Christopher L R Barratt

List of Publications by Citations

123 papers	4,763 citations	40 h-index	67 g-index
150 ext. papers	5,378 ext. citations	6.8 avg, IF	5.45 L-index

#	Paper	IF	Citations
123	A double-blind randomized placebo cross-over controlled trial using the antioxidant vitamin E to treat reactive oxygen species associated male infertility. *Fertility and Sterility*, **1995**, 64, 825-31	4.8	260
122	[Ca2+]i signalling in sperm--making the most of what you've got. *Nature Cell Biology*, **2007**, 9, 235-42	23.4	217
121	The diagnosis of male infertility: an analysis of the evidence to support the development of global WHO guidance-challenges and future research opportunities. *Human Reproduction Update*, **2017**, 23, 660-680	15.8	190
120	Ca2+-stores in sperm: their identities and functions. *Reproduction*, **2009**, 138, 425-37	3.8	147
119	Stimulation of human spermatozoa with progesterone gradients to simulate approach to the oocyte. Induction of [Ca(2+)](i) oscillations and cyclical transitions in flagellar beating. *Journal of Biological Chemistry*, **2004**, 279, 46315-25	5.4	143
118	A survey of assisted reproductive technology births and imprinting disorders. *Human Reproduction*, **2007**, 22, 3237-40	5.7	141
117	DPY19L2 deletion as a major cause of globozoospermia. *American Journal of Human Genetics*, **2011**, 88, 344-50	11	133
116	Human spermatozoa contain multiple targets for protein S-nitrosylation: an alternative mechanism of the modulation of sperm function by nitric oxide?. *Proteomics*, **2007**, 7, 3066-84	4.8	132
115	Sperm proteome mapping of a patient who experienced failed fertilization at IVF reveals altered expression of at least 20 proteins compared with fertile donors: case report. *Human Reproduction*, **2004**, 19, 1438-47	5.7	130
114	Sperm selection in natural conception: what can we learn from Mother Nature to improve assisted reproduction outcomes?. *Human Reproduction Update*, **2015**, 21, 711-26	15.8	120
113	When and how should new technology be introduced into the IVF laboratory?. *Human Reproduction*, **2012**, 27, 303-13	5.7	120
112	Ca2+ signals generated by CatSper and Ca2+ stores regulate different behaviors in human sperm. *Journal of Biological Chemistry*, **2013**, 288, 6248-58	5.4	111
111	Fertility preservation in men with cancer. *Lancet, The*, **2014**, 384, 1295-301	40	107
110	The impact of mitochondrial genetics on male infertility. *Journal of Developmental and Physical Disabilities*, **2005**, 28, 65-73		98
109	Quality control during the conventional analysis of semen, an essential exercise. *Journal of Andrology*, **1989**, 10, 378-85		91
108	'How to count sperm properly': checklist for acceptability of studies based on human semen analysis. *Human Reproduction*, **2016**, 31, 227-32	5.7	90
107	Identification of the true human orthologue of the mouse Zp1 gene: evidence for greater complexity in the mammalian zona pellucida?. *Biochimica Et Biophysica Acta Gene Regulatory Mechanisms*, **1999**, 1447, 303-6		81

106	The clinical significance of calcium-signalling pathways mediating human sperm hyperactivation. *Human Reproduction*, **2013**, 28, 866-76	5.7	75
105	ESHRE special interest group for andrology basic semen analysis course: a continued focus on accuracy, quality, efficiency and clinical relevance. *Human Reproduction*, **2011**, 26, 3207-12	5.7	72
104	Men with oligoasthenoteratozoospermia harbour higher numbers of multiple mitochondrial DNA deletions in their spermatozoa, but individual deletions are not indicative of overall aetiology. *Molecular Human Reproduction*, **2001**, 7, 103-11	4.4	70
103	Evaluation and treatment of familial globozoospermia in five brothers. *Fertility and Sterility*, **2004**, 82, 1436-9	4.8	69
102	Failure of elimination of paternal mitochondrial DNA in abnormal embryos. *Lancet, The*, **2000**, 355, 200	40	69
101	Diagnostic tools in male infertility-the question of sperm dysfunction. *Asian Journal of Andrology*, **2011**, 13, 53-8	2.8	64
100	Mitochondrial mutations and male infertility. *Nature Medicine*, **1997**, 3, 124-5	50.5	64
99	Mobilisation of stored calcium in the neck region of human sperm--a mechanism for regulation of flagellar activity. *International Journal of Developmental Biology*, **2008**, 52, 615-26	1.9	62
98	Secretory pathway Ca(2+)-ATPase (SPCA1) Ca(2)+ pumps, not SERCAs, regulate complex [Ca(2+)](i) signals in human spermatozoa. *Journal of Cell Science*, **2005**, 118, 1673-85	5.3	62
97	Counting sperm does not add up any more: time for a new equation?. *Reproduction*, **2007**, 133, 675-84	3.8	61
96	p,pSDDE activates CatSper and compromises human sperm function at environmentally relevant concentrations. *Human Reproduction*, **2013**, 28, 3167-77	5.7	60
95	A Practical Guide to Basic Laboratory Andrology **2010**,		56
94	Importance of ‡defensins in sperm function. *Molecular Human Reproduction*, **2014**, 20, 821-6	4.4	47
93	Critical evaluation of methylcellulose as an alternative medium in sperm migration tests. *Human Reproduction*, **2002**, 17, 143-9	5.7	46
92	Specific loss of CatSper function is sufficient to compromise fertilizing capacity of human spermatozoa. *Human Reproduction*, **2015**, 30, 2737-46	5.7	45
91	The sequential effects of human cervical mucus, oviductal fluid, and follicular fluid on sperm function. *Fertility and Sterility*, **1994**, 61, 1129-35	4.8	45
90	SMan UpS the importance and strategy for placing male reproductive health centre stage in the political and research agenda. *Human Reproduction*, **2018**, 33, 541-545	5.7	44
89	What should it take to describe a substance or product as Ssperm-safeS *Human Reproduction Update* , **2013**, 19 Suppl 1, i1-45	15.8	44

