David A Horn

List of Publications by Year
in descending order

109 papers	9,411 citations	50276 46 h-index	42399 92 g-index
112 all docs	112 docs citations	112 times ranked	6512 citing authors

#	Article	IF	Citations
1	The Genome Sequence of <i>Trypanosoma cruzi</i> , Etiologic Agent of Chagas Disease. Science, 2005, 309, 409-415.	12.6	1,273
2	The Genome of the Kinetoplastid Parasite, Leishmania major. Science, 2005, 309, 436-442.	12.6	1,237
3	High-throughput phenotyping using parallel sequencing of RNA interference targets in the African trypanosome. Genome Research, 2011, 21, 915-924.	5.5	404
4	A mechanism for cross-resistance to nifurtimox and benznidazole in trypanosomes. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5022-5027.	7.1	370
5	Anti-trypanosomatid drug discovery: an ongoing challenge and a continuing need. Nature Reviews Microbiology, 2017, 15, 217-231.	28.6	315
6	High-throughput decoding of antitrypanosomal drug efficacy and resistance. Nature, 2012, 482, 232-236.	27.8	276
7	Antigenic variation in African trypanosomes. Molecular and Biochemical Parasitology, 2014, 195, 123-129.	1.1	246
8	Drug resistance in African trypanosomiasis: the melarsoprol and pentamidine story. Trends in Parasitology, 2013, 29, 110-118.	3.3	207
9	Genome-wide dissection of the quorum sensing signalling pathway in Trypanosoma brucei. Nature, 2014, 505, 681-685.	27.8	186
10	A doubly inducible system for RNA interference and rapid RNAi plasmid construction in Trypanosoma brucei. Molecular and Biochemical Parasitology, 2005, 139, 75-82.	1.1	150
11	A developmentally regulated position effect at a telomeric locus in Trypanosoma brucei. Cell, 1995, 83, 555-561.	28.9	142
12	Tagging a T. brucei RRNA locus improves stable transfection efficiency and circumvents inducible expression position effects. Molecular and Biochemical Parasitology, 2005, 144, 142-148.	1.1	135
13	Aquaglyceroporin 2 controls susceptibility to melarsoprol and pentamidine in African trypanosomes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10996-11001.	7.1	134
14	Single-locus targeting constructs for reliable regulated RNAi and transgene expression in Trypanosoma brucei. Molecular and Biochemical Parasitology, 2008, 161, 76-79.	1.1	133
15	Molecular mechanisms underlying the control of antigenic variation in African trypanosomes. Current Opinion in Microbiology, 2010, 13, 700-705.	5.1	130
16	Preclinical candidate for the treatment of visceral leishmaniasis that acts through proteasome inhibition. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9318-9323.	7.1	119
17	A sirtuin in the African trypanosome is involved in both DNA repair and telomeric gene silencing but is not required for antigenic variation. Molecular Microbiology, 2007, 63, 724-36.	2.5	109
18	Trypanosoma brucei aquaglyceroporin 2 is a high-affinity transporter for pentamidine and melaminophenyl arsenic drugs and the main genetic determinant of resistance to these drugs. Journal of Antimicrobial Chemotherapy, 2014, 69, 651-663.	3.0	106

