## Toni GabaldÃ3n

List of Publications by Year in descending order

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6113 7069 31,741 260 78 159 citations h-index g-index papers 316 316 316 38507 docs citations times ranked citing authors all docs

| #  | Article  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | trimAl: a tool for automated alignment trimming in large-scale phylogenetic analyses. Bioinformatics, 2009, 25, 1972-1973.   | 1.8  | 7,974     |
| 2  | Whole-genome analyses resolve early branches in the tree of life of modern birds. Science, 2014, 346, 1320-1331.   | 6.0  | 1,583     |
| 3  | Genome Sequence of the Pea Aphid Acyrthosiphon pisum. PLoS Biology, 2010, 8, e1000313.   | 2.6  | 913       |
| 4  | The genome of melon ( <i>Cucumis melo</i> L.). Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11872-11877.  | 3.3  | 654       |
| 5  | Rapid transcriptional plasticity of duplicated gene clusters enables a clonally reproducing aphid to colonise diverse plant species. Genome Biology, 2017, 18, 27.   | 3.8  | 624       |
| 6  | The genome of the recently domesticated crop plant sugar beet (Beta vulgaris). Nature, 2014, 505, 546-549.   | 13.7 | 569       |
| 7  | eggNOG v4.0: nested orthology inference across 3686 organisms. Nucleic Acids Research, 2014, 42, D231-D239.  | 6.5  | 526       |
| 8  | Functional and evolutionary implications of gene orthology. Nature Reviews Genetics, 2013, 14, 360-366.  | 7.7  | 516       |
| 9  | Synonymous Mutations Frequently Act as Driver Mutations in Human Cancers. Cell, 2014, 156, 1324-1335.  | 13.5 | 482       |
| 10 | Redundans: an assembly pipeline for highly heterozygous genomes. Nucleic Acids Research, 2016, 44, e113-e113.  | 6.5  | 429       |
| 11 | Immunity and other defenses in pea aphids, Acyrthosiphon pisum. Genome Biology, 2010, 11, R21.   | 13.9 | 389       |
| 12 | ETE: a python Environment for Tree Exploration. BMC Bioinformatics, 2010, 11, 24.  | 1.2  | 366       |
| 13 | Beyond the Whole-Genome Duplication: Phylogenetic Evidence for an Ancient Interspecies<br>Hybridization in the Baker's Yeast Lineage. PLoS Biology, 2015, 13, e1002220.  | 2.6  | 321       |
| 14 | An expanded evaluation of protein function prediction methods shows an improvement in accuracy. Genome Biology, 2016, 17, 184.   | 3.8  | 308       |
| 15 | Genome structure and metabolic features in the red seaweed <i>Chondrus crispus</i> shed light on evolution of the Archaeplastida. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5247-5252. | 3.3  | 307       |
| 16 | Three crocodilian genomes reveal ancestral patterns of evolution among archosaurs. Science, 2014, 346, 1254449.  | 6.0  | 300       |
| 17 | PhylomeDB v4: zooming into the plurality of evolutionary histories of a genome. Nucleic Acids Research, 2014, 42, D897-D902.   | 6.5  | 264       |
| 18 | An anaerobic mitochondrion that produces hydrogen. Nature, 2005, 434, 74-79.   | 13.7 | 242       |

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|----|--|------|-----------|
| 19 | The Human Oral Microbiome in Health and Disease: From Sequences to Ecosystems. Microorganisms, 2020, 8, 308.   | 1.6  | 231       |
| 20 | Tracing the Evolution of a Large Protein Complex in the Eukaryotes, NADH: Ubiquinone Oxidoreductase (Complex I). Journal of Molecular Biology, 2005, 348, 857-870.   | 2.0  | 228       |
| 21 | High Variability of Mitochondrial Gene Order among Fungi. Genome Biology and Evolution, 2014, 6, 451-465.  | 1.1  | 223       |
| 22 | The First Myriapod Genome Sequence Reveals Conservative Arthropod Gene Content and Genome Organisation in the Centipede Strigamia maritima. PLoS Biology, 2014, 12, e1002005.  | 2.6  | 221       |
| 23 | Acquisition of prokaryotic genes by fungal genomes. Trends in Genetics, 2010, 26, 5-8.   | 2.9  | 219       |
| 24 | Adaptation of S. cerevisiae to Fermented Food Environments Reveals Remarkable Genome Plasticity and the Footprints of Domestication. Molecular Biology and Evolution, 2018, 35, 1712-1727.   | 3.5  | 214       |
| 25 | Microbiome and colorectal cancer: Roles in carcinogenesis and clinical potential. Molecular Aspects of Medicine, 2019, 69, 93-106.   | 2.7  | 212       |
| 26 | Genome sequence of the necrotrophic fungus Penicillium digitatum, the main postharvest pathogen of citrus. BMC Genomics, 2012, 13, 646.  | 1.2  | 205       |
| 27 | Late acquisition of mitochondria by a host with chimaeric prokaryotic ancestry. Nature, 2016, 531, 101-104.  | 13.7 | 204       |
| 28 | Genome sequence of the olive tree, Olea europaea. GigaScience, 2016, 5, 29.  | 3.3  | 201       |
| 29 | Standardized benchmarking in the quest for orthologs. Nature Methods, 2016, 13, 425-430.   | 9.0  | 198       |
| 30 | Molecular signatures of plastic phenotypes in two eusocial insect species with simple societies. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13970-13975.  | 3.3  | 192       |
| 31 | Fungal evolution: diversity, taxonomy and phylogeny of the Fungi. Biological Reviews, 2019, 94,  |      | 191       |
|    | 2101-2137.   | 4.7  | 171       |
| 32 | Large-scale assignment of orthology: back to phylogenetics?. Genome Biology, 2008, 9, 235.   | 13.9 | 187       |
| 32 |  |      |           |
|    | Large-scale assignment of orthology: back to phylogenetics?. Genome Biology, 2008, 9, 235.  Genome, Transcriptome, and Functional Analyses of <i>Penicillium expansum </i>   | 13.9 | 187       |
