Chris John Myers

List of Publications by Year
in descending order

155	3,306	201385	243296
papers	citations	27 h-index	44 g-index

168	168	168	2339
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Round Trip: An Automated Pipeline for Experimental Design, Execution, and Analysis. ACS Synthetic Biology, 2022, 11, 608-622.	1.9	8
2	Sequence-Based Searching for SynBioHub Using VSEARCH. ACS Synthetic Biology, 2022, 11, 990-995.	1.9	4
3	Genetic circuit design automation with Cello 2.0. Nature Protocols, 2022, 17, 1097-1113.	5.5	52
4	BioSimulators: a central registry of simulation engines and services for recommending specific tools. Nucleic Acids Research, 2022, 50, W108-W114.	6.5	11
5	Engineering genetic circuits: advancements in genetic design automation tools and standards for synthetic biology. Current Opinion in Microbiology, 2022, 68, 102155.	2.3	7
6	Synthetic biology open language visual (SBOL Visual) version 2.3. Journal of Integrative Bioinformatics, 2021, 18, .	1.0	6
7	SBOLCanvas: A Visual Editor for Genetic Designs. ACS Synthetic Biology, 2021, 10, 1792-1796.	1.9	9
8	Quantitative characterization of recombinase-based digitizer circuits enables predictable amplification of biological signals. Communications Biology, 2021, 4, 875.	2.0	9
9	VisBOL2â€"Improving Web-Based Visualization for Synthetic Biology Designs. ACS Synthetic Biology, 2021, 10, 2111-2115.	1.9	3
10	Synthetic Biology Knowledge System. ACS Synthetic Biology, 2021, 10, 2276-2285.	1.9	9
11	Curation Principles Derived from the Analysis of the SBOL iGEM Data Set. ACS Synthetic Biology, 2021, 10, 2592-2606.	1.9	3
12	Stochastic Hazard Analysis of Genetic Circuits in iBioSim and STAMINA. ACS Synthetic Biology, 2021, 10, 2532-2540.	1.9	2
13	Specifications of standards in systems and synthetic biology: status and developments in 2021. Journal of Integrative Bioinformatics, 2021, 18, .	1.0	2
14	Synthetic Biology Curation Tools (SYNBICT). ACS Synthetic Biology, 2021, 10, 3200-3204.	1.9	2
15	The Synthetic Biology Open Language (SBOL) Version 3: Simplified Data Exchange for Bioengineering. Frontiers in Bioengineering and Biotechnology, 2020, 8, 1009.	2.0	40
16	Genetic Circuit Dynamics: Hazard and Glitch Analysis. ACS Synthetic Biology, 2020, 9, 2324-2338.	1.9	21
17	SBOL Visual 2 Ontology. ACS Synthetic Biology, 2020, 9, 972-977.	1.9	3
18	Extending SynBioHubâ€™s Functionality with Plugins. ACS Synthetic Biology, 2020, 9, 1216-1220.	1.9	9

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19	The first 10 years of the international coordination network for standards in systems and synthetic biology (COMBINE). Journal of Integrative Bioinformatics, 2020, 17, .	1.0	18
20	Synthetic biology open language (SBOL) version 3.0.0. Journal of Integrative Bioinformatics, 2020, 17, .	1.0	13
21	Systems Biology Markup Language (SBML) Level 3 Package: Distributions, Version 1, Release 1. Journal of Integrative Bioinformatics, 2020, 17, .	1.0	7
22	Specifications of standards in systems and synthetic biology: status and developments in 2020. Journal of Integrative Bioinformatics, 2020, 17, .	1.0	10
23	The long journey towards standards for engineering biosystems. EMBO Reports, 2020, 21, e50521.	2.0	46
24	<scp>SBML</scp> Level 3: an extensible format for the exchange and reuse of biological models. Molecular Systems Biology, 2020, 16, e9110.	3.2	178
25	A Computational Workflow for the Automated Generation of Models of Genetic Designs. ACS Synthetic Biology, 2019, 8, 1548-1559.	1.9	27
26	<scp>i</scp>B<scp>io</scp>S<scp>im</scp> 3: A Tool for Model-Based Genetic Circuit Design. ACS Synthetic Biology, 2019, 8, 1560-1563.	1.9	62
27	Specifications of Standards in Systems and Synthetic Biology: Status and Developments in 2019. Journal of Integrative Bioinformatics, 2019, 16, .	1.0	7
28	Specifying Combinatorial Designs with the Synthetic Biology Open Language (SBOL). ACS Synthetic Biology, 2019, 8, 1519-1523.	1.9	2
29	Design of Asynchronous Genetic Circuits. Proceedings of the IEEE, 2019, 107, 1356-1368.	16.4	16
30	Communicating Structure and Function in Synthetic Biology Diagrams. ACS Synthetic Biology, 2019, 8, 1818-1825.	1.9	30
31	Synthetic Biology Open Language Visual (SBOL Visual) Version 2.1. Journal of Integrative Bioinformatics, 2019, 16, .	1.0	8
32	SBOLExplorer: Data Infrastructure and Data Mining for Genetic Design Repositories. ACS Synthetic Biology, 2019, 8, 2287-2294.	1.9	2
33	Synthetic Biology Open Language (SBOL) Version 2.3. Journal of Integrative Bioinformatics, 2019, 16, .	1.0	16
34	The Systems Biology Markup Language (SBML): Language Specification for Level 3 Version 2 Core Release 2. Journal of Integrative Bioinformatics, 2019, 16, .	1.0	78
35	SBOL-OWL: An Ontological Approach for Formal and Semantic Representation of Synthetic Biology Information. ACS Synthetic Biology, 2019, 8, 1498-1514.	1.9	12
36	Harmonizing semantic annotations for computational models in biology. Briefings in Bioinformatics, 2019, 20, 540-550.	3.2	52

