 11, 1924-33		198
240	Growth differentiation factor 9:bone morphogenetic protein 15 heterodimers are potent regulators of ovarian functions. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E776-85	11.5	194
239	TEX14 is essential for intercellular bridges and fertility in male mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 4982-7	11.5	192
238	Mutant mice lacking acetyl-CoA carboxylase 1 are embryonically lethal. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 12011-6	11.5	192
237	Regulation of muscle mass by follistatin and activins. *Molecular Endocrinology*, **2010**, 24, 1998-2008		191
236	GDF11 controls the timing of progenitor cell competence in developing retina. *Science*, **2005**, 308, 1927-30	33.3	188
235	MLL2 is required in oocytes for bulk histone 3 lysine 4 trimethylation and transcriptional silencing. *PLoS Biology*, **2010**, 8, e1000453	9.7	186
234	Functional microRNA involved in endometriosis. *Molecular Endocrinology*, **2011**, 25, 821-32		186
233	Mice lacking ataxin-1 display learning deficits and decreased hippocampal paired-pulse facilitation. *Journal of Neuroscience*, **1998**, 18, 5508-16	6.6	181
232	Fatty acid synthesis is essential in embryonic development: fatty acid synthase null mutants and most of the heterozygotes die in utero. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 6358-63	11.5	179
231	Overexpression of mouse follistatin causes reproductive defects in transgenic mice. *Molecular Endocrinology*, **1998**, 12, 96-106		175
230	Insertion of Inhbb into the Inhba locus rescues the Inhba-null phenotype and reveals new activin functions. *Nature Genetics*, **2000**, 25, 453-7	36.3	173
229	Smad5 is required for mouse primordial germ cell development. *Mechanisms of Development*, **2001**, 104, 61-7	1.7	170
228	Conditional deletion of Smad1 and Smad5 in somatic cells of male and female gonads leads to metastatic tumor development in mice. *Molecular and Cellular Biology*, **2008**, 28, 248-57	4.8	169
227	Granulosa cell-specific inactivation of follistatin causes female fertility defects. *Molecular Endocrinology*, **2004**, 18, 953-67		167
226	Follistatin regulates enamel patterning in mouse incisors by asymmetrically inhibiting BMP signaling and ameloblast differentiation. *Developmental Cell*, **2004**, 7, 719-30	10.2	163

225	Major chromatin remodeling in the germinal vesicle (GV) of mammalian oocytes is dispensable for global transcriptional silencing but required for centromeric heterochromatin function. *Developmental Biology*, **2004**, 275, 447-58	3.1	163
224	Loss of zona pellucida binding proteins in the acrosomal matrix disrupts acrosome biogenesis and sperm morphogenesis. *Molecular and Cellular Biology*, **2007**, 27, 6794-805	4.8	161
223	Transgenic models to study gonadotropin function: the role of follicle-stimulating hormone in gonadal growth and tumorigenesis. *Molecular Endocrinology*, **1999**, 13, 851-65		157
222	Premature luteinization and cumulus cell defects in ovarian-specific Smad4 knockout mice. *Molecular Endocrinology*, **2006**, 20, 1406-22		140
221	HILS1 is a spermatid-specific linker histone H1-like protein implicated in chromatin remodeling during mammalian spermiogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 10546-51	11.5	140
220	Redundant roles of SMAD2 and SMAD3 in ovarian granulosa cells in vivo. *Molecular and Cellular Biology*, **2008**, 28, 7001-11	4.8	136
219	Role of satellite cells versus myofibers in muscle hypertrophy induced by inhibition of the myostatin/activin signaling pathway. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, E2353-60	11.5	131
218	Bidirectional communication between oocytes and ovarian follicular somatic cells is required for meiotic arrest of mammalian oocytes. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E3723-9	11.5	129
217	Nobox is a homeobox-encoding gene preferentially expressed in primordial and growing oocytes. *Mechanisms of Development*, **2002**, 111, 137-41	1.7	129
216	Germ cell intercellular bridges. *Cold Spring Harbor Perspectives in Biology*, **2011**, 3, a005850	10.2	128
215	Smad5 is essential for left-right asymmetry in mice. *Developmental Biology*, **2000**, 219, 71-8	3.1	128
214	GASZ is essential for male meiosis and suppression of retrotransposon expression in the male germline. *PLoS Genetics*, **2009**, 5, e1000635	6	125
213	Absence of the DNA-/RNA-binding protein MSY2 results in male and female infertility. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 5755-60	11.5	122
212	A bioinformatics tool for linking gene expression profiling results with public databases of microRNA target predictions. *Rna*, **2008**, 14, 2290-6	5.8	121
