

Can Alkan

List of Publications by Year in descending order

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Version: 2024-02-01

107
papers

56,415
citations

32410

55
h-index

33145

104
g-index

120
all docs

120
docs citations

120
times ranked

79154
citing authors

#	ARTICLE	IF	CITATIONS
1	A global reference for human genetic variation. <i>Nature</i> , 2015, 526, 68-74.	13.7	13,998
2	A map of human genome variation from population-scale sequencing. <i>Nature</i> , 2010, 467, 1061-1073.	13.7	7,209
3	An integrated map of genetic variation from 1,092 human genomes. <i>Nature</i> , 2012, 491, 56-65.	13.7	7,199
4	A Hexanucleotide Repeat Expansion in C9ORF72 Is the Cause of Chromosome 9p21-Linked ALS-FTD. <i>Neuron</i> , 2011, 72, 257-268.	3.8	3,833
5	A Draft Sequence of the Neandertal Genome. <i>Science</i> , 2010, 328, 710-722.	6.0	3,588
6	An integrated map of structural variation in 2,504 human genomes. <i>Nature</i> , 2015, 526, 75-81.	13.7	1,994
7	A High-Coverage Genome Sequence from an Archaic Denisovan Individual. <i>Science</i> , 2012, 338, 222-226.	6.0	1,695
8	Genetic history of an archaic hominin group from Denisova Cave in Siberia. <i>Nature</i> , 2010, 468, 1053-1060.	13.7	1,537
9	Genome structural variation discovery and genotyping. <i>Nature Reviews Genetics</i> , 2011, 12, 363-376.	7.7	1,240
10	Mapping copy number variation by population-scale genome sequencing. <i>Nature</i> , 2011, 470, 59-65.	13.7	991
11	Mapping and sequencing of structural variation from eight human genomes. <i>Nature</i> , 2008, 453, 56-64.	13.7	983
12	Great ape genetic diversity and population history. <i>Nature</i> , 2013, 499, 471-475.	13.7	768
13	Limitations of next-generation genome sequence assembly. <i>Nature Methods</i> , 2011, 8, 61-65.	9.0	685
14	Insights into hominid evolution from the gorilla genome sequence. <i>Nature</i> , 2012, 483, 169-175.	13.7	663
15	Personalized copy number and segmental duplication maps using next-generation sequencing. <i>Nature Genetics</i> , 2009, 41, 1061-1067.	9.4	656
16	Diversity of Human Copy Number Variation and Multicopy Genes. <i>Science</i> , 2010, 330, 641-646.	6.0	609
17	Comparative and demographic analysis of orang-utan genomes. <i>Nature</i> , 2011, 469, 529-533.	13.7	541
18	Genome Sequencing Highlights the Dynamic Early History of Dogs. <i>PLoS Genetics</i> , 2014, 10, e1004016.	1.5	481

