Katarzyna A Rejniak

List of Publications by Year
in descending order

43	1,900	304602 22	276775 41
papers	citations	h-index	g-index

50	50	50	2114
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Collective Cell Migration in a Fibrous Environment: A Hybrid Multiscale Modelling Approach. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	0.7	15
2	Bridging cell-scale simulations and radiologic images to explain short-time intratumoral oxygen fluctuations. PLoS Computational Biology, 2021, 17, e1009206.	1.5	7
3	Hybrid modeling frameworks of tumor development and treatment. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2020, 12, e1461.	6.6	56
4	High School Internship Program in Integrated Mathematical Oncology (HIP IMO): Five-Year Experience at Moffitt Cancer Center. Bulletin of Mathematical Biology, 2020, 82, 91.	0.9	4
5	Comparison of Drug Inhibitory Effects ($$hbox {IC}_{50}$$) in Monolayer and Spheroid Cultures. Bulletin of Mathematical Biology, 2020, 82, 68.	0.9	46
6	Drug-Induced Resistance in Micrometastases: Analysis of Spatio-Temporal Cell Lineages. Frontiers in Physiology, 2020, 11, 319.	1.3	21
7	Morphophenotypic classification of tumor organoids as an indicator of drug exposure and penetration potential. PLoS Computational Biology, 2019, 15, e1007214.	1.5	24
8	Single-Cell-Based In Silico Models: A Tool for Dissecting Tumor Heterogeneity. , 2019, , 130-143.		6
9	Micropharmacology: An In Silico Approach for Assessing Drug Efficacy Within a Tumor Tissue. Bulletin of Mathematical Biology, 2019, 81, 3623-3641.	0.9	19
10	Towards personalized computational oncology: from spatial models of tumour spheroids, to organoids, to tissues. Journal of the Royal Society Interface, 2018, 15, 20170703.	1.5	101
11	Targeting Ligand Specificity Linked to Tumor Tissue Topological Heterogeneity via Single-Cell Micro-Pharmacological Modeling. Scientific Reports, 2018, 8, 3638.	1.6	12
12	Mathematical Modeling of Tumor Organoids: Toward Personalized Medicine. Cancer Drug Discovery and Development, 2018, , 193-213.	0.2	1
13	Circulating Tumor Cells: When a Solid Tumor Meets a Fluid Microenvironment. Advances in Experimental Medicine and Biology, 2016, 936, 93-106.	0.8	68
14	Microenvironmental Niches and Sanctuaries: A Route to Acquired Resistance. Advances in Experimental Medicine and Biology, 2016, 936, 149-164.	0.8	24
15	Limiting the development of anti-cancer drug resistance in a spatial model of micrometastases. Mathematical Biosciences and Engineering, 2016, 13, 1185-1206.	1.0	26
16	Pathology to Enhance Precision Medicine in Oncology. Advances in Anatomic Pathology, 2015, 22, 267-272.	2.4	30
17	Diagnostic assessment of osteosarcoma chemoresistance based on Virtual Clinical Trials. Medical Hypotheses, 2015, 85, 348-354.	0.8	24
18	Pyruvate sensitizes pancreatic tumors to hypoxia-activated prodrug TH-302. Cancer & Metabolism, 2015, 3, 2.	2.4	69

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19	Emergence of Anti-Cancer Drug Resistance: Exploring the Importance of the Microenvironmental Niche via a Spatial Model. The IMA Volumes in Mathematics and Its Applications, 2015, , 1-34.	0.5	16
20	Mechanical Aspects of Microtubule Bundling in Taxane-Treated Circulating Tumor Cells. Biophysical Journal, 2014, 107, 1236-1246.	0.2	9
21	The formation of tight tumor clusters affects the efficacy of cell cycle inhibitors: A hybrid model study. Journal of Theoretical Biology, 2014, 352, 31-50.	0.8	26
22	On a conditionally stable nonlinear method to approximate some monotone and bounded solutions of a generalized population model. Applied Mathematics and Computation, 2014, 229, 273-282.	1.4	5
23	IBCell Morphocharts: A Computational Model for Linking Cell Molecular Activity with Emerging Tissue Morphology. Natural Computing Series, 2014, , 507-524.	2.2	3
24	Current Advances in Mathematical Modeling of Anti-Cancer Drug Penetration into Tumor Tissues. Frontiers in Oncology, 2013, 3, 278.	1.3	102
25	The Role of Tumor Tissue Architecture in Treatment Penetration and Efficacy: An Integrative Study. Frontiers in Oncology, 2013, 3, 111.	1.3	62
26	Simulating Cancer: Computational Models in Oncology. Frontiers in Oncology, 2013, 3, 233.	1.3	23
27	Computational investigation of intrinsic and extrinsic mechanisms underlying the formation of carcinoma. Mathematical Medicine and Biology, 2012, 29, 67-84.	0.8	15
28	Homeostatic Imbalance in Epithelial Ducts and Its Role in Carcinogenesis. Scientifica, 2012, 2012, 1-8.	0.6	9
29	Investigating dynamical deformations of tumor cells in circulation: predictions from a theoretical model. Frontiers in Oncology, 2012, 2, 111.	1.3	40
30	Cellular modeling of cancer invasion: Integration of in silico and in vitro approaches. Journal of Cellular Physiology, 2012, 227, 431-438.	2.0	68
31	Hybrid models of tumor growth. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2011, 3, 115-125.	6.6	256
32	Current trends in mathematical modeling of tumorâ€“microenvironment interactions: a survey of tools and applications. Experimental Biology and Medicine, 2010, 235, 411-423.	1.1	54
33	Linking Changes in Epithelial Morphogenesis to Cancer Mutations Using Computational Modeling. PLoS Computational Biology, 2010, 6, e1000900.	1.5	38
34	Microenvironment driven invasion: a multiscale multimodel investigation. Journal of Mathematical Biology, 2009, 58, 579-624.	0.8	92
35	A Computational Study of the Development of Epithelial Acini: I.ÂSufficient Conditions for the Formation of a Hollow Structure. Bulletin of Mathematical Biology, 2008, 70, 677-712.	0.9	54
36	A Computational Study of the Development of Epithelial Acini: II.ÂNecessary Conditions for Structure and Lumen Stability. Bulletin of Mathematical Biology, 2008, 70, 1450-1479.	0.9	36

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37	Invasion emerges from cancer cell adaptation to competitive microenvironments: Quantitative predictions from multiscale mathematical models. Seminars in Cancer Biology, 2008, 18, 338-348.	4.3	64
38	A Single Cell-Based Model of the Ductal Tumour Microarchitecture. Computational and Mathematical Methods in Medicine, 2007, 8, 51-69.	0.7	63
39	Modelling the Development of Complex Tissues Using Individual Viscoelastic Cells. , 2007, , 301-323.		11
40	An immersed boundary framework for modelling the growth of individual cells: An application to the early tumour development. Journal of Theoretical Biology, 2007, 247, 186-204.	0.8	156
41	A Single-Cell Approach in Modeling the Dynamics of Tumor Microregions. Mathematical Biosciences and Engineering, 2005, 2, 643-655.	1.0	68
42	Digital Transcriptome Analysis in the Aging Cerebellum. Annals of the New York Academy of Sciences, 2004, 1019, 58-63.	1.8	7
43	A computational model of the mechanics of growth of the villous trophoblast bilayer. Bulletin of Mathematical Biology, 2004, 66, 199-232.	0.9	50