John Ward

List of Publications by Year
in descending order

36 papers	1,847 citations	430754 18 h-index	377752 34 g-index
36 all docs	36 docs citations	36 times ranked	2325 citing authors

#	Article	IF	Citations
1	On modelling of glucose transport in hollow fibre membrane bioreactor for growing threeâ€dimensional tissue. Asia-Pacific Journal of Chemical Engineering, 2021, 16, e2565.	0.8	2
2	Effects of Scaffold Pore Morphologies on Glucose Transport Limitations in Hollow Fibre Membrane Bioreactor for Bone Tissue Engineering: Experiments and Numerical Modelling. Membranes, 2021, 11, 257.	1.4	10
3	Mathematical modelling of contact dermatitis from nickel and chromium. Journal of Mathematical Biology, 2019, 79, 595-630.	0.8	7
4	Mathematical modelling of a liver hollow fibre bioreactor. Journal of Theoretical Biology, 2019, 475, 25-33.	0.8	4
5	Numerical Modelling of Effects of Biphasic Layers of Corrosion Products to the Degradation of Magnesium Metal In Vitro. Materials, 2018, 11, 1.	1.3	605
6	Dynamical density-functional-theory-based modeling of tissue dynamics: Application to tumor growth. Physical Review E, 2018, 98, 022407.	0.8	17
7	Predicting tyrosinaemia: a mathematical model of 4-hydroxyphenylpyruvate dioxygenase inhibition by nitisinone in rats. Mathematical Medicine and Biology, 2016, 34, dqw006.	0.8	0
8	Using Mathematical Modelling to Explore Hypotheses about the Role of Bovine Epithelium Structure in Foot-And-Mouth Disease Virus-Induced Cell Lysis. PLoS ONE, 2015, 10, e0138571.	1.1	5
9	Timescale analysis of a mathematical model of acetaminophen metabolism and toxicity. Journal of Theoretical Biology, 2015, 386, 132-146.	0.8	23
10	A Mathematical Model of the Growth of Uterine Myomas. Bulletin of Mathematical Biology, 2014, 76, 3088-3121.	0.9	4
11	A mathematical model for the human menstrual cycle. Mathematical Medicine and Biology, 2014, 31, 65-86.	0.8	10
12	Novel in vitro and mathematical models for the prediction of chemical toxicity. Toxicology Research, 2013, 2, 40-59.	0.9	25
13	Thin-film modelling of biofilm growth and quorum sensing. Journal of Engineering Mathematics, 2012, 73, 71-92.	0.6	22
14	Modelling the Influence of Foot-and-Mouth Disease Vaccine Antigen Stability and Dose on the Bovine Immune Response. PLoS ONE, 2012, 7, e30435.	1.1	8
15	Modelling Foot-and-Mouth Disease Virus Dynamics inÂOral Epithelium to Help Identify the Determinants ofÂLysis. Bulletin of Mathematical Biology, 2011, 73, 1503-1528.	0.9	6
16	A mathematical model of the in vitro keratinocyte response to chromium and nickel exposure. Toxicology in Vitro, 2008, 22, 1088-1093.	1.1	3
17	Mathematical Modeling of Quorum-Sensing Control in Biofilms. Springer Series on Biofilms, 2008, , 79-108.	0.0	8
18	A simulation model of rhizome networks for Fallopia japonica (Japanese knotweed) in the United Kingdom. Ecological Modelling, 2007, 200, 421-432.	1.2	32

#	Article	IF	Citations
19	A multi-phase mathematical model of quorum sensing in a maturing Pseudomonas aeruginosa biofilm. Mathematical Biosciences, 2006, 203, 240-276.	0.9	54
20	Modelling antibiotic- and anti-quorum sensing treatment of a spatially-structured Pseudomonas aeruginosa population. Journal of Mathematical Biology, 2005, 51, 557-594.	0.8	47
21	Cell-signalling repression in bacterial quorum sensing. Mathematical Medicine and Biology, 2004, 21, 169-204.	0.8	33
22	Mathematical modelling of therapies targeted at bacterial quorum sensing. Mathematical Biosciences, 2004, 192, 39-83.	0.9	59
23	Early development and quorum sensing in bacterial biofilms. Journal of Mathematical Biology, 2003, 47, 23-55.	0.8	65
24	Mathematical modelling of drug transport in tumour multicell spheroids and monolayer cultures. Mathematical Biosciences, 2003, 181, 177-207.	0.9	110
25	Modelling host tissue degradation by extracellular bacterial pathogens. Mathematical Medicine and Biology, 2003, 20, 227-260.	0.8	16
26	A Mathematical Model of Partial-thickness Burn-wound Infection by Pseudomonas aeruginosa: Quorum Sensing and the Build-up to Invasion. Bulletin of Mathematical Biology, 2002, 64, 239-259.	0.9	30
27	Mathematical modelling of quorum sensing in bacteria. Mathematical Medicine and Biology, 2001, 18, 263-292.	0.8	88
28	Mathematical modelling of quorum sensing in bacteria. Ima Journal of Mathemathics Applied in Medicine and Biology, 2001, 18, 263-92.	0.0	19
29	Modelling the Effect of Cell Shedding on Avascular Tumour Growth. Journal of Theoretical Medicine, 2000, 2, 155-174.	0.5	4
30	Mathematical Modelling of the Effects of Mitotic Inhibitors on Avascular Tumour Growth. Journal of Theoretical Medicine, 1999, 1, 287-311.	0.5	16
31	Mathematical modelling of avascular-tumour growth II: modelling growth saturation. Mathematical Medicine and Biology, 1999, 16, 171-211.	0.8	125
32	Mathematical modelling of avascular-tumour growth. II: Modelling growth saturation. Ima Journal of Mathemathics Applied in Medicine and Biology, 1999, 16, 171-211.	0.0	33
33	Misapplication of the power method. International Journal of Mathematical Education in Science and Technology, 1998, 29, 295-311.	0.8	0
34	Mathematical modelling of avascular-tumour growth. Mathematical Medicine and Biology, 1997, 14, 39-69.	0.8	300
35	Mathematical modelling of avascular-tumour growth. Ima Journal of Mathemathics Applied in Medicine and Biology, 1997, 14, 39-69.	0.0	55
36	A determinant formalism for shape functions. Communications in Applied Numerical Methods, 1987, 3, 129-139.	0.5	2