211	Lineage specification of ovarian theca cells requires multicellular interactions via oocyte and granulosa cells. *Nature Communications*, **2015**, 6, 6934	17.4	112
210	Revelations of ovarian follicle biology from gene knockout mice. *Molecular and Cellular Endocrinology*, **2000**, 163, 61-6	4.4	112
209	Activin betaC and betaE genes are not essential for mouse liver growth, differentiation, and regeneration. *Molecular and Cellular Biology*, **2000**, 20, 6127-37	4.8	111
208	Biochemical interactions of the neuronal pentraxins. Neuronal pentraxin (NP) receptor binds to taipoxin and taipoxin-associated calcium-binding protein 49 via NP1 and NP2. *Journal of Biological Chemistry*, **2000**, 275, 17786-92	5.4	107

207	Follicle-stimulating hormone increases testicular Anti-Mullerian hormone (AMH) production through sertoli cell proliferation and a nonclassical cyclic adenosine 5Rmonophosphate-mediated activation of the AMH Gene. *Molecular Endocrinology*, **2003**, 17, 550-61		106
206	Intraovarian activins are required for female fertility. *Molecular Endocrinology*, **2007**, 21, 2458-71		102
205	Non-invasive genetic diagnosis of male infertility using spermatozoal RNA: KLHL10 mutations in oligozoospermic patients impair homodimerization. *Human Molecular Genetics*, **2006**, 15, 3411-9	5.6	101
204	Genome engineering uncovers 54 evolutionarily conserved and testis-enriched genes that are not required for male fertility in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 7704-10	11.5	98
203	Haploinsufficiency of kelch-like protein homolog 10 causes infertility in male mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 7793-8	11.5	92
202	Preservation of hypothalamic dopaminergic neurons in ParkinsonR disease. *Annals of Neurology*, **1985**, 18, 552-5	9.4	91
201	Knockout of Pentraxin 3, a Downstream Target of Growth Differentiation Factor-9, Causes Female Subfertility		90
200	Growth differentiation factor 9 regulates expression of the bone morphogenetic protein antagonist gremlin. *Journal of Biological Chemistry*, **2004**, 279, 32281-6	5.4	89
199	Mouse oocytes enable LH-induced maturation of the cumulus-oocyte complex via promoting EGF receptor-dependent signaling. *Molecular Endocrinology*, **2010**, 24, 1230-9		88
198	Conversion of midbodies into germ cell intercellular bridges. *Developmental Biology*, **2007**, 305, 389-96	3.1	88
197	Granulosa cell-expressed BMPR1A and BMPR1B have unique functions in regulating fertility but act redundantly to suppress ovarian tumor development. *Molecular Endocrinology*, **2010**, 24, 1251-66		87
196	Activation of neuronal gene expression by the JMJD3 demethylase is required for postnatal and adult brain neurogenesis. *Cell Reports*, **2014**, 8, 1290-9	10.6	85
195	The testis-enriched histone demethylase, KDM4D, regulates methylation of histone H3 lysine 9 during spermatogenesis in the mouse but is dispensable for fertility. *Biology of Reproduction*, **2011**, 84, 1225-34	3.9	85
194	A mutation in the inner mitochondrial membrane peptidase 2-like gene (Immp2l) affects mitochondrial function and impairs fertility in mice. *Biology of Reproduction*, **2008**, 78, 601-10	3.9	84
193	Discovery of novel microRNAs in female reproductive tract using next generation sequencing. *PLoS ONE*, **2010**, 5, e9637	3.7	84
192	The art and artifact of GDF9 activity: cumulus expansion and the cumulus expansion-enabling factor. *Biology of Reproduction*, **2005**, 73, 582-5	3.9	83
191	Analysis of ovarian gene expression in follicle-stimulating hormone beta knockout mice. *Endocrinology*, **2001**, 142, 2742-51	4.8	83
190	Mouse let-7 miRNA populations exhibit RNA editing that is constrained in the 5Rseed/ cleavage/anchor regions and stabilize predicted mmu-let-7a:mRNA duplexes. *Genome Research*, **2008**, 18, 1571-81	9.7	82

189	Analysis of microRNA expression in the prepubertal testis. *PLoS ONE*, **2010**, 5, e15317	3.7	82
188	The long pentraxin PTX3 is crucial for tissue inflammation after intestinal ischemia and reperfusion in mice. *American Journal of Pathology*, **2009**, 174, 1309-18	5.8	81
187	Revisiting oocyte-somatic cell interactions: in search of novel intrafollicular predictors and regulators of oocyte developmental competence. *Molecular Human Reproduction*, **2008**, 14, 673-8	4.4	80
186	BMPR2 is required for postimplantation uterine function and pregnancy maintenance. *Journal of Clinical Investigation*, **2013**, 123, 2539-50	15.9	79
185	Gene targeting approaches to neuroendocrinology: oxytocin, maternal behavior, and affiliation. *Hormones and Behavior*, **1997**, 31, 221-31	3.7	78
