KatherineÂ A Borkovich

List of Publications by Year
in descending order

103 papers	8,656 citations	117625 34 h-index	161849 54 g-index
108 all docs	108 docs citations	108 times ranked	6551 citing authors

#	Article	IF	Citations
1	Targeted Metabolomics Using LCâ€MS in <i>Neurospora crassa</i>. Current Protocols, 2022, 2, .	2.9	0
2	<i>Sly</i>miR482eâ€3p mediates tomato wilt disease by modulating ethylene response pathway. Plant Biotechnology Journal, 2021, 19, 17-19.	8.3	24
3	<i>Fol</i>â€milR1, a pathogenicity factor of <i>Fusarium oxysporum</i>, confers tomato wilt disease resistance by impairing host immune responses. New Phytologist, 2021, 232, 705-718.	7.3	51
4	Small RNA Isolation and Library Construction for Expression Profiling of Small RNAs from Neurospora crassa and Fusarium oxysporum and Analysis of Small RNAs in Fusarium oxysporum-Infected Plant Root Tissue. Methods in Molecular Biology, 2021, 2170, 199-212.	0.9	1
5	Heterotrimeric G-Protein Signaling Is Required for Cellulose Degradation in Neurospora crassa. MBio, 2020, 11, .	4.1	13
6	Clustering analysis of large-scale phenotypic data in the model filamentous fungus Neurospora crassa. BMC Genomics, 2020, 21, 755.	2.8	6
7	Genetic relationships between the RACK1 homolog cpc-2 and heterotrimeric G protein subunit genes in Neurospora crassa. PLoS ONE, 2019, 14, e0223334.	2.5	5
8	The SNARE protein FolVam7 mediates intracellular trafficking to regulate conidiogenesis and pathogenicity in <i>Fusarium oxysporum</i> f. sp. <i>lycopersici</i>. Environmental Microbiology, 2019, 21, 2696-2706.	3.8	14
9	Broad Substrate-Specific Phosphorylation Events Are Associated With the Initial Stage of Plant Cell Wall Recognition in Neurospora crassa. Frontiers in Microbiology, 2019, 10, 2317.	3.5	25
10	FRG3, a Target of slmiR482e-3p, Provides Resistance against the Fungal Pathogen Fusarium oxysporum in Tomato. Frontiers in Plant Science, 2018, 9, 26.	3.6	20
11	Functional Profiling of Transcription Factor Genes in Neurospora crassa. G3: Genes, Genomes, Genetics, 2017, 7, 2945-2956.	1.8	60
12	High-Throughput Construction of Genetically Modified Fungi. Fungal Biology, 2016, , 241-252.	0.6	1
13	7 Heterotrimeric G Proteins. , 2016, , 119-144.		2
14	Calcineurin Subunits A and B Interact to Regulate Growth and Asexual and Sexual Development in Neurospora crassa. PLoS ONE, 2016, 11, e0151867.	2.5	20
15	Global Analysis of Predicted G Proteinâˆ'Coupled Receptor Genes in the Filamentous Fungus, Neurospora crassa. G3: Genes, Genomes, Genetics, 2015, 5, 2729-2743.	1.8	44
16	Metabolic Impacts of Using Nitrogen and Copper-Regulated Promoters to Regulate Gene Expression in <i>Neurospora crassa</i>. G3: Genes, Genomes, Genetics, 2015, 5, 1899-1908.	1.8	21
17	Quantitative Analyses Using Video Bioinformatics and Image Analysis Tools During Growth and Development in the Multicellular Fungus Neurospora crassa. Computational Biology, 2015, , 237-250.	0.2	0
18	A Top-Down Systems Biology Approach for the Identification of Targets for Fungal Strain and Process Development. , 2014, , 25-35.		1

