Athanasius F M MarÃ©e

List of Publications by Year
in descending order

53	5,047	109264	175177
papers	citations	35 h-index	52 g-index

56	56	56	5959
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bistability, wave pinning and localisation in natural reactionâ€“diffusion systems. Physica D: Nonlinear Phenomena, 2021, 416, 132735.	1.3	35
2	Shaping of a three-dimensional carnivorous trap through modulation of a planar growth mechanism. PLoS Biology, 2019, 17, e3000427.	2.6	26
3	Systems Biology Approach Pinpoints Minimum Requirements for Auxin Distribution during Fruit Opening. Molecular Plant, 2019, 12, 863-878.	3.9	6
4	Morphometrics of complex cell shapes: Lobe Contribution Elliptic Fourier Analysis (LOCO-EFA). Development (Cambridge), 2018, 145, .	1.2	34
5	A multi-layered mechanistic modelling approach to understand how effector genes extend beyond phytoplasma to modulate plant hosts, insect vectors and the environment. Current Opinion in Plant Biology, 2018, 44, 39-48.	3.5	67
6	Spatiotemporal coordination of cell division and growth during organ morphogenesis. PLoS Biology, 2018, 16, e2005952.	2.6	79
7	A Sigmoid Functional Response Emerges When Cytotoxic T Lymphocytes Start Killing Fresh TargetÂCells. Biophysical Journal, 2017, 112, 1221-1235.	0.2	14
8	Auxin minimum triggers the developmental switch from cell division to cell differentiation in the Arabidopsis root. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E7641-E7649.	3.3	193
9	Pavement cells and the topology puzzle. Development (Cambridge), 2017, 144, 4386-4397.	1.2	41
10	Rapid transporter regulation prevents substrate flow traffic jams in boron transport. ELife, 2017, 6, .	2.8	14
11	Tissue Dimensionality Influences the Functional Response of Cytotoxic T Lymphocyte-Mediated Killing of Targets. Frontiers in Immunology, 2016, 7, 668.	2.2	14
12	Formation of polarity convergences underlying shoot outgrowths. ELife, 2016, 5, .	2.8	51
13	Parsimonious Model of Vascular Patterning Links Transverse Hormone Fluxes to Lateral Root Initiation: Auxin Leads the Way, while Cytokinin Levels Out. PLoS Computational Biology, 2015, 11, e1004450.	1.5	38
14	The biophysical nature of cells: potential cell behaviours revealed by analytical and computational studies of cell surface mechanics. BMC Biophysics, 2015, 8, 8.	4.4	70
15	Ethylene-Mediated Regulation of A2-Type CYCLINs Modulates Hyponastic Growth in Arabidopsis Â. Plant Physiology, 2015, 169, 194-208.	2.3	22
16	Mathematical Modeling and Experimental Validation of the Spatial Distribution of Boron in the Root of Arabidopsis thaliana Identify High Boron Accumulation in the Tip and Predict a Distinct Root Tip Uptake Function. Plant and Cell Physiology, 2015, 56, 620-630.	1.5	34
17	A General Functional Response of Cytotoxic T Lymphocyte-Mediated Killing of Target Cells. Biophysical Journal, 2014, 106, 1780-1791.	0.2	50
18	An intracellular partitioning-based framework for tissue cell polarity in plants and animals. Development (Cambridge), 2013, 140, 2061-2074.	1.2	98

