

# Alexander A R A Anderson

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

183  
papers

9,032  
citations

48  
h-index

92  
g-index

229  
ext. papers

10,904  
ext. citations

7.3  
avg, IF

6.46  
L-index

#	Paper	IF	Citations
183	Fluctuating methylation clocks for cell lineage tracing at high temporal resolution in human tissues.. <i>Nature Biotechnology</i> , <b>2022</b> ,	44.5	3
182	Immunosuppressive niche engineering at the onset of human colorectal cancer.. <i>Nature Communications</i> , <b>2022</b> , 13, 1798	17.4	0
181	Ovarian cancer immunogenicity is governed by a narrow subset of progenitor tissue-resident memory T cells.. <i>Cancer Cell</i> , <b>2022</b> ,	24.3	2
180	Spatial structure impacts adaptive therapy by shaping intra-tumoral competition. <i>Communications Medicine</i> , <b>2022</b> , 2,		6
179	In Silico Investigations of Multi-Drug Adaptive Therapy Protocols. <i>Cancers</i> , <b>2022</b> , 14, 2699	6.6	1
178	Mistic: An open-source multiplexed image t-SNE viewer. <i>Patterns</i> , <b>2022</b> , 100523	5.1	0
177	Normal tissue architecture determines the evolutionary course of cancer. <i>Nature Communications</i> , <b>2021</b> , 12, 2060	17.4	8
176	Education and Outreach in Physical Sciences in Oncology. <i>Trends in Cancer</i> , <b>2021</b> , 7, 3-9	12.5	2
175	Molecular Determinants of Thyroid Nodules with Indeterminate Cytology and Mutations. <i>Thyroid</i> , <b>2021</b> , 31, 36-49	6.2	4
174	Turnover Modulates the Need for a Cost of Resistance in Adaptive Therapy. <i>Cancer Research</i> , <b>2021</b> , 81, 1135-1147	10.1	18
173	Sex differences in health and disease: A review of biological sex differences relevant to cancer with a spotlight on glioma. <i>Cancer Letters</i> , <b>2021</b> , 498, 178-187	9.9	5
172	The harsh microenvironment in early breast cancer selects for a Warburg phenotype. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	18
171	IgA transcytosis and antigen recognition govern ovarian cancer immunity. <i>Nature</i> , <b>2021</b> , 591, 464-470	50.4	28
170	Adaptive Therapy for Metastatic Melanoma: Predictions from Patient Calibrated Mathematical Models. <i>Cancers</i> , <b>2021</b> , 13,	6.6	9
169	The role of memory in non-genetic inheritance and its impact on cancer treatment resistance. <i>PLoS Computational Biology</i> , <b>2021</b> , 17, e1009348	5	0
168	IgA-dominated humoral immune responses govern patients outcome in endometrial cancer.. <i>Cancer Research</i> , <b>2021</b> ,	10.1	1
167	Comparative study between discrete and continuum models for the evolution of competing phenotype-structured cell populations in dynamical environments. <i>Physical Review E</i> , <b>2020</b> , 102, 042404 <sup>2.4</sup>		4

