Douglas T Carrell

List of Publications by Year
in descending order

118	5,889	94433 37	79698 73
papers	citations	h-index	g-index

121	121	121	6419
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Conserved roles of mouse DUX and human DUX4 in activating cleavage-stage genes and MERVL/HERVL retrotransposons. Nature Genetics, 2017, 49, 925-934.	21.4	545
2	Male obesity and alteration in sperm parameters. Fertility and Sterility, 2008, 90, 2222-2225.	1.0	369
3	Altered protamine expression and diminished spermatogenesis: what is the link?. Human Reproduction Update, 2007, 13, 313-327.	10.8	321
4	A systematic review and meta-analysis to determine the effect of sperm DNA damage on in vitro fertilization and intracytoplasmic sperm injection outcome. Asian Journal of Andrology, 2017, 19, 80.	1.6	292
5	Chromatin and Transcription Transitions of Mammalian Adult Germline Stem Cells and Spermatogenesis. Cell Stem Cell, 2014, 15, 239-253.	11.1	280
6	Epigenetics of the male gamete. Fertility and Sterility, 2012, 97, 267-274.	1.0	240
7	Age-Associated Sperm DNA Methylation Alterations: Possible Implications in Offspring Disease Susceptibility. PLoS Genetics, 2014, 10, e1004458.	3.5	238
8	Obesity, male infertility, and the sperm epigenome. Fertility and Sterility, 2017, 107, 848-859.	1.0	210
9	The human sperm epigenome and its potential role in embryonic development. Molecular Human Reproduction, 2010, 16, 37-47.	2.8	204
10	Comparative analysis of follicle morphology and oocyte diameter in four mammalian species (mouse,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.4	170
11	Aberrant sperm DNA methylation predicts male fertility status and embryo quality. Fertility and Sterility, 2015, 104, 1388-1397.e5.	1.0	153
12	In Vitro Growth, Maturation, Fertilization, and Embryonic Development of Oocytes from Porcine Preantral Follicles. Biology of Reproduction, 2001, 64, 375-381.	2.7	141
13	The Role of the Epididymis and the Contribution of Epididymosomes to Mammalian Reproduction. International Journal of Molecular Sciences, 2020, 21, 5377.	4.1	123
14	Body mass index is inversely related to intra-follicular HCG concentrations, embryo quality and IVF outcome. Reproductive BioMedicine Online, 2001, 3, 109-111.	2.4	116
15	Review: Diagnosis and impact of sperm DNA alterations in assisted reproduction. Best Practice and Research in Clinical Obstetrics and Gynaecology, 2017, 44, 38-56.	2.8	115
16	PANDORA-seq expands the repertoire of regulatory small RNAs by overcoming RNA modifications. Nature Cell Biology, 2021, 23, 424-436.	10.3	115
17	Elevated sperm chromosome aneuploidy and apoptosis in patients with unexplained recurrent pregnancy loss. Obstetrics and Gynecology, 2003, 101, 1229-1235.	2.4	114
18	Effect of Folic Acid and Zinc Supplementation in Men on Semen Quality and Live Birth Among Couples Undergoing Infertility Treatment. JAMA - Journal of the American Medical Association, 2020, 323, 35.	7.4	103