| 33 | Large-scale assignment of orthology: back to phylogenetics?. Genome Biology, 2008, 9, 235.  Genome, Transcriptome, and Functional Analyses of <i>Penicillium expansum </i> Into Secondary Metabolism and Pathogenicity. Molecular Plant-Microbe Interactions, 2015, 28, 232-248.  Phylemon 2.0: a suite of web-tools for molecular evolution, phylogenetics, phylogenomics and | 13.9 | 187       |

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|----|--|------|-----------|
| 37 | Fungal evolution: major ecological adaptations and evolutionary transitions. Biological Reviews, 2019, 94, 1443-1476.  | 4.7  | 181       |
| 38 | Expansion of Signal Transduction Pathways in Fungi by Extensive Genome Duplication. Current Biology, 2016, 26, 1577-1584.  | 1.8  | 175       |
| 39 | Comparative genomics of emerging pathogens in the Candida glabrata clade. BMC Genomics, 2013, 14, 623.   | 1.2  | 174       |
| 40 | Genome and transcriptome analysis of the Mesoamerican common bean and the role of gene duplications in establishing tissue and temporal specialization of genes. Genome Biology, 2016, 17, 32.         | 3.8  | 166       |
| 41 | Evolutionary Emergence of Drug Resistance in Candida Opportunistic Pathogens. Genes, 2018, 9, 461.   | 1.0  | 161       |
| 42 | Peroxisome diversity and evolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 765-773.  | 1.8  | 158       |
| 43 | Reconstruction of the Proto-Mitochondrial Metabolism. Science, 2003, 301, 609-609.   | 6.0  | 155       |
| 44 | Systematic Phenotyping of a Large-Scale Candida glabrata Deletion Collection Reveals Novel Antifungal Tolerance Genes. PLoS Pathogens, 2014, 10, e1004211.   | 2.1  | 155       |
| 45 | A comprehensive genome variation map of melon identifies multiple domestication events and loci influencing agronomic traits. Nature Genetics, 2019, 51, 1607-1615.                                    | 9.4  | 153       |
| 46 | Origin and evolution of the peroxisomal proteome. Biology Direct, 2006, 1, 8.  | 1.9  | 152       |
| 47 | The human phylome. Genome Biology, 2007, 8, R109.  | 3.8  | 150       |
| 48 | Whole genome sequencing of turbot ( <i>Scophthalmus maximus</i> ; Pleuronectiformes): a fish adapted to demersal life. DNA Research, 2016, 23, 181-192.  | 1.5  | 150       |
| 49 | The <i>Solanum commersonii</i> Genome Sequence Provides Insights into Adaptation to Stress Conditions and Genome Evolution of Wild Potato Relatives. Plant Cell, 2015, 27, 954-968.                    | 3.1  | 149       |
| 50 | From Saccharomyces cerevisiae $\hat{a} \in f$ to Candida glabrata $\hat{a} \in f$ in a few easy steps: important adaptations for an opportunistic pathogen. FEMS Microbiology Letters, 2011, 314, 1-9. | 0.7  | 144       |
| 51 | Genome-wide signatures of complex introgression and adaptive evolution in the big cats. Science Advances, 2017, 3, e1700299.   | 4.7  | 142       |
| 52 | Genomic history of the origin and domestication of common bean unveils its closest sister species. Genome Biology, 2017, 18, 60.   | 3.8  | 142       |
| 53 | Eukaryotic cold shock domain proteins: highly versatile regulators of gene expression. BioEssays, 2010, 32, 109-118.   | 1.2  | 141       |
| 54 | Transcriptome analyses of primitively eusocial wasps reveal novel insights into the evolution of sociality and the origin of alternative phenotypes. Genome Biology, 2013, 14, R20.                    | 13.9 | 139       |

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|----|--|-----|-----------|
| 55 | The Genomic Aftermath of Hybridization in the Opportunistic Pathogen Candida metapsilosis. PLoS Genetics, 2015, 11, e1005626.  | 1.5 | 139       |
| 56 | Genome Comparison of Candida orthopsilosis Clinical Strains Reveals the Existence of Hybrids between Two Distinct Subspecies. Genome Biology and Evolution, 2014, 6, 1069-1078.              | 1.1 | 138       |
| 57 | PhylomeDB v3.0: an expanding repository of genome-wide collections of trees, alignments and phylogeny-based orthology and paralogy predictions. Nucleic Acids Research, 2011, 39, D556-D560. | 6.5 | 134       |
| 58 | Extreme genomic erosion after recurrent demographic bottlenecks in the highly endangered Iberian lynx. Genome Biology, 2016, 17, 251.  | 3.8 | 131       |
| 59 | Gene flow contributes to diversification of the major fungal pathogen Candida albicans. Nature Communications, 2018, 9, 2253.  | 5.8 | 131       |
| 60 | Genetically encodable bioluminescent system from fungi. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12728-12732.                             | 3.3 | 130       |
| 61 | Drug-Resistant Fungi: An Emerging Challenge Threatening Our Limited Antifungal Armamentarium.<br>Antibiotics, 2020, 9, 877.  | 1.5 | 125       |
| 62 | The birth of a deadly yeast: tracing the evolutionary emergence of virulence traits in <i>Candida glabrata</i> . FEMS Yeast Research, 2016, 16, fov110.                                      | 1.1 | 123       |
| 63 | Shaping the mitochondrial proteome. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1659, 212-220.  | 0.5 | 122       |
| 64 | Ancient Dispersal of the Human Fungal Pathogen Cryptococcus gattii from the Amazon Rainforest. PLoS ONE, 2013, 8, e71148.  | 1.1 | 122       |
| 65 | Gene gain and loss across the metazoan tree of life. Nature Ecology and Evolution, 2020, 4, 524-533.   | 3.4 | 116       |
| 66 | MetaPhOrs: orthology and paralogy predictions from multiple phylogenetic evidence using a consistency-based confidence score. Nucleic Acids Research, 2011, 39, e32-e32.                     | 6.5 | 114       |
| 67 | Patterns of Genomic Variation in the Opportunistic Pathogen Candida glabrata Suggest the Existence of Mating and a Secondary Association with Humans. Current Biology, 2018, 28, 15-27.e7.   | 1.8 | 114       |
