Ke-Qin Zhang

List of Publications by Year
in descending order

90 papers	2,975 citations	172457 29 h-index	182427 51 g-index
91 all docs	91 docs citations	91 times ranked	2385 citing authors

#	ARTICLE	IF	CITATIONS
1	Genomic and Proteomic Analyses of the Fungus Arthrobotrys oligospora Provide Insights into Nematode-Trap Formation. PLoS Pathogens, 2011, 7, e1002179.	4.7	239
2	Molecular Mechanisms of Nematode-Nematophagous Microbe Interactions: Basis for Biological Control of Plant-Parasitic Nematodes. Annual Review of Phytopathology, 2015, 53, 67-95.	7.8	199
3	Metagenomic insights into communities, functions of endophytes and their associates with infection by root-knot nematode, Meloidogyne incognita, in tomato roots. Scientific Reports, 2015, 5, 17087.	3.3	185
4	Extracellular enzymes and the pathogenesis of nematophagous fungi. Applied Microbiology and Biotechnology, 2007, 75, 21-31.	3.6	148
5	A Trojan horse mechanism of bacterial pathogenesis against nematodes. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16631-16636.	7.1	121
6	Nematicidal enzymes from microorganisms and their applications. Applied Microbiology and Biotechnology, 2013, 97, 7081-7095.	3.6	90
7	<i>Arthrobotrys oligospora</i>: a model organism for understanding the interaction between fungi and nematodes. Mycology, 2011, 2, 59-78.	4.4	89
8	Bacteria can mobilize nematode-trapping fungi to kill nematodes. Nature Communications, 2014, 5, 5776.	12.8	85
9	Fungiâ€"Nematode Interactions: Diversity, Ecology, and Biocontrol Prospects in Agriculture. Journal of Fungi (Basel, Switzerland), 2020, 6, 206.	3.5	80
10	Trapping devices of nematode-trapping fungi: formation, evolution, and genomic perspectives. Biological Reviews, 2017, 92, 357-368.	10.4	79
11	MAP kinase Slt2 orthologs play similar roles in conidiation, trap formation, and pathogenicity in two nematode-trapping fungi. Fungal Genetics and Biology, 2018, 116, 42-50.	2.1	70
12	Two Rab GTPases play different roles in conidiation, trap formation, stress resistance, and virulence in the nematode-trapping fungus Arthrobotrys oligospora. Applied Microbiology and Biotechnology, 2018, 102, 4601-4613.	3.6	67
13	Non-Volatile Metabolites from Trichoderma spp.. Metabolites, 2019, 9, 58.	2.9	64
14	Adiponectin receptor PAQR-2 signaling senses low temperature to promote C. elegans longevity by regulating autophagy. Nature Communications, 2019, 10, 2602.	12.8	61
15	Effect of Volatile Organic Compounds from Bacteria on Nematodes. Chemistry and Biodiversity, 2015, 12, 1415-1421.	2.1	56
16	Crystal structure and mutagenesis analysis of chitinase CrChi1 from the nematophagous fungus Clonostachys rosea in complex with the inhibitor caffeine. Microbiology (United Kingdom), 2010, 156, 3566-3574.	1.8	50
17	The crystal structures of two cuticleâ€"degrading proteases from nematophagous fungi and their contribution to infection against nematodes. FASEB Journal, 2010, 24, 1391-1400.	0.5	49
18	The APSES family proteins in fungi: Characterizations, evolution and functions. Fungal Genetics and Biology, 2015, 81, 271-280.	2.1	48

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19	Nematicidal activity of Trichoderma spp. and isolation of an active compound. World Journal of Microbiology and Biotechnology, 2010, 26, 2297-2302.	3.6	45
