

Christopher L R Barratt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7211102/publications.pdf>

Version: 2024-02-01

136
papers

6,017
citations

61945

43
h-index

76872

74
g-index

150
all docs

150
docs citations

150
times ranked

4975
citing authors

#	ARTICLE	IF	CITATIONS
1	The diagnosis of male infertility: an analysis of the evidence to support the development of global WHO guidance“ challenges and future research opportunities. <i>Human Reproduction Update</i> , 2017, 23, 660-680.	5.2	320
2	A double-blind randomized placebo cross-over controlled trial using the antioxidant vitamin E to treat reactive oxygen species associated male infertility. <i>Fertility and Sterility</i> , 1995, 64, 825-831.	0.5	309
3	[Ca ²⁺] _i signalling in sperm “ making the most of what you've got. <i>Nature Cell Biology</i> , 2007, 9, 235-242.	4.6	245
4	Ca ²⁺ -stores in sperm: their identities and functions. <i>Reproduction</i> , 2009, 138, 425-437.	1.1	181
5	Sperm selection in natural conception: what can we learn from Mother Nature to improve assisted reproduction outcomes?. <i>Human Reproduction Update</i> , 2015, 21, 711-726.	5.2	177
6	DPY19L2 Deletion as a Major Cause of Globozoospermia. <i>American Journal of Human Genetics</i> , 2011, 88, 344-350.	2.6	172
7	Stimulation of Human Spermatozoa with Progesterone Gradients to Simulate Approach to the Oocyte. <i>Journal of Biological Chemistry</i> , 2004, 279, 46315-46325.	1.6	164
8	A survey of assisted reproductive technology births and imprinting disorders. <i>Human Reproduction</i> , 2007, 22, 3237-3240.	0.4	157
9	When and how should new technology be introduced into the IVF laboratory?. <i>Human Reproduction</i> , 2012, 27, 303-313.	0.4	146
10	Human spermatozoa contain multiple targets for protein S-nitrosylation: An alternative mechanism of the modulation of sperm function by nitric oxide?. <i>Proteomics</i> , 2007, 7, 3066-3084.	1.3	144
11	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. <i>Human Reproduction</i> , 2004, 19, 1438-1447.	0.4	141
12	Ca ²⁺ Signals Generated by CatSper and Ca ²⁺ Stores Regulate Different Behaviors in Human Sperm*. <i>Journal of Biological Chemistry</i> , 2013, 288, 6248-6258.	1.6	134
13	Fertility preservation in men with cancer. <i>Lancet, The</i> , 2014, 384, 1295-1301.	6.3	125
14	“How to count sperm properly“™: checklist for acceptability of studies based on human semen analysis. <i>Human Reproduction</i> , 2016, 31, dev305.	0.4	120
15	The impact of mitochondrial genetics on male infertility. <i>Journal of Developmental and Physical Disabilities</i> , 2005, 28, 65-73.	3.6	111
16	Quality Control During the Conventional Analysis of Semen, An Essential Exercise. <i>Journal of Andrology</i> , 1989, 10, 378-385.	2.0	107
17	ESHRE special interest group for andrology basic semen analysis course: a continued focus on accuracy, quality, efficiency and clinical relevance. <i>Human Reproduction</i> , 2011, 26, 3207-3212.	0.4	103
18	Identification of the true human orthologue of the mouse Zp1 gene: evidence for greater complexity in the mammalian zona pellucida?. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1999, 1447, 303-306.	2.4	95