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37	sboljs: Bringing the Synthetic Biology Open Language to the Web Browser. ACS Synthetic Biology, 2019, 8, 191-193.	1.9	3
38	pySBOL: A Python Package for Genetic Design Automation and Standardization. ACS Synthetic Biology, 2019, 8, 1515-1518.	1.9	14
39	Toward reproducible disease models using the Systems Biology Markup Language. Simulation, 2019, 95, 895-930.	1.1	3
40	Approximation Techniques for Stochastic Analysis of Biological Systems. Computational Biology, 2019, , 327-348.	0.1	5
41	STAMINA: STochastic Approximate Model-Checker for INfinite-State Analysis. Lecture Notes in Computer Science, 2019, , 540-549.	1.0	9
42	SynBioHub: A Standards-Enabled Design Repository for Synthetic Biology. ACS Synthetic Biology, 2018, 7, 682-688.	1.9	112
43	Specifications of Standards in Systems and Synthetic Biology: Status and Developments in 2017. Journal of Integrative Bioinformatics, 2018, 15, .	1.0	7
44	Synthetic Biology Open Language (SBOL) Version 2.2.0. Journal of Integrative Bioinformatics, 2018, 15, .	1.0	20
45	The Systems Biology Markup Language (SBML): Language Specification for Level 3 Version 1 Core. Journal of Integrative Bioinformatics, 2018, 15, .	1.0	13
46	The Systems Biology Markup Language (SBML): Language Specification for Level 3 Version 2 Core. Journal of Integrative Bioinformatics, 2018, 15, .	1.0	57
47	Synthetic Biology Open Language Visual (SBOL Visual) Version 2.0. Journal of Integrative Bioinformatics, 2018, 15, .	1.0	21
48	SBOLme: a Repository of SBOL Parts for Metabolic Engineering. ACS Synthetic Biology, 2017, 6, 732-736.	1.9	5
49	SBOLDesigner 2: An Intuitive Tool for Structural Genetic Design. ACS Synthetic Biology, 2017, 6, 1150-1160.	1.9	38
50	A standard-enabled workflow for synthetic biology. Biochemical Society Transactions, 2017, 45, 793-803.	1.6	38
51	A Validator and Converter for the Synthetic Biology Open Language. ACS Synthetic Biology, 2017, 6, 1161-1168.	1.9	5
52	Advances in Formal Methods for the Design of Analog/Mixed-Signal Systems. , 2017, , .		1
53	A brief history of COMBINE. , 2017, , .		6
54	Synthetic Biology Open Language (SBOL) Version 2.1.0. Journal of Integrative Bioinformatics, 2016, 13, .	1.0	11