166	Stromal reactivity differentially drives tumour cell evolution and prostate cancer progression. <i>Nature Ecology and Evolution</i> , <b>2020</b> , 4, 870-884	12.3	10
165	A Mathematical Dissection of the Adaptation of Cell Populations to Fluctuating Oxygen Levels. <i>Bulletin of Mathematical Biology</i> , <b>2020</b> , 82, 81	2.1	9
164	Hybrid Automata Library: A flexible platform for hybrid modeling with real-time visualization. <i>PLoS Computational Biology</i> , <b>2020</b> , 16, e1007635	5	22
163	Mix and Match: Phenotypic Coexistence as a Key Facilitator of Cancer Invasion. <i>Bulletin of Mathematical Biology</i> , <b>2020</b> , 82, 15	2.1	8
162	From cells to tissue: How cell scale heterogeneity impacts glioblastoma growth and treatment response. <i>PLoS Computational Biology</i> , <b>2020</b> , 16, e1007672	5	13
161	Towards Multidrug Adaptive Therapy. <i>Cancer Research</i> , <b>2020</b> , 80, 1578-1589	10.1	60
160	Evolutionary dynamics of competing phenotype-structured populations in periodically fluctuating environments. <i>Journal of Mathematical Biology</i> , <b>2020</b> , 80, 775-807	2	15
159	Inferring Tumor Proliferative Organization from Phylogenetic Tree Measures in a Computational Model. <i>Systematic Biology</i> , <b>2020</b> , 69, 623-637	8.4	6
158	High School Internship Program in Integrated Mathematical Oncology (HIP IMO): Five-Year Experience at Moffitt Cancer Center. <i>Bulletin of Mathematical Biology</i> , <b>2020</b> , 82, 91	2.1	2
157	Histoecology: Applying Ecological Principles and Approaches to Describe and Predict Tumor Ecosystem Dynamics Across Space and Time. <i>Cancer Control</i> , <b>2020</b> , 27, 1073274820946804	2.2	2
156	Searching for Goldilocks: How Evolution and Ecology Can Help Uncover More Effective Patient-Specific Chemotherapies. <i>Cancer Research</i> , <b>2020</b> , 80, 5147-5154	10.1	7
155	Evolutionary dynamics of neoantigens in growing tumors. <i>Nature Genetics</i> , <b>2020</b> , 52, 1057-1066	36.3	21
154	Antibiotic collateral sensitivity is contingent on the repeatability of evolution. <i>Nature Communications</i> , <b>2019</b> , 10, 334	17.4	80
153	NeoPredPipe: high-throughput neoantigen prediction and recognition potential pipeline. <i>BMC Bioinformatics</i> , <b>2019</b> , 20, 264	3.6	33
152	The 2019 mathematical oncology roadmap. <i>Physical Biology</i> , <b>2019</b> , 16, 041005	3	78
151	Multidrug Cancer Therapy in Metastatic Castrate-Resistant Prostate Cancer: An Evolution-Based Strategy. <i>Clinical Cancer Research</i> , <b>2019</b> , 25, 4413-4421	12.9	50
150	Clonal hematopoiesis of indeterminate potential and its impact on patient trajectories after stem cell transplantation. <i>PLoS Computational Biology</i> , <b>2019</b> , 15, e1006913	5	11
149	The impact of proliferation-migration tradeoffs on phenotypic evolution in cancer. <i>Scientific Reports</i> , <b>2019</b> , 9, 2425	4.9	40