#	ARTICLE	IF	CITATIONS
19	Failure of elimination of paternal mitochondrial DNA in abnormal embryos. <i>Lancet, The</i> , 2000, 355, 200.	6.3	91
20	The clinical significance of calcium-signalling pathways mediating human sperm hyperactivation. <i>Human Reproduction</i> , 2013, 28, 866-876.	0.4	84
21	Men with oligoasthenoteratozoospermia harbour higher numbers of multiple mitochondrial DNA deletions in their spermatozoa, but individual deletions are not indicative of overall aetiology. <i>Molecular Human Reproduction</i> , 2001, 7, 103-111.	1.3	82
22	Evaluation and treatment of familial globozoospermia in five brothers. <i>Fertility and Sterility</i> , 2004, 82, 1436-1439.	0.5	76
23	Counting sperm does not add up any more: time for a new equation?. <i>Reproduction</i> , 2007, 133, 675-684.	1.1	75
24	Diagnostic tools in male infertility—the question of sperm dysfunction. <i>Asian Journal of Andrology</i> , 2011, 13, 53-58.	0.8	75
25	p,p'-DDE activates CatSper and compromises human sperm function at environmentally relevant concentrations. <i>Human Reproduction</i> , 2013, 28, 3167-3177.	0.4	74
26	Mitochondrial mutations and male infertility. <i>Nature Medicine</i> , 1997, 3, 124-125.	15.2	73
27	Human sperm ion channel (dys)function: implications for fertilization. <i>Human Reproduction Update</i> , 2019, 25, 758-776.	5.2	68
28	Secretory pathway Ca ²⁺ -ATPase (SPCA1) Ca ²⁺ pumps, not SERCAs, regulate complex [Ca ²⁺] _i signals in human spermatozoa. <i>Journal of Cell Science</i> , 2005, 118, 1673-1685.	1.2	67
29	Mobilisation of stored calcium in the neck region of human sperm a mechanism for regulation of flagellar activity. <i>International Journal of Developmental Biology</i> , 2008, 52, 615-626.	0.3	67
30	Man Up™: the importance and strategy for placing male reproductive health centre stage in the political and research agenda. <i>Human Reproduction</i> , 2018, 33, 541-545.	0.4	65
31	Distribution of semen examination results 2020 – A follow up of data collated for the WHO semen analysis manual 2010. <i>Andrology</i> , 2021, 9, 817-822.	1.9	65
32	Importance of \hat{A} -defensins in sperm function. <i>Molecular Human Reproduction</i> , 2014, 20, 821-826.	1.3	64
33	Identification and Localization of T-type Voltage-operated Calcium Channel Subunits in Human Male Germ Cells. <i>Journal of Biological Chemistry</i> , 2002, 277, 8449-8456.	1.6	62
34	Specific loss of CatSper function is sufficient to compromise fertilizing capacity of human spermatozoa. <i>Human Reproduction</i> , 2015, 30, dev243.	0.4	61
35	Critical evaluation of methylcellulose as an alternative medium in sperm migration tests. <i>Human Reproduction</i> , 2002, 17, 143-149.	0.4	59
36	Depolarization of sperm membrane potential is a common feature of men with subfertility and is associated with low fertilization rate at IVF. <i>Human Reproduction</i> , 2016, 31, 1147-1157.	0.4	57

#	ARTICLE	IF	CITATIONS
37	Encoding of progesterone stimulus intensity by intracellular [Ca ²⁺] ([Ca ²⁺] _i) in human spermatozoa. <i>Biochemical Journal</i> , 2003, 372, 407-417.	1.7	52
38	The sequential effects of human cervical mucus, oviductal fluid, and follicular fluid on sperm function. <i>Fertility and Sterility</i> , 1994, 61, 1129-1135.	0.5	51
39	What should it take to describe a substance or product as 'sperm-safe'. <i>Human Reproduction Update</i> , 2013, 19, i1-i45.	5.2	50
40	Donor insemination—a look to the future. <i>Fertility and Sterility</i> , 1990, 54, 375-387.	0.5	48
41	The role of carbohydrate in sperm-ZP3 adhesion. <i>Molecular Human Reproduction</i> , 1996, 2, 767-774.	1.3	45
42	Voltage-operated calcium channels in male germ cells. <i>Reproduction</i> , 2002, 123, 203-215.	1.1	45
43	Slow calcium oscillations in human spermatozoa. <i>Biochemical Journal</i> , 2004, 378, 827-832.	1.7	44
44	Mobilisation of Ca ²⁺ stores and flagellar regulation in human sperm by S-nitrosylation: a role for NO synthesised in the female reproductive tract. <i>Development (Cambridge)</i> , 2008, 135, 3677-3686.	1.2	44
45	Clinically relevant enhancement of human sperm motility using compounds with reported phosphodiesterase inhibitor activity. <i>Human Reproduction</i> , 2014, 29, 2123-2135.	0.4	44
46	Homozygous in-frame deletion in <i>CATSPERE</i> in a man producing spermatozoa with loss of CatSper function and compromised fertilizing capacity. <i>Human Reproduction</i> , 2018, 33, 1812-1816.	0.4	43
47	Intracellular translocation and differential accumulation of cell-penetrating peptides in bovine spermatozoa: evaluation of efficient delivery vectors that do not compromise human sperm motility. <i>Human Reproduction</i> , 2013, 28, 1874-1889.	0.4	40
48	Protect us from poor-quality medical research. <i>Human Reproduction</i> , 2018, 33, 770-776.	0.4	40
49	Absolute SILAC-Compatible Expression Strain Allows Sumo-2 Copy Number Determination in Clinical Samples. <i>Journal of Proteome Research</i> , 2011, 10, 4869-4875.	1.8	39
50	The contribution of a hidden male factor to unexplained infertility. <i>Fertility and Sterility</i> , 1993, 59, 405-411.	0.5	38
51	2-APB-potentiated channels amplify CatSper-induced Ca ²⁺ signals in human sperm. <i>Biochemical Journal</i> , 2012, 448, 189-200.	1.7	38
52	Zona pellucida and progesterone-induced Ca ²⁺ signaling and acrosome reaction in human spermatozoa. <i>Journal of Andrology</i> , 2002, 23, 306-15.	2.0	37
53	Kinetics of the Progesterone-Induced Acrosome Reaction and Its Relation to Intracellular Calcium Responses in Individual Human Spermatozoa. <i>Biology of Reproduction</i> , 2006, 75, 933-939.	1.2	33
54	A prospective randomized controlled trial comparing urinary luteinizing hormone dipsticks and basal body temperature charts with time donor insemination. <i>Fertility and Sterility</i> , 1989, 52, 394-397.	0.5	31

