## Niranjan Nagarajan

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7588307/publications.pdf

Version: 2024-02-01

114 papers 18,231 citations

53 h-index 20358 116 g-index

142 all docs

 $\begin{array}{c} 142 \\ \\ \text{docs citations} \end{array}$ 

times ranked

142

31938 citing authors

#	Article	IF	CITATIONS
1	SARS-CoV-2 N Gene G29195T Point Mutation May Affect Diagnostic Reverse Transcription-PCR Detection. Microbiology Spectrum, 2022, 10, e0222321.	3.0	13
2	Shared signatures and divergence in skin microbiomes of children with atopic dermatitis and their caregivers. Journal of Allergy and Clinical Immunology, 2022, 150, 894-908.	2.9	14
3	Critical Assessment of Metagenome Interpretation: the second round of challenges. Nature Methods, 2022, 19, 429-440.	19.0	133
4	Metagenomics-enabled microbial surveillance. Nature Microbiology, 2022, 7, 486-496.	13.3	83
5	Emergence of SARS-CoV-2 Spike Mutations during Prolonged Infection in Immunocompromised Hosts. Microbiology Spectrum, 2022, 10, e0079122.	3.0	19
6	Mutual Exclusion of <i>Methanobrevibacter</i> Species in the Human Gut Microbiota Facilitates Directed Cultivation of a <i>Candidatus</i> Methanobrevibacter Intestini Representative. Microbiology Spectrum, 2022, 10, .	3.0	6
7	Atopic dermatitis microbiomes stratify into ecologic dermotypes enabling microbial virulence and disease severity. Journal of Allergy and Clinical Immunology, 2021, 147, 1329-1340.	2.9	26
8	Determination of isoform-specific RNA structure with nanopore long reads. Nature Biotechnology, 2021, 39, 336-346.	17.5	72
9	Household transmission of carbapenemase-producing Enterobacteriaceae: a prospective cohort study. Journal of Antimicrobial Chemotherapy, 2021, 76, 1299-1302.	3.0	3
10	Ectopic gut colonization: a metagenomic study of the oral and gut microbiome in Crohn's disease. Gut Pathogens, 2021, 13, 13.	3.4	26
11	COVID-19 drug practices risk antimicrobial resistance evolution. Lancet Microbe, The, 2021, 2, e135-e136.	7.3	47
12	Evaluating the accuracy of Listeria monocytogenes assemblies from quasimetagenomic samples using long and short reads. BMC Genomics, 2021, 22, 389.	2.8	9
13	Stool metagenome analysis of patients with Klebsiella pneumoniae liver abscess and their domestic partners. International Journal of Infectious Diseases, 2021, 107, 1-4.	3.3	4
14	A global metagenomic map of urban microbiomes and antimicrobial resistance. Cell, 2021, 184, 3376-3393.e17.	28.9	164
15	TUGDA: task uncertainty guided domain adaptation for robust generalization of cancer drug response prediction from <i>in vitro</i> to <i>in vivo</i> settings. Bioinformatics, 2021, 37, i76-i83.	4.1	11
16	BEEM-Static: Accurate inference of ecological interactions from cross-sectional microbiome data. PLoS Computational Biology, 2021, 17, e1009343.	3.2	2
17	Extended-Spectrum $\hat{I}^2$ -Lactamase-Producing and <i>mcr-1</i> -Positive Escherichia coli from the Gut Microbiota of Healthy Singaporeans. Applied and Environmental Microbiology, 2021, 87, e0048821.	3.1	10
18	CalmBelt: Rapid SARS-CoV-2 Genome Characterization for Outbreak Tracking. Frontiers in Medicine, 2021, 8, 790662.	2.6	8

