Mark A J Chaplain

List of Publications by Year
in descending order

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179	11,351	31976	32842
papers	citations	53 h-index	100 g-index

195	195	195	6041
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A novel nonlocal partial differential equation model of endothelial progenitor cell cluster formation during the early stages of vasculogenesis. Journal of Theoretical Biology, 2022, 534, 110963.	1.7	6
2	Special Collection: Celebrating J.D. Murrayâ€™s Contributions to Mathematical Biology. Bulletin of Mathematical Biology, 2022, 84, 13.	1.9	1
3	Modelling rheumatoid arthritis: A hybrid modelling framework to describe pannus formation in a small joint. ImmunoInformatics, 2022, 6, 100014.	2.2	4
4	Evolutionary Dynamics in Vascularised Tumours under Chemotherapy: Mathematical Modelling, Asymptotic Analysis and Numerical Simulations. Vietnam Journal of Mathematics, 2021, 49, 143-167.	0.8	11
5	Development of a coupled simulation toolkit for computational radiation biology based on Geant4 and CompuCell3D. Physics in Medicine and Biology, 2021, 66, 045026.	3.0	5
6	Mechanical Models of Pattern and Form in Biological Tissues: The Role of Stressâ€“Strain Constitutive Equations. Bulletin of Mathematical Biology, 2021, 83, 80.	1.9	9
7	Calibrating models of cancer invasion: parameter estimation using approximate Bayesian computation and gradient matching. Royal Society Open Science, 2021, 8, 202237.	2.4	3
8	A novel 3D atomistic-continuum cancer invasion model: In silico simulations of an in vitro organotypic invasion assay. Journal of Theoretical Biology, 2021, 522, 110677.	1.7	7
9	Targeting Cellular DNA Damage Responses in Cancer: An In Vitro-Calibrated Agent-Based Model Simulating Monolayer and Spheroid Treatment Responses to ATR-Inhibiting Drugs. Bulletin of Mathematical Biology, 2021, 83, 103.	1.9	6
10	Modeling the Emergence of Phenotypic Heterogeneity in Vascularized Tumors. SIAM Journal on Applied Mathematics, 2021, 81, 434-453.	1.8	13
11	Mathematical Modelling of Cancer Invasion: A Review. Springer Proceedings in Mathematics and Statistics, 2021, , 153-172.	0.2	8
12	Quantifying ERK activity in response to inhibition of the BRAFV600E-MEK-ERK cascade using mathematical modelling. British Journal of Cancer, 2021, 125, 1552-1560.	6.4	6
13	Bridging the gap between individual-based and continuum models of growing cell populations. Journal of Mathematical Biology, 2020, 80, 343-371.	1.9	19
14	Quantitative Predictive Modelling Approaches to Understanding Rheumatoid Arthritis: A Brief Review. Cells, 2020, 9, 74.	4.1	13
15	Computational modelling and simulation of cancer growth and migration within a 3D heterogeneous tissue: The effects of fibre and vascular structure. Journal of Computational Science, 2020, 40, 101067.	2.9	20
16	A mathematical multi-organ model for bidirectional epithelialâ€“mesenchymal transitions in the metastatic spread of cancer. IMA Journal of Applied Mathematics, 2020, 85, 724-761.	1.6	12
17	A multiscale model of virus pandemic: Heterogeneous interactive entities in a globally connected world. Mathematical Models and Methods in Applied Sciences, 2020, 30, 1591-1651.	3.3	105
18	A Hybrid Multiscale Model for Cancer Invasion of the Extracellular Matrix. Multiscale Modeling and Simulation, 2020, 18, 824-850.	1.6	26

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19	Discrete and continuum phenotype-structured models for the evolution of cancer cell populations under chemotherapy. Mathematical Modelling of Natural Phenomena, 2020, 15, 14.	2.4	20