184	Loss of Zona Pellucida Binding Proteins in the Acrosomal Matrix Disrupts Acrosome Biogenesis and Sperm Morphogenesis. *Molecular and Cellular Biology*, **2008**, 28, 2495-2495	4.8	78
183	Reproductive defects in gamma-glutamyl transpeptidase-deficient mice. *Endocrinology*, **2000**, 141, 4270-7	4.8	78
182	Discovery of germ cell-specific transcripts by expressed sequence tag database analysis. *Fertility and Sterility*, **2001**, 76, 550-4	4.8	78
181	Absence of tektin 4 causes asthenozoospermia and subfertility in male mice. *FASEB Journal*, **2007**, 21, 1013-25	0.9	77
180	The menstrual cycle: basic biology. *Annals of the New York Academy of Sciences*, **2008**, 1135, 10-8	6.5	76
179	Zygote arrest 1 (Zar1) is an evolutionarily conserved gene expressed in vertebrate ovaries. *Biology of Reproduction*, **2003**, 69, 861-7	3.9	76
178	Overexpression of human chorionic gonadotropin causes multiple reproductive defects in transgenic mice. *Biology of Reproduction*, **2003**, 69, 338-46	3.9	76
177	Connective tissue growth factor is required for normal follicle development and ovulation. *Molecular Endocrinology*, **2011**, 25, 1740-59		74
176	Transforming growth factor β receptor type 1 is essential for female reproductive tract integrity and function. *PLoS Genetics*, **2011**, 7, e1002320	6	74
175	Worldwide frequency of a common genetic variant of luteinizing hormone: an international collaborative research. International Collaborative Research Group. *Fertility and Sterility*, **1997**, 67, 998-1004	4.8	74
174	Mouse TEX14 is required for embryonic germ cell intercellular bridges but not female fertility. *Biology of Reproduction*, **2009**, 80, 449-57	3.9	72
173	Studying TGF-beta superfamily signaling by knockouts and knockins. *Molecular and Cellular Endocrinology*, **2001**, 180, 39-46	4.4	70
172	Estrogen promotes the development of mouse cumulus cells in coordination with oocyte-derived GDF9 and BMP15. *Molecular Endocrinology*, **2010**, 24, 2303-14		69

171	Loss of inhibin alpha uncouples oocyte-granulosa cell dynamics and disrupts postnatal folliculogenesis. *Developmental Biology*, **2009**, 334, 458-67	3.1	67
170	SMAD3 regulates gonadal tumorigenesis. *Molecular Endocrinology*, **2007**, 21, 2472-86		67
169	Previously uncharacterized roles of platelet-activating factor acetylhydrolase 1b complex in mouse spermatogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 7189-94	11.5	67
168	Interrelationship of growth differentiation factor 9 and inhibin in early folliculogenesis and ovarian tumorigenesis in mice. *Molecular Endocrinology*, **2004**, 18, 1509-19		66
167	Genetic models for transforming growth factor beta superfamily signaling in ovarian follicle development. *Molecular and Cellular Endocrinology*, **2004**, 225, 83-91	4.4	66
166	Recombination site selection by Tn3 resolvase: topological tests of a tracking mechanism. *Cell*, **1985**, 40, 147-58	56.2	66
165	Inhibin and p27 interact to regulate gonadal tumorigenesis. *Molecular Endocrinology*, **2001**, 15, 985-96		64
164	Activin-like kinase 2 functions in peri-implantation uterine signaling in mice and humans. *PLoS Genetics*, **2013**, 9, e1003863	6	61
163	Activin bioactivity affects germ cell differentiation in the postnatal mouse testis in vivo. *Biology of Reproduction*, **2010**, 82, 980-90	3.9	61
162	RFPL4 interacts with oocyte proteins of the ubiquitin-proteasome degradation pathway. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 550-5	11.5	61
161	Obox, a family of homeobox genes preferentially expressed in germ cells. *Genomics*, **2002**, 79, 711-7	4.3	60
160	TEX14 interacts with CEP55 to block cell abscission. *Molecular and Cellular Biology*, **2010**, 30, 2280-92	4.8	59
159	Prevention of cachexia-like syndrome development and reduction of tumor progression in inhibin-deficient mice following administration of a chimeric activin receptor type II-murine Fc protein. *Molecular Human Reproduction*, **2007**, 13, 675-83	4.4	58
158	Stimulation of activin receptor II signaling pathways inhibits differentiation of multiple gastric epithelial lineages. *Molecular Endocrinology*, **1998**, 12, 181-92		57
157	The asparagine-linked oligosaccharides of the human chorionic gonadotropin beta subunit facilitate correct disulfide bond pairing. *Journal of Biological Chemistry*, **1995**, 270, 11851-9	5.4	57
156	Mutagenesis and gene transfer define site-specific roles of the gonadotropin oligosaccharides. *Biology of Reproduction*, **1989**, 40, 48-53	3.9	57
155	MRG15 regulates embryonic development and cell proliferation. *Molecular and Cellular Biology*, **2005**, 25, 2924-37	4.8	53