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19	RNA Interference Identifies Two Hydroperoxide Metabolizing Enzymes That Are Essential to the Bloodstream Form of the African Trypanosome. Journal of Biological Chemistry, 2003, 278, 31640-31646.	3.4	105
20	NUP-1 Is a Large Coiled-Coil Nucleoskeletal Protein in Trypanosomes with Lamin-Like Functions. PLoS Biology, 2012, 10, e1001287.	5.6	105
21	Sequence homology and microhomology dominate chromosomal double-strand break repair in African trypanosomes. Nucleic Acids Research, 2008, 36, 2608-2618.	14.5	103
22	Genome-wide RNAi screens in African trypanosomes identify the nifurtimox activator NTR and the eflornithine transporter AAT6. Molecular and Biochemical Parasitology, 2011, 176, 55-57.	1.1	102
23	Trypanosomal histone Î³H2A and the DNA damage response. Molecular and Biochemical Parasitology, 2012, 183, 78-83.	1.1	94
24	Melarsoprol Resistance in African Trypanosomiasis. Trends in Parasitology, 2018, 34, 481-492.	3.3	93
25	DNA Break Site at Fragile Subtelomeres Determines Probability and Mechanism of Antigenic Variation in African Trypanosomes. PLoS Pathogens, 2013, 9, e1003260.	4.7	92
26	VEX1 controls the allelic exclusion required for antigenic variation in trypanosomes. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7225-7230.	7.1	90
27	Clinical and veterinary trypanocidal benzoxaboroles target CPSF3. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 9616-9621.	7.1	90
28	Chromosome-Wide Analysis of Gene Function by RNA Interference in the African Trypanosome. Eukaryotic Cell, 2006, 5, 1539-1549.	3.4	77
29	Position-dependent and promoter-specific regulation of gene expression in Trypanosoma brucei. EMBO Journal, 1997, 16, 7422-7431.	7.8	76
30	Functional characterisation of the iron superoxide dismutase gene repertoire in Trypanosoma brucei. Free Radical Biology and Medicine, 2006, 40, 198-209.	2.9	75
31	Codon usage bias controls mRNA and protein abundance in trypanosomatids. ELife, 2018, 7, .	6.0	74
32	Two essential MYSTâ€family proteins display distinct roles in histone H4K10 acetylation and telomeric silencing in trypanosomes. Molecular Microbiology, 2008, 69, 1054-1068.	2.5	73
33	Monoallelic expression and epigenetic inheritance sustained by a Trypanosoma brucei variant surface glycoprotein exclusion complex. Nature Communications, 2019, 10, 3023.	12.8	73
34	Microhomology-mediated deletion and gene conversion in African trypanosomes. Nucleic Acids Research, 2011, 39, 1372-1380.	14.5	68
35	Analysis of Trypanosoma brucei vsg expression site switching in vitro. Molecular and Biochemical Parasitology, 1997, 84, 189-201.	1.1	67
36	Histone deacetylases play distinct roles in telomeric VSG expression site silencing in African trypanosomes. Molecular Microbiology, 2010, 77, 1237-1245.	2.5	65