20	Learningâ€induced switching costs in a parasitoid can maintain diversity of host aphid phenotypes although biocontrol is destabilized under abiotic stress. Journal of Animal Ecology, 2020, 89, 1216-1229.	2.8	7
21	JTB Editorial Malpractice: A Case Report. Journal of Theoretical Biology, 2020, 488, 110171.	1.7	6
22	Multiscale Modelling of Cancer: Micro-, Meso- and Macro-scales of Growth and Spread. Human Perspectives in Health Sciences and Technology, 2020, , 149-168.	0.4	1
23	A stochastic individual-based model to explore the role of spatial interactions and antigen recognition in the immune response against solid tumours. Journal of Theoretical Biology, 2019, 480, 43-55.	1.7	13
24	A Mathematical Framework for Modelling the Metastatic Spread of Cancer. Bulletin of Mathematical Biology, 2019, 81, 1965-2010.	1.9	63
25	Dissipative particle dynamics simulation of critical pore size in a lipid bilayer membrane. Royal Society Open Science, 2019, 6, 181657.	2.4	2
26	Spatial-Stochastic modelling of synthetic gene regulatory networks. Journal of Theoretical Biology, 2019, 468, 27-44.	1.7	7
27	Blackboard to Bedside: A Mathematical Modeling Bottom-Up Approach Toward Personalized Cancer Treatments. JCO Clinical Cancer Informatics, 2019, 3, 1-11.	2.1	24
28	Derivation and Application of Effective Interface Conditions for Continuum Mechanical Models of Cell Invasion through Thin Membranes. SIAM Journal on Applied Mathematics, 2019, 79, 2011-2031.	1.8	9
29	Combining radiation with hyperthermia: a multiscale model informed by in vitro experiments. Journal of the Royal Society Interface, 2018, 15, 20170681.	3.4	22
30	Computational Approaches and Analysis for a Spatio-Structural-Temporal Invasive Carcinoma Model. Bulletin of Mathematical Biology, 2018, 80, 701-737.	1.9	9
31	Aggregation and travelling wave dynamics in a two-population model of cancer cell growth and invasion. Mathematical Medicine and Biology, 2018, 35, 541-577.	1.2	10
32	Modelling the Immune Response to Cancer: An Individual-Based Approach Accounting for the Difference in Movement Between Inactive and Activated T Cells. Bulletin of Mathematical Biology, 2018, 80, 1539-1562.	1.9	21
33	Modelling the effects of bacterial cell state and spatial location on tuberculosis treatment: Insights from a hybrid multiscale cellular automaton model. Journal of Theoretical Biology, 2018, 446, 87-100.	1.7	23
34	Computational Modelling of Cancer Development and Growth: Modelling at Multiple Scales and Multiscale Modelling. Bulletin of Mathematical Biology, 2018, 80, 1366-1403.	1.9	25
35	Role of extracellular matrix and microenvironment in regulation of tumor growth and LAR-mediated invasion in glioblastoma. PLoS ONE, 2018, 13, e0204865.	2.5	40
36	The role of spatial variations of abiotic factors in mediating intratumour phenotypic heterogeneity. Journal of Theoretical Biology, 2018, 451, 101-110.	1.7	27

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37	The usage of a three-compartment model to investigate the metabolic differences between hepatic reductase null and wild-type mice. Mathematical Medicine and Biology, 2017, 34, 1-13.	1.2	1
38	A Multiscale Mathematical Model of Tumour Invasive Growth. Bulletin of Mathematical Biology, 2017, 79, 389-429.	1.9	40
39	Structured models of cell migration incorporating molecular binding processes. Journal of Mathematical Biology, 2017, 75, 1517-1561.	1.9	24
40	Examining the role of individual movement in promoting coexistence in a spatially explicit prisoner's dilemma. Journal of Theoretical Biology, 2017, 419, 323-332.	1.7	8
41	Transparency and openness in science. Royal Society Open Science, 2017, 4, 160979.	2.4	1
42	Mathematical modelling of cancer invasion: The multiple roles of TGF-Î² pathway on tumour proliferation and cell adhesion. Mathematical Models and Methods in Applied Sciences, 2017, 27, 1929-1962.	3.3	23
