Robert A Cramer

List of Publications by Citations

96 papers	6,062 citations	44 h-index	77 g-index
112 ext. papers	7,538 ext. citations	7.4 avg, IF	5.59 L-index

#	Paper	IF	Citations
96	mTOR- and HIF-1α-mediated aerobic glycolysis as metabolic basis for trained immunity. *Science*, **2014**, 345, 1250684	33.3	1020
95	Transcriptional regulation of chemical diversity in Aspergillus fumigatus by LaeA. *PLoS Pathogens*, **2007**, 3, e50	7.6	275
94	Harnessing calcineurin as a novel anti-infective agent against invasive fungal infections. *Nature Reviews Microbiology*, **2007**, 5, 418-30	22.2	247
93	A sterol-regulatory element binding protein is required for cell polarity, hypoxia adaptation, azole drug resistance, and virulence in Aspergillus fumigatus. *PLoS Pathogens*, **2008**, 4, e1000200	7.6	243
92	Calcineurin controls growth, morphology, and pathogenicity in Aspergillus fumigatus. *Eukaryotic Cell*, **2006**, 5, 1091-103		230
91	Disruption of a nonribosomal peptide synthetase in Aspergillus fumigatus eliminates gliotoxin production. *Eukaryotic Cell*, **2006**, 5, 972-80		184
90	In vivo hypoxia and a fungal alcohol dehydrogenase influence the pathogenesis of invasive pulmonary aspergillosis. *PLoS Pathogens*, **2011**, 7, e1002145	7.6	164
89	Alt a 1 allergen homologs from Alternaria and related taxa: analysis of phylogenetic content and secondary structure. *Fungal Genetics and Biology*, **2005**, 42, 119-29	3.9	162
88	Iridovirus and microsporidian linked to honey bee colony decline. *PLoS ONE*, **2010**, 5, e13181	3.7	158
87	Differential adaptation of Candida albicans in vivo modulates immune recognition by dectin-1. *PLoS Pathogens*, **2013**, 9, e1003315	7.6	145
86	Hypoxia and fungal pathogenesis: to air or not to air?. *Eukaryotic Cell*, **2012**, 11, 560-70		136
85	SREBP coordinates iron and ergosterol homeostasis to mediate triazole drug and hypoxia responses in the human fungal pathogen Aspergillus fumigatus. *PLoS Genetics*, **2011**, 7, e1002374	6	130
84	Calcineurin target CrzA regulates conidial germination, hyphal growth, and pathogenesis of Aspergillus fumigatus. *Eukaryotic Cell*, **2008**, 7, 1085-97		130
83	ChIP-seq and in vivo transcriptome analyses of the Aspergillus fumigatus SREBP SrbA reveals a new regulator of the fungal hypoxia response and virulence. *PLoS Pathogens*, **2014**, 10, e1004487	7.6	110
82	Unique metabolic activation of adipose tissue macrophages in obesity promotes inflammatory responses. *Diabetologia*, **2018**, 61, 942-953	10.3	97
81	IL-1β signaling is critical for leukocyte recruitment after pulmonary Aspergillus fumigatus challenge. *PLoS Pathogens*, **2015**, 11, e1004625	7.6	93
80	Transcriptomic and proteomic analyses of the Aspergillus fumigatus hypoxia response using an oxygen-controlled fermenter. *BMC Genomics*, **2012**, 13, 62	4.5	89

