James A Fraser

List of Publications by Year
in descending order

89 papers	6,980 citations	81900 39 h-index	64796 79 g-index
91 all docs	91 docs citations	91 times ranked	6216 citing authors

#	Article	IF	Citations
1	The Genome of the Basidiomycetous Yeast and Human Pathogen <i>Cryptococcus neoformans</i>. Science, 2005, 307, 1321-1324.	12.6	664
2	MCC950 directly targets the NLRP3 ATP-hydrolysis motif for inflammasome inhibition. Nature Chemical Biology, 2019, 15, 556-559.	8.0	561
3	Same-sex mating and the origin of the Vancouver Island Cryptococcus gattii outbreak. Nature, 2005, 437, 1360-1364.	27.8	472
4	Cryptococcus neoformans and Cryptococcus gattii, the Etiologic Agents of Cryptococcosis. Cold Spring Harbor Perspectives in Medicine, 2014, 4, a019760-a019760.	6.2	374
5	Analysis of the Genome and Transcriptome of Cryptococcus neoformans var. grubii Reveals Complex RNA Expression and Microevolution Leading to Virulence Attenuation. PLoS Genetics, 2014, 10, e1004261.	3.5	336
6	Deciphering the Model Pathogenic Fungus Cryptococcus Neoformans. Nature Reviews Microbiology, 2005, 3, 753-764.	28.6	308
7	Recapitulation of the Sexual Cycle of the Primary Fungal PathogenCryptococcus neoformansvar.gattii: Implications for an Outbreak on Vancouver Island, Canada. Eukaryotic Cell, 2003, 2, 1036-1045.	3.4	280
8	Mating-Type Locus of Cryptococcus neoformans : a Step in the Evolution of Sex Chromosomes. Eukaryotic Cell, 2002, 1, 704-718.	3.4	258
9	Convergent Evolution of Chromosomal Sex-Determining Regions in the Animal and Fungal Kingdoms. PLoS Biology, 2004, 2, e384.	5.6	218
10	Genome Variation in Cryptococcus gattii, an Emerging Pathogen of Immunocompetent Hosts. MBio, 2011, 2, e00342-10.	4.1	182
11	Whole Genome Comparison Reveals High Levels of Inbreeding and Strain Redundancy Across the Spectrum of Commercial Wine Strains of<i>Saccharomyces cerevisiae</i>. G3: Genes, Genomes, Genetics, 2016, 6, 957-971.	1.8	166
12	Polyploid Titan Cells Produce Haploid and Aneuploid Progeny To Promote Stress Adaptation. MBio, 2015, 6, e01340-15.	4.1	135
13	Evolution of fungal sex chromosomes. Molecular Microbiology, 2004, 51, 299-306.	2.5	134
14	Importance of Resolving Fungal Nomenclature: the Case of Multiple Pathogenic Species in the <i>Cryptococcus</i> Genus. MSphere, 2017, 2, .	2.9	124
15	Titan cells formation in Cryptococcus neoformans is finely tuned by environmental conditions and modulated by positive and negative genetic regulators. PLoS Pathogens, 2018, 14, e1006982.	4.7	119
16	Chromosomal sex-determining regions in animals, plants and fungi. Current Opinion in Genetics and Development, 2005, 15, 645-651.	3.3	97
17	A Diverse Population of Cryptococcus gattii Molecular Type VGIII in Southern Californian HIV/AIDS Patients. PLoS Pathogens, 2011, 7, e1002205.	4.7	95
18	Chromosomal Translocation and Segmental Duplication in Cryptococcus neoformans. Eukaryotic Cell, 2005, 4, 401-406.	3.4	94