43	Spatio-temporal models of synthetic genetic oscillators. Mathematical Biosciences and Engineering, 2017, 14, 249-262.	1.9	6
44	A hybrid discrete-continuum approach to model Turing pattern formation. Mathematical Biosciences and Engineering, 2017, 17, 7442-7479.	1.9	10
45	Bystander effects and their implications for clinical radiation therapy: Insights from multiscale in silico experiments. Journal of Theoretical Biology, 2016, 401, 1-14.	1.7	44
46	Multiscale Modelling of Cancer Progression and Treatment Control: The Role of Intracellular Heterogeneities in Chemotherapy Treatment. , 2016, , 1-18.		1
47	Diffusion driven oscillations in gene regulatory networks. Journal of Theoretical Biology, 2016, 407, 51-70.	1.7	15
48	Multimodality imaging and mathematical modelling of drug delivery to glioblastomas. Interface Focus, 2016, 6, 20160039.	3.0	34
49	Strategies of Eradicating Glioma Cells: A Multi-Scale Mathematical Model with MiR-451-AMPK-mTOR Control. PLoS ONE, 2015, 10, e0114370.	2.5	42
50	Hopf bifurcation in a gene regulatory network model: Molecular movement causes oscillations. Mathematical Models and Methods in Applied Sciences, 2015, 25, 1179-1215.	3.3	29
51	Multi-scale modelling of the dynamics of cell colonies: insights into cell-adhesion forces and cancer invasion from in silico simulations. Journal of the Royal Society Interface, 2015, 12, 20141080.	3.4	34
52	Multiscale Modelling of Cancer Progression and Treatment Control: The Role of Intracellular Heterogeneities in Chemotherapy Treatment. Biophysical Reviews and Letters, 2015, 10, 97-114.	0.8	3
53	Systems oncology: Towards patient-specific treatment regimes informed by multiscale mathematical modelling. Seminars in Cancer Biology, 2015, 30, 13-20.	9.6	68
54	The Role of Dimerisation and Nuclear Transport in the Hes1 Gene Regulatory Network. Bulletin of Mathematical Biology, 2014, 76, 766-798.	1.9	26

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55	Mathematical modelling of cancer invasion: Implications of cell adhesion variability for tumour infiltrative growth patterns. Journal of Theoretical Biology, 2014, 361, 41-60.	1.7	107
56	The effect of interstitial pressure on therapeutic agent transport: Coupling with the tumor blood and lymphatic vascular systems. Journal of Theoretical Biology, 2014, 355, 194-207.	1.7	91
57	Stochastic Modelling of Chromosomal Segregation: Errors Can Introduce Correction. Bulletin of Mathematical Biology, 2014, 76, 1590-1606.	1.9	0
58	Mathematical Modeling of Tumor Growth and Treatment. Current Pharmaceutical Design, 2014, 20, 4934-4940.	1.9	145
59	A Hybrid Multiscale Approach in Cancer Modelling and Treatment Prediction. Modeling and Simulation in Science, Engineering and Technology, 2014, , 237-263.	0.6	0
60	Multiscale Analysis and Modelling for Cancer Growth and Development. Springer Proceedings in Mathematics and Statistics, 2014, , 45-53.	0.2	0
61	The effect of interstitial pressure on tumor growth: Coupling with the blood and lymphatic vascular systems. Journal of Theoretical Biology, 2013, 320, 131-151.	1.7	183
62	Mathematical Modeling of Cancer Invasion: The Role of Membrane-Bound Matrix Metalloproteinases. Frontiers in Oncology, 2013, 3, 70.	2.8	36
63	Towards Predicting the Response of a Solid Tumour to Chemotherapy and Radiotherapy Treatments: Clinical Insights from a Computational Model. PLoS Computational Biology, 2013, 9, e1003120.	3.2	91
64	Spatial stochastic modelling of the Hes1 gene regulatory network: intrinsic noise can explain heterogeneity in embryonic stem cell differentiation. Journal of the Royal Society Interface, 2013, 10, 20120988.	3.4	59
