

# Dumitru Trucu

## List of Publications by Year in descending order

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26  
papers

514  
citations

840776

11  
h-index

677142

22  
g-index

30  
all docs

30  
docs citations

30  
times ranked

400  
citing authors

#	ARTICLE	IF	CITATIONS
1	Re-polarisation of Macrophages Within Collective Tumour Cell Migration: A Multiscale Moving Boundary Approach. <i>Frontiers in Applied Mathematics and Statistics</i> , 2022, 7, .	1.3	6
2	Inverse problem approaches for mutation laws in heterogeneous tumours with local and nonlocal dynamics. <i>Mathematical Biosciences and Engineering</i> , 2022, 19, 3720-3747.	1.9	3
3	Nonlocal multiscale modelling of tumour-oncolytic viruses interactions within a heterogeneous fibrous/non-fibrous extracellular matrix. <i>Mathematical Biosciences and Engineering</i> , 2022, 19, 6157-6185.	1.9	2
4	Computational Model of Heterogeneity in Melanoma: Designing Therapies and Predicting Outcomes. <i>Frontiers in Oncology</i> , 2022, 12, 857572.	2.8	4
5	Non-local multiscale approach for the impact of go or grow hypothesis on tumour-viruses interactions. <i>Mathematical Biosciences and Engineering</i> , 2021, 18, 5252-5284.	1.9	3
6	Collective Cell Migration in a Fibrous Environment: A Hybrid Multiscale Modelling Approach. <i>Frontiers in Applied Mathematics and Statistics</i> , 2021, 7, .	1.3	15
7	Mathematical Modelling of Glioblastomas Invasion within the Brain: A 3D Multi-Scale Moving-Boundary Approach. <i>Mathematics</i> , 2021, 9, 2214.	2.2	6
8	Oncolytic viral therapies and the delicate balance between virus-macrophage-tumour interactions: a mathematical approach. <i>Mathematical Biosciences and Engineering</i> , 2021, 18, 764-799.	1.9	10
9	Multiscale dynamics of a heterotypic cancer cell population within a fibrous extracellular matrix. <i>Journal of Theoretical Biology</i> , 2020, 486, 110040.	1.7	13
10	Multiscale moving boundary modelling of cancer interactions with a fusogenic oncolytic virus: The impact of syncytia dynamics. <i>Mathematical Biosciences</i> , 2020, 323, 108296.	1.9	13
11	Directionality of Macrophages Movement in Tumour Invasion: A Multiscale Moving-Boundary Approach. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 148.	1.9	15
12	Cell-Scale Degradation of Peritumoural Extracellular Matrix Fibre Network and Its Role Within Tissue-Scale Cancer Invasion. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 65.	1.9	10
13	Spatio-Genetic and phenotypic modelling elucidates resistance and re-sensitisation to treatment in heterogeneous melanoma. <i>Journal of Theoretical Biology</i> , 2019, 466, 84-105.	1.7	12
14	Multiscale modelling of cancer response to oncolytic viral therapy. <i>Mathematical Biosciences</i> , 2019, 310, 76-95.	1.9	42
15	Multiscale Modelling of Fibres Dynamics and Cell Adhesion within Moving Boundary Cancer Invasion. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 2176-2219.	1.9	27
16	Computational Approaches and Analysis for a Spatio-Structural-Temporal Invasive Carcinoma Model. <i>Bulletin of Mathematical Biology</i> , 2018, 80, 701-737.	1.9	9
17	Aggregation and travelling wave dynamics in a two-population model of cancer cell growth and invasion. <i>Mathematical Medicine and Biology</i> , 2018, 35, 541-577.	1.2	10
18	Signal Propagation in Sensing and Reciprocating Cellular Systems with Spatial and Structural Heterogeneity. <i>Bulletin of Mathematical Biology</i> , 2018, 80, 1900-1936.	1.9	7

#	ARTICLE	IF	CITATIONS
19	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
20	Two-Scale Moving Boundary Dynamics of Cancer Invasion: Heterotypic Cell Populations's Evolution in Heterogeneous ECM. Modeling and Simulation in Science, Engineering and Technology, 2018, , 1-26.	0.6	1
21	A Multiscale Mathematical Model of Tumour Invasive Growth. Bulletin of Mathematical Biology, 2017, 79, 389-429.	1.9	40
22	Structured models of cell migration incorporating molecular binding processes. Journal of Mathematical Biology, 2017, 75, 1517-1561.	1.9	24
23	Multiple scales modelling approaches to social interaction in crowd dynamics and crisis management. Comment on "Human behaviours in evacuation crowd dynamics: From modelling to big data" toward crisis management" by Nicola Bellomo et al.. Physics of Life Reviews, 2016, 18, 53-54.	2.8	2
24	Strategies of Eradicating Glioma Cells: A Multi-Scale Mathematical Model with MiR-451-AMPK-mTOR Control. PLoS ONE, 2015, 10, e0114370.	2.5	42
25	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
26	A Multiscale Moving Boundary Model Arising in Cancer Invasion. Multiscale Modeling and Simulation, 2013, 11, 309-335.	1.6	43