Przemyslaw Prusinkiewicz

List of Publications by Year
in descending order

43 papers	5,143 citations	218677 26 h-index	276875 41 g-index
47 all docs	47 docs citations	47 times ranked	4138 citing authors

#	Article	IF	Citations
1	Computational Models of Auxin-Driven Patterning in Shoots. Cold Spring Harbor Perspectives in Biology, 2022, 14, a040097.	5.5	13
2	Phyllotaxis without symmetry: what can we learn from flower heads?. Journal of Experimental Botany, 2022, 73, 3319-3329.	4.8	9
3	L-system models for image-based phenomics: case studies of maize and canola. In Silico Plants, 2022, 4, .	1.9	9
4	Phyllotactic patterning of gerbera flower heads. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	33
5	Modeling flower pigmentation patterns. ACM Transactions on Graphics, 2021, 40, 1-14.	7.2	6
6	Phyllotaxis: is the golden angle optimal for light capture?. New Phytologist, 2020, 225, 499-510.	7.3	33
7	Latent Space Phenotyping: Automatic Image-Based Phenotyping for Treatment Studies. Plant Phenomics, 2020, 2020, 5801869.	5.9	26
8	Skin Patterning in Psoriasis by Spatial Interactions between Pathogenic Cytokines. IScience, 2019, 20, 546-553.	4.1	11
9	Gillespie-Lindenmayer systems for stochastic simulation of morphogenesis. In Silico Plants, 2019, 1, .	1.9	5
10	Modeling Plant Development with L-Systems. , 2018, , 139-169.		13
11	Why plants make puzzle cells, and how their shape emerges. ELife, 2018, 7, .	6.0	208
12	Crops In Silico: Generating Virtual Crops Using an Integrative and Multi-scale Modeling Platform. Frontiers in Plant Science, 2017, 8, 786.	3.6	102
13	Modeling dense inflorescences. ACM Transactions on Graphics, 2016, 35, 1-14.	7.2	22
14	Auxin-driven patterning with unidirectional fluxes. Journal of Experimental Botany, 2015, 66, 5083-5102.	4.8	50
15	A Division in PIN-Mediated Auxin Patterning during Organ Initiation in Grasses. PLoS Computational Biology, 2014, 10, e1003447.	3.2	112
16	Genetic Control of Plant Development by Overriding a Geometric Division Rule. Developmental Cell, 2014, 29, 75-87.	7.0	203
17	Computational models of plant development and form. New Phytologist, 2012, 193, 549-569.	7.3	144
18	Model for the regulation of <i>Arabidopsis thaliana</i> leaf margin development. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 3424-3429.	7.1	399

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19	Inherent randomness of cell division patterns. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5933-5934.	7.1	10
20	Constraints of space in plant development. Journal of Experimental Botany, 2010, 61, 2117-2129.	4.8	55
21	Control of bud activation by an auxin transport switch. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17431-17436.	7.1	319
22	MAppleT: simulation of apple tree development using mixed stochastic and biomechanical models. Functional Plant Biology, 2008, 35, 936.	2.1	105
23	Quasi-Monte Carlo simulation of the light environment of plants. Functional Plant Biology, 2008, 35, 837.	2.1	62
24	Integrating simulation of architectural development and source - sink behaviour of peach trees by incorporating Markov chains and physiological organ function submodels into L-PEACH. Functional Plant Biology, 2008, 35, 761.	2.1	71
25	Evolution and Development of Inflorescence Architectures. Science, 2007, 316, 1452-1456.	12.6	333
26	Ribbons. Visual Computer, 2007, 23, 945-954.	3.5	3
27	Inhibition fields for phyllotactic pattern formation: a simulation studyThis article is one of a selection of papers published on the Special Theme of Shoot Apical Meristems.. Canadian Journal of Botany, 2006, 84, 1635-1649.	1.1	60
28	Modeling plant morphogenesis. Current Opinion in Plant Biology, 2006, 9, 83-88.	7.1	53
29	A plausible model of phyllotaxis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1301-1306.	7.1	554
30	TOWARD A QUANTIFICATION OF SELF-SIMILARITY IN PLANTS. Fractals, 2005, 13, 91-109.	3.7	30
31	Quantitative Modeling of Arabidopsis Development. Plant Physiology, 2005, 139, 960-968.	4.8	108
32	SELF-SIMILARITY IN PLANTS: INTEGRATING MATHEMATICAL AND BIOLOGICAL PERSPECTIVES. , 2004, , .		13
33	Modeling plant growth and development. Current Opinion in Plant Biology, 2004, 7, 79-83.	7.1	200
34	Interactive Design of Bonsai Tree Models. Computer Graphics Forum, 2003, 22, 591-599.	3.0	50
35	Design and Implementation of the L+C Modeling Language. Electronic Notes in Theoretical Computer Science, 2003, 86, 134-152.	0.9	66
36	GeneVis: Simulation and Visualization of Genetic Networks. Information Visualization, 2003, 2, 201-217.	1.9	3

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37	Modeling a Murex cabritii sea shell with a structured implicit surface modeler. Visual Computer, 2002, 18, 70-80.	3.5	2
38	About the art in this issue. Interactions, 1998, 5, 48-50.	1.0	6
39	MODELING MERISTIC CHARACTERS OF ASTERACEAN FLOWERHEADS. Series in Mathematical Biology and Medicine, 1998, , 281-312.	0.1	7
40	Visual Models of Morphogenesis. Artificial Life, 1993, 1, 61-74.	1.3	12
41	Modeling seashells. Computer Graphics, 1992, 26, 379-387.	0.1	73
42	A collision-based model of spiral phyllotaxis. Computer Graphics, 1992, 26, 361-368.	0.1	33
43	The Algorithmic Beauty of Plants. The Virtual Laboratory, 1990, , .	0.3	1,514