Somali Chaterji

List of Publications by Year
in descending order

39 papers	1,407 citations	623734 14 h-index	552781 26 g-index
41 all docs	41 docs citations	41 times ranked	2403 citing authors

#	Article	IF	Citations
1	Smart polymeric gels: Redefining the limits of biomedical devices. Progress in Polymer Science, 2007, 32, 1083-1122.	24.7	538
2	The MG-RAST metagenomics database and portal in 2015. Nucleic Acids Research, 2016, 44, D590-D594.	14.5	187
3	MG-RAST version 4â€"lessons learned from a decade of low-budget ultra-high-throughput metagenome analysis. Briefings in Bioinformatics, 2019, 20, 1151-1159.	6.5	98
4	Hybrid Low-Power Wide-Area Mesh Network for IoT Applications. IEEE Internet of Things Journal, 2021, 8, 901-915.	8.7	54
5	Synergistic Effects of Matrix Nanotopography and Stiffness on Vascular Smooth Muscle Cell Function. Tissue Engineering - Part A, 2014, 20, 2115-2126.	3.1	48
6	EP-DNN: A Deep Neural Network-Based Global Enhancer Prediction Algorithm. Scientific Reports, 2016, 6, 38433.	3.3	42
7	Combinatorial screening of biochemical and physical signals for phenotypic regulation of stem cellâ€"based cartilage tissue engineering. Science Advances, 2020, 6, eaaz5913.	10.3	42
8	Rafiki. , 2017, , .		33
9	MicroRNA target prediction using thermodynamic and sequence curves. BMC Genomics, 2015, 16, 999.	2.8	28
10	Syndecan-1 Regulates Vascular Smooth Muscle Cell Phenotype. PLoS ONE, 2014, 9, e89824.	2.5	27
11	Opening up the blackbox: an interpretable deep neural network-based classifier for cell-type specific enhancer predictions. BMC Systems Biology, 2016, 10, 54.	3.0	25
12	Scaffold-Free *In Vitro* Arterial Mimetics: The Importance of Smooth Muscleâ€"Endothelium Contact. Tissue Engineering - Part A, 2010, 16, 1901-1912.	3.1	24
13	ApproxDet. , 2020, , .		23
14	CRISPR Genome Engineering for Human Pluripotent Stem Cell Research. Theranostics, 2017, 7, 4445-4469.	10.0	22
15	Tiresias: Context-sensitive Approach to Decipher the Presence and Strength of MicroRNA Regulatory Interactions. Theranostics, 2018, 8, 277-291.	10.0	22
16	Minerva: A reinforcement learning-based technique for optimal scheduling and bottleneck detection in distributed factory operations. , 2018, , .		19
17	Federation in genomics pipelines: techniques and challenges. Briefings in Bioinformatics, 2019, 20, 235-244.	6.5	18
18	Syndecan-1 in mechanosensing of nanotopological cues in engineered materials. Biomaterials, 2018, 155, 13-24.	11.4	16

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19	SARVAVID. , 2016, , .		14
20	Vision Paper: Grand Challenges in Resilience: Autonomous System Resilience through Design and Runtime Measures. IEEE Open Journal of the Computer Society, 2020, 1, 155-172.	7.8	14
21	A data-driven approach to increasing the lifetime of IoT sensor nodes. Scientific Reports, 2021, 11, 22459.	3.3	14
22	An ensemble SVM model for the accurate prediction of non-canonical MicroRNA targets. , 2015, , .		12
23	Lattice: A Vision for Machine Learning, Data Engineering, and Policy Considerations for Digital Agriculture at Scale. IEEE Open Journal of the Computer Society, 2021, 2, 227-240.	7.8	12
24	Orion: Scaling Genomic Sequence Matching with Fine-Grained Parallelization. , 2014, , .		9
25	A Distributed Classifier for MicroRNA Target Prediction with Validation Through TCGA Expression Data. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2018, 15, 1037-1051.	3.0	9
26	Scalable Genome Assembly through Parallel de Bruijn Graph Construction for Multiple k-mers. Scientific Reports, 2019, 9, 14882.	3.3	8
27	Benchmarking Video Object Detection Systems on Embedded Devices under Resource Contention. , 2021, , .		8
28	Scalable Genomic Assembly through Parallel <i>de Bruijn</i> Graph Construction for Multiple K-mers. , 2017, , .		7
29	Athena: Automated Tuning of k-mer based Genomic Error Correction Algorithms using Language Models. Scientific Reports, 2019, 9, 16157.	3.3	6
30	JANUS: Benchmarking Commercial and Open-Source Cloud and Edge Platforms for Object and Anomaly Detection Workloads. , 2020, , .		6
31	Suitability of NoSQL systems â€" Cassandra and ScyllaDB â€" For IoT workloads. , 2017, , .		5
32	Lerna: transformer architectures for configuring error correction tools for short- and long-read genome sequencing. BMC Bioinformatics, 2022, 23, 25.	2.6	5
33	Fast training on large genomics data using distributed Support Vector Machines. , 2016, , .		3
34	Interpretable deep neural networks for enhancer prediction. , 2015, , .		2
35	Prediction of enhancer RNA activity levels from ChIP-seq-derived histone modification combinatorial codes. , 2017, , .		1
36	AIKYATAN: mapping distal regulatory elements using convolutional learning on GPU. BMC Bioinformatics, 2019, 20, 488.	2.6	1

#	Article	IF	Citations
37	Panel 3 Position Paper: Blockchain can be the Backbone of India's Economy. , 2019, , .		1
38	Simultaneous learning of individual microRNA-gene interactions and regulatory comodules. BMC Bioinformatics, 2021, 22, 237.	2.6	1
39	Panel 2 Position Paper: AI could Solve the World's Healthcare Problems and that too at Scale!. , 2019, , .		0