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19	Signal Transduction Pathways. , 2014, , 50-59.		11
20	DNA Repair and Recombination. , 2014, , 96-112.		0
21	Chromatin Structure and Modification. , 2014, , 113-123.		0
22	MicroRNAs Suppress NB Domain Genes in Tomato That Confer Resistance to Fusarium oxysporum. PLoS Pathogens, 2014, 10, e1004464.	4.7	187
23	Global Analysis of Serine/Threonine and Tyrosine Protein Phosphatase Catalytic Subunit Genes in Neurospora crassa Reveals Interplay Between Phosphatases and the p38 Mitogen-Activated Protein Kinase. G3: Genes, Genomes, Genetics, 2014, 4, 349-365.	1.8	39
24	The Conidium. , 2014, , 577-590.		19
25	How Fungi Sense Sugars, Alcohols, and Amino Acids. , 2014, , 467-479.		0
26	Regulation of Gene Expression by Ambient pH. , 2014, , 480-487.		2
27	Heat Shock Response. , 2014, , 488-497.		1
28	Meiotic trans-Sensing and Silencing in Neurospora. , 2014, , 132-144.		4
29	Vacuoles in Filamentous Fungi. , 2014, , 179-190.		5
30	Peroxisomes in Filamentous Fungi. , 2014, , 191-206.		5
31	Amino Acids and Polyamines: Polyfunctional Proteins, Metabolic Cycles, and Compartmentation. , 2014, , 339-358.		2
32	Circadian Rhythms. , 2014, , 442-466.		1
33	Ustilago maydis and Maize: a Delightful Interaction. , 2014, , 622-644.		2
34	EpichloÃ« Endophytes: Models of an Ecological Strategy. , 2014, , 660-675.		1
35	Aspergillus fumigatus. , 2014, , 695-716.		4
36	Cryptococcus neoformans: Budding Yeast and Dimorphic Filamentous Fungus. , 2014, , 717-735.		0

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37	Histoplasma capsulatum. , 2014, , 736-750.		0
38	Mitochondria and Respiration. , 2014, , 153-178.		4
39	Biology and Genetics of Vegetative Incompatibility in Fungi. , 2014, , 274-288.		24
40	Nitrogen Metabolism in Filamentous Fungi. , 2014, , 325-338.		7
41	The Fungal Pathogen Candida albicans. , 2014, , 751-768.		0
42	Magnaporthe oryzae and Rice Blast Disease. , 2014, , 591-606.		14
43	Mating and Sexual Morphogenesis in Basidiomycete Fungi. , 2014, , 536-555.		10
44	Genetic and Physical Interactions between GÎ± Subunits and Components of the GÎ²Î³ Dimer of Heterotrimeric G Proteins in Neurospora crassa. Eukaryotic Cell, 2012, 11, 1239-1248.	3.4	14
45	Roles for Receptors, Pheromones, G Proteins, and Mating Type Genes During Sexual Reproduction in <i>Neurospora crassa</i>. Genetics, 2012, 190, 1389-1404.	2.9	59
46	Small RNA Isolation and Library Construction for Expression Profiling of Small RNAs from Neurospora and Fusarium Using Illumina High-Throughput Deep Sequencing. Methods in Molecular Biology, 2012, 883, 155-164.	0.9	9
47	G Protein Signaling Components in Filamentous Fungal Genomes. , 2012, , 21-38.		5
48	The Guanine Nucleotide Exchange Factor RIC8 Regulates Conidial Germination through GÎ± Proteins in Neurospora crassa. PLoS ONE, 2012, 7, e48026.	2.5	20
49	Global Analysis of Serine-Threonine Protein Kinase Genes in Neurospora crassa. Eukaryotic Cell, 2011, 10, 1553-1564.	3.4	89
50	Use of ¹ H Nuclear Magnetic Resonance To Measure Intracellular Metabolite Levels during Growth and Asexual Sporulation in Neurospora crassa. Eukaryotic Cell, 2011, 10, 820-831.	3.4	25
51	RIC8 Is a Guanine-Nucleotide Exchange Factor for GÎ± Subunits That Regulates Growth and Development in Neurospora crassa. Genetics, 2011, 189, 165-176.	2.9	34
52	High-Throughput Production of Gene Replacement Mutants in Neurospora crassa. Methods in Molecular Biology, 2011, 722, 179-189.	0.9	55
53	Comparative genomics reveals mobile pathogenicity chromosomes in Fusarium. Nature, 2010, 464, 367-373.	27.8	1,442
54	Analysis of Mitogen-Activated Protein Kinase Phosphorylation in Response to Stimulation of Histidine Kinase Signaling Pathways in Neurospora. Methods in Enzymology, 2010, 471, 319-334.	1.0	4

