FranÃ§ois Laviolette

List of Publications by Year
in descending order

39 papers	3,006 citations	516710 16 h-index	414414 32 g-index
42 all docs	42 docs citations	42 times ranked	5067 citing authors

#	Article	IF	Citations
1	Assemblathon 2: evaluating de novo methods of genome assembly in three vertebrate species. GigaScience, 2013, 2, 10.	6.4	582
2	Ray Meta: scalable de novo metagenome assembly and profiling. Genome Biology, 2012, 13, R122.	9.6	549
3	Ray: Simultaneous Assembly of Reads from a Mix of High-Throughput Sequencing Technologies. Journal of Computational Biology, 2010, 17, 1519-1533.	1.6	490
4	Deep Learning for Electromyographic Hand Gesture Signal Classification Using Transfer Learning. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 760-771.	4.9	440
5	Transfer learning for sEMG hand gestures recognition using convolutional neural networks. , 2017, , .		107
6	Predictive computational phenotyping and biomarker discovery using reference-free genome comparisons. BMC Genomics, 2016, 17, 754.	2.8	97
7	Interpretable genotype-to-phenotype classifiers with performance guarantees. Scientific Reports, 2019, 9, 4071.	3.3	75
8	Interpreting Deep Learning Features for Myoelectric Control: A Comparison With Handcrafted Features. Frontiers in Bioengineering and Biotechnology, 2020, 8, 158.	4.1	65
9	Approximate Analysis of Probabilistic Processes: Logic, Simulation and Games. , 2008, , .		64
10	Bisimulation and cocongruence for probabilistic systems. Information and Computation, 2006, 204, 503-523.	0.7	62
11	MHC-NP: Predicting peptides naturally processed by the MHC. Journal of Immunological Methods, 2013, 400-401, 30-36.	1.4	57
12	PAC-Bayesian learning of linear classifiers. , 2009, , .		53
13	A convolutional neural network for robotic arm guidance using sEMG based frequency-features. , 2016, , .		52
14	A Low-Cost, Wireless, 3-D-Printed Custom Armband for sEMG Hand Gesture Recognition. Sensors, 2019, 19, 2811.	3.8	51
15	Machine Learning Assisted Design of Highly Active Peptides for Drug Discovery. PLoS Computational Biology, 2015, 11, e1004074.	3.2	45
16	Unsupervised Domain Adversarial Self-Calibration for Electromyography-Based Gesture Recognition. IEEE Access, 2020, 8, 177941-177955.	4.2	35
17	Learning a peptide-protein binding affinity predictor with kernel ridge regression. BMC Bioinformatics, 2013, 14, 82.	2.6	33
18	PAC-Bayesian Inequalities for Martingales. IEEE Transactions on Information Theory, 2012, 58, 7086-7093.	2.4	22

#	Article	IF	Citations
19	Phenetic Comparison of Prokaryotic Genomes Using k-mers. Molecular Biology and Evolution, 2017, 34, 2716-2729.	8.9	20
20	On constructible graphs, infinite bridged graphs and weakly cop-win graphs. Discrete Mathematics, 2000, 224, 61-78.	0.7	19
21	On cop-win graphs. Discrete Mathematics, 2002, 258, 27-41.	0.7	17
22	Distribution-Dependent PAC-Bayes Priors. Lecture Notes in Computer Science, 2010, , 119-133.	1.3	15
23	Decompositions of infinite graphs: Iâ€”bond-faithful decompositions. Journal of Combinatorial Theory Series B, 2005, 94, 259-277.	1.0	7
24	Edge-Ends in Countable Graphs. Journal of Combinatorial Theory Series B, 1997, 70, 225-244.	1.0	6
25	Learning the set covering machine by bound minimization and margin-sparsity trade-off. Machine Learning, 2010, 78, 175-201.	5.4	6
26	Decompositions of infinite graphs: Part II circuit decompositions. Journal of Combinatorial Theory Series B, 2005, 94, 278-333.	1.0	4
27	Exploring polypharmacy with artificial intelligence: data analysis protocol. BMC Medical Informatics and Decision Making, 2021, 21, 219.	3.0	4
28	Decomposition of infinite eulerian graphs with a small number of vertices of infinite degree. Discrete Mathematics, 1994, 130, 83-87.	0.7	3
29	A logical duality for underspecified probabilistic systems. Information and Computation, 2011, 209, 850-871.	0.7	3
30	Towards the use of consumer-grade electromyographic armbands for interactive, artistic robotics performances. , 2017, , .		3
31	A Demonic Approach to Information in Probabilistic Systems. Lecture Notes in Computer Science, 2009, , 289-304.	1.3	3
32	On the robustness of generalization of drugâ€“drug interaction models. BMC Bioinformatics, 2021, 22, 477.	2.6	3
33	Spanning trees of countable graphs omitting sets of dominated ends. Discrete Mathematics, 1999, 194, 151-172.	0.7	2
34	Time Adaptive Dual Particle Swarm Optimization. , 2017, , .		2
35	Human Analysts at Superhuman Scales: What Has Friendly Software To Do?. Big Data, 2013, 1, 227-236.	3.4	1
36	Risk upper bounds for general ensemble methods with an application to multiclass classification. Neurocomputing, 2017, 219, 15-25.	5.9	1

#	Article	IF	Citations
37	Fast greedy $$mathcal {C}$$-bound minimization with guarantees. Machine Learning, 2020, 109, 1945-1986.	5.4	1
38	The Countable Character of Uncountable Graphs. Electronic Notes in Theoretical Computer Science, 2004, 87, 205-224.	0.9	0
39	Testing probabilistic equivalence through Reinforcement Learning. Information and Computation, 2013, 227, 21-57.	0.7	0