#	ARTICLE	IF	CITATIONS
19	Sequence and structural variation in a human genome uncovered by short-read, massively parallel ligation sequencing using two-base encoding. <i>Genome Research</i> , 2009, 19, 1527-1541.	2.4	448
20	The bonobo genome compared with the chimpanzee and human genomes. <i>Nature</i> , 2012, 486, 527-531.	13.7	445
21	Complete Khoisan and Bantu genomes from southern Africa. <i>Nature</i> , 2010, 463, 943-947.	13.7	400
22	Activating mutations of STAT5B and STAT3 in lymphomas derived from $\hat{\text{I}}\hat{\text{3}}\hat{\text{T}}$ or NK cells. <i>Nature Communications</i> , 2015, 6, 6025.	5.8	334
23	Comparative analysis of the domestic cat genome reveals genetic signatures underlying feline biology and domestication. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 17230-17235.	3.3	281
24	Refinement and Discovery of New Hotspots of Copy-Number Variation Associated with Autism Spectrum Disorder. <i>American Journal of Human Genetics</i> , 2013, 92, 221-237.	2.6	279
25	Combinatorial algorithms for structural variation detection in high-throughput sequenced genomes. <i>Genome Research</i> , 2009, 19, 1270-1278.	2.4	266
26	Copy number variation of individual cattle genomes using next-generation sequencing. <i>Genome Research</i> , 2012, 22, 778-790.	2.4	259
27	mrsFAST: a cache-oblivious algorithm for short-read mapping. <i>Nature Methods</i> , 2010, 7, 576-577.	9.0	248
28	A robust benchmark for detection of germline large deletions and insertions. <i>Nature Biotechnology</i> , 2020, 38, 1347-1355.	9.4	233
29	A burst of segmental duplications in the genome of the African great ape ancestor. <i>Nature</i> , 2009, 457, 877-881.	13.7	222
30	Reconstructing complex regions of genomes using long-read sequencing technology. <i>Genome Research</i> , 2014, 24, 688-696.	2.4	222
31	Haplotype-resolved genome sequencing of a Gujarati Indian individual. <i>Nature Biotechnology</i> , 2011, 29, 59-63.	9.4	216
32	Computational pan-genomics: status, promises and challenges. <i>Briefings in Bioinformatics</i> , 2018, 19, bbw089.	3.2	207
33	Next-generation VariationHunter: combinatorial algorithms for transposon insertion discovery. <i>Bioinformatics</i> , 2010, 26, i350-i357.	1.8	190
34	The structure and evolution of centromeric transition regions within the human genome. <i>Nature</i> , 2004, 430, 857-864.	13.7	179
35	Characterization of missing human genome sequences and copy-number polymorphic insertions. <i>Nature Methods</i> , 2010, 7, 365-371.	9.0	138
36	Nanopore sequencing technology and tools for genome assembly: computational analysis of the current state, bottlenecks and future directions. <i>Briefings in Bioinformatics</i> , 2019, 20, 1542-1559.	3.2	137

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37	SCALCE: boosting sequence compression algorithms using locally consistent encoding. <i>Bioinformatics</i> , 2012, 28, 3051-3057.	1.8	129
38	Analysis of Primate Genomic Variation Reveals a Repeat-Driven Expansion of the Human Genome. <i>Genome Research</i> , 2003, 13, 358-368.	2.4	127
39	MoDIL: detecting small indels from clone-end sequencing with mixtures of distributions. <i>Nature Methods</i> , 2009, 6, 473-474.	9.0	115
40	Detection of structural variants and indels within exome data. <i>Nature Methods</i> , 2012, 9, 176-178.	9.0	109
41	RNA-RNA Interaction Prediction and Antisense RNA Target Search. <i>Journal of Computational Biology</i> , 2006, 13, 267-282.	0.8	106
42	Realizing the potential of blockchain technologies in genomics. <i>Genome Research</i> , 2018, 28, 1255-1263.	2.4	101
43	Detection and characterization of novel sequence insertions using paired-end next-generation sequencing. <i>Bioinformatics</i> , 2010, 26, 1277-1283.	1.8	98
44	<i>Alu</i> repeat discovery and characterization within human genomes. <i>Genome Research</i> , 2011, 21, 840-849.	2.4	94
45	Death and Resurrection of the Human IRGM Gene. <i>PLoS Genetics</i> , 2009, 5, e1000403.	1.5	93
46	GRIM-Filter: Fast seed location filtering in DNA read mapping using processing-in-memory technologies. <i>BMC Genomics</i> , 2018, 19, 89.	1.2	92
47	A large and complex structural polymorphism at 16p12.1 underlies microdeletion disease risk. <i>Nature Genetics</i> , 2010, 42, 745-750.	9.4	89
48	Organization and Evolution of Primate Centromeric DNA from Whole-Genome Shotgun Sequence Data. <i>PLoS Computational Biology</i> , 2007, 3, e181.	1.5	80
49	Identification and validation of a novel mature microRNA encoded by the Merkel cell polyomavirus in human Merkel cell carcinomas. <i>Journal of Clinical Virology</i> , 2011, 52, 272-275.	1.6	80
50	Accelerating read mapping with FastHASH. <i>BMC Genomics</i> , 2013, 14, S13.	1.2	79
51	Genome-wide characterization of centromeric satellites from multiple mammalian genomes. <i>Genome Research</i> , 2011, 21, 137-145.	2.4	78
52	Demographically-Based Evaluation of Genomic Regions under Selection in Domestic Dogs. <i>PLoS Genetics</i> , 2016, 12, e1005851.	1.5	77
53	Extreme selective sweeps independently targeted the X chromosomes of the great apes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6413-6418.	3.3	75
54	Comparative analysis of <i>Alu</i> repeats in primate genomes. <i>Genome Research</i> , 2009, 19, 876-885.	2.4	71

