Pierre Comizzoli

List of Publications by Year in Descending Order

102 papers	1,371 citations	21 h-index	32 g-index
116 ext. papers	1,723 ext. citations	3.6 avg, IF	5.26 L-index

#	Paper	IF	Citations
102	Long-term storage of gametes and gonadal tissues at room temperatures: the end of the ice age?. *Journal of Assisted Reproduction and Genetics*, **2022**, 39, 321	3.4	1
101	The ART of cryopreservation and its changing landscape.. *Fertility and Sterility*, **2022**, 117, 469-476	4.8	1
100	Long-term preservation of germ cells and gonadal tissues at ambient temperatures.. *Reproduction and Fertility*, **2022**, 3, R42-R50	1.1	0
99	The Knowns and Unknowns about Epididymal Extracellular Vesicles in Different Animal Species. *Advanced Biology*, **2021**, e2101066		1
98	Recent Progress in Spermatology Contributing to the Knowledge and Conservation of Rare and Endangered Species. *Annual Review of Animal Biosciences*, **2021**,	13.7	1
97	Transcriptome dynamics in developing testes of domestic cats and impact of age on tissue resilience to cryopreservation. *BMC Genomics*, **2021**, 22, 847	4.5	0
96	Desiccated cat spermatozoa retain DNA integrity and developmental potential after prolonged storage and shipping at non-cryogenic temperatures. *Journal of Assisted Reproduction and Genetics*, **2021**, 1	3.4	4
95	Repeated Evaluations of Testes and Semen Characteristics in Two Binturongs (). *Frontiers in Veterinary Science*, **2021**, 8, 658573	3.1	3
94	The Interconnected Health Initiative: A Smithsonian Framework to Extend One Health Research and Education. *Frontiers in Veterinary Science*, **2021**, 8, 629410	3.1	2
93	Adding new ingredients to the recipe for successful embryo transfers. *Journal of Assisted Reproduction and Genetics*, **2021**, 38, 1019-1020	3.4	
92	Understanding Reproductive Aging in Wildlife to Improve Animal Conservation and Human Reproductive Health. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 680471	5.7	5
91	Oocyte Meiotic Competence in the Domestic Cat Model: Novel Roles for Nuclear Proteins BRD2 and NPM1. *Frontiers in Cell and Developmental Biology*, **2021**, 9, 670021	5.7	1
90	Exposure to epididymal extracellular vesicles enhances immature sperm function and sustains vitality of cryopreserved spermatozoa in the domestic cat model. *Journal of Assisted Reproduction and Genetics*, **2021**, 38, 2061-2071	3.4	5
89	Influence of hydrogel encapsulation during cryopreservation of ovarian tissues and impact of post-thawing in vitro culture systems in a research animal model. *Clinical and Experimental Reproductive Medicine*, **2021**, 48, 111-123	2.2	1
88	Influence of freezing techniques and glycerol-based cryoprotectant combinations on the survival of testicular tissues from adult collared peccaries. *Theriogenology*, **2021**, 167, 111-119	2.8	2
87	Preserving the Female Genome in Trehalose Glass at Supra-Zero Temperatures: The Relationship Between Moisture Content and DNA Damage in Feline Germinal Vesicles. *Cellular and Molecular Bioengineering*, **2021**, 14, 101-112	3.9	3
86	Understanding and Assisting Reproduction in Wildlife Species Using Microfluidics. *Trends in Biotechnology*, **2021**, 39, 584-597	15.1	5

85	Influence of antibiotics on bacterial load and sperm parameters during short-term preservation of collared peccary semen. *Animal Reproduction*, **2021**, 18, e20210021	1.7	0
84	Sand-mediated ice seeding enables serum-free low-cryoprotectant cryopreservation of human induced pluripotent stem cells. *Bioactive Materials*, **2021**, 6, 4377-4388	16.7	2
83	Endometrial receptivity and embryo implantation in carnivores-commonalities and differences with other mammalian species. *Biology of Reproduction*, **2021**, 104, 771-783	3.9	2