| 68 | Big data and other challenges in the quest for orthologs. Bioinformatics, 2014, 30, 2993-2998.   | 1.8 | 109       |
| 69 | Massive gene presence-absence variation shapes an open pan-genome in the Mediterranean mussel.<br>Genome Biology, 2020, 21, 275.   | 3.8 | 105       |
| 70 | Hybridization and emergence of virulence in opportunistic human yeast pathogens. Yeast, 2018, 35, 5-20.  | 0.8 | 104       |
| 71 | PeroxisomeDB 2.0: an integrative view of the global peroxisomal metabolome. Nucleic Acids Research, 2010, 38, D800-D805.   | 6.5 | 103       |
| 72 | The genome of wine yeast Dekkera bruxellensis provides a tool to explore its food-related properties. International Journal of Food Microbiology, 2012, 157, 202-209.                        | 2.1 | 102       |

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|----|--|-----|-----------|
| 73 | Evolutionary genomics of yeast pathogens in the Saccharomycotina. FEMS Yeast Research, 2016, 16, fow064.   | 1.1 | 102       |
| 74 | From Endosymbiont to Host-Controlled Organelle: The Hijacking of Mitochondrial Protein Synthesis and Metabolism. PLoS Computational Biology, 2007, 3, e219.  | 1.5 | 101       |
| 75 | Origin and evolution of metabolic sub-cellular compartmentalization in eukaryotes. Biochimie, 2015, 119, 262-268.  | 1.3 | 101       |
| 76 | Transposons played a major role in the diversification between the closely related almond and peach genomes: results from the almond genome sequence. Plant Journal, 2020, 101, 455-472.                             | 2.8 | 94        |
| 77 | spongeScan: A web for detecting microRNA binding elements in lncRNA sequences. Nucleic Acids Research, 2016, 44, W176-W180.  | 6.5 | 92        |
| 78 | Prediction of protein function and pathways in the genome era. Cellular and Molecular Life Sciences, 2004, 61, 930-944.  | 2.4 | 90        |
| 79 | PhylomeDB: a database for genome-wide collections of gene phylogenies. Nucleic Acids Research, 2007, 36, D491-D496.  | 6.5 | 90        |
| 80 | A Midzone-Based Ruler Adjusts Chromosome Compaction to Anaphase Spindle Length. Science, 2011, 332, 465-468.   | 6.0 | 87        |
| 81 | Citizen science charts two major "stomatotypes―in the oral microbiome of adolescents and reveals links with habits and drinking water composition. Microbiome, 2018, 6, 218.   | 4.9 | 86        |
| 82 | The Genome and Development-Dependent Transcriptomes of Pyronema confluens: A Window into Fungal Evolution. PLoS Genetics, 2013, 9, e1003820.   | 1.5 | 85        |
| 83 | The Quiet and Underappreciated Rise of Drug-Resistant Invasive Fungal Pathogens. Journal of Fungi (Basel, Switzerland), 2020, 6, 138.  | 1.5 | 84        |
| 84 | Fine-scale evolution: genomic, phenotypic and ecological differentiation in two coexisting <i>Salinibacter ruber</i> strains. ISME Journal, 2010, 4, 882-895.  | 4.4 | 81        |
| 85 | Gene Expansion Shapes Genome Architecture in the Human Pathogen Lichtheimia corymbifera: An Evolutionary Genomics Analysis in the Ancient Terrestrial Mucorales (Mucoromycotina). PLoS Genetics, 2014, 10, e1004496. | 1.5 | 80        |
| 86 | The Genome of the Generalist Plant Pathogen Fusarium avenaceum Is Enriched with Genes Involved in Redox, Signaling and Secondary Metabolism. PLoS ONE, 2014, 9, e112703.   | 1.1 | 78        |
| 87 | The Tree versus the Forest: The Fungal Tree of Life and the Topological Diversity within the Yeast Phylome. PLoS ONE, 2009, 4, e4357.  | 1.1 | 77        |
| 88 | Recent trends in molecular diagnostics of yeast infections: from PCR to NGS. FEMS Microbiology Reviews, 2019, 43, 517-547.   | 3.9 | 77        |
| 89 | Regulation of <i>Candida glabrata </i> oxidative stress resistance is adapted to host environment. FEBS Letters, 2011, 585, 319-327.   | 1.3 | 74        |
| 90 | Skin microbiome modulation induced by probiotic solutions. Microbiome, 2019, 7, 95.  | 4.9 | 74        |

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|-----|--|-----|-----------|
| 91  | Combining data from genomes, Y2H and 3D structure indicates that BolA is a reductase interacting with a glutaredoxin. FEBS Letters, 2005, 579, 591-596.                        | 1.3 | 73        |
| 92  | Phylogenomics of the oxidative phosphorylation in fungi reveals extensive gene duplication followed by functional divergence. BMC Evolutionary Biology, 2009, 9, 295.          | 3.2 | 73        |
| 93  | Fungal evolution: cellular, genomic and metabolic complexity. Biological Reviews, 2020, 95, 1198-1232.   | 4.7 | 71        |
| 94  | Genome sequencing and secondary metabolism of the postharvest pathogen Penicillium griseofulvum. BMC Genomics, 2016, 17, 19.   | 1.2 | 70        |
| 95  | YibK is the 2′- <i>O</i> -methyltransferase TrmL that modifies the wobble nucleotide in <i>Escherichia coli</i> tRNA <sup>Leu</sup> isoacceptors. Rna, 2010, 16, 2131-2143.    | 1.6 | 67        |
| 96  | Evidence for short-time divergence and long-time conservation of tissue-specific expression after gene duplication. Briefings in Bioinformatics, 2011, 12, 442-448.            | 3.2 | 67        |
| 97  | PeroxisomeDB: a database for the peroxisomal proteome, functional genomics and disease. Nucleic Acids Research, 2007, 35, D815-D822.   | 6.5 | 65        |
| 98  | Assigning duplication events to relative temporal scales in genome-wide studies. Bioinformatics, 2011, 27, 38-45.  | 1.8 | 65        |
| 99  | Long Non-Coding RNAs As Potential Novel Prognostic Biomarkers in Colorectal Cancer. Frontiers in Genetics, 2016, 7, 54.  | 1.1 | 64        |
| 100 | Whole-Genome Sequencing of the Opportunistic Yeast Pathogen Candida inconspicua Uncovers Its Hybrid Origin. Frontiers in Genetics, 2019, 10, 383.                              | 1.1 | 63        |