20	Anoxybacillus tengchongensis sp. nov. and Anoxybacillus eryuanensis sp. nov., facultatively anaerobic, alkalitolerant bacteria from hot springs. International Journal of Systematic and Evolutionary Microbiology, 2011, 61, 118-122.	1.7	42
21	Comparative Analyses of Mitochondrial Genomes Provide Evolutionary Insights Into Nematode-Trapping Fungi. Frontiers in Microbiology, 2020, 11, 617.	3.5	38
22	The Arf-GAP AoGlo3 regulates conidiation, endocytosis, and pathogenicity in the nematode-trapping fungus Arthrobotrys oligospora. Fungal Genetics and Biology, 2020, 138, 103352.	2.1	36
23	Independent Expansion of Zincin Metalloproteinases in Onygenales Fungi May Be Associated with Their Pathogenicity. PLoS ONE, 2014, 9, e90225.	2.5	35
24	Morphology Regulatory Metabolites from <i>Arthrobotrys oligospora</i>. Journal of Natural Products, 2012, 75, 1419-1423.	3.0	34
25	Recent advances in genes involved in secondary metabolite synthesis, hyphal development, energy metabolism and pathogenicity in Fusarium graminearum (teleomorph Gibberella zeae). Biotechnology Advances, 2014, 32, 390-402.	11.7	34
26	AoATG5 plays pleiotropic roles in vegetative growth, cell nucleus development, conidiation, and virulence in the nematode-trapping fungus Arthrobotrys oligospora. Science China Life Sciences, 2022, 65, 412-425.	4.9	34
27	A proposed adhesin AoMad1 helps nematode-trapping fungus Arthrobotrys oligospora recognizing host signals for life-style switching. Fungal Genetics and Biology, 2015, 81, 172-181.	2.1	32
28	Octopamine connects nutrient cues to lipid metabolism upon nutrient deprivation. Science Advances, 2016, 2, e1501372.	10.3	32
29	Signal pathways involved in microbeâ€“nematode interactions provide new insights into the biocontrol of plant-parasitic nematodes. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180317.	4.0	32
30	Functional analysis of seven regulators of G protein signaling (RGSs) in the nematode-trapping fungus <i>Arthrobotrys oligospora</i>. Virulence, 2021, 12, 1825-1840.	4.4	32
31	Pleiotropic roles of Ras GTPases in the nematode-trapping fungus Arthrobotrys oligospora identified through multi-omics analyses. IScience, 2021, 24, 102820.	4.1	32
32	Chitin Synthesis and Degradation in Fungi: Biology and Enzymes. Advances in Experimental Medicine and Biology, 2019, 1142, 153-167.	1.6	30
33	Ric8 acts as a regulator of Gâ€protein signalling required for nematodeâ€trapping lifecycle of <i>Arthrobotrys oligospora</i>. Environmental Microbiology, 2022, 24, 1714-1730.	3.8	30
34	AoBck1 and AoMkk1 Are Necessary to Maintain Cell Wall Integrity, Vegetative Growth, Conidiation, Stress Resistance, and Pathogenicity in the Nematode-Trapping Fungus Arthrobotrys oligospora. Frontiers in Microbiology, 2021, 12, 649582.	3.5	29
35	High Trap Formation and Low Metabolite Production by Disruption of the Polyketide Synthase Gene Involved in the Biosynthesis of Arthrosporols from Nematode-Trapping Fungus <i>Arthrobotrys oligospora</i>. Journal of Agricultural and Food Chemistry, 2015, 63, 9076-9082.	5.2	28
36	Potent Nematicidal Activity and New Hybrid Metabolite Production by Disruption of a Cytochrome P450 Gene Involved in the Biosynthesis of Morphological Regulatory Arthrosporols in Nematode-Trapping Fungus <i>Arthrobotrys oligospora</i>. Journal of Agricultural and Food Chemistry, 2017, 65, 4111-4120.	5.2	28