154	In vitro differentiation of human embryonic stem cells into ovarian follicle-like cells. *Nature Communications*, **2017**, 8, 15680	17.4	51

153	Association of mutations in the zona pellucida binding protein 1 (ZPBP1) gene with abnormal sperm head morphology in infertile men. *Molecular Human Reproduction*, **2012**, 18, 14-21	4.4	51
152	Activins are critical modulators of growth and survival. *Molecular Endocrinology*, **2003**, 17, 2404-17		49
151	Disruption of gamma-glutamyl leukotrienase results in disruption of leukotriene D(4) synthesis in vivo and attenuation of the acute inflammatory response. *Molecular and Cellular Biology*, **2001**, 21, 5389-95	4.8	49
150	Tektin 3 is required for progressive sperm motility in mice. *Molecular Reproduction and Development*, **2009**, 76, 453-9	2.6	48
149	Cyclin D2 and p27 are tissue-specific regulators of tumorigenesis in inhibin alpha knockout mice. *Molecular Endocrinology*, **2003**, 17, 2053-69		48
148	TCTE1 is a conserved component of the dynein regulatory complex and is required for motility and metabolism in mouse spermatozoa. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E5370-E5378	11.5	47
147	As the world grows: contraception in the 21st century. *Journal of Clinical Investigation*, **2008**, 118, 1330-43	15.9	47
146	Stable expression and characterization of N-terminal tagged recombinant human bone morphogenetic protein 15. *Molecular Human Reproduction*, **2009**, 15, 779-88	4.4	46
145	CRISPR/Cas9-mediated genome editing reveals 30 testis-enriched genes dispensable for male fertility in mice *Biology of Reproduction*, **2019**, 101, 501-511	3.9	45
144	Identification of an inhibin receptor in gonadal tumors from inhibin alpha-subunit knockout mice. *Journal of Biological Chemistry*, **1998**, 273, 398-403	5.4	44
143	Fibroblast growth factors and epidermal growth factor cooperate with oocyte-derived members of the TGFbeta superfamily to regulate Spry2 mRNA levels in mouse cumulus cells. *Biology of Reproduction*, **2009**, 81, 833-41	3.9	43
142	Uterine activin receptor-like kinase 5 is crucial for blastocyst implantation and placental development. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E5098-107	11.5	42
141	Altered excitation-contraction coupling with skeletal muscle specific FKBP12 deficiency. *FASEB Journal*, **2004**, 18, 1597-9	0.9	42
140	A Mild, DNA-Compatible Nitro Reduction Using B(OH). *Organic Letters*, **2019**, 21, 2194-2199	6.2	41
139	Sperm proteins SOF1, TMEM95, and SPACA6 are required for sperm-oocyte fusion in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 11493-11502	11.5	41
138	Deficiency of growth differentiation factor 3 protects against diet-induced obesity by selectively acting on white adipose. *Molecular Endocrinology*, **2009**, 23, 113-23		41
137	Mendelian genetics of male infertility. *Annals of the New York Academy of Sciences*, **2010**, 1214, E1-E17	6.5	40
136	The TGF- Family in the Reproductive Tract. *Cold Spring Harbor Perspectives in Biology*, **2017**, 9,	10.2	39

135	Genetics of mammalian reproduction: modeling the end of the germline. *Annual Review of Physiology*, **2012**, 74, 503-28	23.1	39
134	Identification of Zfp393, a germ cell-specific gene encoding a novel zinc finger protein. *Mechanisms of Development*, **2002**, 118, 233-9	1.7	39
133	Quantitative Comparison of Enrichment from DNA-Encoded Chemical Library Selections. *ACS Combinatorial Science*, **2019**, 21, 75-82	3.9	38
132	Functional analysis of mammalian members of the transforming growth factor-beta superfamily. *Trends in Endocrinology and Metabolism*, **1995**, 6, 120-7	8.8	37
131	Normal reproductive function in InhBP/p120-deficient mice. *Molecular and Cellular Biology*, **2003**, 23, 4882-91	4.8	36
130	CDKN2D-WDFY2 is a cancer-specific fusion gene recurrent in high-grade serous ovarian carcinoma. *PLoS Genetics*, **2014**, 10, e1004216	6	35
129	CRISPR/Cas9-derived models of ovarian high grade serous carcinoma targeting Brca1, Pten and Nf1, and correlation with platinum sensitivity. *Scientific Reports*, **2017**, 7, 16827	4.9	34
128	Retinoblastoma protein plays multiple essential roles in the terminal differentiation of Sertoli cells. *Molecular Endocrinology*, **2009**, 23, 1900-13		34
127	Female infertility and disrupted angiogenesis are actions of specific follistatin isoforms. *Molecular Endocrinology*, **2008**, 22, 415-29		34
126	Oosp1 encodes a novel mouse oocyte-secreted protein. *Genesis*, **2001**, 31, 105-10	1.9	34
125	Expression of recombinant human choriogonadotropin in Chinese hamster ovary glycosylation mutants. *Molecular Endocrinology*, **1989**, 3, 2011-7		33