| 101 | Unexpected Genomic Variability in Clinical and Environmental Strains of the Pathogenic Yeast Candida parapsilosis. Genome Biology and Evolution, 2013, 5, 2382-2392.           | 1.1 | 62        |
| 102 | The kinomes of apicomplexan parasites. Microbes and Infection, 2012, 14, 796-810.  | 1.0 | 61        |
| 103 | Timing the origin of eukaryotic cellular complexity with ancient duplications. Nature Ecology and Evolution, 2021, 5, 92-100.  | 3.4 | 61        |
| 104 | Impact of Homologous Recombination on the Evolution of Prokaryotic Core Genomes. MBio, 2019, 10, .   | 1.8 | 60        |
| 105 | Pochonia chlamydosporia Induces Plant-Dependent Systemic Resistance to Meloidogyne incognita. Frontiers in Plant Science, 2019, 10, 945.                                       | 1.7 | 59        |
| 106 | Sex and parasites: genomic and transcriptomic analysis of Microbotryum lychnidis-dioicae, the biotrophic and plant-castrating anther smut fungus. BMC Genomics, 2015, 16, 461. | 1.2 | 58        |
| 107 | Biological Processes Modulating Longevity across Primates: A Phylogenetic Genome-Phenome Analysis.<br>Molecular Biology and Evolution, 2018, 35, 1990-2004.                    | 3.5 | 58        |
| 108 | The complete genome of Blastobotrys (Arxula) adeninivorans LS3 - a yeast of biotechnological interest. Biotechnology for Biofuels, 2014, 7, 66.                                | 6.2 | 57        |

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|-----|---|------|-----------|
| 109 | Origin, diversification and substrate specificity in the family of <scp>NCS</scp> 1/ <scp>FUR</scp> transporters. Molecular Microbiology, 2015, 96, 927-950.                              | 1.2  | 56        |
| 110 | Inferring gene function from evolutionary change in signatures of translation efficiency. Genome Biology, 2014, 15, R44.  | 13.9 | 53        |
| 111 | From community approaches to single-cell genomics: the discovery of ubiquitous hyperhalophilic <i>Bacteroidetes</i> generalists. ISME Journal, 2015, 9, 16-31.                            | 4.4  | 51        |
| 112 | High-Throughput Proteomics Reveals the Unicellular Roots of Animal Phosphosignaling and Cell Differentiation. Developmental Cell, 2016, 39, 186-197.                                      | 3.1  | 51        |
| 113 | Differential gene retention as an evolutionary mechanism to generate biodiversity and adaptation in yeasts. Scientific Reports, 2015, 5, 11571.   | 1.6  | 50        |
| 114 | Genomes shed light on the secret life of Candida glabrata: not so asexual, not so commensal. Current Genetics, 2019, 65, 93-98.   | 0.8  | 49        |
| 115 | Candida pathogens induce protective mitochondria-associated type I interferon signalling and a damage-driven response in vaginal epithelial cells. Nature Microbiology, 2021, 6, 643-657. | 5.9  | 49        |
| 116 | Phylemon: a suite of web tools for molecular evolution, phylogenetics and phylogenomics. Nucleic Acids Research, 2007, 35, W38-W42.   | 6.5  | 47        |
| 117 | 2× genomes - depth does matter. Genome Biology, 2010, 11, R16.  | 13.9 | 47        |
| 118 | Peroxisomes in parasitic protists. Molecular and Biochemical Parasitology, 2016, 209, 35-45.  | 0.5  | 47        |
| 119 | Narrow mutational signatures drive acquisition of multidrug resistance in the fungal pathogen Candida glabrata. Current Biology, 2021, 31, 5314-5326.e10.                                 | 1.8  | 47        |
| 120 | TACC3-TSC2 maintains nuclear envelope structure and controls cell division. Cell Cycle, 2010, 9, 1143-1155.   | 1.3  | 46        |
| 121 | TreeKO: a duplication-aware algorithm for the comparison of phylogenetic trees. Nucleic Acids Research, 2011, 39, e66-e66.  | 6.5  | 46        |
| 122 | Evolution of selenophosphate synthetases: emergence and relocation of function through independent duplications and recurrent subfunctionalization. Genome Research, 2015, 25, 1256-1267. | 2.4  | 46        |
| 123 | Hybridization and the origin of new yeast lineages. FEMS Yeast Research, 2020, 20, .  | 1.1  | 46        |
| 124 | Genomic evidence for a hybrid origin of the yeast opportunistic pathogen Candida albicans. BMC Biology, 2020, 18, 48.   | 1.7  | 46        |
| 125 | A phylogenomics approach for selecting robust sets of phylogenetic markers. Nucleic Acids Research, 2014, 42, e54-e54.  | 6.5  | 45        |
| 126 | Secondary structure impacts patterns of selection in human lncRNAs. BMC Biology, 2016, 14, 60.  | 1.7  | 43        |

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|-----|--|-----|-----------|
| 127 | Comparative transcriptomics of early dipteran development. BMC Genomics, 2013, 14, 123.  | 1.2 | 41        |
| 128 | Utilization of selenocysteine in early-branching fungal phyla. Nature Microbiology, 2019, 4, 759-765.  | 5.9 | 41        |
| 129 | Commercial Formulates of Trichoderma Induce Systemic Plant Resistance to Meloidogyne incognita in Tomato and the Effect Is Additive to That of the Mi-1.2 Resistance Gene. Frontiers in Microbiology, 2019, 10, 3042.  | 1.5 | 41        |
| 130 | Interactions between Closely Related Bacterial Strains Are Revealed by Deep Transcriptome Sequencing. Applied and Environmental Microbiology, 2015, 81, 8445-8456.   | 1.4 | 40        |
| 131 | Genome Comparisons of Candida glabrata Serial Clinical Isolates Reveal Patterns of Genetic Variation in Infecting Clonal Populations. Frontiers in Microbiology, 2019, 10, 112.  | 1.5 | 40        |