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55	Toward Community Standards and Software for Whole-Cell Modeling. IEEE Transactions on Biomedical Engineering, 2016, 63, 2007-2014.	2.5	51
56	libSBOLj 2.0: A Java Library to Support SBOL 2.0. IEEE Life Sciences Letters, 2016, , 1-1.	1.2	0
57	Sharing Structure and Function in Biological Design with SBOL 2.0. ACS Synthetic Biology, 2016, 5, 498-506.	1.9	88
58	Guest Editors' Introduction Challenges and Opportunities in Analog/Mixed-Signal CAD. IEEE Design and Test, 2016, 33, 5-6.	1.1	2
59	Specifications of Standards in Systems and Synthetic Biology: Status and Developments in 2016. Journal of Integrative Bioinformatics, 2016, 13, 1-7.	1.0	12
60	Design of Mixed-Signal Systems With Asynchronous Control. IEEE Design and Test, 2016, 33, 44-55.	1.1	2
61	An improved fault-tolerant routing algorithm for a Network-on-Chip derived with formal analysis. Science of Computer Programming, 2016, 118, 24-39.	1.5	9
62	Efficient Analysis of Systems Biology Markup Language Models of Cellular Populations Using Arrays. ACS Synthetic Biology, 2016, 5, 835-841.	1.9	5
63	A Converter from the Systems Biology Markup Language to the Synthetic Biology Open Language. ACS Synthetic Biology, 2016, 5, 479-486.	1.9	20
64	Synthetic Biology Open Language (SBOL) Version 2.1.0. Journal of Integrative Bioinformatics, 2016, 13, 291.	1.0	6
65	Specifications of Standards in Systems and Synthetic Biology: Status and Developments in 2016. Journal of Integrative Bioinformatics, 2016, 13, 289.	1.0	7
66	libSBOLj 2.0: A Java Library to Support SBOL 2.0. IEEE Life Sciences Letters, 2015, 1, 34-37.	1.2	24
67	Specifications of Standards in Systems and Synthetic Biology. Journal of Integrative Bioinformatics, 2015, 12, 1-3.	1.0	11
68	Synthetic Biology Open Language (SBOL) Version 2.0.0. Journal of Integrative Bioinformatics, 2015, 12, 902-991.	1.0	22
69	Promoting Coordinated Development of Community-Based Information Standards for Modeling in Biology: The COMBINE Initiative. Frontiers in Bioengineering and Biotechnology, 2015, 3, 19.	2.0	72
70	SBML Level 3 package: Hierarchical Model Composition, Version 1 Release 3. Journal of Integrative Bioinformatics, 2015, 12, 603-659.	1.0	39
71	Generating Systems Biology Markup Language Models from the Synthetic Biology Open Language. ACS Synthetic Biology, 2015, 4, 873-879.	1.9	81
72	Computational Synthetic Biology: Progress and the Road Ahead. IEEE Transactions on Multi-Scale Computing Systems, 2015, 1, 19-32.	2.5	7

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73	JSBML 1.0: providing a smorgasbord of options to encode systems biology models. Bioinformatics, 2015, 31, 3383-3386.	1.8	37
74	Proposed Data Model for the Next Version of the Synthetic Biology Open Language. ACS Synthetic Biology, 2015, 4, 57-71.	1.9	19
75	The Synthetic Biology Open Language. Methods in Molecular Biology, 2015, 1244, 323-336.	0.4	1
76	SBOL Visual: A Graphical Language for Genetic Designs. PLoS Biology, 2015, 13, e1002310.	2.6	73
77	Specifications of Standards in Systems and Synthetic Biology. Journal of Integrative Bioinformatics, 2015, 12, 258.	1.0	14
78	SBML Level 3 package: Hierarchical Model Composition, Version 1 Release 3. Journal of Integrative Bioinformatics, 2015, 12, 268.	1.0	31
79	Systems Biology Markup Language (SBML) Level 2 Version 5: Structures and Facilities for Model Definitions. Journal of Integrative Bioinformatics, 2015, 12, 271.	1.0	42
80	Synthetic Biology Open Language (SBOL) Version 2.0.0. Journal of Integrative Bioinformatics, 2015, 12, 272.	1.0	21
81	Efficient Analysis Methods in Synthetic Biology. Methods in Molecular Biology, 2015, 1244, 217-257.	0.4	0
82	Hierarchical Stochastic Simulation Algorithm for SBML Models of Genetic Circuits. Frontiers in Bioengineering and Biotechnology, 2014, 2, 55.	2.0	5
83	Stochastic Model Checking of Genetic Circuits. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-21.	1.8	10
84	Introduction to the Special Issue on Computational Synthetic Biology. ACM Journal on Emerging Technologies in Computing Systems, 2014, 11, 1-5.	1.8	0
85	LEMA: A tool for the formal verification of digitally-intensive analog/mixed-signal circuits. , 2014, , .		2
86	A Methodology to Annotate Systems Biology Markup Language Models with the Synthetic Biology Open Language. ACS Synthetic Biology, 2014, 3, 57-66.	1.9	30
87	Directed Acyclic Graph-Based Technology Mapping of Genetic Circuit Models. ACS Synthetic Biology, 2014, 3, 543-555.	1.9	30
88	Compositional Model Checking of Concurrent Systems. IEEE Transactions on Computers, 2014, , 1-1.	2.4	3
89	The Synthetic Biology Open Language (SBOL) provides a community standard for communicating designs in synthetic biology. Nature Biotechnology, 2014, 32, 545-550.	9.4	247
90	Meeting report from the fourth meeting of the Computational Modeling in Biology Network (COMBINE). Standards in Genomic Sciences, 2014, 9, 1285-1301.	1.5	21