148	Lesion Dynamics Under Varying Paracrine PDGF Signaling in Brain Tissue. <i>Bulletin of Mathematical Biology</i> , <b>2019</b> , 81, 1645-1664	2.1	3
147	Recasting the Cancer Stem Cell Hypothesis: Unification Using a Continuum Model of Microenvironmental Forces. <i>Current Stem Cell Reports</i> , <b>2019</b> , 5, 22-30	1.8	7
146	Acidity promotes tumour progression by altering macrophage phenotype in prostate cancer. <i>British Journal of Cancer</i> , <b>2019</b> , 121, 556-566	8.7	40
145	The Goldilocks Window of Personalized Chemotherapy: Getting the Immune Response Just Right. <i>Cancer Research</i> , <b>2019</b> , 79, 5302-5315	10.1	17
144	Leveraging transcriptional dynamics to improve BRAF inhibitor responses in melanoma. <i>EBioMedicine</i> , <b>2019</b> , 48, 178-190	8.8	28
143	The Immune Checkpoint Kick Start: Optimization of Neoadjuvant Combination Therapy Using Game Theory. <i>JCO Clinical Cancer Informatics</i> , <b>2019</b> , 3, 1-12	5.2	15
142	EvoFreq: visualization of the Evolutionary Frequencies of sequence and model data. <i>BMC Bioinformatics</i> , <b>2019</b> , 20, 710	3.6	9
141	Model genotype-phenotype mappings and the algorithmic structure of evolution. <i>Journal of the Royal Society Interface</i> , <b>2019</b> , 16, 20190332	4.1	12
140	Mathematical Oncology. <i>Bulletin of Mathematical Biology</i> , <b>2018</b> , 80, 945-953	2.1	29
139	Comparative dynamics of microglial and glioma cell motility at the infiltrative margin of brain tumours. <i>Journal of the Royal Society Interface</i> , <b>2018</b> , 15,	4.1	12
138	Spatial Heterogeneity and Evolutionary Dynamics Modulate Time to Recurrence in Continuous and Adaptive Cancer Therapies. <i>Cancer Research</i> , <b>2018</b> , 78, 2127-2139	10.1	105
137	Simulating PDGF-Driven Glioma Growth and Invasion in an Anatomically Accurate Brain Domain. <i>Bulletin of Mathematical Biology</i> , <b>2018</b> , 80, 1292-1309	2.1	17
136	Immune interconnectivity of anatomically distant tumors as a potential mediator of systemic responses to local therapy. <i>Scientific Reports</i> , <b>2018</b> , 8, 9474	4.9	25
135	Eco-evolutionary causes and consequences of temporal changes in intratumoural blood flow. <i>Nature Reviews Cancer</i> , <b>2018</b> , 18, 576-585	31.3	77
134	Cell signaling heterogeneity is modulated by both cell-intrinsic and -extrinsic mechanisms: An integrated approach to understanding targeted therapy. <i>PLoS Biology</i> , <b>2018</b> , 16, e2002930	9.7	28
133	The evolutionary landscape of colorectal tumorigenesis. <i>Nature Ecology and Evolution</i> , <b>2018</b> , 2, 1661-1672	2.3	52
132	Defining Cancer Subpopulations by Adaptive Strategies Rather Than Molecular Properties Provides Novel Insights into Intratumoral Evolution. <i>Cancer Research</i> , <b>2017</b> , 77, 2242-2254	10.1	75
131	Homeostasis Back and Forth: An Ecoevolutionary Perspective of Cancer. <i>Cold Spring Harbor Perspectives in Medicine</i> , <b>2017</b> , 7,	5.4	31