| 132 | The genome sequence of the grape phylloxera provides insights into the evolution, adaptation, and invasion routes of an iconic pest. BMC Biology, 2020, 18, 90.  | 1.7 | 40        |
| 133 | The transposable element-rich genome of the cereal pest Sitophilus oryzae. BMC Biology, 2021, 19, 241.   | 1.7 | 40        |
| 134 | Structural analyses of a hypothetical minimal metabolism. Philosophical Transactions of the Royal Society B: Biological Sciences, 2007, 362, 1751-1762.  | 1.8 | 39        |
| 135 | Complete DNA Sequence of Kuraishia capsulata Illustrates Novel Genomic Features among Budding Yeasts (Saccharomycotina). Genome Biology and Evolution, 2013, 5, 2524-2539.   | 1.1 | 39        |
| 136 | <i>Lokiarchaeota</i> Marks the Transition between the Archaeal and Eukaryotic Selenocysteine Encoding Systems. Molecular Biology and Evolution, 2016, 33, 2441-2453.   | 3.5 | 39        |
| 137 | Genomic evidence for recurrent genetic admixture during the domestication of Mediterranean olive trees (Olea europaea L.). BMC Biology, 2020, 18, 148.   | 1.7 | 39        |
| 138 | The Case of the Missing Ancient Fungal Polyploids. American Naturalist, 2016, 188, 602-614.  | 1.0 | 38        |
| 139 | Contrasting Genomic Diversity in Two Closely Related Postharvest Pathogens: <i>Penicillium digitatum</i> Aisylvand <i>Penicillium expansum</i> Aisylvand </td <td>1.1</td> <td>37</td> | 1.1 | 37        |
| 140 | Bacillus firmus Strain I-1582, a Nematode Antagonist by Itself and Through the Plant. Frontiers in Plant Science, 2020, 11, 796.   | 1.7 | 37        |
| 141 | The evolving species concepts used for yeasts: from phenotypes and genomes to speciation networks. Fungal Diversity, 2021, 109, 27-55.   | 4.7 | 37        |
| 142 | Relative timing of mitochondrial endosymbiosis and the "preâ€mitochondrial symbioses―hypothesis. IUBMB Life, 2018, 70, 1188-1196.  | 1.5 | 36        |
| 143 | Gearing up to handle the mosaic nature of life in the quest for orthologs. Bioinformatics, 2018, 34, 323-329.  | 1.8 | 36        |
| 144 | Evolutionary and functional patterns of shared gene neighbourhood in fungi. Nature Microbiology, 2019, 4, 2383-2392.   | 5.9 | 35        |

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|-----|--|-----|-----------|
| 145 | DeathBase: a database on structure, evolution and function of proteins involved in apoptosis and other forms of cell death. Cell Death and Differentiation, 2010, 17, 735-736.             | 5.0 | 34        |
| 146 | Impact of the Mitochondrial Genetic Background in Complex III Deficiency. PLoS ONE, 2010, 5, e12801.   | 1.1 | 34        |
| 147 | CROSSMAPPER: estimating cross-mapping rates and optimizing experimental design in multi-species sequencing studies. Bioinformatics, 2020, 36, 925-927.                                     | 1.8 | 34        |
| 148 | Coronavirus Disease 2019 (COVID-19): Emerging and Future Challenges for Dental and Oral Medicine. Journal of Dental Research, 2020, 99, 1113-1113.   | 2.5 | 33        |
| 149 | Parental origin of the allotetraploid tobacco <i>Nicotiana benthamiana</i> . Plant Journal, 2020, 102, 541-554.  | 2.8 | 31        |
| 150 | Trends in yeast diversity discovery. Fungal Diversity, 2022, 114, 491-537.   | 4.7 | 31        |
| 151 | Misidentification of genome assemblies in public databases: The case of <i>Naumovozyma dairenensis</i> and proposal of a protocol to correct misidentifications. Yeast, 2018, 35, 425-429. | 0.8 | 30        |
| 152 | Phylogenomics of the olive tree (Olea europaea) reveals the relative contribution of ancient allo- and autopolyploidization events. BMC Biology, 2018, 16, 15.                             | 1.7 | 30        |
| 153 | PhylomeDB V5: an expanding repository for genome-wide catalogues of annotated gene phylogenies. Nucleic Acids Research, 2022, 50, D1062-D1068.   | 6.5 | 30        |
| 154 | Pathogenic mutations in the 5′ untranslated region of BCS1L mRNA in mitochondrial complex III deficiency. Mitochondrion, 2009, 9, 299-305.   | 1.6 | 29        |
| 155 | Characterization of ecologically diverse viruses infecting co-occurring strains of cosmopolitan hyperhalophilic <i>Bacteroidetes</i> ISME Journal, 2018, 12, 424-437.                      | 4.4 | 29        |
| 156 | Echinocandin-Induced Microevolution of Candida parapsilosis Influences Virulence and Abiotic Stress Tolerance. MSphere, 2018, 3, .   | 1.3 | 29        |
| 157 | Phylogenomics Identifies an Ancestral Burst of Gene Duplications Predating the Diversification of Aphidomorpha. Molecular Biology and Evolution, 2020, 37, 730-756.                        | 3.5 | 29        |
| 158 | The Quest for Orthologs orthology benchmark service in 2022. Nucleic Acids Research, 2022, 50, W623-W632.  | 6.5 | 29        |
| 159 | The Schistosoma mansoni phylome: using evolutionary genomics to gain insight into a parasite's biology. BMC Genomics, 2012, 13, 617.   | 1.2 | 28        |
| 160 | Widespread Inter- and Intra-Domain Horizontal Gene Transfer of d-Amino Acid Metabolism Enzymes in Eukaryotes. Frontiers in Microbiology, 2016, 7, 2001.                                    | 1.5 | 28        |
| 161 | Contrasting patterns of evolutionary diversification in the olfactory repertoires of reptile and bird genomes. Genome Biology and Evolution, 2016, 8, evw013.                              | 1.1 | 28        |
| 162 | Origin and Early Evolution of the Eukaryotic Cell. Annual Review of Microbiology, 2021, 75, 631-647.   | 2.9 | 28        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 163 | Transcriptomic analysis of a psammophyte food crop, sand rice (Agriophyllum squarrosum) and identification of candidate genes essential for sand dune adaptation. BMC Genomics, 2014, 15, 872.                  | 1.2 | 27        |