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91	Formal Analysis of a Fault-Tolerant Routing Algorithm for a Network-on-Chip. Lecture Notes in Computer Science, 2014, , 48-62.	1.0	3
92	Verification of digitally-intensive analog circuits via kernel ridge regression and hybrid reachability analysis. , 2013, , .		9
93	Dynamic Modeling of Cellular Populations within iBioSim. ACS Synthetic Biology, 2013, 2, 223-229.	1.9	15
94	IWBDA 2012 Special Issue. ACS Synthetic Biology, 2013, 2, 203-203.	1.9	0
95	Platforms for Genetic Design Automation. Methods in Microbiology, 2013, , 177-202.	0.4	6
96	An Improvement in Partial Order Reduction Using Behavioral Analysis. , 2012, , .		2
97	Using decision diagrams to compactly represent the state space for explicit model checking. , 2012, , .		2
98	Utilizing stochastic model checking to analyze genetic circuits. , 2012, , .		11
99	Poster Abstract: Methods and Tools for Verification of Cyber-Physical Systems. , 2012, , .		0
100	</title> </titles> <publication_date> <month>06</month> <year>2012</year> </publication_date> <pages> <first_page>C1</first_page> <last_page>C1</last_page> </pages> <publisher_item> <item_number item_number_type='arNumber'>6327710</item_number> </publisher_item> <doi_data> <doi>10.1109/MDT.2012.2211731</doi> <resource>http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumbe. IEEE Design and Test of	1.4	31
101	A Compositional Minimization Approach for Large Asynchronous Design Verification. Lecture Notes in Computer Science, 2012, , 62-79.	1.0	2
102	Formal Verification of Genetic Circuits. Lecture Notes in Computer Science, 2012, , 5-5.	1.0	1
103	Learning Genetic Regulatory Network Connectivity from Time Series Data. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2011, 8, 152-165.	1.9	19
104	A Behavioral Analysis Approach for Efficient Partial Order Reduction. , 2011, , .		1
105	Verification of Analog/Mixed-Signal Circuits Using Labeled Hybrid Petri Nets. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2011, 30, 617-630.	1.9	17
106	Erlang-delayed stochastic chemical kinetic formalism for efficient analysis of biological systems with non-elementary reaction effects. , 2011, , .		0
107	Design and analysis of a robust genetic Muller C-element. Journal of Theoretical Biology, 2010, 264, 174-187.	0.8	12
108	iSSA: An incremental stochastic simulation algorithm for genetic circuits. , 2010, , .		5

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109	ANALOG/MIXED-SIGNAL CIRCUIT VERIFICATION USING MODELS GENERATED FROM SIMULATION TRACES. International Journal of Foundations of Computer Science, 2010, 21, 191-210.	0.8	22
110	Temperature Control of Fimbriation Circuit Switch in Uropathogenic Escherichia coli: Quantitative Analysis via Automated Model Abstraction. PLoS Computational Biology, 2010, 6, e1000723.	1.5	21
111	State space reductions for scalable verification of asynchronous designs. , 2010, , .		0
112	Automatic abstraction for verification of cyber-physical systems. , 2010, , .		45
113	Abstraction Methods for Analysis of Gene Regulatory Networks. , 2010, , 352-385.		0
114	iBioSim: a tool for the analysis and design of genetic circuits. Bioinformatics, 2009, 25, 2848-2849.	1.8	100
115	A new verification method for embedded systems. , 2009, , .		5
116	A Behavioral Synthesis System for Asynchronous Circuits with Bundled-data Implementation. IPSJ Transactions on System LSI Design Methodology, 2009, 2, 64-79.	0.5	3
117	Verification of Analog/Mixed-Signal Circuits Using Symbolic Methods. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2008, 27, 2223-2235.	1.9	23
118	A behavioral synthesis method for asynchronous circuits with bundled-data implementation (Tool) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50		1
119	Production-Passage-Time Approximation: A New Approximation Method to Accelerate the Simulation Process of Enzymatic Reactions. Journal of Computational Biology, 2008, 15, 779-792.	0.8	5
120	A Conservative Framework for Safety-Failure Checking. IEICE Transactions on Information and Systems, 2008, E91-D, 642-654.	0.4	0
121	The Design of a Genetic Muller C-Element. Proceedings of the International Symposium on Advanced Research in Asynchronous Circuits and Systems, 2007, , .	0.0	14
122	Efficient Verification of Hazard-Freedom in Gate-Level Timed Asynchronous Circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 592-605.	1.9	3
123	Synthesis of Timed Circuits Based on Decomposition. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2007, 26, 1177-1195.	1.9	5
124	Application of Automated Model Generation Techniques to Analog/Mixed-Signal Circuits. , 2007, , .		2
125	Hazard Checking of Timed Asynchronous Circuits Revisited. International Conference on Application of Concurrency To System Design, 2007, , .	0.0	0
126	Symbolic Model Checking of Analog/Mixed-Signal Circuits. , 2007, , .		6