124	Recurrent BCAM-AKT2 fusion gene leads to a constitutively activated AKT2 fusion kinase in high-grade serous ovarian carcinoma. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E1272-7	11.5	32
123	MRG15 is required for pre-mRNA splicing and spermatogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5408-15	11.5	32
122	Inhibitory phosphorylation of separase is essential for genome stability and viability of murine embryonic germ cells. *PLoS Biology*, **2008**, 6, e15	9.7	32
121	Uterine ALK3 is essential during the window of implantation. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E387-95	11.5	31
120	Endothelial pentraxin 3 contributes to murine ischemic acute kidney injury. *Kidney International*, **2012**, 82, 1195-207	9.9	31
119	GDF-9 and BMP-15: oocyte organizers. *Reviews in Endocrine and Metabolic Disorders*, **2002**, 3, 27-32	10.5	31
118	Mice deficient in oocyte-specific oligoadenylate synthetase-like protein OAS1D display reduced fertility. *Molecular and Cellular Biology*, **2005**, 25, 4615-24	4.8	31

117	Minireview: The roles of small RNA pathways in reproductive medicine. *Molecular Endocrinology*, **2011**, 25, 1257-79		30
116	Sequence and expression of testis-expressed gene 14 (Tex14): a gene encoding a protein kinase preferentially expressed during spermatogenesis. *Gene Expression Patterns*, **2003**, 3, 231-6	1.5	30
115	Mining the oocyte transcriptome. *Trends in Endocrinology and Metabolism*, **2006**, 17, 136-43	8.8	29
114	Defective whisker follicles and altered brainstem patterns in activin and follistatin knockout mice. *Molecular and Cellular Neurosciences*, **1998**, 12, 206-19	4.8	29
113	Structural characterization of an activin class ternary receptor complex reveals a third paradigm for receptor specificity. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 15505-15513	11.5	28
112	Recurrent DICER1 hotspot mutations in endometrial tumours and their impact on microRNA biogenesis. *Journal of Pathology*, **2015**, 237, 215-25	9.4	28
111	Conditional deletion of the retinoblastoma (Rb) gene in ovarian granulosa cells leads to premature ovarian failure. *Molecular Endocrinology*, **2008**, 22, 2141-61		28
110	Genetic dissection of mammalian fertility pathways. *Nature Medicine*, **2002**, 8, S40-S40	50.5	28
109	Spermatozoa lacking Fertilization Influencing Membrane Protein (FIMP) fail to fuse with oocytes in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 9393-9400	11.5	28
108	Pentraxin 3 deletion aggravates allergic inflammation through a T17-dominant phenotype and enhanced CD4 T-cell survival. *Journal of Allergy and Clinical Immunology*, **2017**, 139, 950-963.e9	11.5	27
107	Dysregulation of uterine signaling pathways in progesterone receptor-Cre knockout of dicer. *Molecular Endocrinology*, **2012**, 26, 1552-66		27
106	Regulation of FSHbeta and GnRH receptor gene expression in activin receptor II knockout male mice. *Molecular and Cellular Endocrinology*, **2003**, 212, 19-27	4.4	27
105	The ret finger protein-like 4 gene, Rfpl4, encodes a putative E3 ubiquitin-protein ligase expressed in adult germ cells. *Mechanisms of Development*, **2002**, 112, 173-7	1.7	27
104	Uterine double-conditional inactivation of and in mice causes endometrial dysregulation, infertility, and uterine cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 3873-3882	11.5	27
103	BMP7 Induces Uterine Receptivity and Blastocyst Attachment. *Endocrinology*, **2017**, 158, 979-992	4.8	26
102	High-throughput discovery of germ-cell-specific genes. *Seminars in Reproductive Medicine*, **2005**, 23, 201-12	1.4	26
101	Functional analysis of oocyte-expressed genes using transgenic models. *Molecular and Cellular Endocrinology*, **2002**, 187, 5-9	4.4	26
100	Regulation of growth differentiation factor 9 expression in oocytes in vivo: a key role of the E-box. *Biology of Reproduction*, **2006**, 74, 999-1006	3.9	25

99	Characterization of integrin expression in the mouse ovary. *Biology of Reproduction*, **2002**, 67, 743-51	3.9	25
98	C-N Coupling of DNA-Conjugated (Hetero)aryl Bromides and Chlorides for DNA-Encoded Chemical Library Synthesis. *Bioconjugate Chemistry*, **2020**, 31, 770-780	6.3	24
97	Sexually dimorphic roles of steroid hormone receptor signaling in gonadal tumorigenesis. *Molecular Endocrinology*, **2003**, 17, 2039-52		24
96	Structure of the mouse activin receptor type II gene. *Biochemical and Biophysical Research Communications*, **1992**, 185, 404-13	3.4	24
95	Follistatin Is a Modulator of Gonadal Tumor Progression and the Activin-Induced Wasting Syndrome in Inhibin-Deficient Mice		24