79	Diverse Regulation of the CreA Carbon Catabolite Repressor in Aspergillus nidulans. *Genetics*, **2016**, 203, 335-52	4	88
78	Trehalose 6-phosphate phosphatase is required for cell wall integrity and fungal virulence but not trehalose biosynthesis in the human fungal pathogen Aspergillus fumigatus. *Molecular Microbiology* , **2010**, 77, 891-911	4.1	85
77	The Janus transcription factor HapX controls fungal adaptation to both iron starvation and iron excess. *EMBO Journal*, **2014**, 33, 2261-76	13	83
76	Calcineurin inhibition or mutation enhances cell wall inhibitors against Aspergillus fumigatus. *Antimicrobial Agents and Chemotherapy*, **2007**, 51, 2979-81	5.9	81
75	Compartment-specific and sequential role of MyD88 and CARD9 in chemokine induction and innate defense during respiratory fungal infection. *PLoS Pathogens*, **2015**, 11, e1004589	7.6	78
74	HacA-independent functions of the ER stress sensor IreA synergize with the canonical UPR to influence virulence traits in Aspergillus fumigatus. *PLoS Pathogens*, **2011**, 7, e1002330	7.6	75
73	Heterogeneity among Isolates Reveals that Fitness in Low Oxygen Correlates with Aspergillus fumigatus Virulence. *MBio*, **2016**, 7,	7.8	75
72	Immune responses against Aspergillus fumigatus: what have we learned?. *Current Opinion in Infectious Diseases*, **2011**, 24, 315-22	5.4	64
71	Sterilizing immunity in the lung relies on targeting fungal apoptosis-like programmed cell death. *Science*, **2017**, 357, 1037-1041	33.3	63
70	Aspergillus fumigatus mitochondrial electron transport chain mediates oxidative stress homeostasis, hypoxia responses and fungal pathogenesis. *Molecular Microbiology*, **2012**, 84, 383-99	4.1	61
69	Phylogenomic analysis of non-ribosomal peptide synthetases in the genus Aspergillus. *Gene*, **2006**, 383, 24-32	3.8	60
68	Identification of Alternaria brassicicola genes expressed in planta during pathogenesis of Arabidopsis thaliana. *Fungal Genetics and Biology*, **2004**, 41, 115-28	3.9	57
67	TmpL, a transmembrane protein required for intracellular redox homeostasis and virulence in a plant and an animal fungal pathogen. *PLoS Pathogens*, **2009**, 5, e1000653	7.6	56
66	Hypoxia enhances innate immune activation to Aspergillus fumigatus through cell wall modulation. *Microbes and Infection*, **2013**, 15, 259-69	9.3	54
65	Myeloid derived hypoxia inducible factor 1-alpha is required for protection against pulmonary Aspergillus fumigatus infection. *PLoS Pathogens*, **2014**, 10, e1004378	7.6	53
64	Regulation of hypoxia adaptation: an overlooked virulence attribute of pathogenic fungi?. *Medical Mycology*, **2010**, 48, 1-15	3.9	53
63	SREBP-dependent triazole susceptibility in Aspergillus fumigatus is mediated through direct transcriptional regulation of erg11A (cyp51A). *Antimicrobial Agents and Chemotherapy*, **2012**, 56, 248-57	5.9	52
62	A high throughput targeted gene disruption method for Alternaria brassicicola functional genomics using linear minimal element (LME) constructs. *Molecular Plant-Microbe Interactions*, **2006**, 19, 7-15	3.6	52

61	Central Role of the Trehalose Biosynthesis Pathway in the Pathogenesis of Human Fungal Infections: Opportunities and Challenges for Therapeutic Development. *Microbiology and Molecular Biology Reviews*, **2017**, 81,	13.2	51
60	At Death's Door: Alternaria Pathogenicity Mechanisms. *Plant Pathology Journal*, **2008**, 24, 101-111	2.5	51
59	Regulation of Sterol Biosynthesis in the Human Fungal Pathogen : Opportunities for Therapeutic Development. *Frontiers in Microbiology*, **2017**, 8, 92	5.7	50
58	Filamentous fungal carbon catabolite repression supports metabolic plasticity and stress responses essential for disease progression. *PLoS Pathogens*, **2017**, 13, e1006340	7.6	49
57	Candida albicans induces arginine biosynthetic genes in response to host-derived reactive oxygen species. *Eukaryotic Cell*, **2013**, 12, 91-100		49
56	The Fus3/Kss1 MAP kinase homolog Amk1 regulates the expression of genes encoding hydrolytic enzymes in Alternaria brassicicola. *Fungal Genetics and Biology*, **2007**, 44, 543-53	3.9	48
55	Aspergillus fumigatus metabolism: clues to mechanisms of in vivo fungal growth and virulence. *Medical Mycology*, **2009**, 47 Suppl 1, S72-9	3.9	47
54	Fungal biofilm morphology impacts hypoxia fitness and disease progression. *Nature Microbiology*, **2019**, 4, 2430-2441	26.6	46
53	Dsc orthologs are required for hypoxia adaptation, triazole drug responses, and fungal virulence in Aspergillus fumigatus. *Eukaryotic Cell*, **2012**, 11, 1557-67		44
52	Interleukin 1 Is Critical for Resistance against Highly Virulent Aspergillus fumigatus Isolates. *Infection and Immunity*, **2017**, 85,	3.7	42
51	The negative cofactor 2 complex is a key regulator of drug resistance in Aspergillus fumigatus. *Nature Communications*, **2020**, 11, 427	17.4	41
50	Functional analysis of the Alternaria brassicicola non-ribosomal peptide synthetase gene AbNPS2 reveals a role in conidial cell wall construction. *Molecular Plant Pathology*, **2007**, 8, 23-39	5.7	41
49	Cloning of a gene encoding an Alt a 1 isoallergen differentially expressed by the necrotrophic fungus Alternaria brassicicola during Arabidopsis infection. *Applied and Environmental Microbiology*, **2003**, 69, 2361-4	4.8	37
48	The small GTPase RacA mediates intracellular reactive oxygen species production, polarized growth, and virulence in the human fungal pathogen Aspergillus fumigatus. *Eukaryotic Cell*, **2011**, 10, 174-86		35
47	Aspergillus fumigatus Photobiology Illuminates the Marked Heterogeneity between Isolates. *MBio*, **2016**, 7,	7.8	34
46	Role of Granulocyte-Macrophage Colony-Stimulating Factor Signaling in Regulating Neutrophil Antifungal Activity and the Oxidative Burst During Respiratory Fungal Challenge. *Journal of Infectious Diseases*, **2016**, 213, 1289-98	7	34
45	Aspergillus fumigatus calcipressin CbpA is involved in hyphal growth and calcium homeostasis. *Eukaryotic Cell*, **2009**, 8, 511-9		31
44	Overview of carbon and nitrogen catabolite metabolism in the virulence of human pathogenic fungi. *Molecular Microbiology*, **2018**, 107, 277-297	4.1	28