88	Encoding of progesterone stimulus intensity by intracellular [Ca2+] ([Ca2+]i) in human spermatozoa. *Biochemical Journal*, **2003**, 372, 407-17	3.8	44
87	Identification and localization of T-type voltage-operated calcium channel subunits in human male germ cells. Expression of multiple isoforms. *Journal of Biological Chemistry*, **2002**, 277, 8449-56	5.4	44
86	The role of carbohydrate in sperm-ZP3 adhesion. *Molecular Human Reproduction*, **1996**, 2, 767-74	4.4	42
85	Donor insemination--a look to the future. *Fertility and Sterility*, **1990**, 54, 375-87	4.8	42
84	Slow calcium oscillations in human spermatozoa. *Biochemical Journal*, **2004**, 378, 827-32	3.8	40
83	Voltage-operated calcium channels in male germ cells. *Reproduction*, **2002**, 123, 203-15	3.8	37
82	Zona pellucida and progesterone-induced Ca2+ signaling and acrosome reaction in human spermatozoa. *Journal of Andrology*, **2002**, 23, 306-15		37
81	Mobilisation of Ca2+ stores and flagellar regulation in human sperm by S-nitrosylation: a role for NO synthesised in the female reproductive tract. *Development (Cambridge)*, **2008**, 135, 3677-86	6.6	36
80	Clinically relevant enhancement of human sperm motility using compounds with reported phosphodiesterase inhibitor activity. *Human Reproduction*, **2014**, 29, 2123-35	5.7	35
79	Depolarization of sperm membrane potential is a common feature of men with subfertility and is associated with low fertilization rate at IVF. *Human Reproduction*, **2016**, 31, 1147-57	5.7	35
78	Intracellular translocation and differential accumulation of cell-penetrating peptides in bovine spermatozoa: evaluation of efficient delivery vectors that do not compromise human sperm motility. *Human Reproduction*, **2013**, 28, 1874-89	5.7	33
77	Absolute SILAC-compatible expression strain allows Sumo-2 copy number determination in clinical samples. *Journal of Proteome Research*, **2011**, 10, 4869-75	5.6	33
76	2-APB-potentiated channels amplify CatSper-induced Ca(2+) signals in human sperm. *Biochemical Journal*, **2012**, 448, 189-200	3.8	33
75	The contribution of a hidden male factor to unexplained infertility. *Fertility and Sterility*, **1993**, 59, 405-11	4.8	33
74	Human sperm ion channel (dys)function: implications for fertilization. *Human Reproduction Update*, **2019**, 25, 758-776	15.8	32
73	A prospective randomized controlled trial comparing urinary luteinizing hormone dipsticks and basal body temperature charts with time donor insemination. *Fertility and Sterility*, **1989**, 52, 394-7	4.8	29
72	Physiological and proteomic approaches to studying prefertilization events in the human. *Reproductive BioMedicine Online*, **2003**, 7, 419-27	4	28
71	Kinetics of the progesterone-induced acrosome reaction and its relation to intracellular calcium responses in individual human spermatozoa. *Biology of Reproduction*, **2006**, 75, 933-9	3.9	27