130	Classifying the evolutionary and ecological features of neoplasms. <i>Nature Reviews Cancer</i> , <b>2017</b> , 17, 605-619	5.19	208
129	Integrating Models to Quantify Environment-Mediated Drug Resistance. <i>Cancer Research</i> , <b>2017</b> , 77, 5409-5418	21	
128	The Influence of Cellular Characteristics on the Evolution of Shape Homeostasis. <i>Artificial Life</i> , <b>2017</b> , 23, 424-448	1.4	2
127	Systematic Screening of Chemokines to Identify Candidates to Model and Create Ectopic Lymph Node Structures for Cancer Immunotherapy. <i>Scientific Reports</i> , <b>2017</b> , 7, 15996	4.9	11
126	Stem Cell Plasticity and Niche Dynamics in Cancer Progression. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2017</b> , 64, 528-537	5	17
125	The Cancer Stem Cell Fraction in Hierarchically Organized Tumors Can Be Estimated Using Mathematical Modeling and Patient-Specific Treatment Trajectories. <i>Cancer Research</i> , <b>2016</b> , 76, 1705-13	10.1	48
124	Spatial Metrics of Tumour Vascular Organisation Predict Radiation Efficacy in a Computational Model. <i>PLoS Computational Biology</i> , <b>2016</b> , 12, e1004712	5	29
123	Stochasticity in the Genotype-Phenotype Map: Implications for the Robustness and Persistence of Bet-Hedging. <i>Genetics</i> , <b>2016</b> , 204, 1523-1539	4	26
122	Phase i trials in melanoma: A framework to translate preclinical findings to the clinic. <i>European Journal of Cancer</i> , <b>2016</b> , 67, 213-222	7.5	23
121	Big Bang and context-driven collapse. <i>Nature Genetics</i> , <b>2015</b> , 47, 196-7	36.3	17
120	Impact of metabolic heterogeneity on tumor growth, invasion, and treatment outcomes. <i>Cancer Research</i> , <b>2015</b> , 75, 1567-79	10.1	180
119	Bridging scales in cancer progression: mapping genotype to phenotype using neural networks. <i>Seminars in Cancer Biology</i> , <b>2015</b> , 30, 30-41	12.7	9
118	In silico analysis suggests differential response to bevacizumab and radiation combination therapy in newly diagnosed glioblastoma. <i>Journal of the Royal Society Interface</i> , <b>2015</b> , 12, 20150388	4.1	12
117	The evolution of carrying capacity in constrained and expanding tumour cell populations. <i>Physical Biology</i> , <b>2015</b> , 12, 056001	3	18
116	Steering Evolution with Sequential Therapy to Prevent the Emergence of Bacterial Antibiotic Resistance. <i>PLoS Computational Biology</i> , <b>2015</b> , 11, e1004493	5	93
115	A filter-flow perspective of haematogenous metastasis offers a non-genetic paradigm for personalised cancer therapy. <i>European Journal of Cancer</i> , <b>2014</b> , 50, 3068-75	7.5	14
114	Microenvironmental variables must influence intrinsic phenotypic parameters of cancer stem cells to affect tumourigenicity. <i>PLoS Computational Biology</i> , <b>2014</b> , 10, e1003433	5	28
113	PM-04IN SILICO ANALYSIS OF AVAGlio AND RTOG 0825 PHASE III CLINICAL TRIALS SUGGESTS SIGNATURES OF PATIENTS TO RECEIVE BENEFIT FROM COMBINED BEVACIZUMAB AND RADIATION THERAPIES. <i>Neuro-Oncology</i> , <b>2014</b> , 16, v169-v169	1	78

112	Bridging population and tissue scale tumor dynamics: a new paradigm for understanding differences in tumor growth and metastatic disease. <i>Cancer Research</i> , <b>2014</b> , 74, 426-435	10.1	13
111	Inhibition of autophagy enhances the effects of the AKT inhibitor MK-2206 when combined with paclitaxel and carboplatin in BRAF wild-type melanoma. <i>Pigment Cell and Melanoma Research</i> , <b>2014</b> , 27, 465-78	4.5	43
110	Mathematics of the Integrative Cancer Biology Program. <i>Interface Focus</i> , <b>2013</b> , 3, 20130023	3.9	6
109	Senescent fibroblasts in melanoma initiation and progression: an integrated theoretical, experimental, and clinical approach. <i>Cancer Research</i> , <b>2013</b> , 73, 6874-85	10.1	35
108	Modeling Tumor-Associated Edema in Gliomas during Anti-Angiogenic Therapy and Its Impact on Imageable Tumor. <i>Frontiers in Oncology</i> , <b>2013</b> , 3, 66	5.3	48
107	Exploiting ecological principles to better understand cancer progression and treatment. <i>Interface Focus</i> , <b>2013</b> , 3, 20130020	3.9	66
106	A mathematical model of tumour self-seeding reveals secondary metastatic deposits as drivers of primary tumour growth. <i>Journal of the Royal Society Interface</i> , <b>2013</b> , 10, 20130011	4.1	34
105	Evolution of intratumoral phenotypic heterogeneity: the role of trait inheritance. <i>Interface Focus</i> , <b>2013</b> , 3, 20130016	3.9	28
104	Mathematical Modeling of the Metastatic Process <b>2013</b> , 189-208		16
103	Cellular modeling of cancer invasion: integration of in silico and in vitro approaches. <i>Journal of Cellular Physiology</i> , <b>2012</b> , 227, 431-8	7	50
102	Unifying metastasis--integrating intravasation, circulation and end-organ colonization. <i>Nature Reviews Cancer</i> , <b>2012</b> , 12, 445-6	31.3	38
101	Exploiting evolution to treat drug resistance: combination therapy and the double bind. <i>Molecular Pharmaceutics</i> , <b>2012</b> , 9, 914-21	5.6	96
100	Applying a patient-specific bio-mathematical model of glioma growth to develop virtual [18F]-FMISO-PET images. <i>Mathematical Medicine and Biology</i> , <b>2012</b> , 29, 31-48	1.3	39
99	Computational investigation of intrinsic and extrinsic mechanisms underlying the formation of carcinoma. <i>Mathematical Medicine and Biology</i> , <b>2012</b> , 29, 67-84	1.3	12
98	Investigating prostate cancer tumour-stroma interactions: clinical and biological insights from an evolutionary game. <i>British Journal of Cancer</i> , <b>2012</b> , 106, 174-81	8.7	70
97	A Hybrid Discrete-Continuum Model of Tumour Induced Angiogenesis <b>2012</b> , 105-133		12
96	Blood Flow and Tumour-Induced Angiogenesis: Dynamically Adapting Vascular Networks <b>2012</b> , 167-212		6
95	Fibroblasts contribute to melanoma tumor growth and drug resistance. <i>Molecular Pharmaceutics</i> , <b>2011</b> , 8, 2039-49	5.6	90