43	Functional and Genomic Architecture of Borrelia burgdorferi-Induced Cytokine Responses in Humans. *Cell Host and Microbe*, **2016**, 20, 822-833	23.4	27
42	Implications of hypoxic microenvironments during invasive aspergillosis. *Medical Mycology*, **2011**, 49 Suppl 1, S120-4	3.9	26
41	Bioinformatic analysis of expressed sequence tags derived from a compatible Alternaria brassicicola-Brassica oleracea interaction. *Molecular Plant Pathology*, **2006**, 7, 113-24	5.7	25
40	Characterization of the Paracoccidioides Hypoxia Response Reveals New Insights into Pathogenesis Mechanisms of This Important Human Pathogenic Fungus. *PLoS Neglected Tropical Diseases*, **2015**, 9, e0004282	4.8	24
39	Coordination of hypoxia adaptation and iron homeostasis in human pathogenic fungi. *Frontiers in Microbiology*, **2012**, 3, 381	5.7	24
38	Polyphasic characterization of xanthomonas strains from onion. *Phytopathology*, **2004**, 94, 184-95	3.8	24
37	Two C4-sterol methyl oxidases (Erg25) catalyse ergosterol intermediate demethylation and impact environmental stress adaptation in Aspergillus fumigatus. *Microbiology (United Kingdom)*, **2014**, 160, 2492-2506	2.9	22
36	Fungal biofilm architecture produces hypoxic microenvironments that drive antifungal resistance. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 22473-22483	11.5	22
35	Characterizing the Pathogenic, Genomic, and Chemical Traits of , a Close Relative of the Major Human Fungal Pathogen. *MSphere*, **2019**, 4,	5	22
34	Protein Kinase A and High-Osmolarity Glycerol Response Pathways Cooperatively Control Cell Wall Carbohydrate Mobilization in. *MBio*, **2018**, 9,	7.8	22
33	Large-scale transcriptional response to hypoxia in Aspergillus fumigatus observed using RNAseq identifies a novel hypoxia regulated ncRNA. *Mycopathologia*, **2014**, 178, 331-9	2.9	21
32	Aspergillus fumigatus virulence through the lens of transcription factors. *Medical Mycology*, **2017**, 55, 24-38	3.9	20
31	RbdB, a Rhomboid Protease Critical for SREBP Activation and Virulence in Aspergillus fumigatus. *MSphere*, **2016**, 1,	5	18
30	Host-Derived Leukotriene B Is Critical for Resistance against Invasive Pulmonary Aspergillosis. *Frontiers in Immunology*, **2017**, 8, 1984	8.4	16
29	Modulation of Immune Signaling and Metabolism Highlights Host and Fungal Transcriptional Responses in Mouse Models of Invasive Pulmonary Aspergillosis. *Scientific Reports*, **2017**, 7, 17096	4.9	16
28	Trehalose-Regulatory Subunit Homolog Moonlights To Mediate Cell Wall Homeostasis through Modulation of Chitin Synthase Activity. *MBio*, **2017**, 8,	7.8	14
27	Beta-glucan-induced inflammatory monocytes mediate antitumor efficacy in the murine lung. *Cancer Immunology, Immunotherapy*, **2018**, 67, 1731-1742	7.4	14
26	Endoplasmic reticulum localized PerA is required for cell wall integrity, azole drug resistance, and virulence in Aspergillus fumigatus. *Molecular Microbiology*, **2014**, 92, 1279-98	4.1	13