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19	Predicting heterogeneity in clone-specific therapeutic vulnerabilities using single-cell transcriptomic signatures. Genome Medicine, 2021, 13, 189.	8.2	20
20	Human Tumor-Infiltrating MAIT Cells Display Hallmarks of Bacterial Antigen Recognition in Colorectal Cancer. Cell Reports Medicine, 2020, 1, 100039.	6.5	32
21	Emergence of tigecycline- and eravacycline-resistant Tet(X4)-producing Enterobacteriaceae in the gut microbiota of healthy Singaporeans. Journal of Antimicrobial Chemotherapy, 2020, 75, 3480-3484.	3.0	34
22	Duration of Carbapenemase-Producing <i>Enterobacteriaceae</i> Carriage in Hospital Patients. Emerging Infectious Diseases, 2020, 26, 2182-2185.	4.3	13
23	Cartography of opportunistic pathogens and antibiotic resistance genes in a tertiary hospital environment. Nature Medicine, 2020, 26, 941-951.	30.7	130
24	Metagenome-wide association analysis identifies microbial determinants of post-antibiotic ecological recovery in the gut. Nature Ecology and Evolution, 2020, 4, 1256-1267.	7.8	98
25	Gut microbiota changes in children with autism spectrum disorder: a systematic review. Gut Pathogens, 2020, 12, 6.	3.4	83
26	Hybrid metagenomic assembly enables high-resolution analysis of resistance determinants and mobile elements in human microbiomes. Nature Biotechnology, 2019, 37, 937-944.	17.5	216
27	Development and application of a transcriptional sensor for detection of heterologous acrylic acid production in E. coli. Microbial Cell Factories, 2019, 18, 139.	4.0	13
28	Boosting natural history research via metagenomic clean-up of crowdsourced feces. PLoS Biology, 2019, 17, e3000517.	5.6	18
29	An expectation-maximization algorithm enables accurate ecological modeling using longitudinal microbiome sequencing data. Microbiome, 2019, 7, 118.	11.1	28
30	Structure mapping of dengue and Zika viruses reveals functional long-range interactions. Nature Communications, 2019, 10, 1408.	12.8	104
31	A Min <scp>ION</scp> â"¢â€based pipeline for fast and costâ€effective <scp>DNA</scp> barcoding. Molecular Ecology Resources, 2018, 18, 1035-1049.	4.8	96
32	Comprehensive Characterization of Cancer Driver Genes and Mutations. Cell, 2018, 173, 371-385.e18.	28.9	1,670
33	Perspective on Oncogenic Processes at the End of the Beginning of Cancer Genomics. Cell, 2018, 173, 305-320.e10.	28.9	272
34	ConsensusDriver Improves upon Individual Algorithms for Predicting Driver Alterations in Different Cancer Types and Individual Patients. Cancer Research, 2018, 78, 290-301.	0.9	20
35	Genome-wide identification of natural RNA aptamers in prokaryotes and eukaryotes. Nature Communications, 2018, 9, 1289.	12.8	37
36	The liver–gut microbiota axis modulates hepatotoxicity of tacrine in the rat. Hepatology, 2018, 67, 282-295.	7.3	75