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55	GateKeeper: a new hardware architecture for accelerating pre-alignment in DNA short read mapping. <i>Bioinformatics</i> , 2017, 33, 3355-3363.	1.8	67
56	Gorilla genome structural variation reveals evolutionary parallelisms with chimpanzee. <i>Genome Research</i> , 2011, 21, 1640-1649.	2.4	65
57	Rates and patterns of great ape retrotransposition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13457-13462.	3.3	57
58	Fast characterization of segmental duplications in genome assemblies. <i>Bioinformatics</i> , 2018, 34, i706-i714.	1.8	55
59	mrsFAST-Ultra: a compact, SNP-aware mapper for high performance sequencing applications. <i>Nucleic Acids Research</i> , 2014, 42, W494-W500.	6.5	54
60	Shifted Hamming distance: a fast and accurate SIMD-friendly filter to accelerate alignment verification in read mapping. <i>Bioinformatics</i> , 2015, 31, 1553-1560.	1.8	54
61	Technology dictates algorithms: recent developments in read alignment. <i>Genome Biology</i> , 2021, 22, 249.	3.8	51
62	Targeting PLK1 overcomes T-DM1 resistance via CDK1-dependent phosphorylation and inactivation of Bcl-2/xL in HER2-positive breast cancer. <i>Oncogene</i> , 2018, 37, 2251-2269.	2.6	49
63	The genome sequencing of an albino Western lowland gorilla reveals inbreeding in the wild. <i>BMC Genomics</i> , 2013, 14, 363.	1.2	48
64	Whole genome sequencing of Turkish genomes reveals functional private alleles and impact of genetic interactions with Europe, Asia and Africa. <i>BMC Genomics</i> , 2014, 15, 963.	1.2	46
65	New Insights into Centromere Organization and Evolution from the White-Cheeked Gibbon and Marmoset. <i>Molecular Biology and Evolution</i> , 2009, 26, 1889-1900.	3.5	45
66	Inter-variational structural variation in grapevine genomes. <i>Plant Journal</i> , 2016, 88, 648-661.	2.8	45
67	Shouji: a fast and efficient pre-alignment filter for sequence alignment. <i>Bioinformatics</i> , 2019, 35, 4255-4263.	1.8	44
68	Early postzygotic mutations contribute to de novo variation in a healthy monozygotic twin pair. <i>Journal of Medical Genetics</i> , 2014, 51, 455-459.	1.5	42
69	Accelerating Genome Analysis: A Primer on an Ongoing Journey. <i>IEEE Micro</i> , 2020, 40, 65-75.	1.8	41
70	GenASM: A High-Performance, Low-Power Approximate String Matching Acceleration Framework for Genome Sequence Analysis. , 2020, , .		37
71	On genomic repeats and reproducibility. <i>Bioinformatics</i> , 2016, 32, 2243-2247.	1.8	33
72	Annotated features of domestic cat "Felis catus genome. <i>GigaScience</i> , 2014, 3, 13.	3.3	30