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37	New Species of Trichoderma Isolated as Endophytes and Saprobes from Southwest China. Journal of Fungi (Basel, Switzerland), 2021, 7, 467.	3.5	28
38	<i>AoPEX1</i> and <i>AoPEX6</i> Are Required for Mycelial Growth, Conidiation, Stress Response, Fatty Acid Utilization, and Trap Formation in <i>Arthrobotrys oligospora</i>. Microbiology Spectrum, 2022, 10, e0027522.	3.0	27
39	Regulatory Mechanism of Trap Formation in the Nematode-Trapping Fungi. Journal of Fungi (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlo	3.5	26
40	Four novel antibacterial sesquiterpene-Î±-amino acid quaternary ammonium hybrids from the mycelium of mushroom Stereum hirsutum. FÃ¬toterapÃ¬Ã¢, 2018, 128, 213-217.	2.2	25
41	AoSsk1, a Response Regulator Required for Mycelial Growth and Development, Stress Responses, Trap Formation, and the Secondary Metabolism in Arthrobotrys oligospora. Journal of Fungi (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.5	25
42	Integrated Metabolomics and Morphogenesis Reveal Volatile Signaling of the Nematode-Trapping Fungus Arthrobotrys oligospora. Applied and Environmental Microbiology, 2018, 84, .	3.1	24
43	Isolation and Characterization of a Novel Endoglucanase from a Bursaphelenchus xylophilus Metagenomic Library. PLoS ONE, 2013, 8, e82437.	2.5	23
44	Sesquiterpenyl Epoxy-Cyclohexenoids and their Signaling Functions in Nematode-Trapping Fungus <i>Arthrobotrys oligospora</i>. Journal of Agricultural and Food Chemistry, 2019, 67, 13061-13072.	5.2	22
45	Two New Sesquiterpenes from the Fungus <i>Stereum</i> sp.. Helvetica Chimica Acta, 2010, 93, 1737-1741.	1.6	20
46	The nitrate assimilation pathway is involved in the trap formation of Arthrobotrys oligospora, a nematode-trapping fungus. Fungal Genetics and Biology, 2016, 92, 33-39.	2.1	19
47	New Bioactive Macrocyclic Diterpenoids from <i>Euphorbia helioscopia</i>. Chemistry and Biodiversity, 2017, 14, e1700327.	2.1	19
48	Nematicidal Key Precursors for the Biosynthesis of Morphological Regulatory Arthrosporols in the Nematode-Trapping Fungus <i>Arthrobotrys oligospora</i>. Journal of Agricultural and Food Chemistry, 2016, 64, 7949-7956.	5.2	16
49	YAP in epithelium senses gut barrier loss to deploy defenses against pathogens. PLoS Pathogens, 2020, 16, e1008766.	4.7	16
50	Aolatg1 and Aolatg13 Regulate Autophagy and Play Different Roles in Conidiation, Trap Formation, and Pathogenicity in the Nematode-Trapping Fungus Arthrobotrys oligospora. Frontiers in Cellular and Infection Microbiology, 2021, 11, 824407.	3.9	15
51	An efficient gene disruption system for the nematophagous fungus Purpureocillium lavendulum. Fungal Biology, 2019, 123, 274-282.	2.5	14
52	The Autophagy-Related Gene Aolatg4 Regulates Hyphal Growth, Sporulation, Autophagosome Formation, and Pathogenicity in Arthrobotrys oligospora. Frontiers in Microbiology, 2020, 11, 592524.	3.5	14
53	Selected Mutations Revealed Intermediates and Key Precursors in the Biosynthesis of Polyketideâ€"Terpenoid Hybrid Sesquiterpenyl Epoxy-cyclohexenoids. Organic Letters, 2017, 19, 3923-3926.	4.6	13
54	A new compound from <i>Stereum insigne</i> CGMCC5.57. Natural Product Research, 2017, 31, 932-937.	1.8	13