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55	High-Throughput Construction of Gene Deletion Cassettes for Generation of Neurospora crassa Knockout Strains. Methods in Molecular Biology, 2010, 638, 33-40.	0.9	51
56	The 2009 George W. Beadle Award. Genetics, 2009, 181, 831-833.	2.9	1
57	Mitogen-Activated Protein Kinase Cascade Required for Regulation of Development and Secondary Metabolism in <i>Neurospora crassa</i>. Eukaryotic Cell, 2008, 7, 2113-2122.	3.4	92
58	The Response Regulator RRG-1 Functions Upstream of a Mitogen-activated Protein Kinase Pathway Impacting Asexual Development, Female Fertility, Osmotic Stress, and Fungicide Resistance inNeurospora crassa. Molecular Biology of the Cell, 2007, 18, 2123-2136.	2.1	103
59	Enabling a Community to Dissect an Organism: Overview of the Neurospora Functional Genomics Project. Advances in Genetics, 2007, 57, 49-96.	1.8	191
60	Circadian rhythmicity mediated by temporal regulation of the activity of p38 MAPK. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18223-18228.	7.1	80
61	Heterotrimeric G Protein Signaling in Filamentous Fungi. Annual Review of Microbiology, 2007, 61, 423-452.	7.3	317
62	The fungal opsin gene nop-1 is negatively-regulated by a component of the blue light sensing pathway and influences conidiation-specific gene expression in Neurospora crassa. Current Genetics, 2007, 52, 149-157.	1.7	57
63	Pheromones Are Essential for Male Fertility and Sufficient To Direct Chemotropic Polarized Growth of Trichogynes during Mating in Neurospora crassa. Eukaryotic Cell, 2006, 5, 544-554.	3.4	103
64	The Predicted G-Protein-Coupled Receptor GPR-1 Is Required for Female Sexual Development inthe Multicellular Fungus Neurospora crassa. Eukaryotic Cell, 2006, 5, 1503-1516.	3.4	37
65	GPR-4 Is a Predicted G-Protein-Coupled Receptor Required for Carbon Source-Dependent Asexual Growth and Development in Neurospora crassa. Eukaryotic Cell, 2006, 5, 1287-1300.	3.4	81
66	A high-throughput gene knockout procedure for Neurospora reveals functions for multiple transcription factors. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10352-10357.	7.1	1,060
67	The Heterotrimeric G-Protein Subunits GNG-1 and GNB-1 Form a GÎ²Î³ Dimer Required for Normal Female Fertility, Asexual Development, and GÎ± Protein Levels in Neurospora crassa. Eukaryotic Cell, 2005, 4, 365-378.	3.4	78
68	Severe Impairment of Growth and Differentiation in a Neurospora crassa Mutant Lacking All Heterotrimeric GÎ± Proteins. Genetics, 2004, 166, 1229-1240.	2.9	48
69	A pheromone receptor gene, pre-1, is essential for mating type-specific directional growth and fusion of trichogynes and female fertility in Neurospora crassa. Molecular Microbiology, 2004, 52, 1781-1798.	2.5	134
70	Lessons from the Genome Sequence of<i>Neurospora crassa</i>: Tracing the Path from Genomic Blueprint to Multicellular Organism. Microbiology and Molecular Biology Reviews, 2004, 68, 1-108.	6.6	572
71	The genome sequence of the filamentous fungus Neurospora crassa. Nature, 2003, 422, 859-868.	27.8	1,528
72	Shared and Independent Roles for a GÎ± i Protein and Adenylyl Cyclase in Regulating Development and Stress Responses in Neurospora crassa. Eukaryotic Cell, 2002, 1, 634-642.	3.4	68