94	Analysis of Ovarian Gene Expression in Follicle-Stimulating Hormone β Knockout Mice		24
93	NELL2-mediated lumicrine signaling through OVCH2 is required for male fertility. *Science*, **2020**, 368, 1132-1135	33.3	23
92	Identification of multiple male reproductive tract-specific proteins that regulate sperm migration through the oviduct in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 18498-18506	11.5	23
91	Cloning of the mouse gonadotropin beta-subunit-encoding genes, I. Structure of the follicle-stimulating hormone beta-subunit-encoding gene. *Gene*, **1995**, 166, 333-4	3.8	23
90	H3K27 demethylase, JMJD3, regulates fragmentation of spermatogonial cysts. *PLoS ONE*, **2013**, 8, e72689	3.7	23
89	Keratinocyte-derived follistatin regulates epidermal homeostasis and wound repair. *Laboratory Investigation*, **2009**, 89, 131-41	5.9	22
88	Activin-like kinase 5 (ALK5) inactivation in the mouse uterus results in metastatic endometrial carcinoma. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 3883-3892	11.5	21
87	Insights Into SMAD4 Loss in Pancreatic Cancer From Inducible Restoration of TGF-β Signaling. *Molecular Endocrinology*, **2015**, 29, 1440-53		21
86	Reproductive tract function and dysfunction in women. *Nature Reviews Endocrinology*, **2011**, 7, 517-25	15.2	21
85	Preimplantation mouse embryos depend on inhibitory phosphorylation of separase to prevent chromosome missegregation. *Molecular and Cellular Biology*, **2009**, 29, 1498-505	4.8	21
84	Impaired male sexual behavior in activin receptor type II knockout mice. *Biology of Reproduction*, **2005**, 73, 1182-90	3.9	21
83	Whole Reproductive System Non-Negative Matrix Factorization Mass Spectrometry Imaging of an Early-Stage Ovarian Cancer Mouse Model. *PLoS ONE*, **2016**, 11, e0154837	3.7	21
82	Discovery of potent thrombin inhibitors from a protease-focused DNA-encoded chemical library. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 16782-16789	11.5	20

81	Systematic Identification of Druggable Epithelial-Stromal Crosstalk Signaling Networks in Ovarian Cancer. *Journal of the National Cancer Institute*, **2019**, 111, 272-282	9.7	20
80	Role of androgens in testicular tumor development in inhibin-deficient mice. *Endocrinology*, **1997**, 138, 5000-5	4.8	20
79	Uterine Activin-Like Kinase 4 Regulates Trophoblast Development During Mouse Placentation. *Molecular Endocrinology*, **2015**, 29, 1684-93		19
78	Genetic manipulations to study reproduction. *Molecular and Cellular Endocrinology*, **2005**, 234, 127-35	4.4	19
77	Restricted germ cell expression of a gene encoding a novel mammalian HORMA domain-containing protein. *Gene Expression Patterns*, **2004**, 5, 257-63	1.5	19
76	Blockage of the Rete Testis and Efferent Ductules by Ectopic Sertoli and Leydig Cells Causes Infertility in Dax1-Deficient Male Mice		19
75	Minireview: Genetic Models for the Study of Gonadotropin Actions		19
74	Identifying Oxacillinase-48 Carbapenemase Inhibitors Using DNA-Encoded Chemical Libraries. *ACS Infectious Diseases*, **2020**, 6, 1214-1227	5.5	18
73	GASZ promotes germ cell derivation from embryonic stem cells. *Stem Cell Research*, **2013**, 11, 845-60	1.6	18
72	Identification and characterization of RBM44 as a novel intercellular bridge protein. *PLoS ONE*, **2011**, 6, e17066	3.7	18
71	Activins and inhibins: novel regulators of thymocyte development. *Biochemical and Biophysical Research Communications*, **2009**, 381, 229-35	3.4	18
70	Identification and characterization of evolutionarily conserved pufferfish, zebrafish, and frog orthologs of GASZ. *Biology of Reproduction*, **2004**, 70, 1619-25	3.9	18
69	Homogeneous and Functional Group Tolerant Ring-Closing Metathesis for DNA-Encoded Chemical Libraries. *ACS Combinatorial Science*, **2020**, 22, 80-88	3.9	18
68	Reconstitution of the oocyte nucleolus in mice through a single nucleolar protein, NPM2. *Journal of Cell Science*, **2017**, 130, 2416-2429	5.3	17
67	Multistep Synthesis of 1,2,4-Oxadiazoles via DNA-Conjugated Aryl Nitrile Substrates. *Bioconjugate Chemistry*, **2019**, 30, 1304-1308	6.3	17
66	The testis-specific serine proteases PRSS44, PRSS46, and PRSS54 are dispensable for male mouse fertility *Biology of Reproduction*, **2020**, 102, 84-91	3.9	17
65	Palladium-Catalyzed Hydroxycarbonylation of (Hetero)aryl Halides for DNA-Encoded Chemical Library Synthesis. *Bioconjugate Chemistry*, **2019**, 30, 2209-2215	6.3	17
64	Luteinizing hormone promotes gonadal tumorigenesis in inhibin-deficient mice. *Molecular and Cellular Endocrinology*, **2008**, 294, 19-28	4.4	17