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19	Decreased fecundity and sperm DNA methylation patterns. Fertility and Sterility, 2016, 105, 51-57.e3.	1.0	102
20	Subfertility increases risk of testicular cancer: evidence from population-based semen samples. Fertility and Sterility, 2016, 105, 322-328.e1.	1.0	100
21	Genetic dissection of spermatogenic arrest through exome analysis: clinical implications for the management of azoospermic men. Genetics in Medicine, 2020, 22, 1956-1966.	2.4	88
22	The aetiology of sperm protamine abnormalities and their potential impact on the sperm epigenome. Journal of Developmental and Physical Disabilities, 2008, 31, 537-545.	3.6	82
23	Effect of male and female body mass index on pregnancy and live birth success after inÂvitro fertilization. Fertility and Sterility, 2015, 103, 388-395.	1.0	80
24	Diet and sperm quality: Nutrients, foods and dietary patterns. Reproductive Biology, 2019, 19, 219-224.	1.9	80
25	Sperm epigenetics in the study of male fertility, offspring health, and potential clinical applications. Systems Biology in Reproductive Medicine, 2017, 63, 69-76.	2.1	73
26	Male adiposity, sperm parameters and reproductive hormones: An updated systematic review and collaborative metaâ€analysis. Obesity Reviews, 2021, 22, e13082.	6.5	68
27	Contributions of spermatozoa to embryogenesis: assays to evaluate their genetic and epigenetic fitness. Reproductive BioMedicine Online, 2008, 16, 474-484.	2.4	67
28	Paternal germ line aging: DNA methylation age prediction from human sperm. BMC Genomics, 2018, 19, 763.	2.8	67
29	The Incidence of Antisperm Antibodies in Infertility Patients with a History of Cryptorchidism. Journal of Urology, 1994, 151, 381-383.	0.4	62
30	Transcription and imprinting dynamics in developing postnatal male germline stem cells. Genes and Development, 2015, 29, 2312-2324.	5.9	61
31	ANDROLOGY LAB CORNER*: The Clinical Implementation of Sperm Chromosome Aneuploidy Testing: Pitfalls and Promises. Journal of Andrology, 2008, 29, 124-133.	2.0	55
32	The impact of ejaculatory abstinence on semen analysis parameters: a systematic review. Journal of Assisted Reproduction and Genetics, 2018, 35, 213-220.	2.5	54
33	Non-motile sperm cell separation using a spiral channel. Analytical Methods, 2015, 7, 8041-8047.	2.7	51
34	Separation of sperm cells from samples containing high concentrations of white blood cells using a spiral channel. Biomicrofluidics, 2017, 11, 054106.	2.4	49
35	Development of In Vitro-Matured Oocytes from Porcine Preantral Follicles Following Intracytoplasmic Sperm Injection. Biology of Reproduction, 2001, 65, 1579-1585.	2.7	47
36	Intra-sample heterogeneity of sperm DNA methylation. Molecular Human Reproduction, 2015, 21, 313-319.	2.8	44

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37	Sperm DNA Fragmentation: Consequences for Reproduction. Advances in Experimental Medicine and Biology, 2019, 1166, 87-105.	1.6	43
38	The search for SNPs, CNVs, and epigenetic variants associated with the complex disease of male infertility. Systems Biology in Reproductive Medicine, 2011, 57, 17-26.	2.1	40
39	The Expression of miRNAs in Human Ovaries, Oocytes, Extracellular Vesicles, and Early Embryos: A Systematic Review. Cells, 2019, 8, 1564.	4.1	39
40	A simplified coculture system using homologous, attached cumulus tissue results in improved human embryo morphology and pregnancy rates during in vitro fertilization. Journal of Assisted Reproduction and Genetics, 1999, 16, 344-349.	2.5	35
41	Sperm epigenetics and aging. Translational Andrology and Urology, 2018, 7, S328-S335.	1.4	35
42	Adherence to the Mediterranean diet is positively associated with sperm motility: A cross-sectional analysis. Scientific Reports, 2019, 9, 3389.	3.3	32
43	Cancer risk in first- and second-degree relatives of men with poor semen quality. Fertility and Sterility, 2016, 106, 731-738.	1.0	31
44	Male exposure to bisphenol A (BPA) and semen quality in the Home Observation of Periconceptional Exposures (HOPE) cohort. Reproductive Toxicology, 2019, 90, 82-87.	2.9	31
45	Disruption of human meiotic telomere complex genes TERB1, TERB2 and MAJIN in men with non-obstructive azoospermia. Human Genetics, 2021, 140, 217-227.	3.8	31
46	Use of automated imaging and analysis technology for the detection of aneuploidy in human sperm. Fertility and Sterility, 2008, 90, 434-437.	1.0	29
47	Comparative single-cell analysis of biopsies clarifies pathogenic mechanisms in Klinefelter syndrome. American Journal of Human Genetics, 2021, 108, 1924-1945.	6.2	29
48	Micro-electrophoresis: a noninvasive method of sperm selection based on membrane charge. Fertility and Sterility, 2015, 103, 361-366.e3.	1.0	27
49	Rare mutations in the complement regulatory gene CSMD1 are associated with male and female infertility. Nature Communications, 2019, 10, 4626.	12.8	24
50	Childhood Cancer Risk in the Siblings and Cousins of Men with Poor Semen Quality. Journal of Urology, 2017, 197, 898-905.	0.4	22
51	Differential DNA methylation pattern and sperm quality in men with varicocele. Fertility and Sterility, 2020, 114, 770-778.	1.0	22
52	Age-associated sperm DNA methylation patterns do not directly persist trans-generationally. Epigenetics and Chromatin, 2019, 12, 74.	3.9	21
53	Sperm Concentration Is Poorly Associated With Hypoandrogenism in Infertile Men. Urology, 2015, 85, 1062-1067.	1.0	20
54	Impacts of Abstinence Time on Semen Parameters in a Large Population-based Cohort of Subfertile Men. Urology, 2017, 108, 90-95.	1.0	19

