

# Francesc A RossellÀ³

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

1,248  
citations

567281

15  
h-index

395702

33  
g-index

74  
all docs

74  
docs citations

74  
times ranked

1124  
citing authors

#	ARTICLE	IF	CITATIONS
1	Diffusional conductances to CO <sub>2</sub> as a target for increasing photosynthesis and photosynthetic water-use efficiency. <i>Photosynthesis Research</i> , 2013, 117, 45-59.	2.9	305
2	Comparison of Tree-Child Phylogenetic Networks. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2009, 6, 552-569.	3.0	123
3	Extended Newick: it is time for a standard representation of phylogenetic networks. <i>BMC Bioinformatics</i> , 2008, 9, 532.	2.6	82
4	On the coverings by tolerance classes*1. <i>Information Sciences</i> , 2004, 166, 193-211.	6.9	63
5	A new balance index for phylogenetic trees. <i>Mathematical Biosciences</i> , 2013, 241, 125-136.	1.9	49
6	A distance metric for a class of tree-sibling phylogenetic networks. <i>Bioinformatics</i> , 2008, 24, 1481-1488.	4.1	48
7	Cophenetic metrics for phylogenetic trees, after Sokal and Rohlf. <i>BMC Bioinformatics</i> , 2013, 14, 3.	2.6	48
8	Averaging fuzzy biopolymers. <i>Fuzzy Sets and Systems</i> , 2005, 152, 139-158.	2.7	45
9	Metrics for Phylogenetic Networks I: Generalizations of the Robinson-Foulds Metric. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2009, 6, 46-61.	3.0	44
10	Tripartitions do not always discriminate phylogenetic networks. <i>Mathematical Biosciences</i> , 2008, 211, 356-370.	1.9	28
11	Nodal distances for rooted phylogenetic trees. <i>Journal of Mathematical Biology</i> , 2010, 61, 253-276.	1.9	26
12	Metrics for Phylogenetic Networks II: Nodal and Triplets Metrics. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2009, 6, 454-469.	3.0	22
13	Graph Transformation in Molecular Biology. <i>Lecture Notes in Computer Science</i> , 2005, , 116-133.	1.3	21
14	Algebraic transformation of unary partial algebras II: Single-pushout approach. <i>Theoretical Computer Science</i> , 1999, 216, 311-362.	0.9	17
15	All that glisters is not galled. <i>Mathematical Biosciences</i> , 2009, 221, 54-59.	1.9	17
16	Exact formulas for the variance of several balance indices under the Yule model. <i>Journal of Mathematical Biology</i> , 2013, 67, 1833-1846.	1.9	17
17	Chemical Graphs, Chemical Reaction Graphs, and Chemical Graph Transformation. <i>Electronic Notes in Theoretical Computer Science</i> , 2005, 127, 157-166.	0.9	15
18	An algebraic metric for phylogenetic trees. <i>Applied Mathematics Letters</i> , 2009, 22, 1320-1324.	2.7	15

#	ARTICLE	IF	CITATIONS
19	On Nakhleh's Metric for Reduced Phylogenetic Networks. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2009, 6, 629-638.	3.0	15
20	Comparison of Galled Trees. <i>IEEE/ACM Transactions on Computational Biology and Bioinformatics</i> , 2011, 8, 410-427.	3.0	15
21	Sound Colless-like balance indices for multifurcating trees. <i>PLoS ONE</i> , 2018, 13, e0203401.	2.5	14
22	A perl package and an alignment tool for phylogenetic networks. <i>BMC Bioinformatics</i> , 2008, 9, 175.	2.6	13
23	Unbiased Taxonomic Annotation of Metagenomic Samples. <i>Journal of Computational Biology</i> , 2018, 25, 348-360.	1.6	12
24	On Sackin's original proposal: the variance of the leaves' depths as a phylogenetic balance index. <i>BMC Bioinformatics</i> , 2020, 21, 154.	2.6	12
25	A reconstruction problem for a class of phylogenetic networks with lateral gene transfers. <i>Algorithms for Molecular Biology</i> , 2015, 10, 28.	1.2	11
26	Analysis of Metabolic Pathways by Graph Transformation. <i>Lecture Notes in Computer Science</i> , 2004, , 70-82.	1.3	11
27	Algebraic transformation of unary partial algebras I. double-pushout approach. <i>Theoretical Computer Science</i> , 1997, 184, 145-193.	0.9	10
28	An algebraic view of the relation between largest common subtrees and smallest common supertrees. <i>Theoretical Computer Science</i> , 2006, 362, 33-53.	0.9	10
29	Scalar and fuzzy cardinalities of crisp and fuzzy multisets. <i>International Journal of Intelligent Systems</i> , 2009, 24, 587-623.	5.7	10
30	The mean value of the squared path-difference distance for rooted phylogenetic trees. <i>Journal of Mathematical Analysis and Applications</i> , 2010, 371, 168-176.	1.0	10
31	On the minimum value of the Colless index and the bifurcating trees that achieve it. <i>Journal of Mathematical Biology</i> , 2020, 80, 1993-2054.	1.9	9
32	A balance index for phylogenetic trees based on rooted quartets. <i>Journal of Mathematical Biology</i> , 2019, 79, 1105-1148.	1.9	8
33	AligNet: alignment of protein-protein interaction networks. <i>BMC Bioinformatics</i> , 2020, 21, 265.	2.6	8
34	A new family of metrics for biopolymer contact structures. <i>Computational Biology and Chemistry</i> , 2004, 28, 21-37.	2.3	7
35	Path lengths in tree-child time consistent hybridization networks. <i>Information Sciences</i> , 2010, 180, 366-383.	6.9	7
36	On the complexity of some problems for the Blum, Shub & Smale model. , 1992, , 117-129.		6