#	ARTICLE	IF	CITATIONS
55	Physiological and proteomic approaches to studying prefertilization events in the human. <i>Reproductive BioMedicine Online</i> , 2003, 7, 419-427.	1.1	30
56	Coordinated transcriptional regulation patterns associated with infertility phenotypes in men. <i>Journal of Medical Genetics</i> , 2007, 44, 498-508.	1.5	30
57	Clinical relevance of sperm DNA assessment: an update. <i>Fertility and Sterility</i> , 2010, 94, 1958-1959.	0.5	27
58	Interaction between sperm and zona pellucida in male fertility. <i>Lancet, The</i> , 2001, 358, 1660-1662.	6.3	26
59	Progesterone's gateway into sperm. <i>Nature</i> , 2011, 471, 313-314.	13.7	26
60	Single-cell analysis of $[Ca^{2+}]_i$ signalling in sub-fertile men: characteristics and relation to fertilization outcome. <i>Human Reproduction</i> , 2018, 33, 1023-1033.	0.4	25
61	Complex CatSper-dependent and independent $[Ca^{2+}]_i$ signalling in human spermatozoa induced by follicular fluid. <i>Human Reproduction</i> , 2017, 32, 1995-2006.	0.4	22
62	Gamete donation: a question of anonymity. <i>Fertility and Sterility</i> , 2006, 85, 500-501.	0.5	21
63	Novel pharmacological actions of trequinsin hydrochloride improve human sperm cell motility and function. <i>British Journal of Pharmacology</i> , 2019, 176, 4521-4536.	2.7	21
64	The human spermatozoon – a stripped down but refined machine. <i>Journal of Biology</i> , 2009, 8, 63.	2.7	20
65	Clinical challenges in providing embryos for stem-cell initiatives. <i>Lancet, The</i> , 2004, 364, 115-118.	6.3	19
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.. <i>Human Reproduction</i> , 2008, 23, 1240-1241.	0.4	19
67	Drug discovery for male subfertility using high-throughput screening: a new approach to an unsolved problem. <i>Human Reproduction</i> , 2017, 32, 974-984.	0.4	19
68	A global approach to addressing the policy, research and social challenges of male reproductive health. <i>Human Reproduction Open</i> , 2021, 2021, hoab009.	2.3	19
69	Raising Standards in Semen Analysis: Professional and Personal Responsibility. <i>Journal of Andrology</i> , 2004, 25, 862-863.	2.0	18
70	Sperm motility: things are moving in the lab!. <i>Molecular Human Reproduction</i> , 2011, 17, 453-456.	1.3	18
71	$[Ca^{2+}]_i$ oscillations in human sperm are triggered in the flagellum by membrane potential-sensitive activity of CatSper. <i>Human Reproduction</i> , 2021, 36, 293-304.	0.4	17
72	Extended semen examinations in the sixth edition of the WHO Laboratory Manual for the Examination and Processing of Human Semen: contributing to the understanding of the function of the male reproductive system. <i>Fertility and Sterility</i> , 2022, 117, 252-257.	0.5	17

