

# Julien Dorier

## List of Publications by Year in descending order

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Version: 2024-02-01

40  
papers

1,740  
citations

236925

25  
h-index

330143

37  
g-index

44  
all docs

44  
docs citations

44  
times ranked

2174  
citing authors

#	ARTICLE	IF	CITATIONS
1	<scp>SBML</scp> Level 3: an extensible format for the exchange and reuse of biological models. Molecular Systems Biology, 2020, 16, e9110.	7.2	178
2	SBML qualitative models: a model representation format and infrastructure to foster interactions between qualitative modelling formalisms and tools. BMC Systems Biology, 2013, 7, 135.	3.0	145
3	Models that include supercoiling of topological domains reproduce several known features of interphase chromosomes. Nucleic Acids Research, 2014, 42, 2848-2855.	14.5	106
4	Quantum compass model on the square lattice. Physical Review B, 2005, 72, .	3.2	105
5	Transcription-induced supercoiling as the driving force of chromatin loop extrusion during formation of TADs in interphase chromosomes. Nucleic Acids Research, 2018, 46, 1648-1660.	14.5	90
6	KnotProt 2.0: a database of proteins with knots and other entangled structures. Nucleic Acids Research, 2019, 47, D367-D375.	14.5	70
7	Theory of Magnetization Plateaux in the Shastry-Sutherland Model. Physical Review Letters, 2008, 101, 250402.	7.8	66
8	Topological origins of chromosomal territories. Nucleic Acids Research, 2009, 37, 6316-6322.	14.5	66
9	The SIB Swiss Institute of Bioinformatics's™ resources: focus on curated databases. Nucleic Acids Research, 2016, 44, D27-D37.	14.5	64
10	CTCF loss has limited effects on global genome architecture in Drosophila despite critical regulatory functions. Nature Communications, 2021, 12, 1011.	12.8	60
11	Cell-autonomous inflammation of BRCA1-deficient ovarian cancers drives both tumor-intrinsic immunoreactivity and immune resistance via STING. Cell Reports, 2021, 36, 109412.	6.4	60
12	Supersolid Phase Induced by Correlated Hopping in Spin- $\frac{1}{2}$ Frustrated Quantum Magnets. Physical Review Letters, 2008, 100, 090401.	7.8	55
13	DNA supercoiling inhibits DNA knotting. Nucleic Acids Research, 2008, 36, 4956-4963.	14.5	43
14	Single-particle versus pair condensation of hard-core bosons with correlated hopping. Physical Review B, 2006, 74, .	3.2	42
15	Cooperative kinking at distant sites in mechanically stressed DNA. Nucleic Acids Research, 2011, 39, 9820-9832.	14.5	41
16	Studies of global and local entanglements of individual protein chains using the concept of knotoids. Scientific Reports, 2017, 7, 6309.	3.3	41
17	A single-cell morpho-transcriptomic map of brassinosteroid action in the Arabidopsis root. Molecular Plant, 2021, 14, 1985-1999.	8.3	40
18	Are TADs supercoiled?. Nucleic Acids Research, 2019, 47, 521-532.	14.5	39

#	ARTICLE	IF	CITATIONS
19	Topological Models for Open-Knotted Protein Chains Using the Concepts of Knotoids and Bonded Knotoids. <i>Polymers</i> , 2017, 9, 444.	4.5	38
20	Boolean regulatory network reconstruction using literature based knowledge with a genetic algorithm optimization method. <i>BMC Bioinformatics</i> , 2016, 17, 410.	2.6	37
21	Solids and Supersolids of Three-Body Interacting Polar Molecules on an Optical Lattice. <i>Physical Review Letters</i> , 2008, 101, 150405.	7.8	36
22	Effects of supercoiling on enhancer-promoter contacts. <i>Nucleic Acids Research</i> , 2014, 42, 10425-10432.	14.5	35
23	Transcription-induced supercoiling explains formation of self-interacting chromatin domains in <i>S. pombe</i> . <i>Nucleic Acids Research</i> , 2017, 45, 9850-9859.	14.5	35
24	How topoisomerase IV can efficiently unknot and decatenate negatively supercoiled DNA molecules without causing their torsional relaxation. <i>Nucleic Acids Research</i> , 2016, 44, 4528-4538.	14.5	33
25	Effects of physiological self-crowding of DNA on shape and biological properties of DNA molecules with various levels of supercoiling. <i>Nucleic Acids Research</i> , 2015, 43, 2390-2399.	14.5	31
26	Essential role of Cp190 in physical and regulatory boundary formation. <i>Science Advances</i> , 2022, 8, eabl8834.	10.3	27
27	The role of transcription factories-mediated interchromosomal contacts in the organization of nuclear architecture. <i>Nucleic Acids Research</i> , 2010, 38, 7410-7421.	14.5	26
28	Generation of supercoils in nicked and gapped DNA drives DNA unknotting and postreplicative decatenation. <i>Nucleic Acids Research</i> , 2015, 43, 7229-7236.	14.5	26
29	Modelling of crowded polymers elucidate effects of double-strand breaks in topological domains of bacterial chromosomes. <i>Nucleic Acids Research</i> , 2013, 41, 6808-6815.	14.5	24
30	Knoto-ID: a tool to study the entanglement of open protein chains using the concept of knotoids. <i>Bioinformatics</i> , 2018, 34, 3402-3404.	4.1	23
31	Closing the DNA replication cycle: from simple circular molecules to supercoiled and knotted DNA catenanes. <i>Nucleic Acids Research</i> , 2019, 47, 7182-7198.	14.5	19
32	Efficient computation of minimal perturbation sets in gene regulatory networks. <i>Frontiers in Physiology</i> , 2013, 4, 361.	2.8	12
33	Supersolid Phases of Hardcore Bosons on the Square Lattice: Correlated Hopping, Next-Nearest Neighbor Hopping and Frustration. <i>Progress of Theoretical Physics Supplement</i> , 2008, 176, 355-374.	0.1	8
34	Molecular Dynamics Simulation of Supercoiled, Knotted, and Catenated DNA Molecules, Including Modeling of Action of DNA Gyrase. <i>Methods in Molecular Biology</i> , 2017, 1624, 339-372.	0.9	6
35	Expert curation for building network-based dynamical models: a case study on atherosclerotic plaque formation. <i>Database: the Journal of Biological Databases and Curation</i> , 2018, 2018, .	3.0	6
36	Magnetization plateaux in an extended Shastry-Sutherland model. <i>Journal of Physics: Conference Series</i> , 2009, 145, 012047.	0.4	2

#	ARTICLE	IF	CITATIONS
37	A Direct Observation of Highly Bent and Twisted DNA at the Single Molecule Level. Biophysical Journal, 2010, 98, 467a.	0.5	0
38	Structural Characterization of Torsional Destabilization in DNA. Biophysical Journal, 2011, 100, 176a.	0.5	0
39	Role of Topological Exclusion in Formation and Organization of Chromosomal Territories. Progress of Theoretical Physics Supplement, 2011, 191, 46-54.	0.1	0
40	Introducing Supercoiling into Models of Chromosome Structure. , 2019, , 115-138.		0