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37	Understanding the microbial basis of body odor in pre-pubescent children and teenagers. Microbiome, 2018, 6, 213.	11.1	47
38	Predicting Cancer Drug Response using a Recommender System. Bioinformatics, 2018, 34, 3907-3914.	4.1	101
39	Immunological corollary of the pulmonary mycobiome in bronchiectasis: the CAMEB study. European Respiratory Journal, 2018, 52, 1800766.	6.7	105
40	Fast and accurate de novo genome assembly from long uncorrected reads. Genome Research, 2017, 27, 737-746.	5.5	2,071
41	Development of a genetically programed vanillin-sensing bacterium for high-throughput screening of lignin-degrading enzyme libraries. Biotechnology for Biofuels, 2017, 10, 32.	6.2	28
42	Transcriptomics Analysis Reveals Putative Genes Involved in Biofilm Formation and Biofilm-associated Drug Resistance of Enterococcus faecalis. Journal of Endodontics, 2017, 43, 949-955.	3.1	33
43	Mammalian Systems Biotechnology Reveals Global Cellular Adaptations in a Recombinant CHO Cell Line. Cell Systems, 2017, 4, 530-542.e6.	6.2	84
44	Critical Assessment of Metagenome Interpretationâ€"a benchmark of metagenomics software. Nature Methods, 2017, 14, 1063-1071.	19.0	635
45	The draft genome of tropical fruit durian (Durio zibethinus). Nature Genetics, 2017, 49, 1633-1641.	21.4	150
46	Mapping RNA-RNA Interactions Globally Using Biotinylated Psoralen. Journal of Visualized Experiments, 2017, , .	0.3	12
47	Single-virion sequencing of lamivudine-treated HBV populations reveal population evolution dynamics and demographic history. BMC Genomics, 2017, 18, 829.	2.8	6
48	Comparative genomics of Cryptococcus neoformans var. grubii associated with meningitis in HIV infected and uninfected patients in Vietnam. PLoS Neglected Tropical Diseases, 2017, 11, e0005628.	3.0	45
49	Measurement of fetal fraction in cell-free DNA from maternal plasma using a panel of insertion/deletion polymorphisms. PLoS ONE, 2017, 12, e0186771.	2.5	21
50	<i>In vitro</i> and <i>in vivo</i> correlates of physiological and neoplastic human Fallopian tube stem cells. Journal of Pathology, 2016, 238, 519-530.	4.5	68
51	Fast and sensitive mapping of nanopore sequencing reads with GraphMap. Nature Communications, 2016, 7, 11307.	12.8	331
52	Predicting microbial interactions through computational approaches. Methods, 2016, 102, 12-19.	3.8	49
53	Tissue Microbiome Profiling Identifies an Enrichment of Specific Enteric Bacteria in Opisthorchis viverrini Associated Cholangiocarcinoma. EBioMedicine, 2016, 8, 195-202.	6.1	94
54	InÂVivo Mapping of Eukaryotic RNA Interactomes Reveals Principles of Higher-Order Organization and Regulation. Molecular Cell, 2016, 62, 603-617.	9.7	290

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55	Whole metagenome profiling reveals skin microbiome-dependent susceptibility to atopic dermatitis flare. Nature Microbiology, 2016, 1, 16106.	13.3	298
56	INC-Seq: accurate single molecule reads using nanopore sequencing. GigaScience, 2016, 5, 34.	6.4	133
57	@MInter: automated text-mining of microbial interactions. Bioinformatics, 2016, 32, 2981-2987.	4.1	30
58	OPERA-LG: efficient and exact scaffolding of large, repeat-rich eukaryotic genomes with performance guarantees. Genome Biology, 2016, 17, 102.	8.8	77
59	OPTIMA: sensitive and accurate whole-genome alignment of error-prone genomic maps by combinatorial indexing and technology-agnostic statistical analysis. GigaScience, 2016, 5, 2.	6.4	12
60	Mutational spectrum of Barrett's stem cells suggests paths to initiation of a precancerous lesion. Nature Communications, 2016, 7, 10380.	12.8	57
61	Single-molecule optical genome mapping of a human HapMap and a colorectal cancer cell line. GigaScience, 2015, 4, 65.	6.4	7
62	Genus-Wide Comparative Genomics of Malassezia Delineates Its Phylogeny, Physiology, and Niche Adaptation on Human Skin. PLoS Genetics, 2015, 11, e1005614.	3.5	198
63	Analysis of Dengue Virus Genetic Diversity during Human and Mosquito Infection Reveals Genetic Constraints. PLoS Neglected Tropical Diseases, 2015, 9, e0004044.	3.0	47
64	Tracking Dengue Virus Intra-host Genetic Diversity during Human-to-Mosquito Transmission. PLoS Neglected Tropical Diseases, 2015, 9, e0004052.	3.0	70
65	Cloning and variation of ground state intestinal stem cells. Nature, 2015, 522, 173-178.	27.8	156
66	Recurrent Fusion Genes in Gastric Cancer: CLDN18-ARHGAP26 Induces Loss of Epithelial Integrity. Cell Reports, 2015, 12, 272-285.	6.4	112
67	Patient-specific driver gene prediction and risk assessment through integrated network analysis of cancer omics profiles. Nucleic Acids Research, 2015, 43, e44-e44.	14.5	111
68	High-depth sequencing of over 750 genes supports linear progression of primary tumors and metastases in most patients with liver-limited metastatic colorectal cancer. Genome Biology, 2015, 16, 32.	8.8	42
69	Direct whole-genome deep-sequencing of human respiratory syncytial virus A and B from Vietnamese children identifies distinct patterns of inter- and intra-host evolution. Journal of General Virology, 2015, 96, 3470-3483.	2.9	30
70	BAsE-Seq: a method for obtaining long viral haplotypes from short sequence reads. Genome Biology, 2014, 15, 517.	8.8	45
71	The importance of study design for detecting differentially abundant features in high-throughput experiments. Genome Biology, 2014, 15, 527.	8.8	13
72	The Opisthorchis viverrini genome provides insights into life in the bile duct. Nature Communications, 2014, 5, 4378.	12.8	144