#	Article	IF	Citations
127	Analog/Mixed-Signal Circuit Verification Using Models Generated from Simulation Traces. , 2007, , 114-128.		18
128	Bounded Model Checking of Analog and Mixed-Signal Circuits Using an SMT Solver. , 2007, , 66-81.		5
129	Scheduling Methods for Asynchronous Circuits with Bundled-Data Implementations Based on the Approximation of Start Times. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2007, E90-A, 2790-2799.	0.2	9
130	Verification of Analog/Mixed-Signal Circuits Using Labeled Hybrid Petri Nets. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2006, , .	0.0	14
131	Verification of timed circuits with failure-directed abstractions. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2006, 25, 403-412.	1.9	10
132	The Case for Analog Circuit Verification. Electronic Notes in Theoretical Computer Science, 2006, 153, 53-63.	0.9	15
133	Verification of analog/mixed-signal circuits using labeled hybrid petri nets. IEEE/ACM International Conference on Computer-Aided Design, Digest of Technical Papers, 2006, , .	0.0	17
134	ILP-based Scheduling for Asynchronous Circuits in Bundled-Data Implementation. , 2006, , .		4
135	Effective Contraction of Timed STGs for Decomposition Based Timed Circuit Synthesis. Lecture Notes in Computer Science, 2006, , 229-244.	1.0	0
136	Partial Order Reduction for Detecting Safety and Timing Failures of Timed Circuits. IEICE Transactions on Information and Systems, 2005, E88-D, 1646-1661.	0.4	7
137	Failure Trace Analysis of Timed Circuits for Automatic Timing Constraints Derivation. IEICE Transactions on Information and Systems, 2005, E88-D, 2555-2564.	0.4	0
138	CMOS Analog MAP Decoder for (8,4) Hamming Code. IEEE Journal of Solid-State Circuits, 2004, 39, 122-131.	3.5	64
139	Verification of Analog and Mixed-Signal Circuits Using Timed Hybrid Petri Nets. Lecture Notes in Computer Science, 2004, , 426-440.	1.0	12
140	Modular verification of timed circuits using automatic abstraction. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2003, 22, 1138-1153.	1.9	19
141	Direct synthesis of timed circuits from free-choice STGs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2002, 21, 275-290.	1.9	1
142	Efficient algorithms for exact two-level hazard-free logic minimization. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2002, 21, 1269-1283.	1.9	12
143	Modular Synthesis of Timed Circuits using Partial Orders on LPNs. Electronic Notes in Theoretical Computer Science, 2002, 65, 180-201.	0.9	2
144	An asynchronous instruction length decoder. IEEE Journal of Solid-State Circuits, 2001, 36, 217-228.	3.5	55

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145	Timed circuit verification using TEL structures. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2001, 20, 129-146.	1.9	12
146	Timed circuits. , 2001, , .		20
147	Automatic Abstraction for Verification of Timed Circuits and Systems?. Lecture Notes in Computer Science, 2001, , 182-193.	1.0	5
148	Interfacing synchronous and asynchronous modules within a high-speed pipeline. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2000, 8, 573-583.	2.1	33
149	Timed state space exploration using POSETs. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2000, 19, 501-520.	1.9	21
150	POSET timing and its application to the synthesis and verification of gate-level timed circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1999, 18, 769-786.	1.9	13
151	Covering conditions and algorithms for the synthesis of speed-independent circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 1998, 17, 205-219.	1.9	21
152	Verification of timed systems using POSETs. Lecture Notes in Computer Science, 1998, , 403-415.	1.0	29
153	Synthesis of timed asynchronous circuits. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 1993, 1, 106-119.	2.1	92
154	Engineering Genetic Circuits. , 0, , .		16
155	Effecient Stochastic Simulation to Analyze Targeted Properties of Biological Systems. , 0, , .		3