65	A Multiscale Moving Boundary Model Arising in Cancer Invasion. Multiscale Modeling and Simulation, 2013, 11, 309-335.	1.6	43
66	Intracellular Modelling of Cell-Matrix Adhesion during Cancer Cell Invasion. Mathematical Modelling of Natural Phenomena, 2012, 7, 29-48.	2.4	15
67	Three-scale convergence for processes in heterogeneous media. Applicable Analysis, 2012, 91, 1351-1373.	1.3	30
68	Integrated intravital microscopy and mathematical modeling to optimize nanotherapeutics delivery to tumors. AIP Advances, 2012, 2, 11208.	1.3	84
69	Computational Modeling of Single-Cell Migration: The Leading Role of Extracellular Matrix Fibers. Biophysical Journal, 2012, 103, 1141-1151.	0.5	96
70	A Hybrid Discrete-Continuum Mathematical Model of Pattern Prediction in the Developing Retinal Vasculature. Bulletin of Mathematical Biology, 2012, 74, 2272-2314.	1.9	44
71	Evasion of tumours from the control of the immune system: consequences of brief encounters. Biology Direct, 2012, 7, 31.	4.6	45
72	Integrating Intracellular Dynamics Using CompuCell3D and Bionetsolver: Applications to Multiscale Modelling of Cancer Cell Growth and Invasion. PLoS ONE, 2012, 7, e33726.	2.5	66

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73	Dynamics of angiogenesis during murine retinal development: a coupledin vivoandin silicostudy. Journal of the Royal Society Interface, 2012, 9, 2351-2364.	3.4	36
74	Influence of the Nuclear Membrane, Active Transport, and Cell Shape on the Hes1 and p53â€“Mdm2 Pathways: Insights from Spatio-temporal Modelling. Bulletin of Mathematical Biology, 2012, 74, 1531-1579.	1.9	35
75	Modelling the effects of cell-cycle heterogeneity on the response of a solid tumour to chemotherapy: Biological insights from a hybrid multiscale cellular automaton model. Journal of Theoretical Biology, 2012, 308, 1-19.	1.7	130
76	A Hybrid Discrete-Continuum Model of Tumour Induced Angiogenesis. , 2012, , 105-133.		15
77	Blood Flow and Tumour-Induced Angiogenesis: Dynamically Adapting Vascular Networks. , 2012, , 167-212.		6
78	Spatio-Temporal Modelling of Intracellular Signalling Pathways: Transcription Factors, Negative Feedback Systems and Oscillations. SIMAI Springer Series, 2012, , 55-82.	0.4	2
79	Physical Oncology: A Bench-to-Bedside Quantitative and Predictive Approach. Cancer Research, 2011, 71, 298-302.	0.9	52
80	A Spatio-Temporal Model of Notch Signalling in the Zebrafish Segmentation Clock: Conditions for Synchronised Oscillatory Dynamics. PLoS ONE, 2011, 6, e16980.	2.5	23
81	Dynamics of Angiogenesis During Wound Healing: A Coupled In Vivo and In Silico Study. Microcirculation, 2011, 18, 183-197.	1.8	50
82	Spatio-temporal modelling of the intracellular signalling pathway: The roles of diffusion, active transport, and cell geometry. Journal of Theoretical Biology, 2011, 290, 7-26.	1.7	25
83	Mathematical modeling of cancer cell invasion of tissue: biological insight from mathematical analysis and computational simulation. Journal of Mathematical Biology, 2011, 63, 141-171.	1.9	123
84	A Continuum Mathematical Model of the Developing Murine Retinal Vasculature. Bulletin of Mathematical Biology, 2011, 73, 2430-2451.	1.9	32
85	Spatio-temporal modelling of the Hes1 and p53-Mdm2 intracellular signalling pathways. Journal of Theoretical Biology, 2011, 273, 15-31.	1.7	64
86	Correction: Physical Oncology: A Bench-to-Bedside Quantitative and Predictive Approach. Cancer Research, 2011, 71, 2024-2024.	0.9	0
87	Multiscale mathematical modelling in biology and medicine. IMA Journal of Applied Mathematics, 2011, 76, 371-388.	1.6	34
