Dumitru Trucu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9283824/publications.pdf

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26	514	840776 11	677142 22
papers	citations	h-index	g-index

30	30	30	400
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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
2	A Multiscale Moving Boundary Model Arising in Cancer Invasion. Multiscale Modeling and Simulation, 2013, 11, 309-335.	1.6	43
3	Strategies of Eradicating Glioma Cells: A Multi-Scale Mathematical Model with MiR-451-AMPK-mTOR Control. PLoS ONE, 2015, 10, e0114370.	2.5	42
4	Multiscale modelling of cancer response to oncolytic viral therapy. Mathematical Biosciences, 2019, 310, 76-95.	1.9	42
5	A Multiscale Mathematical Model of Tumour Invasive Growth. Bulletin of Mathematical Biology, 2017, 79, 389-429.	1.9	40
6	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
7	Multiscale Modelling of Fibres Dynamics and Cell Adhesion within Moving Boundary Cancer Invasion. Bulletin of Mathematical Biology, 2019, 81, 2176-2219.	1.9	27
8	Structured models of cell migration incorporating molecular binding processes. Journal of Mathematical Biology, 2017, 75, 1517-1561.	1.9	24
9	Directionality of Macrophages Movement in Tumour Invasion: A Multiscale Moving-Boundary Approach. Bulletin of Mathematical Biology, 2020, 82, 148.	1.9	15
10	Collective Cell Migration in a Fibrous Environment: A Hybrid Multiscale Modelling Approach. Frontiers in Applied Mathematics and Statistics, 2021, 7, .	1.3	15
11	Multiscale dynamics of a heterotypic cancer cell population within a fibrous extracellular matrix. Journal of Theoretical Biology, 2020, 486, 110040.	1.7	13
12	Multiscale moving boundary modelling of cancer interactions with a fusogenic oncolytic virus: The impact of syncytia dynamics. Mathematical Biosciences, 2020, 323, 108296.	1.9	13
13	Spatio-Genetic and phenotypic modelling elucidates resistance and re-sensitisation to treatment in heterogeneous melanoma. Journal of Theoretical Biology, 2019, 466, 84-105.	1.7	12
14	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
15	Cell-Scale Degradation of Peritumoural Extracellular Matrix Fibre Network and Its Role Within Tissue-Scale Cancer Invasion. Bulletin of Mathematical Biology, 2020, 82, 65.	1.9	10
16	Oncolytic viral therapies and the delicate balance between virus-macrophage-tumour interactions: a mathematical approach. Mathematical Biosciences and Engineering, 2021, 18, 764-799.	1.9	10
17	Computational Approaches and Analysis for a Spatio-Structural-Temporal Invasive Carcinoma Model. Bulletin of Mathematical Biology, 2018, 80, 701-737.	1.9	9
18	Signal Propagation in Sensing and Reciprocating Cellular Systems with Spatial and Structural Heterogeneity. Bulletin of Mathematical Biology, 2018, 80, 1900-1936.	1.9	7

#	Article	IF	Citations
19	Mathematical Modelling of Glioblastomas Invasion within the Brain: A 3D Multi-Scale Moving-Boundary Approach. Mathematics, 2021, 9, 2214.	2.2	6
20	Re-polarisation of Macrophages Within Collective Tumour Cell Migration: A Multiscale Moving Boundary Approach. Frontiers in Applied Mathematics and Statistics, 2022, 7, .	1.3	6
21	Computational Model of Heterogeneity in Melanoma: Designing Therapies and Predicting Outcomes. Frontiers in Oncology, 2022, 12, 857572.	2.8	4
22	Non-local multiscale approach for the impact of go or grow hypothesis on tumour-viruses interactions. Mathematical Biosciences and Engineering, 2021, 18, 5252-5284.	1.9	3
23	Inverse problem approaches for mutation laws in heterogeneous tumours with local and nonlocal dynamics. Mathematical Biosciences and Engineering, 2022, 19, 3720-3747.	1.9	3
24	Multiple scales modelling approaches to social interaction in crowd dynamics and crisis management. Comment on â€œHuman behaviours in evacuation crowd dynamics: From modelling to â€œbig dataâ€•toward crisis managementâ€•by Nicola Bellomo et al.. Physics of Life Reviews, 2016, 18, 53-54.	2.8	2
25	Nonlocal multiscale modelling of tumour-oncolytic viruses interactions within a heterogeneous fibrous/non-fibrous extracellular matrix. Mathematical Biosciences and Engineering, 2022, 19, 6157-6185.	1.9	2
26	Two-Scale Moving Boundary Dynamics of Cancer Invasion: Heterotypic Cell Populationsâ€™ Evolution in Heterogeneous ECM. Modeling and Simulation in Science, Engineering and Technology, 2018, , 1-26.	0.6	1