94	The role of IDH1 mutated tumour cells in secondary glioblastomas: an evolutionary game theoretical view. <i>Physical Biology</i> , <b>2011</b> , 8, 015016	3	43
93	Investigating prostate cancer tumour-stroma interactions - clinical and biological insights from an evolutionary game. <i>Nature Precedings</i> , <b>2011</b> ,		1
92	Evolving homeostatic tissue using genetic algorithms. <i>Progress in Biophysics and Molecular Biology</i> , <b>2011</b> , 106, 414-25	4.7	16
91	Hybrid models of tumor growth. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , <b>2011</b> , 3, 115-25	6.6	195
90	PTEN loss confers BRAF inhibitor resistance to melanoma cells through the suppression of BIM expression. <i>Cancer Research</i> , <b>2011</b> , 71, 2750-60	10.1	419
89	Production of 2-hydroxyglutarate by isocitrate dehydrogenase 1-mutated gliomas: an evolutionary alternative to the Warburg shift?. <i>Neuro-Oncology</i> , <b>2011</b> , 13, 1262-4	1	6
88	Quantifying the role of angiogenesis in malignant progression of gliomas: in silico modeling integrates imaging and histology. <i>Cancer Research</i> , <b>2011</b> , 71, 7366-75	10.1	174
87	Abstract 24: A genetic model of metastatic evolution: Driver and passenger mutations affect metastatic fitness <b>2011</b> ,		2
86	A multiscale model of the bone marrow and hematopoiesis. <i>Mathematical Biosciences and Engineering</i> , <b>2011</b> , 8, 643-58	2.1	14
85	Modelling the Impact of Pericyte Migration and Coverage of Vessels on the Efficacy of Vascular Disrupting Agents. <i>Mathematical Modelling of Natural Phenomena</i> , <b>2010</b> , 5, 163-202	3	6
84	Linking changes in epithelial morphogenesis to cancer mutations using computational modeling. <i>PLoS Computational Biology</i> , <b>2010</b> , 6, e1000900	5	35
83	The biology underlying molecular imaging in oncology: from genome to anatome and back again. <i>Clinical Radiology</i> , <b>2010</b> , 65, 517-21	2.9	84
82	Perspectives on tissue interactions in development and disease. <i>Current Molecular Medicine</i> , <b>2010</b> , 10, 95-112	2.5	27
81	Evolution, Regulation and Disruption of Homeostatis and Its Role in Carcinogenesis. <i>Chapman &amp; Hall/CRC Mathematical and Computational Biology Series</i> , <b>2010</b> , 1-30		2
80	Diffusion-limited tumour growth: simulations and analysis. <i>Mathematical Biosciences and Engineering</i> , <b>2010</b> , 7, 385-400	2.1	16
79	Microenvironmental independence associated with tumor progression. <i>Cancer Research</i> , <b>2009</b> , 69, 8797-8806		48
78	Paradoxical dependencies of tumor dormancy and progression on basic cell kinetics. <i>Cancer Research</i> , <b>2009</b> , 69, 8814-21	10.1	144
77	The role of transforming growth factor-beta-mediated tumor-stroma interactions in prostate cancer progression: an integrative approach. <i>Cancer Research</i> , <b>2009</b> , 69, 7111-20	10.1	51