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73	A G-Protein Î² Subunit Required for Sexual and Vegetative Development and Maintenance of Normal GÎ± Protein Levels in Neurospora crassa. Eukaryotic Cell, 2002, 1, 378-390.	3.4	89
74	Regulation of Conidiation and Adenylyl Cyclase Levels by the GÎ± Protein GNA-3 in Neurospora crassa. Molecular and Cellular Biology, 2000, 20, 7693-7705.	2.3	132
75	A Eukaryotic Protein, NOP-1, Binds Retinal To Form an Archaeal Rhodopsin-like Photochemically Reactive Pigmentâ€. Biochemistry, 1999, 38, 14138-14145.	2.5	164
76	Positive Regulation of Adenylyl Cyclase Activity by a GÎ±iHomolog inNeurospora crassa. Fungal Genetics and Biology, 1999, 26, 48-61.	2.1	69
77	Mutational Activation of a GÎ±i Causes Uncontrolled Proliferation of Aerial Hyphae and Increased Sensitivity to Heat and Oxidative Stress in Neurospora crassa. Genetics, 1999, 151, 107-117.	2.9	77
78	Overlapping Functions for Two G Protein Î± Subunits in Neurospora crassa. Genetics, 1997, 147, 137-145.	2.9	56
79	Signal Transduction Pathways Involving Protein Phosphorylation in Prokaryotes. Annual Review of Biochemistry, 1991, 60, 401-441.	11.1	540
80	[16] Coupling of receptor function to phosphate-transfer reactions in bacterial chemotaxis. Methods in Enzymology, 1991, 200, 205-214.	1.0	35
81	The dynamics of protein phosphorylation in bacterial chemotaxis. Cell, 1990, 63, 1339-1348.	28.9	183
82	Protein phosphorylation in the bacterial chemotaxis system. Biochimie, 1989, 71, 1013-1019.	2.6	13
83	History and Importance to Human Affairs. , 0, , 1-7.		0
84	Hyphal Structure. , 0, , 8-24.		12
85	Phylogenetics and Phylogenomics of the Fungal Tree of Life. , 0, , 36-49.		3
86	Mitotic Cell Cycle Control. , 0, , 61-80.		2
87	Meiosis. , 0, , 81-95.		1
88	Hyphal Fusion. , 0, , 260-273.		42
89	<i>Fusarium</i>Genetics and Pathogenicity. , 0, , 607-621.		1
90	Transposable Elements and Repeat-Induced Point Mutation. , 0, , 124-131.		0

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91	Mycoviruses. , 0, , 145-152.		14
92	The Cytoskeleton in Filamentous Fungi. , 0, , 207-223.		2
93	Hyphal Growth and Polarity. , 0, , 238-259.		6
94	Gluconeogenesis. , 0, , 312-324.		2
95	Secondary Metabolism. , 0, , 376-395.		7
96	Plant Cell Wall and Chitin Degradation. , 0, , 396-413.		6
97	Necrotrophic Fungi: Live and Let Die. , 0, , 645-659.		0
98	Mycoparasitism. , 0, , 676-693.		38
99	Mating Systems and Sexual Morphogenesis in Ascomycetes. , 0, , 499-535.		99
100	Sulfur, Phosphorus, and Iron Metabolism. , 0, , 359-375.		4
101	Regulation of<i>Aspergillus</i>Conidiation. , 0, , 557-576.		23
102	Light Sensing. , 0, , 415-441.		9
103	The Cell Wall of Filamentous Fungi. , 0, , 224-237.		16