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73	Draft Genome Sequence of Polychlorinated Biphenyl-Dechlorinating Dehalococcoides mccartyi Strain SG1, Which Carries a Circular Putative Plasmid. Genome Announcements, 2014, 2, .	0.8	6
74	Systems consequences of amplicon formation in human breast cancer. Genome Research, 2014, 24, 1559-1571.	5 <b>.</b> 5	32
75	Papaya Repeat Database. , 2014, , 225-240.		1
76	Genomic characterization of three unique <i>Dehalococcoides</i> that respire on persistent polychlorinated biphenyls. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12103-12108.	7.1	168
77	Next-Generation Whole Genome Sequencing of Dengue Virus. Methods in Molecular Biology, 2014, 1138, 175-195.	0.9	14
78	Sequence assembly demystified. Nature Reviews Genetics, 2013, 14, 157-167.	16.3	396
79	The draft genome of sweet orange (Citrus sinensis). Nature Genetics, 2013, 45, 59-66.	21.4	837
80	Species Identification and Profiling of Complex Microbial Communities Using Shotgun Illumina Sequencing of 16S rRNA Amplicon Sequences. PLoS ONE, 2013, 8, e60811.	2.5	93
81	A Randomized, Double-Blind Placebo Controlled Trial of Balapiravir, a Polymerase Inhibitor, in Adult Dengue Patients. Journal of Infectious Diseases, 2013, 207, 1442-1450.	4.0	201
82	Genome Sequencing of Four Strains of Rickettsia prowazekii, the Causative Agent of Epidemic Typhus, Including One Flying Squirrel Isolate. Genome Announcements, $2013,1,1$	0.8	17
83	A common BIM deletion polymorphism mediates intrinsic resistance and inferior responses to tyrosine kinase inhibitors in cancer. Nature Medicine, 2012, 18, 521-528.	30.7	510
84	LoFreq: a sequence-quality aware, ultra-sensitive variant caller for uncovering cell-population heterogeneity from high-throughput sequencing datasets. Nucleic Acids Research, 2012, 40, 11189-11201.	14.5	1,074
85	Exome sequencing of gastric adenocarcinoma identifies recurrent somatic mutations in cell adhesion and chromatin remodeling genes. Nature Genetics, 2012, 44, 570-574.	21.4	560
86	FinIS: Improved in silico Finishing Using an Exact Quadratic Programming Formulation. Lecture Notes in Computer Science, 2012, , 314-325.	1.3	20
87	Whole-genome reconstruction and mutational signatures in gastric cancer. Genome Biology, 2012, 13, R115.	9.6	116
88	Long Span DNA Paired-End-Tag (DNA-PET) Sequencing Strategy for the Interrogation of Genomic Structural Mutations and Fusion-Point-Guided Reconstruction of Amplicons. PLoS ONE, 2012, 7, e46152.	2.5	13
89	Genome mapping on nanochannel arrays for structural variation analysis and sequence assembly. Nature Biotechnology, 2012, 30, 771-776.	17.5	586
90	Comprehensive long-span paired-end-tag mapping reveals characteristic patterns of structural variations in epithelial cancer genomes. Genome Research, 2011, 21, 665-675.	5 <b>.</b> 5	74