82	Interactions between reproductive biology and microbiomes in wild animal species.. *Animal Microbiome*, **2021**, 3, 87	4.1	2
81	First Evaluations and Cryopreservation of Semen Samples from Sunda Clouded Leopards (). *Animals* , **2020**, 10,	3.1	7
80	Neurotensin stimulates the sperm acrosome reaction and reduces percentages of fertilization in vitro.. *F&S Science*, **2020**, 1, 27-35	0.4	
79	Influence of different extenders on morphological and functional parameters of frozen-thawed spermatozoa of jaguar (Panthera onca). *Cryobiology*, **2020**, 92, 53-61	2.7	9
78	Novel Proteomic Profiling of Epididymal Extracellular Vesicles in the Domestic Cat Reveals Proteins Related to Sequential Sperm Maturation with Differences Observed between Normospermic and Teratospermic Individuals. *Molecular and Cellular Proteomics*, **2020**, 19, 2090-2104	7.6	7
77	First Birth of Cheetah Cubs from In Vitro Fertilization and Embryo Transfer. *Animals*, **2020**, 10,	3.1	6
76	Reproductive biology and biotechnologies in wild felids. *Theriogenology*, **2020**, 150, 360-373	2.8	10
75	Initial response of ovarian tissue transcriptome to vitrification or microwave-assisted dehydration in the domestic cat model. *BMC Genomics*, **2020**, 21, 828	4.5	2
74	Sperm Morphology and Male Age in Black-Throated Blue Warblers, an Ecological Model System. *Animals*, **2020**, 10,	3.1	5
73	Influence of Microwave-Assisted Drying on Structural Integrity and Viability of Testicular Tissues from Adult and Prepubertal Domestic Cats. *Biopreservation and Biobanking*, **2020**, 18, 415-424	2.1	5
72	David E. Wildt-An Inspiring Leader in the Conservation of Wild Species. *Journal of Heredity*, **2020**, 111, 414-416	2.4	
71	Cryopreservation and Culture of Testicular Tissues: An Essential Tool for Biodiversity Preservation. *Biopreservation and Biobanking*, **2020**, 18, 235-243	2.1	11
70	Reproductive Science as an Essential Component of Conservation Biology: New Edition. *Advances in Experimental Medicine and Biology*, **2019**, 1200, 1-10	3.6	5
69	Reproductive Microbiomes in Wild Animal Species: A New Dimension in Conservation Biology. *Advances in Experimental Medicine and Biology*, **2019**, 1200, 225-240	3.6	6
68	Combinations of Growth Factors Regulating LIF/STAT3, WNT, and FGF2 Pathways Sustain Pluripotency-Related Proteins in Cat Embryonic Cells. *Stem Cells and Development*, **2019**, 28, 329-340	4.4	5

67	Early ovine preantral follicles have a potential to grow until antral stage in two-step culture system in the presence of aqueous extract of Justicia insularis. *Reproduction in Domestic Animals*, **2019**, 54, 1121-1130	1.6	
66	Activation of adenosine monophosphate-activated protein kinase (AMPK) enhances energy metabolism, motility, and fertilizing ability of cryopreserved spermatozoa in domestic cat model. *Journal of Assisted Reproduction and Genetics*, **2019**, 36, 1401-1412	3.4	5
65	Whole Genome Sequencing and Re-sequencing of the Sable Antelope (): A Resource for Monitoring Diversity in and Populations. *G3: Genes, Genomes, Genetics*, **2019**, 9, 1785-1793	3.2	14
64	Protecting and Extending Fertility for Females of Wild and Endangered Mammals **2019**, 401-412		2
63	Advances and Challenges of Using Ovarian Preantral Follicles to Develop Biobanks of Wild Mammals. *Biopreservation and Biobanking*, **2019**, 17, 334-341	2.1	5
62	Unlocking the mysteries of the cumulus-oocyte complex-a critical cellular partnership for developmental competence. *Journal of Assisted Reproduction and Genetics*, **2019**, 36, 411-412	3.4	
61	Endogenous pluripotent factor expression after reprogramming cat fetal fibroblasts using inducible transcription factors. *Molecular Reproduction and Development*, **2019**, 86, 1671-1681	2.6	3