25	An Ssd1 Homolog Impacts Trehalose and Chitin Biosynthesis and Contributes to Virulence in Aspergillus fumigatus. *MSphere*, **2019**, 4,	5	10
24	Platelets are critical for survival and tissue integrity during murine pulmonary Aspergillus fumigatus infection. *PLoS Pathogens*, **2020**, 16, e1008544	7.6	10
23	Reducing Aspergillus fumigatus Virulence through Targeted Dysregulation of the Conidiation Pathway. *MBio*, **2020**, 11,	7.8	9
22	Natamycin and Voriconazole Exhibit Synergistic Interactions with Nonantifungal Ophthalmic Agents against Species Ocular Isolates. *Antimicrobial Agents and Chemotherapy*, **2019**, 63,	5.9	7
21	New advances in invasive aspergillosis immunobiology leading the way towards personalized therapeutic approaches. *Cytokine*, **2016**, 84, 63-73	4	7
20	Fungal cell wall dynamics and infection site microenvironments: signal integration and infection outcome. *Current Opinion in Microbiology*, **2013**, 16, 385-90	7.9	7
19	Model Systems to Study the Chronic, Polymicrobial Infections in Cystic Fibrosis: Current Approaches and Exploring Future Directions. *MBio*, **2021**, 12, e0176321	7.8	7
18	Hyperbaric Oxygen Reduces Aspergillus fumigatus Proliferation and Influences Disease Outcomes. *Antimicrobial Agents and Chemotherapy*, **2018**, 62,	5.9	6
17	MDA5 Is an Essential Sensor of a Pathogen-Associated Molecular Pattern Associated with Vitality That Is Necessary for Host Resistance against. *Journal of Immunology*, **2020**, 205, 3058-3070	5.3	5
16	Aspergillus fumigatus Hsp90 interacts with the main components of the cell wall integrity pathway and cooperates in heat shock and cell wall stress adaptation. *Cellular Microbiology*, **2021**, 23, e13273	3.9	5
15	If looks could kill: Fungal macroscopic morphology and virulence. *PLoS Pathogens*, **2020**, 16, e1008612	7.6	4
14	Aspergillus fumigatus In-Host HOG Pathway Mutation for Cystic Fibrosis Lung Microenvironment Persistence. *MBio*, **2021**, 12, e0215321	7.8	4
13	Biofilms: five-star accommodations for the aerobically challenged. *Current Biology*, **2014**, 24, R1002-4	6.3	3
12	Host Lung Environment Limits Aspergillus fumigatus Germination through an SskA-Dependent Signaling Response. *MSphere*, **2021**, e0092221	5	3
11	Characterizing the pathogenic, genomic, and chemical traits ofAspergillus fischeri, a close relative of the major human fungal pathogenAspergillus fumigatus		3
10	Aspergillus fumigatus Strain-Specific Conidia Lung Persistence Causes an Allergic Broncho-Pulmonary Aspergillosis-Like Disease Phenotype. *MSphere*, **2021**, 6,	5	3
9	Is It Time To Kill the Survival Curve? A Case for Disease Progression Factors in Microbial Pathogenesis and Host Defense Research. *MBio*, **2021**, 12,	7.8	3
8	A Heterogeneously Expressed Gene Family Modulates the Biofilm Architecture and Hypoxic Growth of. *MBio*, **2021**, 12,	7.8	3

List of Publications

7	Combined Pan-, Population-, and Phylo-Genomic Analysis of Aspergillus fumigatus Reveals Population Structure and Lineage-Specific Diversity		2
6	Response to Comment on "Sterilizing immunity in the lung relies on targeting fungal apoptosis-like programmed cell death". *Science*, **2018**, 360,	33.3	1
5	Genetic Regulation of Aspergillus Secondary Metabolites and Their Role in Fungal Pathogenesis185-199		1
4	Aspergillus fumigatus biofilms: Toward understanding how growth as a multicellular network increases antifungal resistance and disease progression. *PLoS Pathogens*, **2021**, 17, e1009794	7.6	1
3	An Alanine Aminotransferase Is Required for Biofilm-Specific Resistance of Aspergillus fumigatus to Echinocandin Treatment.. *MBio*, **2022**, e0293321	7.8	1
2	Detection of Low Oxygen Microenvironments in a Murine Model of Invasive Pulmonary Aspergillosis Using Pimonidazole. *Methods in Molecular Biology*, **2021**, 2260, 197-205	1.4	0
1	The effect of reducing agents on challenge of rainbow trout with Aeromonas salmonicida. *Journal of Fish Diseases*, **2017**, 40, 437-441	2.6	