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37	Aquaporin 2 Mutations in Trypanosoma brucei gambiense Field Isolates Correlate with Decreased Susceptibility to Pentamidine and Melarsoprol. PLoS Neglected Tropical Diseases, 2013, 7, e2475.	3.0	63
38	Intracellular redistribution of neuropeptides and secretory proteins during differentiation of neuronal cell lines. Neuroscience, 1992, 46, 881-889.	2.3	60
39	Histone deacetylases in Trypanosoma brucei: two are essential and another is required for normal cell cycle progression. Molecular Microbiology, 2002, 45, 89-97.	2.5	60
40	Trypanosomatid histones. Molecular Microbiology, 2004, 53, 365-372.	2.5	60
41	Cyclic AMP Effectors in African Trypanosomes Revealed by Genome-Scale RNA Interference Library Screening for Resistance to the Phosphodiesterase Inhibitor CpdA. Antimicrobial Agents and Chemotherapy, 2013, 57, 4882-4893.	3.2	59
42	Genetic manipulation indicates that ARD1 is an essential NÎ±-acetyltransferase in Trypanosoma brucei. Molecular and Biochemical Parasitology, 2000, 111, 309-317.	1.1	57
43	The central roles of telomeres and subtelomeres in antigenic variation in African trypanosomes. Chromosome Research, 2005, 13, 525-533.	2.2	56
44	Vitamin C biosynthesis in trypanosomes: A role for the glycosome. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 11645-11650.	7.1	56
45	Cell-cycle-regulated control of VSG expression site silencing by histones and histone chaperones ASF1A and CAF-1b in Trypanosoma brucei. Nucleic Acids Research, 2012, 40, 10150-10160.	14.5	56
46	Antigenic variation in A frican trypanosomes: the importance of chromosomal and nuclear context in VSG expression control. Cellular Microbiology, 2013, 15, 1984-1993.	2.1	55
47	Acetylation of histone H4K4 is cell cycle regulated and mediated by HAT3 in <i>Trypanosoma brucei</i>. Molecular Microbiology, 2008, 67, 762-771.	2.5	54
48	PPL2 Translesion Polymerase Is Essential for the Completion of Chromosomal DNA Replication in the African Trypanosome. Molecular Cell, 2013, 52, 554-565.	9.7	54
49	Antiparasitic Chemotherapy: From Genomes to Mechanisms. Annual Review of Pharmacology and Toxicology, 2014, 54, 71-94.	9.4	53
50	Inducible high-efficiency CRISPR-Cas9-targeted gene editing and precision base editing in African trypanosomes. Scientific Reports, 2018, 8, 7960.	3.3	53
51	Epigenetic Regulation of Virulence Gene Expression in Parasitic Protozoa. Cell Host and Microbe, 2016, 19, 629-640.	11.0	51
52	Spatial integration of transcription and splicing in a dedicated compartment sustains monogenic antigen expression in African trypanosomes. Nature Microbiology, 2021, 6, 289-300.	13.3	50
53	Genome-scale RNAi screens for high-throughput phenotyping in bloodstream-form African trypanosomes. Nature Protocols, 2015, 10, 106-133.	12.0	49
54	Genetic dissection of drug resistance in trypanosomes. Parasitology, 2013, 140, 1478-1491.	1.5	47

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55	Repression of polymerase Iâ€mediated gene expression at Trypanosoma brucei telomeres. EMBO Reports, 2006, 7, 93-99.	4.5	46
56	Pentamidine Is Not a Permeant but a Nanomolar Inhibitor of the Trypanosoma brucei Aquaglyceroporin-2. PLoS Pathogens, 2016, 12, e1005436.	4.7	46
57	Deletion of a trypanosome telomere leads to loss of silencing and progressive loss of terminal DNA in the absence of cell cycle arrest. Nucleic Acids Research, 2007, 35, 872-880.	14.5	45
58	Chimerization at the AQP2â€"AQP3 locus is the genetic basis of melarsoprolâ€"pentamidine cross-resistance in clinical Trypanosoma brucei gambiense isolates. International Journal for Parasitology: Drugs and Drug Resistance, 2015, 5, 65-68.	3.4	44
59	Genome-wide and protein kinase-focused RNAi screens reveal conserved and novel damage response pathways in Trypanosoma brucei. PLoS Pathogens, 2017, 13, e1006477.	4.7	44
60	Insights into antitrypanosomal drug mode-of-action from cytology-based profiling. PLoS Neglected Tropical Diseases, 2018, 12, e0006980.	3.0	41
61	Receptor-mediated endocytosis for drug delivery in African trypanosomes: fulfilling Paul Ehrlich's vision of chemotherapy. Trends in Parasitology, 2013, 29, 207-212.	3.3	40
62	Deletion of the Trypanosoma brucei Superoxide Dismutase Gene sodb1 Increases Sensitivity to Nifurtimox and Benznidazole. Antimicrobial Agents and Chemotherapy, 2007, 51, 755-758.	3.2	39
63	Vacuolar ATPase depletion affects mitochondrial ATPase function, kinetoplast dependency, and drug sensitivity in trypanosomes. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9112-9117.	7.1	39
64	Telomere maintenance and length regulation in Trypanosoma brucei. EMBO Journal, 2000, 19, 2332-2339.	7.8	38
65	Site-specific DNA double-strand breaks greatly increase stable transformation efficiency in Trypanosoma brucei. Molecular and Biochemical Parasitology, 2009, 166, 194-197.	1.1	38
66	Aquaglyceroporin-null trypanosomes display glycerol transport defects and respiratory-inhibitor sensitivity. PLoS Pathogens, 2017, 13, e1006307.	4.7	37
67	Modulation of the Surface Proteome through Multiple Ubiquitylation Pathways in African Trypanosomes. PLoS Pathogens, 2015, 11, e1005236.	4.7	34
68	Benzoxaborole treatment perturbs S-adenosyl-L-methionine metabolism in Trypanosoma brucei. PLoS Neglected Tropical Diseases, 2018, 12, e0006450.	3.0	33
69	The Molecular Control of Antigenic Variation in Trypanosoma brucei. Current Molecular Medicine, 2004, 4, 563-576.	1.3	32
70	Cathepsin-L Can Resist Lysis by Human Serum in Trypanosoma brucei brucei. PLoS Pathogens, 2014, 10, e1004130.	4.7	32
71	Gluconeogenesis using glycerol as a substrate in bloodstream-form Trypanosoma brucei. PLoS Pathogens, 2018, 14, e1007475.	4.7	32
72	Suramin exposure alters cellular metabolism and mitochondrial energy production in African trypanosomes. Journal of Biological Chemistry, 2020, 295, 8331-8347.	3.4	32