| 164 | MetaPhOrs 2.0: integrative, phylogeny-based inference of orthology and paralogy across the tree of life. Nucleic Acids Research, 2020, 48, W553-W557.   | 6.5 | 27        |
| 165 | Lineage-specific gene loss following mitochondrial endosymbiosis and its potential for function prediction in eukaryotes. Bioinformatics, 2005, 21, ii144-ii150.  | 1.8 | 26        |
| 166 | Measuring guide-tree dependency of inferred gaps in progressive aligners. Bioinformatics, 2013, 29, 1011-1017.  | 1.8 | 26        |
| 167 | Horizontal acquisition of toxic alkaloid synthesis in a clade of plant associated fungi. Fungal Genetics and Biology, 2016, 86, 71-80.  | 0.9 | 26        |
| 168 | MICU1 Confers Protection from MCU-Dependent Manganese Toxicity. Cell Reports, 2018, 25, 1425-1435.e7.   | 2.9 | 26        |
| 169 | Genome Sequencing and Transcriptome Analysis Reveal Recent Species-Specific Gene Duplications in the Plastic Gilthead Sea Bream (Sparus aurata). Frontiers in Marine Science, 2019, 6, .                        | 1.2 | 26        |
| 170 | Quest for Orthologs Entails Quest for Tree of Life: In Search of the Gene Stream. Genome Biology and Evolution, 2015, 7, 1988-1999.   | 1.1 | 25        |
| 171 | Evolution of Proteins and Proteomes: A Phylogenetics Approach. Evolutionary Bioinformatics, 2005, 1, 117693430500100.   | 0.6 | 23        |
| 172 | Evolution of spliceosomal introns following endosymbiotic gene transfer. BMC Evolutionary Biology, 2010, 10, 57.  | 3.2 | 23        |
| 173 | nextPARS: parallel probing of RNA structures in Illumina. Rna, 2018, 24, 609-619.   | 1.6 | 23        |
| 174 | Triazole Evolution of Candida parapsilosis Results in Cross-Resistance to Other Antifungal Drugs, Influences Stress Responses, and Alters Virulence in an Antifungal Drug-Dependent Manner. MSphere, 2020, 5, . | 1.3 | 23        |
| 175 | Comparison of Gene Repertoires and Patterns of Evolutionary Rates in Eight Aphid Species That Differ by Reproductive Mode. Genome Biology and Evolution, 2012, 4, 155-167.                                      | 1.1 | 22        |
| 176 | ArthropodaCyc: a CycADS powered collection of BioCyc databases to analyse and compare metabolism of arthropods. Database: the Journal of Biological Databases and Curation, 2016, 2016, baw081.                 | 1.4 | 22        |
| 177 | Post-exercise hypotension and skeletal muscle oxygenation is regulated by nitrate-reducing activity of oral bacteria. Free Radical Biology and Medicine, 2019, 143, 252-259.                                    | 1.3 | 22        |
| 178 | Integrative Omics Analysis Reveals a Limited Transcriptional Shock After Yeast Interspecies Hybridization. Frontiers in Genetics, 2020, 11, 404.  | 1.1 | 22        |
| 179 | The Leishmania metaphylome: a comprehensive survey of Leishmania protein phylogenetic relationships. BMC Genomics, 2015, 16, 887.   | 1.2 | 21        |
| 180 | Investigation of Candida parapsilosis virulence regulatory factors during host-pathogen interaction. Scientific Reports, 2018, 8, 1346.   | 1.6 | 21        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 181 | Patterns and impacts of nonvertical evolution in eukaryotes: a paradigm shift. Annals of the New York Academy of Sciences, 2020, 1476, 78-92.  | 1.8 | 21        |
| 182 | Mitochondrial genome variability within the Candida parapsilosis species complex. Mitochondrion, 2012, 12, 514-519.  | 1.6 | 20        |
| 183 | Highly expressed captured genes and cross-kingdom domains present in Helitrons create novel diversity in Pleurotus ostreatus and other fungi. BMC Genomics, 2014, 15, 1071.          | 1.2 | 20        |
| 184 | Metabolic gene clusters encoding the enzymes of two branches of the 3-oxoadipate pathway in the pathogenic yeast Candida albicans. FEMS Yeast Research, 2015, 15, .                  | 1.1 | 20        |
| 185 | Comparative Genomics-Based Prediction of Protein Function. Methods in Molecular Biology, 2008, 439, 387-401.   | 0.4 | 20        |
| 186 | A metabolic scenario for the evolutionary origin of peroxisomes from the endomembranous system. Cellular and Molecular Life Sciences, 2014, 71, 2373-2376.                           | 2.4 | 19        |
| 187 | Distinct roles of the polarity factors Boi1 and Boi2 in the control of exocytosis and abscission in budding yeast. Molecular Biology of the Cell, 2017, 28, 3082-3094.               | 0.9 | 19        |
| 188 | Eicosanoid biosynthesis influences the virulence of <i>Candida parapsilosis</i> . Virulence, 2018, 9, 1019-1035.   | 1.8 | 18        |
| 189 | Discovery of EMRE in fungi resolves the true evolutionary history of the mitochondrial calcium uniporter. Nature Communications, 2020, 11, 4031.                                     | 5.8 | 18        |
| 190 | Evolution of proteins and proteomes: a phylogenetics approach. Evolutionary Bioinformatics, 2007, $1$ , $51-61$ .  | 0.6 | 18        |
| 191 | Citizen-science reveals changes in the oral microbiome in Spain through age and lifestyle factors. Npj<br>Biofilms and Microbiomes, 2022, 8, 38.                                     | 2.9 | 18        |
| 192 | Genome Sequence of the Brown Rot Fungal Pathogen Monilinia laxa. Genome Announcements, 2018, 6, .  | 0.8 | 17        |
| 193 | Computational approaches for the prediction of protein function in the mitochondrion. American Journal of Physiology - Cell Physiology, 2006, 291, C1121-C1128.                      | 2.1 | 16        |
| 194 | CycADS: an annotation database system to ease the development and update of BioCyc databases. Database: the Journal of Biological Databases and Curation, 2011, 2011, bar008-bar008. | 1.4 | 16        |