#	Article	IF	Citations
19	Juicy Stories on Female Reproductive Tissue Development: Coordinating the Hormone Flows. Journal of Integrative Plant Biology, 2013, 55, 847-863.	4.1	16
20	How Cells Integrate Complex Stimuli: The Effect of Feedback from Phosphoinositides and Cell Shape on Cell Polarization and Motility. PLoS Computational Biology, 2012, 8, e1002402.	1.5	103
21	Chemotactic Migration of T Cells towards Dendritic Cells Promotes the Detection of Rare Antigens. PLoS Computational Biology, 2012, 8, e1002763.	1.5	37
22	Ethyleneâ€induced differential petiole growth in Arabidopsis thaliana involves local microtubule reorientation and cell expansion. New Phytologist, 2012, 193, 339-348.	3.5	74
23	A Bistable Circuit Involving SCARECROW-RETINOBLASTOMA Integrates Cues to Inform Asymmetric Stem Cell Division. Cell, 2012, 150, 1002-1015.	13.5	273
24	Morphogengineering roots: comparing mechanisms of morphogen gradient formation. BMC Systems Biology, 2012, 6, 37.	3.0	45
25	Tissue-resident memory CD8 ⁺ T cells continuously patrol skin epithelia to quickly recognize local antigen. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19739-19744.	3.3	230
26	Deterministic Versus Stochastic Cell Polarisation Through Wave-Pinning. Bulletin of Mathematical Biology, 2012, 74, 2570-99.	0.9	49
27	The role of fluctuations and stress on the effective viscosity of cell aggregates. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17271-17275.	3.3	183
28	Towards estimating the true duration of dendritic cell interactions with T cells. Journal of Immunological Methods, 2009, 347, 54-69.	0.6	39
29	Analysing immune cell migration. Nature Reviews Immunology, 2009, 9, 789-798.	10.6	216
30	A quantitative comparison of rates of phagocytosis and digestion of apoptotic cells by macrophages from normal (BALB/c) and diabetes-prone (NOD) mice. Journal of Applied Physiology, 2008, 104, 157-169.	1.2	43
31	Root System Architecture from Coupling Cell Shape to Auxin Transport. PLoS Biology, 2008, 6, e307.	2.6	353
32	Lymph node topology dictates T cell migration behavior. Journal of Experimental Medicine, 2007, 204, 771-780.	4.2	203
33	Cell adhesion and cortex contractility determine cell patterning in the Drosophila retina. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18549-18554.	3.3	177
34	The Cellular Potts Model and Biophysical Properties of Cells, Tissues and Morphogenesis. , 2007, , 107-136.		81
35	Spatial modelling of brief and long interactions between T cells and dendritic cells. Immunology and Cell Biology, 2007, 85, 306-314.	1.0	51
36	Auxin transport is sufficient to generate a maximum and gradient guiding root growth. Nature, 2007, 449, 1008-1013.	13.7	761

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37	Mathematical Model for Spatial Segregation of the Rho-Family GTPases Based on Inhibitory Crosstalk. Bulletin of Mathematical Biology, 2007, 69, 1943-1978.	0.9	130
38	Lymph node topology dictates T cell migration behavior. Journal of Cell Biology, 2007, 177, i2-i2.	2.3	1
39	Modelling the onset of Type 1 diabetes: can impaired macrophage phagocytosis make the difference between health and disease?. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1267-1282.	1.6	46
40	Polarization and Movement of Keratocytes: A Multiscale Modelling Approach. Bulletin of Mathematical Biology, 2006, 68, 1169-1211.	0.9	208
41	Moving Forward Moving Backward: Directional Sorting of Chemotactic Cells due to Size and Adhesion Differences. PLoS Computational Biology, 2006, 2, e56.	1.5	39
42	Modeling competition among autoreactive CD8+ T cells in autoimmune diabetes: implications for antigen-specific therapy. International Immunology, 2006, 18, 1067-1077.	1.8	15
43	Quantifying macrophage defects in type 1 diabetes. Journal of Theoretical Biology, 2005, 233, 533-551.	0.8	50
44	Prevention of diabetes by manipulation of anti-IGRP autoimmunity: high efficiency of a low-affinity peptide. Nature Medicine, 2005, 11, 645-652.	15.2	132
45	The RNA Silencing Pathway: The Bits and Pieces That Matter. PLoS Computational Biology, 2005, 1, e21.	1.5	39
46	Modelling Dictyostelium discoideum Morphogenesis: the Culmination. Bulletin of Mathematical Biology, 2002, 64, 327-353.	0.9	44
47	How amoeboids self-organize into a fruiting body: Multicellular coordination in Dictyostelium discoideum. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 3879-3883.	3.3	223
48	Release of Virus from Lymphoid Tissue Affects Human Immunodeficiency Virus Type 1 and Hepatitis C Virus Kinetics in the Blood. Journal of Virology, 2001, 75, 2597-2603.	1.5	24
49	Small variations in multiple parameters account for wide variations in HIVâ€“1 setâ€“points: a novel modelling approach. Proceedings of the Royal Society B: Biological Sciences, 2001, 268, 235-242.	1.2	52
50	Estimating Relative Fitness in Viral Competition Experiments. Journal of Virology, 2000, 74, 11067-11072.	1.5	85
51	Phototaxis during the slug stage of Dictyostelium discoideum: a model study. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 1351-1360.	1.2	49
52	Migration and Thermotaxis of Dictyostelium discoideum Slugs, a Model Study. Journal of Theoretical Biology, 1999, 199, 297-309.	0.8	65
53	Responses of Complex Cells in Area 17 of the Cat to Bi-vectorial Transparent Motion. Vision Research, 1996, 36, 2805-2813.	0.7	24