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	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
2	Mathematical modelling of avascular-tumour growth. Mathematical Medicine and Biology, 1997, 14, 39-69.	0.8	300
3	Mathematical modelling of avascular-tumour growth II: modelling growth saturation. Mathematical Medicine and Biology, 1999, 16, 171-211.	0.8	125
4	Mathematical modelling of drug transport in tumour multicell spheroids and monolayer cultures. Mathematical Biosciences, 2003, 181, 177-207.	0.9	110
5	Mathematical modelling of quorum sensing in bacteria. Mathematical Medicine and Biology, 2001, 18, 263-292.	0.8	88
6	Early development and quorum sensing in bacterial biofilms. Journal of Mathematical Biology, 2003, 47, 23-55.	0.8	65
7	Mathematical modelling of therapies targeted at bacterial quorum sensing. Mathematical Biosciences, 2004, 192, 39-83.	0.9	59
8	Mathematical modelling of avascular-tumour growth. Ima Journal of Mathemathics Applied in Medicine and Biology, 1997, 14, 39-69.	0.0	55
9	A multi-phase mathematical model of quorum sensing in a maturing Pseudomonas aeruginosa biofilm. Mathematical Biosciences, 2006, 203, 240-276.	0.9	54
10	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
11	Cell-signalling repression in bacterial quorum sensing. Mathematical Medicine and Biology, 2004, 21, 169-204.	0.8	33
12	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
13	A simulation model of rhizome networks for Fallopia japonica (Japanese knotweed) in the United Kingdom. Ecological Modelling, 2007, 200, 421-432.	1.2	32
14	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
15	Novel in vitro and mathematical models for the prediction of chemical toxicity. Toxicology Research, 2013, 2, 40-59.	0.9	25
16	Timescale analysis of a mathematical model of acetaminophen metabolism and toxicity. Journal of Theoretical Biology, 2015, 386, 132-146.	0.8	23
17	Thin-film modelling of biofilm growth and quorum sensing. Journal of Engineering Mathematics, 2012, 73, 71-92.	0.6	22
18	Mathematical modelling of quorum sensing in bacteria. Ima Journal of Mathemathics Applied in Medicine and Biology, 2001, 18, 263-92.	0.0	19

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19	Dynamical density-functional-theory-based modeling of tissue dynamics: Application to tumor growth. Physical Review E, 2018, 98, 022407.	0.8	17
20	Mathematical Modelling of the Effects of Mitotic Inhibitors on Avascular Tumour Growth. Journal of Theoretical Medicine, 1999, 1, 287-311.	0.5	16
21	Modelling host tissue degradation by extracellular bacterial pathogens. Mathematical Medicine and Biology, 2003, 20, 227-260.	0.8	16
22	A mathematical model for the human menstrual cycle. Mathematical Medicine and Biology, 2014, 31, 65-86.	0.8	10
23	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
24	Mathematical Modeling of Quorum-Sensing Control in Biofilms. Springer Series on Biofilms, 2008, , 79-108.	0.0	8
25	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
26	Mathematical modelling of contact dermatitis from nickel and chromium. Journal of Mathematical Biology, 2019, 79, 595-630.	0.8	7
27	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
28	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
29	Modelling the Effect of Cell Shedding on Avascular Tumour Growth. Journal of Theoretical Medicine, 2000, 2, 155-174.	0.5	4
30	A Mathematical Model of the Growth of Uterine Myomas. Bulletin of Mathematical Biology, 2014, 76, 3088-3121.	0.9	4
31	Mathematical modelling of a liver hollow fibre bioreactor. Journal of Theoretical Biology, 2019, 475, 25-33.	0.8	4
32	A mathematical model of the in vitro keratinocyte response to chromium and nickel exposure. Toxicology in Vitro, 2008, 22, 1088-1093.	1.1	3
33	A determinant formalism for shape functions. Communications in Applied Numerical Methods, 1987, 3, 129-139.	0.5	2
34	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
35	Misapplication of the power method. International Journal of Mathematical Education in Science and Technology, 1998, 29, 295-311.	0.8	0
36	Predicting tyrosinaemia: a mathematical model of 4-hydroxyphenylpyruvate dioxygenase inhibition by nitisinone in rats. Mathematical Medicine and Biology, 2016, 34, dqw006.	0.8	0