70	Homozygous in-frame deletion in CATSPERE in a man producing spermatozoa with loss of CatSper function and compromised fertilizing capacity. *Human Reproduction*, **2018**, 33, 1812-1816	5.7	27
69	Coordinated transcriptional regulation patterns associated with infertility phenotypes in men. *Journal of Medical Genetics*, **2007**, 44, 498-508	5.8	26
68	Interaction between sperm and zona pellucida in male fertility. *Lancet, The*, **2001**, 358, 1660-2	40	26
67	Protect us from poor-quality medical research. *Human Reproduction*, **2018**, 33, 770-776	5.7	21
66	The human sperm proteome: the potential for new biomarkers of male fertility and a transformation in our understanding of the spermatozoon as a machine: commentary on the article Identification of proteomic differences in asthenozoospermic sperm samples by Martinez et al. *Human Reproduction*, **2008**, 23, 1240-1	5.7	18
65	Clinical challenges in providing embryos for stem-cell initiatives. *Lancet, The*, **2004**, 364, 115-8	40	18
64	The human spermatozoon - a stripped down but refined machine. *Journal of Biology*, **2009**, 8, 63		17
63	Single-cell analysis of [Ca2+]i signalling in sub-fertile men: characteristics and relation to fertilization outcome. *Human Reproduction*, **2018**, 33, 1023-1033	5.7	16
62	Gamete donation: a question of anonymity. *Fertility and Sterility*, **2006**, 85, 500-1	4.8	16
61	Drug discovery for male subfertility using high-throughput screening: a new approach to an unsolved problem. *Human Reproduction*, **2017**, 32, 974-984	5.7	15
60	The interaction of parameters of male and female fertility in couples with previously unexplained infertility**Supported by a Harris Birthright grant, Royal College of Obstetricians and Gynaecologists, London, United Kingdom.Presented at XIII World Congress of Fertility and Sterility, Marrakesh, Morocco, October 1989.. *Fertility and Sterility*, **1990**, 54, 824-827	4.8	15
59	Complex CatSper-dependent and independent [Ca2+]i signalling in human spermatozoa induced by follicular fluid. *Human Reproduction*, **2017**, 32, 1995-2006	5.7	14
58	The effects of clomiphene citrate and cyclofenil on cervical mucus volume and receptivity over the periovulatory period. *Fertility and Sterility*, **1993**, 59, 125-9	4.8	14
57	The more accurate timing of insemination with regard to ovulation does not create a significant improvement in pregnancy rates in a donor insemination program. *Fertility and Sterility*, **1994**, 61, 308-13	4.8	14
56	Distribution of semen examination results 2020 - A follow up of data collated for the WHO semen analysis manual 2010. *Andrology*, **2021**, 9, 817-822	4.2	14
55	WHO manual...who should care?. *Human Reproduction*, **1999**, 14, 2431-3	5.7	13
54	Human oocytes express ATP-sensitive K(+) channels. *Human Reproduction*, **2010**, 25, 2774-82	5.7	12
53	Sperm are promiscuous and CatSper is to blame. *EMBO Journal*, **2012**, 31, 1624-6	13	12

52	Peritoneal sperm recovery can be consistently demonstrated in women with unexplained infertility. *Fertility and Sterility*, **1990**, 53, 1106-8	4.8	11
51	Novel pharmacological actions of trequinsin hydrochloride improve human sperm cell motility and function. *British Journal of Pharmacology*, **2019**, 176, 4521-4536	8.6	10
50	Man-made versus female-made environment--will the real capacitation please stand up?. *Human Reproduction Update*, **2006**, 12, 1-2	15.8	10
49	Raising standards in semen analysis: professional and personal responsibility. *Journal of Andrology*, **2004**, 25, 862-3		10
48	Continuous behavioural SswitchingSin human spermatozoa and its regulation by Ca2+-mobilising stimuli. *Molecular Human Reproduction*, **2019**, 25, 423-432	4.4	7
47	Response of human spermatozoa to an internal calcium ATPase inhibitor, 2,5-di(tert-butyl) hydroquinone. *The Journal of Experimental Zoology*, **1997**, 279, 284-90		7
46	The spermatozoon at fertilisation: current understanding and future research directions. *Human Fertility*, **2005**, 8, 241-51	1.9	7
45	[Ca2+]i oscillations in human sperm are triggered in the flagellum by membrane potential-sensitive activity of CatSper. *Human Reproduction*, **2021**, 36, 293-304	5.7	7
44	Characterization of cyclic adenine dinucleotide phosphate ribose levels in human spermatozoa. *Fertility and Sterility*, **2006**, 86, 891-8	4.8	6
43	A global approach to addressing the policy, research and social challenges of male reproductive health. *Human Reproduction Open*, **2021**, 2021, hoab009	6.1	6
42	Andrology is desperate for a new assay Let us make sure we get it right this time *Middle East Fertility Society Journal*, **2013**, 18, 82-83	1.4	5
41	Chloride channels join the sperm SchannelomeS *Journal of Physiology*, **2012**, 590, 2553-4	3.9	5
40	A phenotypic screening platform utilising human spermatozoa identifies compounds with contraceptive activity. *ELife*, **2020**, 9,	8.9	5
39	A spontaneous increase in intracellular Ca2+ in metaphase II human oocytes in vitro can be prevented by drugs targeting ATP-sensitive K+ channels. *Human Reproduction*, **2016**, 31, 287-97	5.7	4
38	Elevating intracellular calcium levels in human sperm using an internal calcium ATPase inhibitor, 2,5-di(tert-butyl) hydroquinone (TBQ), initiates capacitation and the acrosome reaction but only in the presence of extracellular calcium **1997**, 279, 291-300		4
37	Progesterone interaction with sperm plasma membrane, calcium influx and induction of the acrosome reaction. *Reproductive Medicine Review*, **1999**, 7, 81-93		4
36	Regulation of Sperm Behaviour126-142		3
35	Sperm Ultrastructure in Fertile Men and Male Sterility36-58		3