88	MATHEMATICAL MODELLING OF CANCER INVASION: THE IMPORTANCE OF CELLâ€“CELL ADHESION AND CELLâ€“MATRIX ADHESION. Mathematical Models and Methods in Applied Sciences, 2011, 21, 719-743.	3.3	82
89	Quantifying the Role of Angiogenesis in Malignant Progression of Gliomas: In Silico Modeling Integrates Imaging and Histology. Cancer Research, 2011, 71, 7366-7375.	0.9	217
90	Modelling contact spread of infection in hostâ€“parasitoid systems: Vertical transmission of pathogens can cause chaos. Journal of Theoretical Biology, 2010, 262, 441-451.	1.7	6

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91	Quantitative Modeling of Tumor Dynamics and Radiotherapy. Acta Biotheoretica, 2010, 58, 341-353.	1.5	70
92	Modeling Gastrulation in the Chick Embryo: Formation of the Primitive Streak. PLoS ONE, 2010, 5, e10571.	2.5	63
93	A pharmacodynamic model of Aurora kinase inhibitors in the spindle assembly checkpoint. Frontiers in Bioscience - Landmark, 2010, 15, 249.	3.0	10
94	Modelling the Impact of Pericyte Migration and Coverage of Vessels on the Efficacy of Vascular Disrupting Agents. Mathematical Modelling of Natural Phenomena, 2010, 5, 163-202.	2.4	7
95	Notes on configurational thermostat schemes. Journal of Chemical Physics, 2010, 132, 246101.	3.0	11
96	MATHEMATICAL MODELLING OF CANCER INVASION OF TISSUE: THE ROLE AND EFFECT OF NONLOCAL INTERACTIONS. Mathematical Models and Methods in Applied Sciences, 2009, 19, 257-281.	3.3	132
97	Spatio-Temporal Modelling of the p53â€“mdm2 Oscillatory System. Mathematical Modelling of Natural Phenomena, 2009, 4, 97-116.	2.4	18
98	Paradoxical Dependencies of Tumor Dormancy and Progression on Basic Cell Kinetics. Cancer Research, 2009, 69, 8814-8821.	0.9	175
99	Multiscale modelling and nonlinear simulation of vascular tumour growth. Journal of Mathematical Biology, 2009, 58, 765-798.	1.9	319
100	Preface. Journal of Mathematical Biology, 2009, 58, 481-483.	1.9	4
101	On immunotherapies and cancer vaccination protocols: A mathematical modelling approach. Journal of Theoretical Biology, 2009, 259, 820-827.	1.7	78
102	Multi-scale modelling of cancer cell intravasation: the role of cadherins in metastasis. Physical Biology, 2009, 6, 016008.	1.8	131
103	Mathematical modelling of cancer cell invasion of tissue: Local and non-local models and the effect of adhesion. Journal of Theoretical Biology, 2008, 250, 684-704.	1.7	246
104	A computational model of cell migration coupling the growth of focal adhesions with oscillatory cell protrusions. Journal of Theoretical Biology, 2008, 253, 701-716.	1.7	46
105	Oscillations and bistability in the dynamics of cytotoxic reactions mediated by the response of immune cells to solid tumours. Mathematical and Computer Modelling, 2008, 47, 649-662.	2.0	27
106	Mathematical modelling of cancer cell invasion of tissue. Mathematical and Computer Modelling, 2008, 47, 533-545.	2.0	106
107	Modeling the Influence of the E-Cadherin-Î²-Catenin Pathway in Cancer Cell Invasion: A Multiscale Approach. Biophysical Journal, 2008, 95, 155-165.	0.5	215
108	Modelling Aspects of Cancer Growth: Insight from Mathematical and Numerical Analysis and Computational Simulation. Lecture Notes in Mathematics, 2008, , 147-200.	0.2	20

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109	Modeling the temporal evolution of the spindle assembly checkpoint and role of Aurora B kinase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20215-20220.	7.1	42
110	Disease induced dynamics in hostâ€“parasitoid systems: chaos and coexistence. Journal of the Royal Society Interface, 2007, 4, 463-471.	3.4	18
111	Global convergence of a reactionâ€“diffusion predatorâ€“prey model with stage structure and nonlocal delays. Computers and Mathematics With Applications, 2007, 53, 770-788.	2.7	9