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55	Overexpression of the Key Virulence Proteases Bace16 and Bae16 in <i>Bacillus nematocida</i> B16 to Improve Its Nematocidal Activity. Journal of Molecular Microbiology and Biotechnology, 2011, 21, 130-137.	1.0	12
56	Cloning and homology modeling of a serine protease gene (PrC) from the nematophagous fungus Clonostachys rosea. Annals of Microbiology, 2011, 61, 511-516.	2.6	10
57	Orbilia blumenaviensis and its Arthrobotrys anamorph. Mycological Progress, 2012, 11, 255-262.	1.4	10
58	Knockout of the <i>adp</i> gene related with colonization in <scp><i>B</i></scp><i>acillus nematocida</i>â€…<scp>B</scp>16 using customized transcription activatorâ€like effectors nucleases. Microbial Biotechnology, 2015, 8, 681-692.	4.2	10
59	Proteomic changes in Arthrobotrys oligospora conidia in response to benzaldehyde-induced fungistatic stress. Journal of Proteomics, 2019, 192, 358-365.	2.4	10
60	Novel Polyketide-Terpenoid Hybrid Metabolites and Increased Fungal Nematocidal Ability by Disruption of Genes <i>277</i> and <i>279</i> in Nematode-Trapping Fungus <i>Arthrobotrys oligospora</i>. Journal of Agricultural and Food Chemistry, 2020, 68, 7870-7879.	5.2	10
61	Phospholipase C (AoPLC2) regulates mycelial development, trap morphogenesis, and pathogenicity of the nematode-trapping fungus Arthrobotrys oligospora. Journal of Applied Microbiology, 2022, 132, 2144-2156.	3.1	10
62	Quantitative proteomics revealed partial fungistatic mechanism of ammonia against conidial germination of nematode-trapping fungus Arthrobotrys oligospora ATCC24927. International Journal of Biochemistry and Cell Biology, 2018, 98, 104-112.	2.8	9
63	Novel Polyketide-Terpenoid Hybrid Metabolites from a Potent Nematicidal <i>Arthrobotrys oligospora</i> Mutant Î”<i>AOL_s00215g278</i>. Journal of Agricultural and Food Chemistry, 2020, 68, 11449-11458.	5.2	9
64	The complete mitochondrial genome of the nematode-trapping fungus Dactylellina haptotyla. Mitochondrial DNA Part B: Resources, 2018, 3, 964-965.	0.4	8
65	Vib-PT, an Aromatic Prenyltransferase Involved in the Biosynthesis of Vibralactone from <i>Stereum vibrans</i>. Applied and Environmental Microbiology, 2020, 86, .	3.1	8
66	Functional Analysis of Two Affinity cAMP Phosphodiesterases in the Nematode-Trapping Fungus Arthrobotrys oligospora. Pathogens, 2022, 11, 405.	2.8	8
67	Phylogenic analysis of adhesion related genes Mad1 revealed a positive selection for the evolution of trapping devices of nematode-trapping fungi. Scientific Reports, 2016, 6, 22609.	3.3	7
68	The lysine acetylome of the nematocidal bacterium Bacillus nematocida and impact of nematode on the acetylome. Journal of Proteomics, 2018, 177, 31-39.	2.4	7
69	Unexpected Biosynthesis of Fluorescein-Like Arthrocolins against Resistant Strains in an Engineered <i>Escherichia coli</i>. Organic Letters, 2019, 21, 6499-6503.	4.6	7
70	Characterization of the complete mitochondrial genome of Drechslerella brochopaga, a fungal species trapping nematodes with constricting rings. Mitochondrial DNA Part B: Resources, 2019, 4, 858-859.	0.4	7
71	Complete mitochondrial genome and phylogenetic analysis of Orbilia dorsalia, a species producing mature sexual structures on culture. Mitochondrial DNA Part B: Resources, 2019, 4, 573-574.	0.4	7