#	ARTICLE	IF	CITATIONS
73	The effects of clomiphene citrate and cyclofenil on cervical mucus volume and receptivity over the periovulatory period. <i>Fertility and Sterility</i> , 1993, 59, 125-129.	0.5	16
74	The more accurate timing of insemination with regard to ovulation does not create a significant improvement in pregnancy rates in a donor insemination program. <i>Fertility and Sterility</i> , 1994, 61, 308-313.	0.5	16
75	WHO manual...Who should care?*. <i>Human Reproduction</i> , 1999, 14, 2431-2433.	0.4	16
76	A phenotypic screening platform utilising human spermatozoa identifies compounds with contraceptive activity. <i>ELife</i> , 2020, 9, .	2.8	16
77	The interaction of parameters of male and female fertility in couples with previously unexplained infertility. <i>Fertility and Sterility</i> , 1990, 54, 824-827.	0.5	15
78	Human oocytes express ATP-sensitive K ⁺ channels. <i>Human Reproduction</i> , 2010, 25, 2774-2782.	0.4	15
79	Male infertility joins the translational medicine revolution. <i>Sperm DNA: from basic science to clinical reality. Molecular Human Reproduction</i> , 2010, 16, 1-2.	1.3	13
80	Sperm are promiscuous and CatSper is to blame. <i>EMBO Journal</i> , 2012, 31, 1624-1626.	3.5	13
81	Peritoneal sperm recovery can be consistently demonstrated in women with unexplained infertility. <i>Fertility and Sterility</i> , 1990, 53, 1106-1108.	0.5	12
82	What advances may the future bring to the diagnosis, treatment, and care of male sexual and reproductive health?. <i>Fertility and Sterility</i> , 2022, 117, 258-267.	0.5	12
83	The spermatozoon at fertilisation: Current understanding and future research directions. <i>Human Fertility</i> , 2005, 8, 241-251.	0.7	9
84	Continuous behavioural Ca^{2+} switching™ in human spermatozoa and its regulation by Ca^{2+} -mobilising stimuli. <i>Molecular Human Reproduction</i> , 2019, 25, 423-432.	1.3	9
85	Response of human spermatozoa to an internal calcium ATPase inhibitor, 2,5-di(tert-butyl) hydroquinone. , 1997, 279, 284-290.		8
86	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.		7
87	Chloride channels join the sperm Ca^{2+} channelome™. <i>Journal of Physiology</i> , 2012, 590, 2553-2554.	1.3	7
88	Progesterone interaction with sperm plasma membrane, calcium influx and induction of the acrosome reaction. <i>Reproductive Medicine Review</i> , 1999, 7, 81-93.	0.3	6
89	Characterization of cyclic adenosine dinucleotide phosphate ribose levels in human spermatozoa. <i>Fertility and Sterility</i> , 2006, 86, 891-898.	0.5	6
90	A spontaneous increase in intracellular Ca^{2+} in metaphase II human oocytes in vitro can be prevented by drugs targeting ATP-sensitive K ⁺ channels. <i>Human Reproduction</i> , 2015, 31, dev300.	0.4	6

#	ARTICLE	IF	CITATIONS
91	Is there a robust future for research in reproduction?. <i>Molecular Human Reproduction</i> , 2016, 22, 1-2.	1.3	6
92	Compounds enhancing human sperm motility identified using a high-throughput phenotypic screening platform. <i>Human Reproduction</i> , 2022, 37, 466-475.	0.4	6
93	Andrology is desperate for a new assay â€œ Let us make sure we get it right this timeâ€¦. <i>Middle East Fertility Society Journal</i> , 2013, 18, 82-83.	0.5	5
94	WHO 2021 and 2030 reference values for semen assessment: three challenges for andrology in the journey ahead. <i>Reproductive BioMedicine Online</i> , 2022, 45, 187-190.	1.1	5
95	Functional genomics in reproductive medicine. <i>Human Fertility</i> , 2002, 5, 3-5.	0.7	4
96	Communication between female tract and sperm. <i>Communicative and Integrative Biology</i> , 2009, 2, 82-85.	0.6	4
97	Regulation of Sperm Behaviour. , 2017, , 126-142.		4
98	Protocol for developing a core outcome set for male infertility research: an international consensus development study. <i>Human Reproduction Open</i> , 2022, 2022, hoac014.	2.3	4
99	Cryo-survival of spermatozoa. <i>Human Reproduction</i> , 1999, 14, 2925-2925.	0.4	3
100	COMMENTEEffect of a phytoestrogen food supplement on reproductive health in normal males. <i>Clinical Science</i> , 2001, 100, 659.	1.8	3
101	Genomic and proteomic approaches to defining sperm production and function. , 0, , 49-71.		3
102	Sperm Ultrastructure in Fertile Men and Male Sterility: Revisiting Teratozoospermia. , 0, , 36-58.		3
103	The mystery is solvedâ€”CatSper is the principal calcium channel activated by progesterone in human spermatozoa. <i>Asian Journal of Andrology</i> , 2011, 13, 351-352.	0.8	3
104	High-throughput phenotypic screening of the human spermatozoon. <i>Reproduction</i> , 2022, 163, R1-R9.	1.1	3
105	Semen analysis: setting standards for the measurement of sperm numbers. <i>Journal of Andrology</i> , 2005, 26, 11.	2.0	3
106	Research funding for male reproductive health and infertility in the UK and USA [2016 â€œ 2019]. <i>Human Fertility</i> , 2023, 26, 439-449.	0.7	3
107	Sperm RNA and Its Use as a Clinical Marker. , 2017, , 59-72.		2
108	A Dolce & Gabbana model in every ART clinic?. <i>Molecular Human Reproduction</i> , 2018, 24, 431-432.	1.3	2

