Stephen Baigent

List of Publications by Year
in descending order

22 papers	364 citations	840776 11 h-index	794594 19 g-index
22 all docs	22 docs citations	22 times ranked	270 citing authors

#	Article	IF	Citations
1	PMatrix Properties, Injectivity, and Stability in Chemical Reaction Systems. SIAM Journal on Applied Mathematics, 2007, 67, 1523-1547.	1.8	71
2	A physiological model of cerebral blood flow control. Mathematical Biosciences, 2005, 194, 125-173.	1.9	65
3	Modelling the Effect of Gap Junction Nonlinearities in Systems of Coupled Cells. Journal of Theoretical Biology, 1997, 186, 223-239.	1.7	43
4	Geometry of carrying simplices of 3-species competitive Lotkaâ€“Volterra systems. Nonlinearity, 2013, 26, 1001-1029.	1.4	30
5	Cells coupled by voltage-dependent gap junctions: the asymptotic dynamical limit. BioSystems, 2003, 68, 213-222.	2.0	20
6	Global Stability of Interior and Boundary Fixed Points for Lotkaâ€“Volterra Systems. Differential Equations and Dynamical Systems, 2012, 20, 53-66.	1.0	16
7	Arterial ammonia levels in cirrhosis are determined by systemic and hepatic hemodynamics, and by organ function<scp>:</scp> a quantitative modelling study. Liver International, 2014, 34, e45-55.	3.9	16
8	Fixed point global attractors and repellors in competitive Lotkaâ€“Volterra systems. Dynamical Systems, 2011, 26, 367-390.	0.4	15
9	Convexity-preserving flows of totally competitive planar Lotkaâ€“Volterra equations and the geometry of the carrying simplex. Proceedings of the Edinburgh Mathematical Society, 2012, 55, 53-63.	0.3	13
10	Convexity of the carrying simplex for discrete-time planar competitive Kolmogorov systems. Journal of Difference Equations and Applications, 2016, 22, 609-622.	1.1	13
11	Global stability of discrete-time competitive population models. Journal of Difference Equations and Applications, 2017, 23, 1378-1396.	1.1	13
12	Electron transfer networks. Journal of Mathematical Chemistry, 2008, 43, 1355-1370.	1.5	9
13	Quantifying the Likelihood of Co-existence for Communities with Asymmetric Competition. Bulletin of Mathematical Biology, 2012, 74, 2315-2338.	1.9	9
14	Global stability and repulsion in autonomous Kolmogorov systems. Communications on Pure and Applied Analysis, 2015, 14, 1205-1238.	0.8	9
15	Stability in generic mitochondrial models. Journal of Mathematical Chemistry, 2009, 46, 322-339.	1.5	8
16	Lotkaâ€“Volterra Dynamical Systems. , 2017, , 157-188.		6
17	Mathematical Model of Ammonia Handling in the Rat Renal Medulla. PLoS ONE, 2015, 10, e0134477.	2.5	3
18	The balance simplex in non-competitive 2-species scaled Lotkaâ€“Volterra systems. Journal of Biological Dynamics, 2019, 13, 128-147.	1.7	3

#	Article	IF	Citations
19	Manifolds of balance in planar ecological systems. Applied Mathematics and Computation, 2019, 358, 204-215.	2.2	1
20	Balance simplices of 3-species May-Leonard systems. Journal of Biological Dynamics, 2020, 14, 187-199.	1.7	1
21	Nonmonotone invariant manifolds in the Nagylakiâ€“Crow model. Nonlinear Analysis: Real World Applications, 2018, 41, 570-587.	1.7	0
22	Invariant manifolds of Competitive Selectionâ€“Recombination dynamics. Nonlinear Analysis: Real World Applications, 2020, 53, 103054.	1.7	0