David Soloveichik

List of Publications by Year
in descending order

18	3,285	933447 10	888059 17
papers	citations	h-index	g-index

21	21	21	2009
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Programming and training rate-independent chemical reaction networks. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	3
2	Composable Rate-Independent Computation in Continuous Chemical Reaction Networks. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021, 18, 250-260.	3.0	3
3	Programming Substrate-Independent Kinetic Barriers With Thermodynamic Binding Networks. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021, 18, 283-295.	3.0	1
4	DNA punch cards for storing data on native DNA sequences via enzymatic nicking. Nature Communications, 2020, 11, 1742.	12.8	70
5	SIMD||DNA: Single Instruction, Multiple Data Computation with DNA Strand Displacement Cascades. Lecture Notes in Computer Science, 2019, , 219-235.	1.3	10
6	Computing properties of stable configurations of thermodynamic binding networks. Theoretical Computer Science, 2019, 785, 17-29.	0.9	3
7	Stable leader election in population protocols requires linear time. Distributed Computing, 2018, 31, 257-271.	0.8	32
8	Effective design principles for leakless strand displacement systems. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E12182-E12191.	7.1	94
9	The Design Space of Strand Displacement Cascades with Toehold-Size Clamps. Lecture Notes in Computer Science, 2017, , 64-81.	1.3	8
10	Enzyme-free nucleic acid dynamical systems. Science, 2017, 358, .	12.6	274
11	Thermodynamic Binding Networks. Lecture Notes in Computer Science, 2017, , 249-266.	1.3	8
12	Leakless DNA Strand Displacement Systems. Lecture Notes in Computer Science, 2015, , 133-153.	1.3	50
13	Rate-independent computation in continuous chemical reaction networks. , 2014, , .		32
14	Deterministic function computation with chemical reaction networks. Natural Computing, 2014, 13, 517-534.	3.0	88
15	Programmable chemical controllers made from DNA. Nature Nanotechnology, 2013, 8, 755-762.	31.5	439
16	Efficient Turing-Universal Computation with DNA Polymers. Lecture Notes in Computer Science, 2011, , 123-140.	1.3	80
17	DNA as a universal substrate for chemical kinetics. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 5393-5398.	7.1	649
18	Enzyme-Free Nucleic Acid Logic Circuits. Science, 2006, 314, 1585-1588.	12.6	1,440