| 195 | PTP-central: A comprehensive resource of protein tyrosine phosphatases in eukaryotic genomes. Methods, 2014, 65, 156-164.  | 1.9 | 16        |
| 196 | Lack of the PGA exopolysaccharide in Salmonella as an adaptive trait for survival in the host. PLoS Genetics, 2017, 13, e1006816.  | 1.5 | 16        |
| 197 | Transcriptomic analyses reveal groups of co-expressed, syntenic lncRNAs in four species of the genus <i>Caenorhabditis</i> . RNA Biology, 2019, 16, 320-329.                         | 1.5 | 16        |
| 198 | Extreme diversification driven by parallel events of massive loss of heterozygosity in the hybrid lineage of <i>Candida albicans</i>   | 1.2 | 16        |

| #   | Article  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 199 | Lack of phylogenetic support for a supposed actinobacterial origin of peroxisomes. Gene, 2010, 465, 61-65.   | 1.0 | 15        |
| 200 | Elevated Vacuolar Uptake of Fluorescently Labeled Antifungal Drug Caspofungin Predicts Echinocandin Resistance in Pathogenic Yeast. ACS Central Science, 2020, 6, 1698-1712.                   | 5.3 | 15        |
| 201 | Soybean aphid biotype 1 genome: Insights into the invasive biology and adaptive evolution of a major agricultural pest. Insect Biochemistry and Molecular Biology, 2020, 120, 103334.          | 1.2 | 15        |
| 202 | Transient Mitochondria Dysfunction Confers Fungal Cross-Resistance against Phagocytic Killing and Fluconazole. MBio, 2021, 12, e0112821.   | 1.8 | 15        |
| 203 | Oral microbiome in down syndrome and its implications on oral health. Journal of Oral Microbiology, 2021, 13, 1865690.   | 1.2 | 15        |
| 204 | Variation and evolution of biomolecular systems: Searching for functional relevance. FEBS Letters, 2005, 579, 1839-1845.   | 1.3 | 14        |
| 205 | Predicting phenotypic traits of prokaryotes from protein domain frequencies. BMC Bioinformatics, 2010, 11, 481.  | 1.2 | 14        |
| 206 | Molecular Typing of Candida glabrata. Mycopathologia, 2020, 185, 755-764.  | 1.3 | 14        |
| 207 | Comparative Genomics and Transcriptomics To Analyze Fruiting Body Development in Filamentous Ascomycetes. Genetics, 2019, 213, 1545-1563.  | 1.2 | 14        |
| 208 | HaploTypo: a variant-calling pipeline for phased genomes. Bioinformatics, 2020, 36, 2569-2571.   | 1.8 | 14        |
| 209 | Genome analysis of <i>Candida subhashii</i> reveals its hybrid nature and dual mitochondrial genome conformations. DNA Research, 2021, 28, .   | 1.5 | 14        |
| 210 | Phylogenetic Analyses Uncover a Novel Clade of Transferrin in Nonmammalian Vertebrates. Molecular Biology and Evolution, 2013, 30, 894-905.  | 3.5 | 13        |
| 211 | Evolutionary considerations on the origin of peroxisomes from the endoplasmic reticulum, and their relationships with mitochondria. Cellular and Molecular Life Sciences, 2014, 71, 2379-2382. | 2.4 | 13        |
| 212 | Factors enforcing the species boundary between the human pathogens Cryptococcus neoformans and Cryptococcus deneoformans. PLoS Genetics, 2021, 17, e1008871.                                   | 1.5 | 13        |
| 213 | Candidemia Among Coronavirus Disease 2019 Patients in Turkey Admitted to Intensive Care Units: A Retrospective Multicenter Study. Open Forum Infectious Diseases, 2022, 9, ofac078.            | 0.4 | 13        |
| 214 | Using genomics to understand the mechanisms of virulence and drug resistance in fungal pathogens. Biochemical Society Transactions, 2022, 50, 1259-1268.                                       | 1.6 | 13        |
| 215 | Evolutionary histories of expanded peptidase families in Schistosoma mansoni. Memorias Do Instituto Oswaldo Cruz, 2011, 106, 864-877.  | 0.8 | 12        |
| 216 | Genome Variation in the Model Halophilic Bacterium Salinibacter ruber. Frontiers in Microbiology, 2018, 9, 1499.   | 1.5 | 12        |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 217 | Selection following Gene Duplication Shapes Recent Genome Evolution in the Pea Aphid Acyrthosiphon pisum. Molecular Biology and Evolution, 2020, 37, 2601-2615.   | 3.5 | 12        |
| 218 | Evolution of the Peroxisomal Proteome. Sub-Cellular Biochemistry, 2018, 89, 221-233.  | 1.0 | 11        |
| 219 | Citizen-science based study of the oral microbiome in Cystic fibrosis and matched controls reveals major differences in diversity and abundance of bacterial and fungal species. Journal of Oral Microbiology, 2021, 13, 1897328. | 1.2 | 11        |
| 220 | Comparative Genomics Used to Predict Virulence Factors and Metabolic Genes among Monilinia Species. Journal of Fungi (Basel, Switzerland), 2021, 7, 464.  | 1.5 | 11        |
| 221 | Chromatin profiling reveals heterogeneity in clinical isolates of the human pathogen Aspergillus fumigatus. PLoS Genetics, 2022, 18, e1010001.  | 1.5 | 11        |
| 222 | EvolClust: automated inference of evolutionary conserved gene clusters in eukaryotes. Bioinformatics, 2020, 36, 1265-1266.  | 1.8 | 10        |
| 223 | Phenotypic Variability in a Coinfection With Three Independent Candida parapsilosis Lineages. Frontiers in Microbiology, 2020, 11, 1994.  | 1.5 | 10        |
| 224 | Shared evolutionary footprints suggest mitochondrial oxidative damage underlies multiple complex I losses in fungi. Open Biology, 2021, 11, 200362.   | 1.5 | 10        |
| 225 | The long non-coding RNA landscape of Candida yeast pathogens. Nature Communications, 2021, 12, 7317.  | 5.8 | 10        |
| 226 | Structural characterization of NORAD reveals a stabilizing role of spacers and two new repeat units. Computational and Structural Biotechnology Journal, 2021, 19, 3245-3254.   | 1.9 | 9         |