63	Acrosome-specific gene AEP1: identification, characterization and roles in spermatogenesis. *Journal of Cellular Physiology*, **2006**, 209, 755-66	7	16
62	Follistatin is critical for mouse uterine receptivity and decidualization. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E4772-E4781	11.5	15
61	Metabolomic serum profiling detects early-stage high-grade serous ovarian cancer in a mouse model. *Journal of Proteome Research*, **2015**, 14, 917-27	5.6	15
60	Cloning of the mouse gonadotropin beta-subunit-encoding genes, II. Structure of the luteinizing hormone beta-subunit-encoding genes. *Gene*, **1995**, 166, 335-6	3.8	15
59	Functional analysis of miR-34c as a putative tumor suppressor in high-grade serous ovarian cancer. *Biology of Reproduction*, **2014**, 91, 113	3.9	14
58	Germ-line immortality. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 16395-6	11.5	14
57	UBE2B mRNA alterations are associated with severe oligozoospermia in infertile men. *Molecular Human Reproduction*, **2013**, 19, 388-94	4.4	13
56	Genetic engineering to study testicular tumorigenesis. *Apmis*, **2003**, 111, 174-81; discussion 182-3	3.4	13
55	Discovery and characterization of bromodomain 2-specific inhibitors of BRDT. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	13
54	ARMC12 regulates spatiotemporal mitochondrial dynamics during spermiogenesis and is required for male fertility. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	13
53	Tmprss12 is required for sperm motility and uterotubal junction migration in mice. *Biology of Reproduction*, **2020**, 103, 254-263	3.9	12
52	CRISPR/Cas9-mediated genome-edited mice reveal 10 testis-enriched genes are dispensable for male fecundity. *Biology of Reproduction*, **2020**, 103, 195-204	3.9	12
51	Dynamic cytoplasmic projections connect mammalian spermatogonia. *Development (Cambridge)*, **2018**, 145,	6.6	12
50	MrgX is not essential for cell growth and development in the mouse. *Molecular and Cellular Biology*, **2005**, 25, 4873-80	4.8	12
49	Characterization of spermatogonial stem cells lacking intercellular bridges and genetic replacement of a mutation in spermatogonial stem cells. *PLoS ONE*, **2012**, 7, e38914	3.7	12
48	Disrupting the male germ line to find infertility and contraception targets. *Annales D'Endocrinologie*, **2014**, 75, 101-8	1.7	11
47	Epithelialization of mouse ovarian tumor cells originating in the fallopian tube stroma. *Oncotarget*, **2016**, 7, 66077-66086	3.3	11
46	Large-scale discovery of male reproductive tract-specific genes through analysis of RNA-seq datasets. *BMC Biology*, **2020**, 18, 103	7.3	10

45	Prss55 but not Prss51 is required for male fertility in mice. *Biology of Reproduction*, **2020**, 103, 223-234	3.9	9
44	DNA-encoded chemistry technology yields expedient access to SARS-CoV-2 M inhibitors. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	9
43	Testicular cell adhesion molecule 1 (TCAM1) is not essential for fertility. *Molecular and Cellular Endocrinology*, **2010**, 315, 246-53	4.4	8
42	LIN28 lets BLIMP1 take the right course. *Developmental Cell*, **2009**, 17, 160-1	10.2	8
41	Mass-spectrometry-based proteomic correlates of grade and stage reveal pathways and kinases associated with aggressive human cancers. *Oncogene*, **2021**, 40, 2081-2095	9.2	8
40	Shaping the sperm head: an ER enzyme leaves its mark. *Journal of Clinical Investigation*, **2006**, 116, 2860-3	15.9	7
39	Mouse t-complex protein 11 is important for progressive motility in sperm. *Biology of Reproduction*, **2020**, 102, 852-862	3.9	7
38	CRISPR/Cas9-based genome editing in mice uncovers 13 testis- or epididymis-enriched genes individually dispensable for male reproduction. *Biology of Reproduction*, **2020**, 103, 183-194	3.9	6
37	Knockout of mouse receptor accessory protein 6 leads to sperm function and morphology defects. *Biology of Reproduction*, **2020**, 102, 1234-1247	3.9	6
36	Appetite for reproduction: dietary restriction, aging and the mammalian gonad. *Journal of Biology*, **2008**, 7, 23		6
35	PAM14, a novel MRG- and Rb-associated protein, is not required for development and T-cell function in mice. *Molecular and Cellular Biology*, **2004**, 24, 8366-73	4.8	6
34	Clinical performance of a semi-quantitative assay for SARS-CoV2 IgG and SARS-CoV2 IgM antibodies. *Clinica Chimica Acta*, **2020**, 510, 790-795	6.2	6
33	Synthesis of 5-substituted tetrazoles DNA-conjugated nitrile. *Organic and Biomolecular Chemistry*, **2020**, 18, 9221-9226	3.9	6
32	Metabolism of JQ1, an inhibitor of bromodomain and extra terminal bromodomain proteins, in human and mouse liver microsomes. *Biology of Reproduction*, **2020**, 103, 427-436	3.9	6