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73	Genome-wide RNAi selection identifies a regulator of transmission stage-enriched gene families and cell-type differentiation in Trypanosoma brucei. PLoS Pathogens, 2017, 13, e1006279.	4.7	30
74	Exploiting the Achillesâ€™ heel of membrane trafficking in trypanosomes. Current Opinion in Microbiology, 2016, 34, 97-103.	5.1	28
75	Inhibitors of human histone deacetylase with potent activity against the African trypanosome Trypanosoma brucei. Bioorganic and Medicinal Chemistry Letters, 2012, 22, 1886-1890.	2.2	27
76	Host-parasite co-metabolic activation of antitrypanosomal aminomethyl-benzoxaboroles. PLoS Pathogens, 2018, 14, e1006850.	4.7	26
77	Elongator Protein 3b Negatively Regulates Ribosomal DNA Transcription in African Trypanosomes. Molecular and Cellular Biology, 2011, 31, 1822-1832.	2.3	25
78	What has DNA sequencing revealed about the VSG expression sites of African trypanosomes?. Trends in Parasitology, 2009, 25, 359-363.	3.3	24
79	High-resolution analysis of multi-copy variant surface glycoprotein gene expression sites in African trypanosomes. BMC Genomics, 2016, 17, 806.	2.8	23
80	Co-dependence between trypanosome nuclear lamina components in nuclear stability and control of gene expression. Nucleic Acids Research, 2016, 44, 10554-10570.	14.5	23
81	Nuclear gene transcription and chromatin in Trypanosoma brucei. International Journal for Parasitology, 2001, 31, 1157-1165.	3.1	22
82	Locus-specific control of DNA resection and suppression of subtelomeric VSG recombination by HAT3 in the African trypanosome. Nucleic Acids Research, 2014, 42, 12600-12613.	14.5	22
83	Comparative genomics of drug resistance in Trypanosoma brucei rhodesiense. Cellular and Molecular Life Sciences, 2016, 73, 3387-3400.	5.4	22
84	A profile of research on the parasitic trypanosomatids and the diseases they cause. PLoS Neglected Tropical Diseases, 2022, 16, e0010040.	3.0	22
85	The Role of Folate Transport in Antifolate Drug Action in Trypanosoma brucei. Journal of Biological Chemistry, 2016, 291, 24768-24778.	3.4	21
86	Expression of the SmN Splicing Protein Is Developmentally Regulated in the Rodent Brain but Not in the Rodent Heart. Developmental Biology, 1993, 156, 319-323.	2.0	20
87	Introducing histone modification in trypanosomes. Trends in Parasitology, 2007, 23, 239-242.	3.3	18
88	Veterinary trypanocidal benzoxaboroles are peptidase-activated prodrugs. PLoS Pathogens, 2020, 16, e1008932.	4.7	16
89	Expression of the tissue specific splicing protein SmN in neuronal cell lines and in regions of the brain with different splicing capacities. Molecular Brain Research, 1992, 16, 13-19.	2.3	14
90	A post-transcriptional respiratome regulon in trypanosomes. Nucleic Acids Research, 2019, 47, 7063-7077.	14.5	14