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91	Opera: Reconstructing Optimal Genomic Scaffolds with High-Throughput Paired-End Sequences. Journal of Computational Biology, 2011, 18, 1681-1691.	1.6	183
92	GiRaF: robust, computational identification of influenza reassortments via graph mining. Nucleic Acids Research, 2011, 39, e34-e34.	14.5	64
93	Opera: Reconstructing Optimal Genomic Scaffolds with High-Throughput Paired-End Sequences. Lecture Notes in Computer Science, 2011, , 437-451.	1.3	12
94	Alignment and clustering of phylogenetic markers - implications for microbial diversity studies. BMC Bioinformatics, 2010, $11$ , $152$ .	2.6	63
95	Finishing genomes with limited resources: lessons from an ensemble of microbial genomes. BMC Genomics, 2010, 11, 242.	2.8	46
96	Finding Biologically Accurate Clusterings in Hierarchical Tree Decompositions Using the Variation of Information. Journal of Computational Biology, 2010, 17, 503-516.	1.6	29
97	Sequencing and Genome Assembly Using Next-Generation Technologies. Methods in Molecular Biology, 2010, 673, 1-17.	0.9	47
98	Genomic characterization of the Yersinia genus. Genome Biology, 2010, 11, R1.	9.6	103
99	2009 Swine-Origin Influenza A (H1N1) Resembles Previous Influenza Isolates. PLoS ONE, 2009, 4, e6402.	2.5	31
100	Statistical Methods for Detecting Differentially Abundant Features in Clinical Metagenomic Samples. PLoS Computational Biology, 2009, 5, e1000352.	3.2	1,495
101	Complete Genome Sequence of <i>Aggregatibacter</i> ( <i>Haemophilus</i> ) <i>aphrophilus</i> NJ8700. Journal of Bacteriology, 2009, 191, 4693-4694.	2.2	28
102	Reliability and efficiency of algorithms for computing the significance of the Mann–Whitney test. Computational Statistics, 2009, 24, 605-622.	1.5	10
103	Parametric Complexity of Sequence Assembly: Theory and Applications to Next Generation Sequencing. Journal of Computational Biology, 2009, 16, 897-908.	1.6	96
104	Finding Biologically Accurate Clusterings in Hierarchical Tree Decompositions Using the Variation of Information. Lecture Notes in Computer Science, 2009, , 400-417.	1.3	10
105	Genome-Wide Analysis of Repetitive Elements in Papaya. Tropical Plant Biology, 2008, 1, 191-201.	1.9	24
106	The draft genome of the transgenic tropical fruit tree papaya (Carica papaya Linnaeus). Nature, 2008, 452, 991-996.	27.8	964
107	Uncovering Genomic Reassortments among Influenza Strains by Enumerating Maximal Bicliques., 2008,,.		17
108	FAST: Fourier transform based algorithms for significance testing of ungapped multiple alignments. Bioinformatics, 2008, 24, 577-578.	4.1	7

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109	Scaffolding and validation of bacterial genome assemblies using optical restriction maps. Bioinformatics, 2008, 24, 1229-1235.	4.1	195
110	Apples to apples: improving the performance of motif finders and their significance analysis in the Twilight Zone. Bioinformatics, 2006, 22, e393-e401.	4.1	8
111	A Fast and Numerically Robust Method for Exact Multinomial Goodness-of-Fit Test. Journal of Computational and Graphical Statistics, 2006, 15, 779-802.	1.7	11
112	Computing the P-value of the information content from an alignment of multiple sequences. Bioinformatics, 2005, 21, i311-i318.	4.1	34
113	Automatic prediction of protein domains from sequence information using a hybrid learning system. Bioinformatics, 2004, 20, 1335-1360.	4.1	73
114	A multi-expert system for the automatic detection of protein domains from sequence information. , 2003, , .		2