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19	Nuclear Accumulation of the GATA Factor AreA in Response to Complete Nitrogen Starvation by Regulation of Nuclear Export. Eukaryotic Cell, 2005, 4, 1646-1653.	3.4	93
20	Complete Genome Sequence of Sporisorium scitamineum and Biotrophic Interaction Transcriptome with Sugarcane. PLoS ONE, 2015, 10, e0129318.	2.5	93
21	Recent Evolution of the Human Pathogen Cryptococcus neoformans by Intervarietal Transfer of a 14-Gene Fragment. Molecular Biology and Evolution, 2006, 23, 1879-1890.	8.9	91
22	Evolution of the Mating Type Locus: Insights Gained from the Dimorphic Primary Fungal Pathogens Histoplasma capsulatum, Coccidioides immitis, and Coccidioides posadasii. Eukaryotic Cell, 2007, 6, 622-629.	3.4	87
23	PAK Kinases Ste20 and Pak1 Govern Cell Polarity at Different Stages of Mating inCryptococcus neoformans. Molecular Biology of the Cell, 2004, 15, 4476-4489.	2.1	83
24	A Genomic Safe Haven for Mutant Complementation in Cryptococcus neoformans. PLoS ONE, 2015, 10, e0122916.	2.5	83
25	Nitrogen Metabolite Repression of Metabolism and Virulence in the Human Fungal Pathogen <i>Cryptococcus neoformans</i>. Genetics, 2011, 188, 309-323.	2.9	78
26	Fungal mating-type loci. Current Biology, 2003, 13, R792-R795.	3.9	77
27	Clinical and Environmental Isolates of Cryptococcus gattii from Australia That Retain Sexual Fecundity. Eukaryotic Cell, 2005, 4, 1410-1419.	3.4	76
28	First Contemporary Case of Human Infection with Cryptococcus gattii in Puget Sound: Evidence for Spread of the Vancouver Island Outbreak. Journal of Clinical Microbiology, 2007, 45, 3086-3088.	3.9	76
29	Sexual reproduction and dimorphism in the pathogenic basidiomycetes. FEMS Yeast Research, 2009, 9, 161-177.	2.3	73
30	Sulfonylureas Have Antifungal Activity and Are Potent Inhibitors of Candida albicans Acetohydroxyacid Synthase. Journal of Medicinal Chemistry, 2013, 56, 210-219.	6.4	64
31	Ploidy variation as an adaptive mechanism in human pathogenic fungi. Seminars in Cell and Developmental Biology, 2013, 24, 339-346.	5.0	62
32	Microevolution of Cryptococcus neoformans Driven by Massive Tandem Gene Amplification. Molecular Biology and Evolution, 2012, 29, 1987-2000.	8.9	57
33	Comparative Genomics of Serial Isolates of <i>Cryptococcus neoformans</i> Reveals Gene Associated With Carbon Utilization and Virulence. G3: Genes, Genomes, Genetics, 2013, 3, 675-686.	1.8	57
34	De novo GTP Biosynthesis Is Critical for Virulence of the Fungal Pathogen Cryptococcus neoformans. PLoS Pathogens, 2012, 8, e1002957.	4.7	56
35	Targeted Genome Editing via CRISPR in the Pathogen Cryptococcus neoformans. PLoS ONE, 2016, 11, e0164322.	2.5	55
36	A Gene from Aspergillus nidulans with Similarity to URE2 of Saccharomyces cerevisiae Encodes a Glutathione S -Transferase Which Contributes to Heavy Metal and Xenobiotic Resistance. Applied and Environmental Microbiology, 2002, 68, 2802-2808.	3.1	54