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55	Sperm-like-particle (SLP) behavior in curved microfluidic channels. Microfluidics and Nanofluidics, 2019, 23, 1.	2.2	18
56	Epigenetic marks in zebrafish sperm: insights into chromatin compaction, maintenance of pluripotency, and the role of the paternal genome after fertilization. Asian Journal of Andrology, 2011, 13, 620-621.	1.6	17
57	A Functional Analysis and the Potential Clinical Significance Of 7 Categories of Sperm Morphology. Journal of Urology, 1994, 151, 377-380.	0.4	16
58	Comparison of maturation, meiotic competence, and chromosome aneuploidy of oocytes derived from two protocols for in vitro culture of mouse secondary follicles. Journal of Assisted Reproduction and Genetics, 2005, 22, 347-354.	2.5	16
59	Risk of childhood mortality in family members of men with poor semen quality. Human Reproduction, 2016, 32, 239-247.	0.9	13
60	Pre-screening method for somatic cell contamination in human sperm epigenetic studies. Systems Biology in Reproductive Medicine, 2018, 64, 146-155.	2.1	13
61	The Sperm Epigenome: Implications for Assisted Reproductive Technologies. Advances in Experimental Medicine and Biology, 2019, 1166, 47-56.	1.6	12
62	Do paternal semen parameters influence the birth weight or BMI of the offspring? A study from the Utah Population Database. Journal of Assisted Reproduction and Genetics, 2018, 35, 793-799.	2.5	11
63	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. PLoS Genetics, 2020, 16, e1008756.	3.5	11
64	Seminal infection with Ralstonia picketti and cytolysosomal spermophagy in a previously fertile man. Fertility and Sterility, 2003, 79, 1665-1667.	1.0	10
65	The impact of zinc and folic acid supplementation on sperm DNA methylation: results from the folic acid and zinc supplementation randomized clinical trial (FAZST). Fertility and Sterility, 2022, 117, 75-85.	1.0	10
66	The correlation of sperm chromatin decondensation following in vitro exposure to heparin and sperm penetration rates. Journal of Assisted Reproduction and Genetics, 1998, 15, 560-564.	2.5	9
67	Ovarian Folliculogenesis: Emerging Role of In Vitro Maturation of Oocytes and Follicles in Clinical Practice. Clinical Obstetrics and Gynecology, 2003, 46, 239-253.	1.1	9
68	Male Factor Infertility and Clomiphene Citrate: A Meta-Analysisâ€"The Effect of Clomiphene Citrate on Oligospermia. Urology Practice, 2015, 2, 199-205.	0.5	9
69	Microfluidic System for Rapid Isolation of Sperm From Microdissection TESE Specimens. Urology, 2020, 140, 70-76.	1.0	9
70	Sperm DNA methylation changes after shortâ€term nut supplementation in healthy men consuming a Westernâ€style diet. Andrology, 2021, 9, 260-268.	3.5	9
71	Differential impacts of particulate air pollution exposure on early and late stages of spermatogenesis. Ecotoxicology and Environmental Safety, 2021, 220, 112419.	6.0	9
72	The combined effect of obesity and aging on human sperm DNA methylation signatures: inclusion of BMI in the paternal germ line age prediction model. Scientific Reports, 2020, 10, 15409.	3.3	8