60	Responsiveness of the cheetah (Acinonyx jubatus) ovary to exogenous gonadotropins after preemptive oral progestin treatment. *Theriogenology*, **2019**, 138, 39-46	2.8	0
59	Single injection of eCG/hCG leads to successful estrous synchronization in the collared peccary (Pecari tajacu Linnaeus, 1758). *Animal Reproduction Science*, **2019**, 208, 106112	2.1	4
58	Sex steroids influence organizational but not functional decidualization of feline endometrial cells in a 3D culture system *Biology of Reproduction*, **2019**, 101, 906-915	3.9	2
57	Desiccation and supra-zero temperature storage of cat germinal vesicles lead to less structural damage and similar epigenetic alterations compared to cryopreservation. *Molecular Reproduction and Development*, **2019**, 86, 1822-1831	2.6	4
56	Combination of intracellular cryoprotectants preserves the structure and the cells proliferative capacity potential of adult collared peccary testicular tissue subjected to solid surface vitrification. *Cryobiology*, **2019**, 91, 53-60	2.7	7
55	Three-dimensional culture of endometrial cells from domestic cats: A new in vitro platform for assessing plastic toxicity. *PLoS ONE*, **2019**, 14, e0217365	3.7	4
54	RFRP3 influences basal lamina degradation, cellular death, and progesterone secretion in cultured preantral ovarian follicles from the domestic cat. *PeerJ*, **2019**, 7, e7540	3.1	6
53	From the Ivory Tower to Reality! Conclusions of the New Edition. *Advances in Experimental Medicine and Biology*, **2019**, 1200, 545-550	3.6	1
52	Breakthroughs and new horizons in reproductive biology of rare and endangered animal species. *Biology of Reproduction*, **2019**, 101, 514-525	3.9	39
51	Influence of microwave-assisted dehydration on morphological integrity and viability of cat ovarian tissues: First steps toward long-term preservation of complex biomaterials at supra-zero temperatures. *PLoS ONE*, **2019**, 14, e0225440	3.7	7
50	Semen Cryopreservation and Banking for the Conservation of Neotropical Carnivores. *Biopreservation and Biobanking*, **2019**, 17, 183-188	2.1	9

49	Influence of Cellular Lipids on Cryopreservation of Mammalian Oocytes and Preimplantation Embryos: A Review. *Biopreservation and Biobanking*, **2019**, 17, 76-83	2.1	23
48	Insulin promotes preantral follicle growth and antrum formation through temporal expression of genes regulating steroidogenesis and water transport in the cat. *Reproduction, Fertility and Development*, **2018**, 30, 1369-1379	1.8	6
47	Influence of extracellular environment on the motility and structural properties of spermatozoa collected from hormonally stimulated Panamanian Golden Frog (Atelopus zeteki). *Theriogenology*, **2018**, 108, 153-160	2.8	9
46	Key factors enhancing sperm fertilizing ability are transferred from the epididymis to the spermatozoa via epididymosomes in the domestic cat model. *Journal of Assisted Reproduction and Genetics*, **2018**, 35, 221-228	3.4	19
45	Supplementation of in vitro culture medium with FSH to grow follicles and mature oocytes can be replaced by extracts of Justicia insularis. *PLoS ONE*, **2018**, 13, e0208760	3.7	7
44	Influence of warming and reanimation conditions on seminiferous tubule morphology, mitochondrial activity, and cell composition of vitrified testicular tissues in the domestic cat model. *PLoS ONE*, **2018**, 13, e0207317	3.7	10
43	Retinoic acid promotes in vitro follicle activation in the cat ovary by regulating expression of matrix metalloproteinase 9. *PLoS ONE*, **2018**, 13, e0202759	3.7	2
42	Dry Preservation of Spermatozoa: Considerations for Different Species. *Biopreservation and Biobanking*, **2017**, 15, 158-168	2.1	11
41	Age-associated and deslorelin-induced declines in serum anti-Müllerian hormone concentrations in female cheetahs, Acinonyx jubatus. *General and Comparative Endocrinology*, **2017**, 250, 54-57	3	5