34	Genomic and proteomic approaches to defining sperm production and function49-71		3
33	Functional genomics in reproductive medicine. *Human Fertility*, **2002**, 5, 3-5	1.9	3
32	The mystery is solved--CatSper is the principal calcium channel activated by progesterone in human spermatozoa. *Asian Journal of Andrology*, **2011**, 13, 351-2	2.8	3
31	Communication between female tract and sperm: Saying NO* when you mean yes. *Communicative and Integrative Biology*, **2009**, 2, 82-5	1.7	2
30	Physiological and Proteomic Approaches to Understanding Human Sperm Function **2007**, 77-97		2
29	Globozoospermia308-312		2
28	Semen analysis: setting standards for the measurement of sperm numbers. *Journal of Andrology*, **2005**, 26, 11		2
27	Sperm RNA and Its Use as a Clinical Marker59-72		1
26	Reply: Development of a novel home sperm test What are the limitations?. *Human Reproduction*, **2006**, 21, 3030-3031	5.7	1
25	COMMENTEffect of a phytoestrogen food supplement on reproductive health in normal males. *Clinical Science*, **2001**, 100, 659	6.5	1
24	The future of reproductive cellular engineering in male infertility. *Urologic Clinics of North America*, **2002**, 29, 809-15	2.9	1
23	Cryo-survival of spermatozoa. *Human Reproduction*, **1999**, 14, 2925-2925	5.7	1
22	Behavioural switching during oscillations of intracellular Ca concentration in free-swimming human sperm.. *Reproduction and Fertility*, **2021**, 2, L5-L7	1.1	1
21	Research Funding for Male Reproductive Health and Infertility in the UK and USA [2016 2019]		1
20	What advances may the future bring to the diagnosis, treatment, and care of male sexual and reproductive health?. *Fertility and Sterility*, **2022**, 117, 258-267	4.8	0
19	The structure of CatSper is revealed: happy days for sperm biology. *Human Reproduction*, **2021**, 36, 2811-2813	5.7	0
18	Protocol for developing a core outcome set for male infertility research: an international consensus development study.. *Human Reproduction Open*, **2022**, 2022, hoac014	6.1	0
17	Research funding for male reproductive health and infertility in the UK and USA [2016 - 2019].. *Human Fertility*, **2022**, 1-11	1.9	0

16	Current Concepts and Unresolved Questions in Human Sperm Cumulus and Zona Interaction152-156	
15	Male Infertility and Assisted Reproduction193-207	
14	MHR celebration issue in tribute to Professor Sir Robert Edwards. *Molecular Human Reproduction*, **2013**, 19, 783-4	4.4
13	Basic physiology5-32	
12	Reply: Development of a novel home sperm test - temperature range. *Human Reproduction*, **2006**, 21, 3028-3029	5.7
11	COMMENTEffect of a phytoestrogen food supplement on reproductive health in normal males. *Clinical Science*, **2001**, 100, 659-659	6.5
10	Donor Insemination: Past, Present and Future Perspectives **2020**, 189-198	
9	Donor insemination **2010**, 149-158	
8	Globozoospermia **2021**, 492-497	
7	Education, education, education-now more than ever?. *Molecular Human Reproduction*, **2018**, 24, 426-429	4.4
6	Investigating infertility in primary care. *Practitioner*, **2009**, 253, 26-8	
5	Computer-Aided Sperm Analysis **2022**, 130-154	
4	Basic Physiology **2022**, 5-33	
3	Interpreting Andrology Laboratory Results **2022**, 316-332	
2	Reproductive Toxicology **2022**, 303-306	
1	The use of donor insemination148-157	