76	Gene divergence and pathway duplication in the metabolic network of yeast and digital organisms. <i>Journal of the Royal Society Interface</i> , <b>2009</b> , 6, 1233-45	4.1	3
75	Nest expansion assay: a cancer systems biology approach to in vitro invasion measurements. <i>BMC Research Notes</i> , <b>2009</b> , 2, 130	2.3	21
74	Front instabilities and invasiveness of simulated avascular tumors. <i>Bulletin of Mathematical Biology</i> , <b>2009</b> , 71, 1189-227	2.1	44
73	Microenvironment driven invasion: a multiscale multimodel investigation. <i>Journal of Mathematical Biology</i> , <b>2009</b> , 58, 579-624	2	77
72	Multiscale modelling and nonlinear simulation of vascular tumour growth. <i>Journal of Mathematical Biology</i> , <b>2009</b> , 58, 765-98	2	270
71	Evolution of cell motility in an individual-based model of tumour growth. <i>Journal of Theoretical Biology</i> , <b>2009</b> , 259, 67-83	2.3	51
70	Modelling evolutionary cell behaviour using neural networks: application to tumour growth. <i>BioSystems</i> , <b>2009</b> , 95, 166-74	1.9	18
69	Multi-scale modelling of cancer cell intravasation: the role of cadherins in metastasis. <i>Physical Biology</i> , <b>2009</b> , 6, 016008	3	109
68	A spatial model of tumor-host interaction: application of chemotherapy. <i>Mathematical Biosciences and Engineering</i> , <b>2009</b> , 6, 521-46	2.1	56
67	Integrative mathematical oncology. <i>Nature Reviews Cancer</i> , <b>2008</b> , 8, 227-34	31.3	317
66	Invasion emerges from cancer cell adaptation to competitive microenvironments: quantitative predictions from multiscale mathematical models. <i>Seminars in Cancer Biology</i> , <b>2008</b> , 18, 338-48	12.7	54
65	Modeling the influence of the E-cadherin-beta-catenin pathway in cancer cell invasion: a multiscale approach. <i>Biophysical Journal</i> , <b>2008</b> , 95, 155-65	2.9	184
64	Dependence of invadopodia function on collagen fiber spacing and cross-linking: computational modeling and experimental evidence. <i>Biophysical Journal</i> , <b>2008</b> , 95, 2203-18	2.9	59
63	Model-controlled hydrodynamic focusing to generate multiple overlapping gradients of surface-immobilized proteins in microfluidic devices. <i>Lab on A Chip</i> , <b>2008</b> , 8, 238-44	7.2	25
62	A computational study of the development of epithelial acini: I. Sufficient conditions for the formation of a hollow structure. <i>Bulletin of Mathematical Biology</i> , <b>2008</b> , 70, 677-712	2.1	43
61	A computational study of the development of epithelial acini: II. Necessary conditions for structure and lumen stability. <i>Bulletin of Mathematical Biology</i> , <b>2008</b> , 70, 1450-79	2.1	29
60	A hybrid cellular automaton model of clonal evolution in cancer: the emergence of the glycolytic phenotype. <i>Journal of Theoretical Biology</i> , <b>2008</b> , 250, 705-22	2.3	99
59	Mathematical modelling of cancer cell invasion of tissue. <i>Mathematical and Computer Modelling</i> , <b>2008</b> , 47, 533-545		81