40	Circumventing the natural, frequent oestrogen waves of the female cheetah (Acinonyx jubatus) using oral progestin (Altrenogest). *Reproduction, Fertility and Development*, **2017**, 29, 1486-1498	1.8	13
39	Effects of hormonal stimulation on the concentration and quality of excreted spermatozoa in the critically endangered Panamanian golden frog (Atelopus zeteki). *Theriogenology*, **2017**, 91, 27-35	2.8	24
38	Stem cell factor promotes in vitro ovarian follicle development in the domestic cat by upregulating c-kit mRNA expression and stimulating the phosphatidylinositol 3-kinase/AKT pathway. *Reproduction, Fertility and Development*, **2017**, 29, 1356-1368	1.8	15
37	The impact of ovarian stimulation protocol on oocyte quality, subsequent in vitro embryo development, and pregnancy after transfer to recipients in Eld's deer (Rucervus eldii thamin). *Theriogenology*, **2017**, 91, 134-144	2.8	7
36	Saving the saola from extinction. *Science*, **2017**, 357, 1248	33.3	8
35	Structural integrity and developmental potential of spermatozoa following microwave-assisted drying in the domestic cat model. *Theriogenology*, **2017**, 103, 36-43	2.8	20
34	Cryobanking Biomaterials from Wild Animal Species to Conserve Genes and Biodiversity: Relevance to Human Biobanking and Biomedical Research **2017**, 217-235		8
33	The preservation of vital functions in cat ovarian tissues during vitrification depends more on the temperature of the cryoprotectant exposure than on the sucrose supplementation. *Cryobiology*, **2016**, 73, 187-95	2.7	24
32	Carbonyl cyanide 4-(trifluoromethoxy)phenylhydrazone (FCCP) pre-exposure ensures follicle integrity during in vitro culture of ovarian tissue but not during cryopreservation in the domestic cat model. *Journal of Assisted Reproduction and Genetics*, **2016**, 33, 1621-1631	3.4	6

31	Incidence of methylated histones H3K4 and H3K79 in cat germinal vesicles is regulated by specific nuclear factors at the acquisition of developmental competence during the folliculogenesis. *Journal of Assisted Reproduction and Genetics*, **2016**, 33, 783-94	3.4	3
30	Effect of extracellular adenosine 5Striphosphate on cryopreserved epididymal cat sperm intracellular ATP concentration, sperm quality, and in vitro fertilizing ability. *Theriogenology*, **2015**, 84, 702-9	2.8	11
29	Positive impact of sucrose supplementation during slow freezing of cat ovarian tissues on cellular viability, follicle morphology, and DNA integrity. *Theriogenology*, **2015**, 83, 1553-61	2.8	32
28	Resilience of oocyte germinal vesicles to microwave-assisted drying in the domestic cat model. *Biopreservation and Biobanking*, **2015**, 13, 164-71	2.1	25
27	Nucleolar Translocation of Histone Deacetylase 2 Is Involved in Regulation of Transcriptional Silencing in the Cat Germinal Vesicle. *Biology of Reproduction*, **2015**, 93, 33	3.9	8
26	Damage to fetal bovine ovarian tissue caused by cryoprotectant exposure and vitrification is mitigated during tissue culture. *Journal of Assisted Reproduction and Genetics*, **2015**, 32, 1239-50	3.4	15
25	Spermatozoa isolated from cat testes retain their structural integrity as well as a developmental potential after refrigeration for up to 7 days. *Zygote*, **2015**, 23, 644-51	1.6	4
24	Biotechnologies for wildlife fertility preservation. *Animal Frontiers*, **2015**, 5, 73-78	5.5	13
23	Biobanking efforts and new advances in male fertility preservation for rare and endangered species. *Asian Journal of Andrology*, **2015**, 17, 640-5	2.8	49
22	Follicle-stimulating hormone receptor (FSHR) alternative skipping of exon 2 or 3 affects ovarian response to FSH. *Molecular Human Reproduction*, **2014**, 20, 630-43	4.4	20