112	A mathematical model of breast cancer development, local treatment and recurrence. Journal of Theoretical Biology, 2007, 246, 245-259.	1.7	176
113	A model of breast carcinogenesis and recurrence after radiotherapy. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1121701-1121702.	0.2	6
114	Chemotaxis-induced spatio-temporal heterogeneity in multi-species host-parasitoid systems. Journal of Mathematical Biology, 2007, 55, 365-388.	1.9	27
115	Thermostats for â€œSlowâ€•Configurational Modes. Journal of Statistical Physics, 2007, 128, 1321-1336.	1.2	150
116	Mathematical modelling of the loss of tissue compression responsiveness and its role in solid tumour development. Mathematical Medicine and Biology, 2006, 23, 197-229.	1.2	161
117	MATHEMATICAL MODELING OF TUMOR-INDUCED ANGIOGENESIS. Annual Review of Biomedical Engineering, 2006, 8, 233-257.	12.3	242
118	Global convergence of a reactionâ€“diffusion predatorâ€“prey model with stage structure for the predator. Applied Mathematics and Computation, 2006, 176, 388-401.	2.2	2
119	Modelling the spatio-temporal dynamics of multi-species hostâ€“parasitoid interactions: Heterogeneous patterns and ecological implications. Journal of Theoretical Biology, 2006, 241, 876-886.	1.7	33
120	Robust numerical methods for taxisâ€“diffusionâ€“reaction systems: Applications to biomedical problems. Mathematical and Computer Modelling, 2006, 43, 49-75.	2.0	71
121	Mathematical modelling of the influence of blood rheological properties upon adaptative tumour-induced angiogenesis. Mathematical and Computer Modelling, 2006, 44, 96-123.	2.0	120
122	A Lotkaâ€“Volterra type food chain model with stage structure and time delays. Journal of Mathematical Analysis and Applications, 2006, 315, 90-105.	1.0	11
123	Travelling wave and convergence in stage-structured reactionâ€“diffusion competitive models with nonlocal delays. Chaos, Solitons and Fractals, 2006, 30, 974-992.	5.1	25
124	Mathematical modelling of radiotherapy strategies for early breast cancer. Journal of Theoretical Biology, 2006, 241, 158-171.	1.7	95
125	Mathematical modelling of dynamic adaptive tumour-induced angiogenesis: Clinical implications and therapeutic targeting strategies. Journal of Theoretical Biology, 2006, 241, 564-589.	1.7	352
126	A novel â€œsandwichâ€•assay for quantifying chemo-regulated cell migration within 3-dimensional matrices: Wound healing cytokines exhibit distinct motogenic activities compared to the transmembrane assay. Cytoskeleton, 2006, 63, 287-300.	4.4	23

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127	Periodic solutions of a Lotkaâ€“Volterra type multi-species population model with time delays. Mathematische Nachrichten, 2006, 279, 911-927.	0.8	0
128	Visualisation of the numerical solution of partial differential equation systems in three space dimensions and its importance for mathematical models in biology. Mathematical Biosciences and Engineering, 2006, 3, 571-582.	1.9	11
129	Evolution of searching and life history characteristics in individual-based models of hostâ€“parasitoidâ€“microbe associations. Journal of Theoretical Biology, 2005, 237, 1-16.	1.7	12
130	Modelling and analysis of a competitive model with stage structure. Mathematical and Computer Modelling, 2005, 41, 159-175.	2.0	11
131	Mathematical modelling of flow in 2D and 3D vascular networks: Applications to anti-angiogenic and chemotherapeutic drug strategies. Mathematical and Computer Modelling, 2005, 41, 1137-1156.	2.0	139
132	A laguerre-legendre spectral-element method for the solution of partial differential equations on infinite domains: Application to the diffusion of tumour angiogenesis factors. Mathematical and Computer Modelling, 2005, 41, 1171-1192.	2.0	14