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57	Cell kinetics underlying grading of gliomas. <i>FASEB Journal</i> , <b>2008</b> , 22, 706.9	0.9	
56	A Hybrid Multiscale Model of Solid Tumour Growth and Invasion: Evolution and the Microenvironment <b>2007</b> , 3-28		10
55	A mathematical model of breast cancer development, local treatment and recurrence. <i>Journal of Theoretical Biology</i> , <b>2007</b> , 246, 245-59	2.3	143
54	A model of breast carcinogenesis and recurrence after radiotherapy. <i>Proceedings in Applied Mathematics and Mechanics</i> , <b>2007</b> , 7, 1121701-1121702	0.2	6
53	Chemotaxis-induced spatio-temporal heterogeneity in multi-species host-parasitoid systems. <i>Journal of Mathematical Biology</i> , <b>2007</b> , 55, 365-88	2	27
52	An evolutionary hybrid cellular automaton model of solid tumour growth. <i>Journal of Theoretical Biology</i> , <b>2007</b> , 246, 583-603	2.3	156
51	Modelling of Cancer Growth, Evolution and Invasion: Bridging Scales and Models. <i>Mathematical Modelling of Natural Phenomena</i> , <b>2007</b> , 2, 1-29	3	30
50	A Hybrid Mathematical Model of Solid Tumour Growth: Bridging the Genotype to Phenotype Chasm. <i>FASEB Journal</i> , <b>2007</b> , 21, A97	0.9	1
49	Mathematical modelling of radiotherapy strategies for early breast cancer. <i>Journal of Theoretical Biology</i> , <b>2006</b> , 241, 158-71	2.3	74
48	Mathematical modelling of dynamic adaptive tumour-induced angiogenesis: clinical implications and therapeutic targeting strategies. <i>Journal of Theoretical Biology</i> , <b>2006</b> , 241, 564-89	2.3	293
47	A novel Sandwich Assay for quantifying chemo-regulated cell migration within 3-dimensional matrices: wound healing cytokines exhibit distinct motogenic activities compared to the transmembrane assay. <i>Cytoskeleton</i> , <b>2006</b> , 63, 287-300		21
46	Computational Methods and Results for Structured Multiscale Models of Tumor Invasion. <i>Multiscale Modeling and Simulation</i> , <b>2006</b> , 5, 1-20	1.8	42
45	Mathematical modeling of tumor-induced angiogenesis. <i>Annual Review of Biomedical Engineering</i> , <b>2006</b> , 8, 233-57	12	200
44	Tumor morphology and phenotypic evolution driven by selective pressure from the microenvironment. <i>Cell</i> , <b>2006</b> , 127, 905-15	56.2	573
43	Modelling the spatio-temporal dynamics of multi-species host-parasitoid interactions: heterogeneous patterns and ecological implications. <i>Journal of Theoretical Biology</i> , <b>2006</b> , 241, 876-86	2.3	28
42	Mathematical modelling of the influence of blood rheological properties upon adaptive tumour-induced angiogenesis. <i>Mathematical and Computer Modelling</i> , <b>2006</b> , 44, 96-123		105
41	Visualisation of the numerical solution of partial differential equation systems in three space dimensions and its importance for mathematical models in biology. <i>Mathematical Biosciences and Engineering</i> , <b>2006</b> , 3, 571-82	2.1	10