#	ARTICLE	IF	CITATIONS
109	Physiological and Proteomic Approaches to Understanding Human Sperm Function. , 2007, , 77-97.		2
110	The future of reproductive cellular engineering in male infertility. Urologic Clinics of North America, 2002, 29, 809-815.	0.8	1
111	Reply: Development of a novel home sperm test â€œ What are the limitations?. Human Reproduction, 2006, 21, 3030-3031.	0.4	1
112	Preimplantation genetic screeningâ€™23 years to navigate and translate into the clinical arena. We need a new roadmap!. Molecular Human Reproduction, 2016, 22, 837-838.	1.3	1
113	â€˜Single cell analysis in developmentâ€™ special series. Molecular Human Reproduction, 2016, 22, 159-159.	1.3	1
114	Male fertility: a window on the health of this generation and the next. Reproductive BioMedicine Online, 2019, 39, 721-723.	1.1	1
115	Behavioural switching during oscillations of intracellular Ca ²⁺ concentration in free-swimming human sperm. Reproduction and Fertility, 2021, 2, L5-L7.	0.6	1
116	The structure of CatSper is revealed: happy days for sperm biology. Human Reproduction, 2021, 36, 2811-2813.	0.4	1
117	Letters to the Editor. Human Reproduction, 1991, 6, 611-611.	0.4	0
118	COMMENTEeffect of a phytoestrogen food supplement on reproductive health in normal males. Clinical Science, 2001, 100, 659-659.	1.8	0
119	Reply: Development of a novel home sperm test - temperature range. Human Reproduction, 2006, 21, 3028-3029.	0.4	0
120	Basic physiology. , 0, , 5-32.		0
121	Where the rubber hits the road: the translational pulse of reproductive biology. Molecular Human Reproduction, 2013, 19, 119-119.	1.3	0
122	MHR celebration issue in tribute to Professor Sir Robert Edwards. Molecular Human Reproduction, 2013, 19, 783-784.	1.3	0
123	Lessons in Andrology. Andrology, 2016, 4, 987-989.	1.9	0
124	Current Concepts and Unresolved Questions in Human Sperm Cumulus and Zona Interaction. , 0, , 152-156.		0
125	Male Infertility and Assisted Reproduction. , 0, , 193-207.		0
126	People are very open-minded about new things, as long as they are exactly like the old onesâ€™. Molecular Human Reproduction, 2018, 24, 1-1.	1.3	0

#	ARTICLE	IF	CITATIONS
127	Education, education, education“now more than ever?. Molecular Human Reproduction, 2018, 24, 426-429.	1.3	0
128	#ESHREjc live edition report: “the forgotten Y“™“advanced paternal age from a global health perspective. Human Reproduction, 2021, 37, 195-197.	0.4	0
129	Donor insemination. , 2010, , 149-158.		0
130	Donor Insemination: Past, Present and Future Perspectives. , 2020, , 189-198.		0
131	Counting the Hidden Costs of Male Reproductive Health. World Journal of Men?s Health, 2022, 40, .	1.7	0
132	Investigating infertility in primary care. Practitioner, 2009, 253, 26-8.	0.3	0
133	Computer-Aided Sperm Analysis. , 2022, , 130-154.		0
134	Basic Physiology. , 2022, , 5-33.		0
135	Reproductive Toxicology. , 2022, , 303-306.		0
136	The use of donor insemination. , 0, , 148-157.		0