133	Permanence and periodicity of a delayed ratio-dependent predatorâ€“prey model with stage structure. Journal of Mathematical Analysis and Applications, 2005, 303, 602-621.	1.0	22
134	Periodic solutions for a predatorâ€“prey model with Holling-type functional response and time delays. Applied Mathematics and Computation, 2005, 161, 637-654.	2.2	32
135	Global stability of a stage-structured predator-prey model with prey dispersal. Applied Mathematics and Computation, 2005, 171, 293-314.	2.2	5
136	Dynamic heterogeneous spatio-temporal pattern formation in host-parasitoid systems with synchronised generations. Journal of Mathematical Biology, 2005, 50, 559-583.	1.9	10
137	MATHEMATICAL MODELLING OF CANCER CELL INVASION OF TISSUE: THE ROLE OF THE UROKINASE PLASMINOGEN ACTIVATION SYSTEM. Mathematical Models and Methods in Applied Sciences, 2005, 15, 1685-1734.	3.3	245
138	Global spatiotemporal order and induced stochastic resonance due to a locally applied signal. Physical Review E, 2004, 69, 045102.	2.1	4
139	Periodic solutions for a delayed predator-prey model of prey dispersal in two-patch environments. Nonlinear Analysis: Real World Applications, 2004, 5, 183-206.	1.7	48
140	Periodic solution of a Lotkaâ€“Volterra predatorâ€“prey model with dispersion and time delays. Applied Mathematics and Computation, 2004, 148, 537-560.	2.2	33
141	Persistence and stability of a stage-structured predator-prey model with time delays. Applied Mathematics and Computation, 2004, 150, 259-277.	2.2	24
142	Periodic solutions of a predatorâ€“prey model with stage structure for predator. Applied Mathematics and Computation, 2004, 154, 847-870.	2.2	5
143	Periodic solution for athree-species Lotka-Volterra food-chain model with time delays. Mathematical and Computer Modelling, 2004, 40, 823-837.	2.0	20
144	Persistence and global stability of a ratio-dependent predatorâ€“prey model with stage structure. Applied Mathematics and Computation, 2004, 158, 729-744.	2.2	50

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145	Persistence and periodicity of a delayed ratio-dependent predatorâ€“prey model with stage structure and prey dispersal. Applied Mathematics and Computation, 2004, 159, 823-846.	2.2	5
146	Global stability of a Lotkaâ€“Volterra type predatorâ€“prey model with stage structure and time delay. Applied Mathematics and Computation, 2004, 159, 863-880.	2.2	36
147	A mathematical model for the dynamics of large membrane deformations of isolated fibroblasts. Bulletin of Mathematical Biology, 2004, 66, 1119-1154.	1.9	29
148	Mathematical modelling of the spatio-temporal response of cytotoxic T-lymphocytes to a solid tumour. Mathematical Medicine and Biology, 2004, 21, 1-34.	1.2	145
149	Travelling-wave analysis of a model of the immune response to cancer. Comptes Rendus - Biologies, 2004, 327, 995-1008.	0.2	34
150	Mathematical Modelling of Tumour-induced Angiogenesis: Network Growth and Structure. Cancer Treatment and Research, 2004, 117, 51-75.	0.5	30
151	Mathematical Modelling of Solid Tumour Growth: Applications of Pre-pattern Formation. , 2003, , 283-293.		0
152	Mathematical Modelling of Flow Through Vascular Networks: Implications for Tumour-induced Angiogenesis and Chemotherapy Strategies. Bulletin of Mathematical Biology, 2002, 64, 673-702.	1.9	264
153	Mathematical Modelling of Hostâ€“Parasitoid Systems: Effects of Chemically Mediated Parasitoid Foraging Strategies on Within- and Between-generation Spatio-temporal Dynamics. Journal of Theoretical Biology, 2002, 214, 31-47.	1.7	18