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37	Discovery of a Modified Tetrapolar Sexual Cycle in Cryptococcus amylolentus and the Evolution of MAT in the Cryptococcus Species Complex. PLoS Genetics, 2012, 8, e1002528.	3.5	54
38	A fluorogenic C. neoformans reporter strain with a robust expression of m-cherry expressed from a safe haven site in the genome. Fungal Genetics and Biology, 2017, 108, 13-25.	2.1	53
39	Transitions in Sexuality: Recapitulation of an Ancestral Tri- and Tetrapolar Mating System in <i>Cryptococcus neoformans</i>. Eukaryotic Cell, 2008, 7, 1847-1855.	3.4	50
40	The Formamidase Gene of <i>Aspergillus nidulans</i>: Regulation by Nitrogen Metabolite Repression and Transcriptional Interference by an Overlapping Upstream Gene. Genetics, 2001, 157, 119-131.	2.9	49
41	The Genes gmdA, Encoding an Amidase, and bzuA, Encoding a Cytochrome P450, Are Required for Benzamide Utilization in Aspergillus nidulans. Fungal Genetics and Biology, 2002, 35, 135-146.	2.1	41
42	Commercial AHAS-inhibiting herbicides are promising drug leads for the treatment of human fungal pathogenic infections. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9649-E9658.	7.1	40
43	Structures of fungal and plant acetohydroxyacid synthases. Nature, 2020, 586, 317-321.	27.8	37
44	Characterization of the Complete Uric Acid Degradation Pathway in the Fungal Pathogen Cryptococcus neoformans. PLoS ONE, 2013, 8, e64292.	2.5	36
45	Isolation and Characterization of Two Ammonium Permease Genes, meaA and mepA , from Aspergillus nidulans. Eukaryotic Cell, 2002, 1, 85-94.	3.4	35
46	Comparative genomics of non-pseudomonal bacterial species colonising paediatric cystic fibrosis patients. PeerJ, 2015, 3, e1223.	2.0	35
47	Secondary Metabolites of the Sponge-Derived Fungus <i>Acremonium persicinum</i>. Journal of Natural Products, 2013, 76, 1432-1440.	3.0	34
48	Convergent microevolution of Cryptococcus neoformans hypervirulence in the laboratory and the clinic. Scientific Reports, 2017, 7, 17918.	3.3	34
49	A Unique Chromosomal Rearrangement in the Cryptococcus neoformans var. <i>grubii</i> Type Strain Enhances Key Phenotypes Associated with Virulence. MBio, 2012, 3, .	4.1	30
50	Nitrogen regulation of virulence in clinically prevalent fungal pathogens. FEMS Microbiology Letters, 2013, 345, 77-84.	1.8	30
51	Reactive Oxygen Species Homeostasis and Virulence of the Fungal Pathogen <i>Cryptococcus neoformans</i> Requires an Intact Proline Catabolism Pathway. Genetics, 2013, 194, 421-433.	2.9	30
52	Chemical Inhibitors of Non-Homologous End Joining Increase Targeted Construct Integration in Cryptococcus neoformans. PLoS ONE, 2016, 11, e0163049.	2.5	30
53	Multiple Nuclear Localization Signals Mediate Nuclear Localization of the GATA Transcription Factor AreA. Eukaryotic Cell, 2014, 13, 527-538.	3.4	29
54	Sirtuins in the phylum Basidiomycota: A role in virulence in Cryptococcus neoformans. Scientific Reports, 2017, 7, 46567.	3.3	27

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55	Purine Acquisition and Synthesis by Human Fungal Pathogens. Microorganisms, 2017, 5, 33.	3.6	27
56	Evolution of the Mating-Type Locus: The Basidiomycetes. , 0, , 19-34.		25
57	Antibacterial and antifungal screening of natural products sourced from Australian fungi and characterisation of pestalactams Dâ€"F. Phytochemistry, 2016, 124, 79-85.	2.9	21
58	GMP Synthase Is Required for Virulence Factor Production and Infection by Cryptococcus neoformans. Journal of Biological Chemistry, 2017, 292, 3049-3059.	3.4	19
59	The beer and biofuels laboratory: A report on implementing and supporting a large, interdisciplinary, yeastâ€focused courseâ€based undergraduate research experience. Biochemistry and Molecular Biology Education, 2018, 46, 213-222.	1.2	19
60	Yeast diversity sampling on the San Juan Islands reveals no evidence for the spread of the Vancouver IslandCryptococcus gattiioutbreak to this locale. FEMS Yeast Research, 2006, 6, 620-624.	2.3	18
61	Commercial Herbicides Can Trigger the Oxidative Inactivation of Acetohydroxyacid Synthase. Angewandte Chemie - International Edition, 2016, 55, 4247-4251.	13.8	18
62	The Long History of the Diverse Roles of Short ORFs: sPEPs in Fungi. Proteomics, 2018, 18, e1700219.	2.2	18
63	Surveying purine biosynthesis across the domains of life unveils promising drug targets in pathogens. Immunology and Cell Biology, 2020, 98, 819-831.	2.3	17
64	Disruption of de Novo Adenosine Triphosphate (ATP) Biosynthesis Abolishes Virulence in <i>Cryptococcus neoformans</i>. ACS Infectious Diseases, 2016, 2, 651-663.	3.8	16
65	Cryptococcus neoformans ADS lyase is an enzyme essential for virulence whose crystal structure reveals features exploitable in antifungal drug design. Journal of Biological Chemistry, 2017, 292, 11829-11839.	3.4	15
66	Antifungal benzo[b]thiophene 1,1-dioxide IMPDH inhibitors exhibit pan-assay interference (PAINS) profiles. Bioorganic and Medicinal Chemistry, 2018, 26, 5408-5419.	3.0	15
67	Balancing Stability and Flexibility within the Genome of the Pathogen Cryptococcus neoformans. PLoS Pathogens, 2013, 9, e1003764.	4.7	14
68	Flemingin-Type Prenylated Chalcones from the Sarawak Rainforest Plant <i>Desmodium congestum</i>. Journal of Natural Products, 2015, 78, 2141-2144.	3.0	13
69	Herbicides That Target Acetohydroxyacid Synthase Are Potent Inhibitors of the Growth of Drug-Resistant <i>Candida auris</i>. ACS Infectious Diseases, 2020, 6, 2901-2912.	3.8	13
70	Characterization of an Nmr Homolog That Modulates GATA Factor-Mediated Nitrogen Metabolite Repression in Cryptococcus neoformans. PLoS ONE, 2012, 7, e32585.	2.5	12
71	amdS as a dominant recyclable marker in Cryptococcus neoformans. Fungal Genetics and Biology, 2019, 131, 103241.	2.1	10
72	Is the Nickel-Dependent Urease Complex of <i>Cryptococcus</i> the Pathogenâ€™s Achillesâ€™ Heel?. MBio, 2013, 4, .	4.1	9