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73	Establishing a stable, repeatable platform for measuring changes in sperm DNA methylation. Clinical Epigenetics, 2018, 10, 119.	4.1	7
74	Proton-pump inhibitor use does not affect semen quality in subfertile men. Asian Journal of Andrology, 2018, 20, 290.	1.6	7
75	A Randomized Trial to Evaluate the Effects of Folic Acid and Zinc Supplementation on Male Fertility and Livebirth: Design and Baseline Characteristics. American Journal of Epidemiology, 2020, 189, 8-26.	3.4	6
76	Increasing evidence of the role of the sperm epigenome in embryogenesis: oligoasthenoteratozoospermia, altered embryo DNA methylation, and miscarriage. Fertility and Sterility, 2018, 110, 401-402.	1.0	5
77	A brief review of current and proposed federal government regulation of assisted reproduction laboratories in the United States. Journal of Andrology, 2002, 23, 611-7.	2.0	5
78	Preface. Systems Biology in Reproductive Medicine, 2010, 56, 205-206.	2.1	4
79	Using sperm testing to improve patient and offspring health: rational, evidence-based care of the infertile male in the ART clinic. Translational Andrology and Urology, 2017, 6, S443-S445.	1.4	4
80	Using Polygenic Scores in Social Science Research: Unraveling Childlessness. Frontiers in Sociology, 2019, 4, 74.	2.0	4
81	Paternal genetic and epigenetic influences on IVF outcome. Expert Review of Obstetrics and Gynecology, 2008, 3, 359-367.	0.4	3
82	Understanding the Genetics of Male Infertility: Progress at the Bench and in the Clinic. Systems Biology in Reproductive Medicine, 2011, 57, 1-2.	2.1	3
83	The â€˜harsh and the hassleâ€™ of science and the slide to irreproducibility: a concern that must be addressed by investigators and journals. Andrology, 2013, 1, 799-800.	3.5	3
84	Research Highlights: Highlights from the latest articles in advances in the understanding of sperm epigenetics. Epigenomics, 2013, 5, 21-24.	2.1	2
85	Paternal aging and increased risk of congenital disease, psychiatric disorders, and cancer. , 2013, , 93-102.		2
86	The role of the sperm centrosome in reproductive fitness. , 0, , 50-60.		2
87	Semen characteristics and aging: technical considerations regarding variability. , 2013, , 183-190.		2
88	The hamster egg penetration test may decrease intracytoplasmic sperm injection utilization while maintaining high conventional fertilization rates. Asian Journal of Andrology, 2021, 23, 11.	1.6	2
89	Polyploidy in mouse embryos derived from in vivo and in vitro fertilization is dependent on the timing of pregnant mare serum gonadotropin (PMSG) injection. Fertility and Sterility, 2007, 87, 1470-1472.	1.0	1
90	Has the renewed interest in sperm RNA led to fresh insights? A critical review and hypothesis. , 0, , 38-49.		1

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91	The reproductive fitness of the human male gamete. , 0, , 1-5.		1
92	The sperm genome: effect of aneuploidies, structural variations, single nucleotide changes, and DNA damage on embryogenesis and development. , 0, , 6-15.		1
93	Imprinted gene anomalies in sperm. , 0, , 27-37.		1
94	The role of aging on fecundity in the male. , 0, , 70-81.		1
95	Obesity and male infertility: is there an effect on embryogenesis?. , 0, , 141-148.		1
96	Aberrant methylation of the H19 imprinting control region may increase the risk of spontaneous abortion. Epigenomics, 2013, 5, 23-4.	2.1	1
97	Guest Editors: Douglas T Carrell and Csilla. Reproductive BioMedicine Online, 2008, 16, 471-473.	2.4	0
98	The male biological clock. , 0, , 61-69.		0
99	The sperm epigenome: a role in embryogenesis and fetal health?. , 0, , 16-26.		0
100	Sperm selection and ART outcome: a means to overcome the effects of aging and abnormal spermatogenesis?. , 0, , 165-173.		0
101	Variability of human semen quality: caution in interpreting semen analysis data. , 0, , 174-182.		0
102	Aging, DNA damage, and reproductive outcome. , 0, , 82-92.		0
103	Sexual function in the aging male. , 0, , 103-115.		0
104	Supplements and replacement therapies for the aging male and their effects on reproductive fitness. , 0, , 116-128.		0
105	Environment and lifestyle effects on fertility. , 0, , 129-140.		0
106	Intracytoplasmic sperm injection: does the sperm matter?. , 0, , 149-164.		0
107	Announcing the first Andrology Award. Andrology, 2014, 2, 299-299.	3.5	0
108	Refined phenotyping, large cohorts, and collaborative research are vital for realizing the potential of genomics to transform care for male infertility. Fertility and Sterility, 2014, 102, 967.	1.0	0

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109	Reply: Sperm DNA damage and ART: sins of the fathers and the doctors?. Human Reproduction, 2015, 30, 492-492.	0.9	0
110	Use of secondary contraception following vasectomy: insights from the Pregnancy Risk Assessment Monitoring System, 2007â€“2011. Translational Andrology and Urology, 2018, 7, S264-S270.	1.4	0
111	AUTHOR REPLY. Urology, 2020, 140, 75-76.	1.0	0
112	Hypermethylation of the MTHFR gene is common in sperm from couples with unexplained pregnancy loss. Epigenomics, 2013, 5, 22-3.	2.1	0
113	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. , 2020, 16, e1008756.		0
114	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. , 2020, 16, e1008756.		0
115	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. , 2020, 16, e1008756.		0
116	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. , 2020, 16, e1008756.		0
117	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. , 2020, 16, e1008756.		0
118	NRF2 loss recapitulates heritable impacts of paternal cigarette smoke exposure. , 2020, 16, e1008756.		0