Marcus John Tindall

List of Publications by Year
in descending order

42 papers	1,057 citations	471509 17 h-index	434195 31 g-index
43 all docs	43 docs citations	43 times ranked	1359 citing authors

#	Article	IF	Citations
1	Overview of Mathematical Approaches Used to Model Bacterial Chemotaxis II: Bacterial Populations. Bulletin of Mathematical Biology, 2008, 70, 1570-1607.	1.9	211
2	Methods of Model Reduction for Large-Scale Biological Systems: A Survey of Current Methods and Trends. Bulletin of Mathematical Biology, 2017, 79, 1449-1486.	1.9	97
3	Overview of Mathematical Approaches Used to Model Bacterial Chemotaxis I: The Single Cell. Bulletin of Mathematical Biology, 2008, 70, 1525-1569.	1.9	96
4	From a discrete to a continuum model of cell dynamics in one dimension. Physical Review E, 2009, 80, 031912.	2.1	78
5	Comparing a discrete and continuum model of the intestinal crypt. Physical Biology, 2011, 8, 026011.	1.8	38
6	The Metabolites of the Dietary Flavonoid Quercetin Possess Potent Antithrombotic Activity, and Interact with Aspirin to Enhance Antiplatelet Effects. TH Open, 2019, 03, e244-e258.	1.4	37
7	Best Practices to Maximize the Use and Reuse of Quantitative and Systems Pharmacology Models: Recommendations From the United Kingdom Quantitative and Systems Pharmacology Network. CPT: Pharmacometrics and Systems Pharmacology, 2019, 8, 259-272.	2.5	37
8	Classifying general nonlinear force laws in cell-based models via the continuum limit. Physical Review E, 2012, 85, 021921.	2.1	33
9	Feedback regulation by Atf3 in the endothelin-1-responsive transcriptome of cardiomyocytes: Egr1 is a principal Atf3 target. Biochemical Journal, 2012, 444, 343-355.	3.7	31
10	Multi-scale, whole-system models of liver metabolic adaptation to fat and sugar in non-alcoholic fatty liver disease. Npj Systems Biology and Applications, 2018, 4, 33.	3.0	30
11	Modeling Chemotaxis Reveals the Role of Reversed Phosphotransfer and a Bi-Functional Kinase-Phosphatase. PLoS Computational Biology, 2010, 6, e1000896.	3.2	29
12	A mathematical model of the sterol regulatory element binding protein 2 cholesterol biosynthesis pathway. Journal of Theoretical Biology, 2014, 349, 150-162.	1.7	26
13	Modelling the Cell Cycle and Cell Movement in Multicellular Tumour Spheroids. Bulletin of Mathematical Biology, 2007, 69, 1147-1165.	1.9	24
14	Regulation of Early Steps of GPVI Signal Transduction by Phosphatases: A Systems Biology Approach. PLoS Computational Biology, 2015, 11, e1004589.	3.2	22
15	Theoretical insights into bacterial chemotaxis. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2012, 4, 247-259.	6.6	21
16	Modelling the formation of necrotic regions in avascular tumours. Mathematical Biosciences, 2008, 211, 34-55.	1.9	20
17	A continuum receptor model of hepatic lipoprotein metabolism. Journal of Theoretical Biology, 2009, 257, 371-384.	1.7	19
18	A combined model reduction algorithm for controlled biochemical systems. BMC Systems Biology, 2017, 11, 17.	3.0	18

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19	A mathematical model of the mevalonate cholesterol biosynthesis pathway. Journal of Theoretical Biology, 2018, 443, 157-176.	1.7	18
20	Physiologically-based pharmacokinetic and toxicokinetic models for estimating human exposure to five toxic elements through oral ingestion. Environmental Toxicology and Pharmacology, 2018, 57, 104-114.	4.0	18
21	Model reduction in mathematical pharmacology. Journal of Pharmacokinetics and Pharmacodynamics, 2018, 45, 537-555.	1.8	16
22	Response kinetics in the complex chemotaxis signalling pathway of Rhodobacter sphaeroides. Journal of the Royal Society Interface, 2013, 10, 20121001.	3.4	15
23	An Integrated Mathematical Model of Cellular Cholesterol Biosynthesis and Lipoprotein Metabolism. Processes, 2018, 6, 134.	2.8	12
24	Understanding post-operative temperature drop in cardiac surgery: a mathematical model. Mathematical Medicine and Biology, 2008, 25, 323-335.	1.2	11
25	Modelling acidosis and the cell cycle in multicellular tumour spheroids. Journal of Theoretical Biology, 2012, 298, 107-115.	1.7	11
26	Modelling Negative Feedback Networks for Activating Transcription Factor 3 Predicts a Dominant Role for miRNAs in Immediate Early Gene Regulation. PLoS Computational Biology, 2014, 10, e1003597.	3.2	11
27	A high-density immunoblotting methodology for quantification of total protein levels and phosphorylation modifications. Scientific Reports, 2015, 5, 16995.	3.3	11
28	Understanding the link between single cell and population scale responses of Escherichia coli in differing ligand gradients. Computational and Structural Biotechnology Journal, 2015, 13, 528-538.	4.1	9
29	Modelling Cell Growth and its Modulation of the G1/S Transition. Bulletin of Mathematical Biology, 2007, 69, 197-214.	1.9	8
30	A moving mesh approach for modelling avascular tumour growth. Applied Numerical Mathematics, 2013, 72, 99-114.	2.1	8
31	Integrating protein networks and machine learning for disease stratification in the Hereditary Spastic Paraplegias. IScience, 2021, 24, 102484.	4.1	8
32	Spatiotemporal modelling of CheY complexes in Escherichia coli chemotaxis. Progress in Biophysics and Molecular Biology, 2009, 100, 40-46.	2.9	7
33	Investigating Flavonoids as Molecular Templates for the Design of Smallâ€Molecule Inhibitors of Cell Signaling. Journal of Food Science, 2013, 78, N1921-8.	3.1	6
34	A Web-Based Knowledge Elicitation System (GISEL) for Planning and Assessing Group Screening Experiments for Product Development. Journal of Computing and Information Science in Engineering, 2004, 4, 218-225.	2.7	5
35	Mathematical Analysis of the Escherichia coli Chemotaxis Signalling Pathway. Bulletin of Mathematical Biology, 2018, 80, 758-787.	1.9	5
36	A model of the PI cycle reveals the regulating roles of lipid-binding proteins and pitfalls of using mosaic biological data. Scientific Reports, 2020, 10, 13244.	3.3	5

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37	A mathematical model of the in vitro keratinocyte response to chromium and nickel exposure. Toxicology in Vitro, 2008, 22, 1088-1093.	2.4	3
38	Fold-Change Detection in a Whole-Pathway Model of Escherichia coli chemotaxis. Bulletin of Mathematical Biology, 2014, 76, 1376-1395.	1.9	2
39	System insights into hemostasis: Open questions and the role of mathematical modelling. Physics of Life Reviews, 2018, 26-27, 106-107.	2.8	1
40	A mathematical model of the role of aggregation in sonic hedgehog signalling. PLoS Computational Biology, 2021, 17, e1008562.	3.2	0
41	Web-Based Knowledge Elicitation and Application to Planned Experiments for Product Development. , 2003, , .		0
42	Intracellular signalling during bacterial chemotaxis. SEB Experimental Biology Series, 2008, 61, 161-74.	0.1	0