Marcus John Tindall

List of Publications by Year
in descending order

#	Article	IF	Citations
1	A mathematical model of the role of aggregation in sonic hedgehog signalling. PLoS Computational Biology, 2021, 17, e1008562.	3.2	0
2	Integrating protein networks and machine learning for disease stratification in the Hereditary Spastic Paraplegias. IScience, 2021, 24, 102484.	4.1	8
3	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
4	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
5	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
6	Mathematical Analysis of the Escherichia coli Chemotaxis Signalling Pathway. Bulletin of Mathematical Biology, 2018, 80, 758-787.	1.9	5
7	Model reduction in mathematical pharmacology. Journal of Pharmacokinetics and Pharmacodynamics, 2018, 45, 537-555.	1.8	16
8	A mathematical model of the mevalonate cholesterol biosynthesis pathway. Journal of Theoretical Biology, 2018, 443, 157-176.	1.7	18
9	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
10	An Integrated Mathematical Model of Cellular Cholesterol Biosynthesis and Lipoprotein Metabolism. Processes, 2018, 6, 134.	2.8	12
11	System insights into hemostasis: Open questions and the role of mathematical modelling. Physics of Life Reviews, 2018, 26-27, 106-107.	2.8	1
12	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
13	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
14	A combined model reduction algorithm for controlled biochemical systems. BMC Systems Biology, 2017, 11, 17.	3.0	18
15	A high-density immunoblotting methodology for quantification of total protein levels and phosphorylation modifications. Scientific Reports, 2015, 5, 16995.	3.3	11
16	Regulation of Early Steps of GPVI Signal Transduction by Phosphatases: A Systems Biology Approach. PLoS Computational Biology, 2015, 11, e1004589.	3.2	22
17	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
18	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

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19	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
20	Fold-Change Detection in a Whole-Pathway Model of Escherichia coli chemotaxis. Bulletin of Mathematical Biology, 2014, 76, 1376-1395.	1.9	2
21	A moving mesh approach for modelling avascular tumour growth. Applied Numerical Mathematics, 2013, 72, 99-114.	2.1	8
22	Response kinetics in the complex chemotaxis signalling pathway of <i>Rhodobacter sphaeroides</i>. Journal of the Royal Society Interface, 2013, 10, 20121001.	3.4	15
23	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
24	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
25	Classifying general nonlinear force laws in cell-based models via the continuum limit. Physical Review E, 2012, 85, 021921.	2.1	33
26	Theoretical insights into bacterial chemotaxis. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2012, 4, 247-259.	6.6	21
27	Modelling acidosis and the cell cycle in multicellular tumour spheroids. Journal of Theoretical Biology, 2012, 298, 107-115.	1.7	11
28	Comparing a discrete and continuum model of the intestinal crypt. Physical Biology, 2011, 8, 026011.	1.8	38
29	Modeling Chemotaxis Reveals the Role of Reversed Phosphotransfer and a Bi-Functional Kinase-Phosphatase. PLoS Computational Biology, 2010, 6, e1000896.	3.2	29
30	From a discrete to a continuum model of cell dynamics in one dimension. Physical Review E, 2009, 80, 031912.	2.1	78
31	Spatiotemporal modelling of CheY complexes in Escherichia coli chemotaxis. Progress in Biophysics and Molecular Biology, 2009, 100, 40-46.	2.9	7
32	A continuum receptor model of hepatic lipoprotein metabolism. Journal of Theoretical Biology, 2009, 257, 371-384.	1.7	19
33	Overview of Mathematical Approaches Used to Model Bacterial Chemotaxis I: The Single Cell. Bulletin of Mathematical Biology, 2008, 70, 1525-1569.	1.9	96
34	Overview of Mathematical Approaches Used to Model Bacterial Chemotaxis II: Bacterial Populations. Bulletin of Mathematical Biology, 2008, 70, 1570-1607.	1.9	211
35	Modelling the formation of necrotic regions in avascular tumours. Mathematical Biosciences, 2008, 211, 34-55.	1.9	20
36	A mathematical model of the in vitro keratinocyte response to chromium and nickel exposure. Toxicology in Vitro, 2008, 22, 1088-1093.	2.4	3

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37	Understanding post-operative temperature drop in cardiac surgery: a mathematical model. Mathematical Medicine and Biology, 2008, 25, 323-335.	1.2	11
38	Intracellular signalling during bacterial chemotaxis. SEB Experimental Biology Series, 2008, 61, 161-74.	0.1	0
39	Modelling the Cell Cycle and Cell Movement in Multicellular Tumour Spheroids. Bulletin of Mathematical Biology, 2007, 69, 1147-1165.	1.9	24
40	Modelling Cell Growth and its Modulation of the G1/S Transition. Bulletin of Mathematical Biology, 2007, 69, 197-214.	1.9	8
41	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
42	Web-Based Knowledge Elicitation and Application to Planned Experiments for Product Development. , 2003, , .		0