#	ARTICLE	IF	CITATIONS
37	Pushout Complements for Arbitrary Partial Algebras. Lecture Notes in Computer Science, 2000, , 131-144.	1.3	6
38	The Generalized Robinson-Foulds Distance for Phylogenetic Trees. Journal of Computational Biology, 2021, 28, 1181-1195.	1.6	6
39	Pushout complements for partly total algebras. Mathematical Structures in Computer Science, 2002, 12, 177-201.	0.6	5
40	On the algebraic representation of RNA secondary structures with Gâ€¦U pairs. Journal of Mathematical Biology, 2003, 47, 1-22.	1.9	5
41	AN APPROACH TO MEMBRANE COMPUTING UNDER INEXACTITUDE. International Journal of Foundations of Computer Science, 2004, 15, 841-864.	1.1	5
42	The Probabilities of Trees and Cladograms under Fordâ€™s $\mathcal{M}_1$ -Model. Scientific World Journal, The, 2018, 2018, 1-7.	2.1	5
43	The Comparison of Tree-Sibling Time Consistent Phylogenetic Networks Is Graph Isomorphism-Complete. Scientific World Journal, The, 2014, 2014, 1-6.	2.1	4
44	Towards a Double Pushout Transformation of Algebras. Electronic Notes in Theoretical Computer Science, 2002, 51, 265-276.	0.9	3
45	Optimal Artificial Chemistries and Metabolic Pathways. , 0, , .		3
46	Efficient Reconstruction of Metabolic Pathways by Bidirectional Chemical Search. Bulletin of Mathematical Biology, 2009, 71, 750-769.	1.9	3
47	The expected value of the squared cophenetic metric under the Yule and the uniform models. Mathematical Biosciences, 2018, 295, 73-85.	1.9	3
48	Alignment of biological networks by integer linear programming: virus-host protein-protein interaction networks. BMC Bioinformatics, 2020, 21, 434.	2.6	3
49	On the semilattice of inner extensions of a fuzzy partial algebra. Fuzzy Sets and Systems, 2002, 127, 383-390.	2.7	2
50	Squaring within the Colless index yields a better balance index. Mathematical Biosciences, 2021, 331, 108503.	1.9	2
51	A Generalized Robinson-Foulds Distance for Clonal Trees, Mutation Trees, and Phylogenetic Trees and Networks. , 2020, , .		2
52	On the lattice of fuzzy weak subalgebras of a fuzzy partial algebra. , 0, , .		1
53	SINGLE-PUSHOUT TRANSFORMATION OF TOTAL ALGEBRAS. International Journal of Foundations of Computer Science, 2004, 15, 205-222.	1.1	1
54	Reidys' and Stadler's metrics for RNA contact structures. Mathematical and Computer Modelling, 2004, 40, 771-776.	2.0	1

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55	The expected value under the Yule model of the squared path-difference distance. Applied Mathematics Letters, 2012, 25, 2031-2036.	2.7	1
56	Tree-Child Cluster Networks. Fundamenta Informaticae, 2014, 134, 1-15.	0.4	1
57	Reconstructing Metabolic Pathways by Bidirectional Chemical Search. Lecture Notes in Computer Science, 2007, , 217-232.	1.3	1
58	Probabilities of Fuzzy Events Based on Scalar Cardinalities. Advances in Intelligent and Soft Computing, 2002, , 92-97.	0.2	1
59	The Fair Proportion Is a Shapley Value on Phylogenetic Networks Too. Lecture Notes in Computer Science, 2018, , 77-87.	1.3	1
60	On Hájek's characterization of weak model classes. Algebra Universalis, 1995, 34, 214-219.	0.3	0
61	The uniqueness condition for the double pushout transformation of algebras. Information Sciences, 2005, 171, 93-124.	6.9	0
62	Mono-unary algebras are uniquely determined by their lattices of fuzzy weak subalgebras. Fuzzy Sets and Systems, 2005, 149, 349-367.	2.7	0
63	The weak hereditary class of a variety. Czechoslovak Mathematical Journal, 2006, 56, 697-710.	0.3	0
64	On the Ancestral Compatibility of Two Phylogenetic Trees with Nested Taxa. Journal of Mathematical Biology, 2006, 53, 340-364.	1.9	0
65	The Median of the Distance between Two Leaves in a Phylogenetic Tree. Advances in Intelligent and Soft Computing, 2010, , 131-135.	0.2	0
66	Unbiased Taxonomic Annotation of Metagenomic Samples. Lecture Notes in Computer Science, 2017, , 162-173.	1.3	0