154	Spatio-temporal pattern formation on spherical surfaces: numerical simulation and application to solid tumour growth. Journal of Mathematical Biology, 2001, 42, 387-423.	1.9	169
155	A new mathematical model for avascular tumour growth. Journal of Mathematical Biology, 2001, 43, 291-312.	1.9	211
156	A positive splitting method for mixed hyperbolic-parabolic systems. Numerical Methods for Partial Differential Equations, 2001, 17, 152-168.	3.6	31
157	A gradient-driven mathematical model of antiangiogenesis. Mathematical and Computer Modelling, 2000, 32, 1141-1152.	2.0	23
158	Mathematical modelling of angiogenesis. , 2000, 50, 37-51.		121
159	Modelling the Effects of Paclitaxel and Cisplatin on Breast and Ovarian Cancer. Journal of Theoretical Medicine, 2000, 3, 11-23.	0.5	2
160	Continuous and Discrete Mathematical Models of Tumor-induced Angiogenesis. Bulletin of Mathematical Biology, 1998, 60, 857-899.	1.9	937
161	Free boundary value problems associated with the growth and development of multicellular spheroids. European Journal of Applied Mathematics, 1997, 8, 639-658.	2.9	153
162	Two-dimensional models of tumour angiogenesis and anti-angiogenesis strategies. Mathematical Medicine and Biology, 1997, 14, 189-205.	1.2	104

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163	Growth of necrotic tumors in the presence and absence of inhibitors. Mathematical Biosciences, 1996, 135, 187-216.	1.9	243
164	A mathematical model of the first steps of tumour-related angiogenesis: Capillary sprout formation and secondary branching. Mathematical Medicine and Biology, 1996, 13, 73-98.	1.2	79
165	Avascular growth, angiogenesis and vascular growth in solid tumours: The mathematical modelling of the stages of tumour development. Mathematical and Computer Modelling, 1996, 23, 47-87.	2.0	203
166	A mathematical model of vascular tumour growth and invasion. Mathematical and Computer Modelling, 1996, 23, 43-60.	2.0	101
167	Modelling the role of cell-cell adhesion in the growth and development of carcinomas. Mathematical and Computer Modelling, 1996, 24, 1-17.	2.0	295
168	The role of N-methyl-D-aspartate (NMDA) receptors in wind-up: A mathematical model. Mathematical Medicine and Biology, 1996, 13, 193-205.	1.2	34
169	The mathematical modelling of tumour angiogenesis and invasion. Acta Biotheoretica, 1995, 43, 387-402.	1.5	89
170	A mathematical analysis of a model for tumour angiogenesis. Journal of Mathematical Biology, 1995, 33, 744-70.	1.9	48
171	Mathematical models for tumour angiogenesis: Numerical simulations and nonlinear wave solutions. Bulletin of Mathematical Biology, 1995, 57, 461-486.	1.9	129
172	Growth of nonnecrotic tumors in the presence and absence of inhibitors. Mathematical Biosciences, 1995, 130, 151-181.	1.9	370
173	Nonlinear diffusion of a growth inhibitory factor in multicell spheroids. Mathematical Biosciences, 1994, 121, 1-13.	1.9	32
174	The Strain Energy Function of an Ideal Plant Cell Wall. Journal of Theoretical Biology, 1993, 163, 77-97.	1.7	28
175	Modelling the growth of solid tumours and incorporating a method for their classification using nonlinear elasticity theory. Journal of Mathematical Biology, 1993, 31, 431-73.	1.9	71
176	A qualitative analysis of some models of tissue growth. Mathematical Biosciences, 1993, 113, 77-89.	1.9	51
177	A model mechanism for the chemotactic response of endothelial cells to tumour angiogenesis factor. Mathematical Medicine and Biology, 1993, 10, 149-168.	1.2	169
178	The Development of a Spatial Pattern in a Model for Cancer Growth. , 1993, , 45-59.		19
179	A Mathematical Model for the Diffusion of Tumour Angiogenesis Factor into the Surrounding Host Tissue. Mathematical Medicine and Biology, 1991, 8, 191-220.	1.2	37