31	DEVELOPMENTAL BIOLOGY. Toward a rapid and reversible male pill. *Science*, **2015**, 350, 385-6	33.3	5
30	Identification of KIAA1210 as a novel X-chromosome-linked protein that localizes to the acrosome and associates with the ectoplasmic specialization in testes. *Biology of Reproduction*, **2017**, 96, 469-477	3.9	5
29	Cfap97d1 is important for flagellar axoneme maintenance and male mouse fertility. *PLoS Genetics*, **2020**, 16, e1008954	6	5
28	Knockout of family with sequence similarity 170 member A (Fam170a) causes male subfertility, while Fam170b is dispensable in mice. *Biology of Reproduction*, **2020**, 103, 205-222	3.9	4

27	Absence of inhibin alpha and retinoblastoma protein leads to early sertoli cell dysfunction. *PLoS ONE*, **2010**, 5, e11797	3.7	4
26	Solution-Phase Fmoc-Based Peptide Synthesis for DNA-Encoded Chemical Libraries: Reaction Conditions, Protecting Group Strategies, and Pitfalls. *ACS Combinatorial Science*, **2020**, 22, 833-843	3.9	4
25	Cooperation-based sperm clusters mediate sperm oviduct entry and fertilization. *Protein and Cell*, **2021**, 12, 810-817	7.2	4
24	Design and construction of a stereochemically diverse piperazine-based DNA-encoded chemical library. *Bioorganic and Medicinal Chemistry*, **2021**, 48, 116387	3.4	4
23	CIB4 is essential for the haploid phase of spermatogenesis in mice. *Biology of Reproduction*, **2020**, 103, 235-243	3.9	3
22	Amino acid 72 of mouse and human GDF9 mature domain is responsible for altered homodimer bioactivities but has subtle effects on GDF9:BMP15 heterodimer activities. *Biology of Reproduction*, **2014**, 91, 142	3.9	3
21	Reply to Mottershead et al.: GDF9:BMP15 heterodimers are potent regulators of ovarian functions. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E2258	11.5	3
20	Endometrial receptivity and implantation require uterine BMP signaling through an ACVR2A-SMAD1/SMAD5 axis. *Nature Communications*, **2021**, 12, 3386	17.4	3
19	Knockout of serine-rich single-pass membrane protein 1 (Ssmem1) causes globozoospermia and sterility in male mice. *Biology of Reproduction*, **2020**, 103, 244-253	3.9	3
18	FAM209 associates with DPY19L2, and is required for sperm acrosome biogenesis and fertility in mice. *Journal of Cell Science*, **2021**, 134,	5.3	3
17	Epigenetic modifications by Trithorax group proteins during early embryogenesis: do members of Trx-G function as maternal effect genes?. *Reproductive BioMedicine Online*, **2007**, 14, 201-7	4	2
16	Niclosamide's potential direct targets in ovarian cancer. *Biology of Reproduction*, **2021**, 105, 403-412	3.9	2
15	Follistatin mediates learning and synaptic plasticity via regulation of Asic4 expression in the hippocampus. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	2
14	Society for Reproductive Biology Founders' Lecture 2007. Insights into germ cell biology: from the bench to the clinic. *Reproduction, Fertility and Development*, **2007**, 19, 783-91	1.8	1
13	Poreless eggshells. *Journal of Clinical Investigation*, **2015**, 125, 4005-7	15.9	1
12	Identifying Metabolic Pathways of c-MET Tyrosine Kinase Inhibitor Tepotinib in Human and Mouse Liver Microsomes. *FASEB Journal*, **2020**, 34, 1-1	0.9	1
11	Local versus systemic control of bone and skeletal muscle mass by components of the transforming growth factor-β signaling pathway. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
10	Unique Diacidic Fragments Inhibit the OXA-48 Carbapenemase and Enhance the Killing of Producing OXA-48. *ACS Infectious Diseases*, **2021**, 7, 3345-3354	5.5	0

9	Reply to Liu et al.: ALK5-mediated tumor suppressor signaling through SMAD2 and SMAD3 in the uterus. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 9166-9167	11.5
8	Mouse models to identify genes throughout oogenesis73-80	
7	TRANSGENIC MOUSE MODELS TO STUDY INHIBIN AND ACTIVIN **2001**, 279-327	
6	TESTICULAR CELL ADHESION MOLECULE 1 (TCAM1): AN IMPORTANT MEDIATOR OF GERM CELL-SERTOLI CELL INTERACTIONS?. *Biology of Reproduction*, **2007**, 77, 167-168	3.9
5	IDENTIFICATION OF A NOVEL INTERCELLULAR BRIDGE PROTEIN, IBP2. *Biology of Reproduction*, **2007**, 77, 115-115	3.9
4	Chromosomal Variants and Gene Expression Dysregulation in Endometriosis.. *Biology of Reproduction*, **2008**, 78, 166-167	3.9
3	Conditional Inactivation of Retinoblastoma Protein (RB1) in Sertoli Cells Causes Progressive Infertility.. *Biology of Reproduction*, **2008**, 78, 54-54	3.9
2	Activin Regulates KIT mRNA and Protein in the Postnatal Mouse Testis.. *Biology of Reproduction*, **2008**, 78, 130-130	3.9
1	MicroRNAs in Human Ovarian Cancer.. *Biology of Reproduction*, **2008**, 78, 200-200	3.9