72	Polyketide Synthaseâ€“Terpenoid Synthase Hybrid Pathway Regulation of Trap Formation through Ammonia Metabolism Controls Soil Colonization of Predominant Nematode-Trapping Fungus. Journal of Agricultural and Food Chemistry, 2021, 69, 4464-4479.	5.2	7

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73	Genetic Diversity and Azole Resistance Among Natural Aspergillus fumigatus Populations in Yunnan, China. Microbial Ecology, 2022, 83, 869-885.	2.8	7
74	Chemical Constituents of the Fungus Veronaea sp.. Chemistry of Natural Compounds, 2015, 51, 270-272.	0.8	6
75	Evidence for Inbreeding and Genetic Differentiation among Geographic Populations of the Saprophytic Mushroom Trogia venenata from Southwestern China. PLoS ONE, 2016, 11, e0149507.	2.5	6
76	Orbilia tianmushanensis sp. nov., a new member of the O. luteorubella group with an unusual asexual morph. Journal of Microbiology, 2016, 54, 9-13.	2.8	6
77	The complete mitochondrial genomes of the nematode-trapping fungus <i>Arthrobotrys oligospora</i>. Mitochondrial DNA Part B: Resources, 2018, 3, 966-967.	0.4	6
78	Two CRISPR/Cas9 Systems Developed in Thermomyces dupontii and Characterization of Key Gene Functions in Thermolide Biosynthesis and Fungal Adaptation. Applied and Environmental Microbiology, 2020, 86, .	3.1	6
79	Morphological and molecular characterization of Orbilia pseudopolybrocha and O. tonghaiensis, two new species of Orbiliaceae from China. International Journal of Systematic and Evolutionary Microbiology, 2020, 70, 2664-2676.	1.7	6
80	Two new asexual genera and six new asexual species in the family Microthyriaceae (Dothideomycetes,) Tj ETQq0 0 0 rgBT /Overlock 10 T	1.9	6
81	Metabolites from Two Dominant Thermophilic Fungal SpeciesThermomyces lanuginosusandScytalidium thermophilum. Chemistry and Biodiversity, 2020, 17, e2000137.	2.1	5
82	Survival and infectivity of second-stage root-knot nematode Meloidogyne incognita juveniles depend on lysosome-mediated lipolysis. Journal of Biological Chemistry, 2022, 298, 101637.	3.4	5
83	Characterization of the complete mitochondrial genome of the nematophagous fungus Purpureocillium lavendulum. Mitochondrial DNA Part B: Resources, 2021, 6, 33-35.	0.4	3
84	TOR functions as a molecular switch connecting an iron cue with host innate defense against bacterial infection. PLoS Genetics, 2021, 17, e1009383.	3.5	3
85	Acetylation of Sesquiterpenyl Epoxy-Cyclohexenoids Regulates Fungal Growth, Stress Resistance, Endocytosis, and Pathogenicity of Nematode-Trapping Fungus <i>Arthrobotrys oligospora</i> via Metabolism and Transcription. Journal of Agricultural and Food Chemistry, 2022, 70, 6145-6155.	5.2	3
86	From taxonomy and industry to genetics: Fungal Biology in China. Fungal Genetics and Biology, 2015, 81, 110-112.	2.1	2
87	The complete mitochondrial genome of the edible Basidiomycete mushroom <i>Phlebopus Portentosus</i>. Mitochondrial DNA Part B: Resources, 2017, 2, 696-697.	0.4	2
88	Historical Differentiation and Recent Hybridization in Natural Populations of the Nematode-Trapping Fungus Arthrobotrys oligospora in China. Microorganisms, 2021, 9, 1919.	3.6	2
89	Two new aromadendrane sesquiterpenes from <i>Verticillium psalliotae</i>. Natural Product Research, 2019, 33, 1257-1261.	1.8	1
90	A New Sesquiterpene from Stereum sp. YMF1.04734. Chemistry of Natural Compounds, 2019, 55, 669-670.	0.8	1