Sven Sahle

List of Publications by Year
in descending order

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41 papers	4,589 citations	430874 18 h-index	289244 40 g-index
43 all docs	43 docs citations	43 times ranked	5744 citing authors

#	Article	IF	Citations
1	COPASI--a COmplex PAthway SImulator. Bioinformatics, 2006, 22, 3067-3074.	4.1	2,265
2	The Systems Biology Graphical Notation. Nature Biotechnology, 2009, 27, 735-741.	17.5	828
3	Reproducible computational biology experiments with SED-ML - The Simulation Experiment Description Markup Language. BMC Systems Biology, 2011, 5, 198.	3.0	211
4	<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
5	Computational Modeling of Biochemical Networks Using COPASI. Methods in Molecular Biology, 2009, 500, 17-59.	0.9	163
6	Minimum Information About a Simulation Experiment (MIASE). PLoS Computational Biology, 2011, 7, e1001122.	3.2	133
7	The Systems Biology Markup Language (SBML): Language Specification for Level 3 Version 1 Core. Journal of Integrative Bioinformatics, 2015, 12, 266.	1.5	102
8	COPASI and its applications in biotechnology. Journal of Biotechnology, 2017, 261, 215-220.	3.8	78
9	The Systems Biology Markup Language (SBML): Language Specification for Level 3 Version 2 Core Release 2. Journal of Integrative Bioinformatics, 2019, 16, .	1.5	78
10	PEtabâ€”Interoperable specification of parameter estimation problems in systems biology. PLoS Computational Biology, 2021, 17, e1008646.	3.2	55
11	Applications and trends in systems biology in biochemistry. FEBS Journal, 2011, 278, 2767-2857.	4.7	53
12	Combining theoretical analysis and experimental data generation reveals IRF9 as a crucial factor for accelerating interferonâ€ƒÎ±â€induced early antiviral signalling. FEBS Journal, 2010, 277, 4741-4754.	4.7	45
13	A new strategy for assessing sensitivities in biochemical models. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3619-3631.	3.4	37
14	Local stimulation induces long-range order in spatio-temporal disorder. Journal of Chemical Physics, 1999, 110, 3251-3255.	3.0	34
15	SYCAMOREâ€”a <u>sy</u>stems biology <u>c</u>omputational <u>a</u>nalysis and <u>mo</u>deling <u>r</u>esearch <u>e</u>nvironment. Bioinformatics, 2008, 24, 1463-1464.	4.1	31
16	Dynamics and feedback loops in the transforming growth factor Î² signaling pathway. Biophysical Chemistry, 2012, 162, 22-34.	2.8	29
17	A model diagram layout extension for SBML. Bioinformatics, 2006, 22, 1879-1885.	4.1	28
18	Accessible methods for the dynamic time-scale decomposition of biochemical systems. Bioinformatics, 2009, 25, 2816-2823.	4.1	26

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19	Simplification of biochemical models: a general approach based on the analysis of the impact of individual species and reactions on the systems dynamics. BMC Systems Biology, 2012, 6, 14.	3.0	20
20	The Systems Biology Markup Language (SBML) Level 3 Package: Layout, Version 1 Core. Journal of Integrative Bioinformatics, 2015, 12, 550-602.	1.5	18
21	SBML Level 3 package: Render, Version 1, Release 1. Journal of Integrative Bioinformatics, 2018, 15, .	1.5	18
22	The Systems Biology Markup Language (SBML) Level 3 Package: Layout, Version 1 Core. Journal of Integrative Bioinformatics, 2015, 12, 267.	1.5	17
23	Hyperchaos and chaotic hierarchy in lowâ€dimensional chemical systems. Journal of Chemical Physics, 1994, 100, 8907-8911.	3.0	16
24	A20/TNFAIP3 Discriminates Tumor Necrosis Factor (TNF)-Induced NF-Î ºB from JNK Pathway Activation in Hepatocytes. Frontiers in Physiology, 2017, 8, 610.	2.8	16
25	Homogeneous and Spatio-temporal Chaos in Biochemical Reactions With Feedback Inhibition. Journal of Theoretical Biology, 1998, 193, 233-242.	1.7	15
26	Deterministic inference for stochastic systems using multiple shooting and a linear noise approximation for the transition probabilities. IET Systems Biology, 2015, 9, 181-192.	1.5	14
27	Glycolytic oscillations in a model of a lactic acid bacterium metabolism. Biophysical Chemistry, 2013, 172, 53-60.	2.8	13
28	A Systems Biology Study on NFÎ ºB Signaling in Primary Mouse Hepatocytes. Frontiers in Physiology, 2012, 3, 466.	2.8	9
29	Exploiting intrinsic fluctuations to identify model parameters. IET Systems Biology, 2015, 9, 64-73.	1.5	9
30	A new model for the aerobic metabolism of yeast allows the detailed analysis of the metabolic regulation during glucose pulse. Biophysical Chemistry, 2015, 206, 40-57.	2.8	7
31	Quantitative systems pharmacology of interferon alpha administration: A multi-scale approach. PLoS ONE, 2019, 14, e0209587.	2.5	7
32	An Electrochemically Induced Oscillatory Instability. Journal of Physical Chemistry A, 1999, 103, 33-37.	2.5	6
33	Comparison of approaches for parameter estimation on stochastic models: Generic least squares versus specialized approaches. Computational Biology and Chemistry, 2016, 61, 75-85.	2.3	5
34	Robustness of frequency vs. amplitude coding of calcium oscillations during changing temperatures. Biophysical Chemistry, 2019, 245, 17-24.	2.8	5
35	Transition to Higher Chaos in Diffusively Coupled Chemical Oscillators. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1994, 49, 835-837.	1.5	4
36	Misinterpretation risks of global stochastic optimisation of kinetic models revealed by multiple optimisation runs. Mathematical Biosciences, 2019, 307, 25-32.	1.9	4

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37	Spatio-temporal patterns with hyperchaotic dynamics in diffusively coupled biochemical oscillators. Discrete Dynamics in Nature and Society, 1997, 1, 161-167.	0.9	3
38	A termination criterion for parameter estimation in stochastic models in systems biology. BioSystems, 2015, 137, 55-63.	2.0	2
39	Quantitative and integrative analysis of paracrine hepatocyte activation by nonparenchymal cells upon lipopolysaccharide induction. FEBS Journal, 2017, 284, 796-813.	4.7	1
40	Modelling of Instabilities in Coupled Electrochemical and Biochemical Reaction Systems. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1993, 48, 643-645.	1.5	0
41	Detection of Short Term Correlated Events Hidden within Noise. Zeitschrift Fur Physikalische Chemie, 2002, 216, .	2.8	0