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91	Ornithine uptake and the modulation of drug sensitivity in <i>Trypanosoma brucei</i>. FASEB Journal, 2017, 31, 4649-4660.	0.5	12
92	Genome-scale RNAi screens in African trypanosomes. Trends in Parasitology, 2022, 38, 160-173.	3.3	11
93	Identification of a Proteasome-Targeting Arylsulfonamide with Potential for the Treatment of Chagasâ€™ Disease. Antimicrobial Agents and Chemotherapy, 2022, 66, AAC0153521.	3.2	11
94	The Cardiac Form of the Tissue-Specific SmN Protein is Identical to the Brain and Embryonic Forms of the Protein. Journal of Molecular and Cellular Cardiology, 1993, 25, 321-329.	1.9	9
95	Mice lackingSnrpn expression show normal regulation of neuronal alternative splicing events. Molecular Biology Reports, 1994, 20, 19-25.	2.3	9
96	High-throughput decoding of drug targets and drug resistance mechanisms in African trypanosomes. Parasitology, 2014, 141, 77-82.	1.5	9
97	Trypanosoma brucei J protein 2 is a stress inducible and essential Hsp40. International Journal of Biochemistry and Cell Biology, 2015, 60, 93-98.	2.8	9
98	Faster growth with shorter antigens can explain a VSG hierarchy during African trypanosome infections: a feint attack by parasites. Scientific Reports, 2018, 8, 10922.	3.3	9
99	Redistribution of secretory granule components precedes that of synaptic vesicle proteins during differentiation of a neuronal cell line in serum-free medium. Neuroscience, 1992, 51, 575-582.	2.3	8
100	Antigenic Variation: Extending the Reach of Telomeric Silencing. Current Biology, 2009, 19, R496-R498.	3.9	8
101	RNA interference, growth and differentiation appear normal in African trypanosomes lacking Tudor staphylococcal nuclease. Molecular and Biochemical Parasitology, 2010, 174, 70-73.	1.1	8
102	Alternative splicing of the mRNA encoding the Î± subunits of the Go GTP-binding protein during brain development and in neuronal cell lines. Neuroscience Letters, 1993, 155, 57-60.	2.1	5
103	Analysis of Small GTPase Function in Trypanosomes. Methods in Enzymology, 2008, 438, 57-76.	1.0	5
104	Oligo targeting for profiling drug resistance mutations in the parasitic trypanosomatids. Nucleic Acids Research, 2022, 50, e79-e79.	14.5	5
105	A distal region of the CALC-1 gene is necessary for regulated alternative splicing. FEBS Letters, 1993, 324, 123-126.	2.8	4
106	Distinct activation mechanisms trigger the trypanocidal activity of DNA damaging prodrugs. Molecular Microbiology, 2017, 106, 207-222.	2.5	4
107	Control of Variant Surface Glycoprotein Expression by CFB2 in Trypanosoma brucei and Quantitative Proteomic Connections to Translation and Cytokinesis. MSphere, 2022, 7, e0006922.	2.9	4
108	The tissue specific SmN protein does not influence the alternative splicing of endogenous N-Cam and C-SRC RNAs in transfected 3T3 cells. Molecular Brain Research, 1993, 19, 181-187.	2.3	1

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109	How Antiparasitic Drugs Workâ€"And Sometimes Stop Working!. PLoS Pathogens, 2016, 12, e1005430.	4.7	1