21	Epidermal growth factor (EGF) sustains in vitro primordial follicle viability by enhancing stromal cell proliferation via MAPK and PI3K pathways in the prepubertal, but not adult, cat ovary. *Biology of Reproduction*, **2014**, 90, 86	3.9	42
20	Recent advances and prospects in germplasm preservation of rare and endangered species. *Advances in Experimental Medicine and Biology*, **2014**, 753, 331-56	3.6	28
19	Reproductive science as an essential component of conservation biology. *Advances in Experimental Medicine and Biology*, **2014**, 753, 3-14	3.6	11
18	Mammalian fertility preservation through cryobiology: value of classical comparative studies and the need for new preservation options. *Reproduction, Fertility and Development*, **2013**, 26, 91-8	1.8	29
17	Retention of structure and function of the cat germinal vesicle after air-drying and storage at suprazero temperature. *Biology of Reproduction*, **2013**, 88, 139	3.9	23
16	Effects of cold storage on plasma membrane, DNA integrity and fertilizing ability of feline testicular spermatozoa. *Animal Reproduction Science*, **2012**, 131, 219-27	2.1	9
15	Absence of seasonal changes in FSHR gene expression in the cat cumulus-oocyte complex in vivo and in vitro. *Reproduction*, **2012**, 144, 111-22	3.8	15
14	Centrosomal Functions and Dysfunctions in Cat Spermatozoa **2012**, 49-58		5

13	Increasing age influences uterine integrity, but not ovarian function or oocyte quality, in the cheetah (Acinonyx jubatus). *Biology of Reproduction*, **2011**, 85, 243-53	3.9	45
12	Lessons from biodiversity--the value of nontraditional species to advance reproductive science, conservation, and human health. *Molecular Reproduction and Development*, **2010**, 77, 397-409	2.6	81
11	Protecting and extending fertility for females of wild and endangered mammals. *Cancer Treatment and Research*, **2010**, 156, 87-100	3.5	47
10	Paracrine factors from cumulus-enclosed oocytes ensure the successful maturation and fertilization in vitro of denuded oocytes in the cat model. *Fertility and Sterility*, **2009**, 91, 2051-60	4.8	43
9	A Historical Overview of Embryo and Oocyte Preservation in the World of Mammalian In Vitro Fertilization and Biotechnology. *Reproductive Medicine and Assisted Reproductive Techniques Series*, **2009**, 1-11		3
8	Vitrification of Ovarian Cortex from Prepubertal and Adult Cats Induces Less Damage to the Primordial Follicles than Slow Freezing.. *Biology of Reproduction*, **2009**, 81, 187-187	3.9	2
7	Impact of anisosmotic conditions on structural and functional integrity of cumulus-oocyte complexes at the germinal vesicle stage in the domestic cat. *Molecular Reproduction and Development*, **2008**, 75, 345-54	2.6	34
6	Diversity of Endangered Species Reproduction as Studied Worldwide.. *Biology of Reproduction*, **2008**, 78, 283-283	3.9	
5	Poor centrosomal function of cat testicular spermatozoa impairs embryo development in vitro after intracytoplasmic sperm injection. *Biology of Reproduction*, **2006**, 75, 252-60	3.9	48
4	Applications of emerging technologies to the study and conservation of threatened and endangered species. *Reproduction, Fertility and Development*, **2006**, 18, 77-90	1.8	110
3	In vitro development of domestic cat embryos following intra-cytoplasmic sperm injection with testicular spermatozoa. *Theriogenology*, **2006**, 66, 1659-63	2.8	28
2	Effect of 1,2-propanediol versus 1,2-ethanediol on subsequent oocyte maturation, spindle integrity, fertilization, and embryo development in vitro in the domestic cat. *Biology of Reproduction*, **2004**, 71, 598-604	3.9	41
1	Reproductive biotechnologies for endangered mammalian species. *Reproduction, Nutrition, Development*, **2000**, 40, 493-504		80