40	A hybrid mathematical model of solid tumour invasion: the importance of cell adhesion. <i>Mathematical Medicine and Biology</i> , <b>2005</b> , 22, 163-86	1.3	398
39	Mathematical modeling of cancer: the future of prognosis and treatment. <i>Clinica Chimica Acta</i> , <b>2005</b> , 357, 173-9	6.2	79
38	Mathematical modelling of flow in 2D and 3D vascular networks: Applications to anti-angiogenic and chemotherapeutic drug strategies. <i>Mathematical and Computer Modelling</i> , <b>2005</b> , 41, 1137-1156		124
37	An individual based model of rippling movement in a myxobacteria population. <i>Journal of Theoretical Biology</i> , <b>2005</b> , 234, 341-9	2.3	7
36	Mathematical modelling of tumour-induced angiogenesis: network growth and structure. <i>Cancer Treatment and Research</i> , <b>2004</b> , 117, 51-75	3.5	26
35	Application of the Hybrid Discrete-continuum Technique <b>2003</b> , 261-279		2
34	A Hybrid Discrete-continuum Technique for Individual-based Migration Models <b>2003</b> , 251-259		5
33	Mathematical modelling of flow through vascular networks: implications for tumour-induced angiogenesis and chemotherapy strategies. <i>Bulletin of Mathematical Biology</i> , <b>2002</b> , 64, 673-702	2.1	234
32	How simple grazing rules can lead to persistent boundaries in vegetation communities. <i>Oikos</i> , <b>2001</b> , 95, 15-24	4	8
31	A gradient-driven mathematical model of antiangiogenesis. <i>Mathematical and Computer Modelling</i> , <b>2000</b> , 32, 1141-1152		20
30	A mathematical analysis of a model for capillary network formation in the absence of endothelial cell proliferation. <i>Applied Mathematics Letters</i> , <b>1999</b> , 12, 121-127	3.5	27
29	Continuous and discrete mathematical models of tumor-induced angiogenesis. <i>Bulletin of Mathematical Biology</i> , <b>1998</b> , 60, 857-99	2.1	756
28	Understanding the potential benefits of adaptive therapy for metastatic melanoma		1
27	VALIS: Virtual Alignment of pathoLogY Image Series		1
26	Turnover modulates the need for a cost of resistance in adaptive therapy		6
25	Non-linear tumor-immune interactions arising from spatial metabolic heterogeneity		4
24	Stem Cell Plasticity and Niche Dynamics in Cancer Progression		1
23	MultiCellDS: a community-developed standard for curating microenvironment-dependent multicellular data		8

22	MultiCellDS: a standard and a community for sharing multicellular data	7
21	Spatial heterogeneity and evolutionary dynamics modulate time to recurrence in continuous and adaptive cancer therapies	6
20	Stromal Reactivity Differentially Drives Tumor Cell Evolution and Prostate Cancer Progression	2
19	Hybrid approach for parameter estimation in agent-based models	2
18	Antibiotic collateral sensitivity is contingent on the repeatability of evolution	2
17	Spatial structure impacts adaptive therapy by shaping intra-tumoral competition	4
16	The dynamic tumor ecosystem: how cell turnover and trade-offs affect cancer evolution	4
15	Using neural networks to bridge scales in cancer: Mapping signaling pathways to phenotypes	1
14	Inferring Tumour Proliferative Organisation from Phylogenetic Tree Measures in a Computational Model	1
13	NeoPredPipe: High-Throughput Neoantigen Prediction and Recognition Potential Pipeline	2
12	Hybrid Automata Library: A modular platform for efficient hybrid modeling with real-time visualization	5
11	Towards multi-drug adaptive therapy	6
10	Acidity promotes tumor progression by altering macrophage phenotype in prostate cancer	4
9	Evolutionary dynamics of neoantigens in growing tumours	5
8	Tissue structure accelerates evolution: premalignant sweeps precede neutral expansion	4
7	Clonal Architecture of the Epidermis: Homeostasis Limits Keratinocyte Evolution	3
6	Macrophage-mediated immunoediting drives ductal carcinoma evolution: Space is the game changer	3
5	Niche engineering drives early passage through an immune bottleneck in progression to colorectal cancer	5

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