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73	Discovery and genotyping of novel sequence insertions in many sequenced individuals. <i>Bioinformatics</i> , 2017, 33, i161-i169.	1.8	29
74	Discovery of tandem and interspersed segmental duplications using high-throughput sequencing. <i>Bioinformatics</i> , 2019, 35, 3923-3930.	1.8	29
75	Toolkit for automated and rapid discovery of structural variants. <i>Methods</i> , 2017, 129, 3-7.	1.9	28
76	Apollo: a sequencing-technology-independent, scalable and accurate assembly polishing algorithm. <i>Bioinformatics</i> , 2020, 36, 3669-3679.	1.8	26
77	Divergent Origins and Concerted Expansion of Two Segmental Duplications on Chromosome 16. <i>Journal of Heredity</i> , 2001, 92, 462-468.	1.0	25
78	Optimal design of oligonucleotide microarrays for measurement of DNA copy-number. <i>Human Molecular Genetics</i> , 2007, 16, 2770-2779.	1.4	25
79	Hercules: a profile HMM-based hybrid error correction algorithm for long reads. <i>Nucleic Acids Research</i> , 2018, 46, e125.	6.5	23
80	Optimal seed solver: optimizing seed selection in read mapping. <i>Bioinformatics</i> , 2016, 32, 1632-1642.	1.8	21
81	The Role of Unequal Crossover in Alpha-Satellite DNA Evolution: A Computational Analysis. <i>Journal of Computational Biology</i> , 2004, 11, 933-944.	0.8	20
82	SneakySnake: a fast and accurate universal genome pre-alignment filter for CPUs, GPUs and FPGAs. <i>Bioinformatics</i> , 2021, 36, 5282-5290.	1.8	19
83	<i>Clcn4-2</i> genomic structure differs between the X locus in <i>Mus spretus</i> and the autosomal locus in <i>Mus musculus</i> : AT motif enrichment on the X. <i>Genome Research</i> , 2011, 21, 402-409.	2.4	18
84	Discovery of large genomic inversions using long range information. <i>BMC Genomics</i> , 2017, 18, 65.	1.2	18
85	Determining the origin of synchronous multifocal bladder cancer by exome sequencing. <i>BMC Cancer</i> , 2015, 15, 871.	1.1	17
86	Sensitive and fast mapping of di-base encoded reads. <i>Bioinformatics</i> , 2011, 27, 1915-1921.	1.8	16
87	VALOR2: characterization of large-scale structural variants using linked-reads. <i>Genome Biology</i> , 2020, 21, 72.	3.8	15
88	taveRNA: a web suite for RNA algorithms and applications. <i>Nucleic Acids Research</i> , 2007, 35, W325-W329.	6.5	14
89	Fast characterization of segmental duplication structure in multiple genome assemblies. <i>Algorithms for Molecular Biology</i> , 2022, 17, 4.	0.3	10
90	RNA Secondary Structure Prediction Via Energy Density Minimization. <i>Lecture Notes in Computer Science</i> , 2006, , 130-142.	1.0	9

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91	Building and Improving Reference Genome Assemblies. Proceedings of the IEEE, 2017, , 1-14.	16.4	6
92	Manipulating multiple sequence alignments via MaM and WebMaM. Nucleic Acids Research, 2005, 33, W295-W298.	6.5	5
93	Fast and accurate mapping of Complete Genomics reads. Methods, 2015, 79-80, 3-10.	1.9	5
94	GateKeeper-GPU: Fast and Accurate Pre-Alignment Filtering in Short Read Mapping. , 2021, , .		5
95	Polishing copy number variant calls on exome sequencing data via deep learning. Genome Research, 2022, 32, 1170-1182.	2.4	5
96	Whole-Genome Shotgun Sequence CNV Detection Using Read Depth. Methods in Molecular Biology, 2018, 1833, 61-72.	0.4	4
97	An algorithmic analysis of the role of unequal crossover in alpha-satellite DNA evolution. Genome Informatics, 2002, 13, 93-102.	0.4	4
98	Robustness of Massively Parallel Sequencing Platforms. PLoS ONE, 2015, 10, e0138259.	1.1	3
99	Combinatorial Algorithms for Structural Variation Detection in High Throughput Sequenced Genomes. Lecture Notes in Computer Science, 2009, , 218-219.	1.0	3
100	Automatic characterization of copy number polymorphism using high throughput sequencing. Turkish Journal of Electrical Engineering and Computer Sciences, 2020, 28, 253-261.	0.9	2
101	Characterizing microsatellite polymorphisms using assembly-based and mapping-based tools. Turkish Journal of Biology, 2019, 43, 264-273.	2.1	1
102	Frequent Activating Mutations Of JAK-STAT Pathway Genes In Natural Killer Cell Lymphomas. Blood, 2013, 122, 812-812.	0.6	1
103	Can you Really Anonymize the Donors of Genomic Data in Today's Digital World?. Lecture Notes in Computer Science, 2016, , 237-244.	1.0	1
104	Genomics technologies to study structural variations in the grapevine genome. BIO Web of Conferences, 2016, 7, 01016.	0.1	0
105	Evaluation of genome scaffolding tools using pooled clone sequencing. Turkish Journal of Biology, 2018, 42, 471-476.	2.1	0
106	PERSONAL GENOMICS " Session Introduction. , 2009, , 302-304.		0
107	Abstract 2848: Identifying and targeting competing endogenous RNA (ceRNAs) networks to inhibit lung metastasis in triple negative breast cancer. , 2017, , .		0