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73	Regulatory Mechanism of the Atypical AP-1-Like Transcription Factor Yap1 in Cryptococcus neoformans. MSphere, 2019, 4, .	2.9	8
74	The 2.0 Ã… X-ray structure for yeast acetohydroxyacid synthase provides new insights into its cofactor and quaternary structure requirements. PLoS ONE, 2017, 12, e0171443.	2.5	8
75	Crystallization and preliminary X-ray analysis of mycophenolic acid-resistant and mycophenolic acid-sensitive forms of IMP dehydrogenase from the human fungal pathogen<i>Cryptococcus</i>. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 1104-1107.	0.7	7
76	Broadening the spectrum of fluorescent protein tools for use in the encapsulated human fungal pathogen Cryptococcus neoformans. Fungal Genetics and Biology, 2020, 138, 103365.	2.1	7
77	Lineages Derived from Cryptococcus neoformans Type Strain H99 Support a Link between the Capacity to Be Pleomorphic and Virulence. MBio, 2022, 13, e0028322.	4.1	7
78	High Resolution Crystal Structures of the Acetohydroxyacid Synthaseâ€Pyruvate Complex Provide New Insights into Its Catalytic Mechanism. ChemistrySelect, 2017, 2, 11981-11988.	1.5	6
79	Quantitation of Purines from Pigeon Guano and Implications for Cryptococcus neoformans Survival During Infection. Mycopathologia, 2019, 184, 273-281.	3.1	6
80	Antimicrobial Octapeptin C4 Analogues Active against Cryptococcus Species. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	5
81	Kalparinol, a Salvialane (Isodaucane) Sesquiterpenoid Derived from Native Australian <i>Dysphania</i> Species That Suggests a Putative Biogenetic Link to Zerumbone. Journal of Natural Products, 2020, 83, 1473-1479.	3.0	5
82	Sex, MAT, and the Evolution of Fungal Virulence. , 0, , 13-33.		5
83	Humulene Diepoxides from the Australian Arid Zone Herb Dysphania : Assignment of Aged Hops Constituents. Chemistry - A European Journal, 2020, 26, 1653-1660.	3.3	3
84	Purification, crystallization and preliminary X-ray analysis of adenylosuccinate synthetase from the fungal pathogen<i>Cryptococcus neoformans</i>. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 1033-1036.	0.7	2
85	Commercial Herbicides Can Trigger the Oxidative Inactivation of Acetohydroxyacid Synthase. Angewandte Chemie, 2016, 128, 4319-4323.	2.0	2
86	Structural features of Cryptococcus neoformans bifunctional GAR/AIR synthetase may present novel antifungal drug targets. Journal of Biological Chemistry, 2021, 297, 101091.	3.4	2
87	Problem Formation.. , 2007, , 19-38.		0
88	Rethinking the targets for antifungal development. Microbiology Australia, 2015, 36, 88.	0.4	0
89	Identification and characterisation of sPEPs in Cryptococcus neoformans. Fungal Genetics and Biology, 2022, 160, 103688.	2.1	0