| 227 | Multiple Hybridization Events Punctuate the Evolutionary Trajectory of <i>Malassezia furfur </i> MBio, 2022, 13, e0385321.  | 1.8 | 9         |
| 228 | Eukaryotic transporters for hydroxyderivatives of benzoic acid. Scientific Reports, 2017, 7, 8998.  | 1.6 | 8         |
| 229 | Transcriptome Sequencing Approaches to Elucidate Host–Microbe Interactions in Opportunistic Human Fungal Pathogens. Current Topics in Microbiology and Immunology, 2018, 422, 193-235.  | 0.7 | 8         |
| 230 | Benzylic Dehydroxylation of Echinocandin Antifungal Drugs Restores Efficacy against Resistance Conferred by Mutated Glucan Synthase. Journal of the American Chemical Society, 2022, 144, 5965-5975.                              | 6.6 | 8         |
| 231 | Examination of Genome-Wide Ortholog Variation in Clinical and Environmental Isolates of the Fungal Pathogen Aspergillus fumigatus. MBio, 2022, 13, .  | 1.8 | 8         |
| 232 | Evolution of the ferritin family in vertebrates. Trends in Evolutionary Biology, 2012, 4, 3.  | 0.4 | 7         |
| 233 | Selection of Marker Genes Using Whole-Genome DNA Polymorphism Analysis. Evolutionary Bioinformatics, 2012, 8, EBO.S8989.  | 0.6 | 7         |
| 234 | Mitochondrial Carriers Link the Catabolism of Hydroxyaromatic Compounds to the Central Metabolism in Candida parapsilosis. G3: Genes, Genomes, Genetics, 2016, 6, 4047-4058.  | 0.8 | 7         |

| #   | Article   | IF               | CITATIONS        |
|-----|---|------------------|------------------|
| 235 | Target Enrichment Enables the Discovery of IncRNAs with Somatic Mutations or Altered Expression in Paraffin-Embedded Colorectal Cancer Samples. Cancers, 2020, 12, 2844.  | 1.7              | 7                |
| 236 | The Transcriptional Aftermath in Two Independently Formed Hybrids of the Opportunistic Pathogen Candida orthopsilosis. MSphere, 2020, 5, .  | 1.3              | 7                |
| 237 | Genome Assemblies of Two Rare Opportunistic Yeast Pathogens: <i>Diutina rugosa</i> (syn. <i>Candida) Tj ETQq1 Genetics, 2019, 9, 3921-3927.</i>   | 1 0.78431<br>0.8 | .4 rgBT /Ov<br>6 |
| 238 | Profiling of RNA Structure at Single-Nucleotide Resolution Using nextPARS. Methods in Molecular Biology, 2021, 2284, 51-62.   | 0.4              | 6                |
| 239 | SeqEditor: an application for primer design and sequence analysis with or without GTF/GFF files. Bioinformatics, 2021, 37, 1610-1612.   | 1.8              | 5                |
| 240 | Human albumin enhances the pathogenic potential of Candida glabrata on vaginal epithelial cells. PLoS Pathogens, 2021, 17, e1010037.  | 2.1              | 5                |
| 241 | The complete mitochondrial genome of the Giant Manta ray, Manta birostris. Mitochondrial DNA, 2015, 26, 787-788.  | 0.6              | 4                |
| 242 | Regulatory Mechanisms of a Highly Pectinolytic Mutant of Penicillium occitanis and Functional Analysis of a Candidate Gene in the Plant Pathogen Fusarium oxysporum. Frontiers in Microbiology, 2017, 8, 1627.                      | 1.5              | 4                |
| 243 | Grand Challenges in Fungal Genomics and Evolution. Frontiers in Fungal Biology, 2020, 1, .  | 0.9              | 4                |
| 244 | A Mouse Model Suggests That Heart Failure and Its Common Comorbidity Sleep Fragmentation Have No Synergistic Impacts on the Gut Microbiome. Microorganisms, 2021, 9, 641.   | 1.6              | 4                |
| 245 | Roles of the human microbiome in cancer. Hepatobiliary Surgery and Nutrition, 2021, 10, 558-560.  | 0.7              | 4                |
| 246 | Genome analysis of five recently described species of the CUG-Ser clade uncovers <i>Candida theae</i> as a new hybrid lineage with pathogenic potential in the <i>Candida parapsilosis</i> species complex. DNA Research, 2022, , . | 1.5              | 4                |
| 247 | FUNGALOXPHOS: An integrated database for oxidative phosphorylation in fungi. Mitochondrion, 2013, 13, 357-359.  | 1.6              | 3                |
| 248 | 3 Phylogenomics for the Study of Fungal Biology. , 2014, , 61-79.   |                  | 3                |
| 249 |   |                  |                  |

| #   | ARTICLE  | lF  | CITATIONS |
|-----|--|-----|-----------|
| 253 | Evolution of Fungi and Their Respiratory Metabolism. , 2011, , 257-272.  |     | 1         |
| 254 | Mitochondrial Origins. , 2012, , 3-18.   |     | 1         |
| 255 | Transcriptome and proteome profiling reveals complex adaptations of Candida parapsilosis cells assimilating hydroxyaromatic carbon sources. PLoS Genetics, 2022, 18, e1009815. | 1.5 | 1         |
| 256 | Chromosome-level assembly, annotation and phylome of $\langle i \rangle$ Pelobates cultripes $\langle i \rangle$ , the western spadefoot toad. DNA Research, 2022, 29, .       | 1.5 | 1         |
| 257 | Phylogenomics: The Evolution of Common Bean as Seen from the Perspective of All of Its Genes. Compendium of Plant Genomes, 2017, , 263-287.                                    | 0.3 | O         |
| 258 | From Endosymbiont to Host-Controlled Organelle: the Hijacking of Mitochondrial Protein Synthesis and Metabolism. PLoS Computational Biology, 2005, preprint, e219.             | 1.5 | 0         |
| 259 | Dating nodes in a phylogeny using inferred horizontal gene transfers. Peer Community in Evolutionary Biology, 2018, , 100037.  | 0.0 | 0         |
| 260 | Evolutionary analyses of genes in Echinodermata offer insights towards the origin of metazoan phyla. Genomics, 2022, 114, 110431.  | 1.3 | O         |