Bruce E Shapiro

List of Publications by Year
in descending order

16 papers	**1,418** citations
759233 **12** h-index	1058476 **14** g-index
16 all docs	**16** docs citations
16 times ranked	**1678** citing authors

#	Article	IF	Citations
1	An auxin-driven polarized transport model for phyllotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1633-1638.	7.1	558
2	<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
3	Modeling the organization of the WUSCHEL expression domain in the shoot apical meristem. Bioinformatics, 2005, 21, i232-i240.	4.1	145
4	Cellerator: extending a computer algebra system to include biochemical arrows for signal transduction simulations. Bioinformatics, 2003, 19, 677-678.	4.1	116
5	Osmotic forces and gap junctions in spreading depression: a computational model. Journal of Computational Neuroscience, 2001, 10, 99-120.	1.0	95
6	Analysis of cell division patterns in the <i>Arabidopsis</i> shoot apical meristem. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4815-4820.	7.1	78
7	MathSBML: a package for manipulating SBML-based biological models. Bioinformatics, 2004, 20, 2829-2831.	4.1	55
8	An enzyme mechanism language for the mathematical modeling of metabolic pathways. Bioinformatics, 2005, 21, 774-780.	4.1	44
9	A Mathematical Model for the Branched Chain Amino Acid Biosynthetic Pathways of Escherichia coli K12. Journal of Biological Chemistry, 2005, 280, 11224-11232.	3.4	36
10	A quantitative analysis of single protein-ligand complex separation with the atomic force microscope. Biophysical Chemistry, 1997, 67, 211-219.	2.8	34
11	APPLICATION OF A GENERALIZED MWC MODEL FOR THE MATHEMATICAL SIMULATION OF METABOLIC PATHWAYS REGULATED BY ALLOSTERIC ENZYMES. Journal of Bioinformatics and Computational Biology, 2006, 04, 335-355.	0.8	23
12	Graphical method for force analysis: Macromolecular mechanics with atomic force microscopy. , 1999, 37, 576-581.		18
13	Using cellzilla for plant growth simulations at the cellular level. Frontiers in Plant Science, 2013, 4, 408.	3.6	17
14	Hysteresis in Force Probe Measurements: a Dynamical Systems Perspective. Journal of Theoretical Biology, 1998, 194, 551-559.	1.7	13
15	Pycellerator: an arrow-based reaction-like modelling language for biological simulations. Bioinformatics, 2016, 32, 629-631.	4.1	8
16	A Pycellerator Tutorial. Methods in Molecular Biology, 2019, 1945, 1-32.	0.9	0