

Raluca Eftimie

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7049541/publications.pdf>

Version: 2024-02-01

70
papers

1,466
citations

430874

18
h-index

345221

36
g-index

76
all docs

76
docs citations

76
times ranked

1167
citing authors

#	ARTICLE	IF	CITATIONS
1	Interactions Between the Immune System and Cancer: A Brief Review of Non-spatial Mathematical Models. Bulletin of Mathematical Biology, 2011, 73, 2-32.	1.9	330
2	Mathematical Models for Immunology: Current State of the Art and Future Research Directions. Bulletin of Mathematical Biology, 2016, 78, 2091-2134.	1.9	143
3	Complex spatial group patterns result from different animal communication mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 6974-6979.	7.1	97
4	Hyperbolic and kinetic models for self-organized biological aggregations and movement: a brief review. Journal of Mathematical Biology, 2012, 65, 35-75.	1.9	79
5	Modeling Group Formation and Activity Patterns in Self-Organizing Collectives of Individuals. Bulletin of Mathematical Biology, 2007, 69, 1537-1565.	1.9	66
6	The re-polarisation of M2 and M1 macrophages and its role on cancer outcomes. Journal of Theoretical Biology, 2016, 390, 23-39.	1.7	56
7	Multi-Stability and Multi-Instability Phenomena in a Mathematical Model of Tumor-Immune-Virus Interactions. Bulletin of Mathematical Biology, 2011, 73, 2932-2961.	1.9	45
8	Multiscale modelling of cancer response to oncolytic viral therapy. Mathematical Biosciences, 2019, 310, 76-95.	1.9	42
9	Modeling anti-tumor Th1 and Th2 immunity in the rejection of melanoma. Journal of Theoretical Biology, 2010, 265, 467-480.	1.7	39
10	Weakly nonlinear analysis of a hyperbolic model for animal group formation. Journal of Mathematical Biology, 2009, 59, 37-74.	1.9	35
11	Patterns of spread of influenza A in Canada. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131174.	2.6	32
12	An investigation of a nonlocal hyperbolic model for self-organization of biological groups. Journal of Mathematical Biology, 2010, 61, 545-579.	1.9	30
13	Modelling and investigation of the CD ⁴ Macrophages paradox in melanoma immunotherapies. Journal of Theoretical Biology, 2017, 420, 82-104.	1.7	27
14	ANALYSIS OF HOPF/HOPF BIFURCATIONS IN NONLOCAL HYPERBOLIC MODELS FOR SELF-ORGANISED AGGREGATIONS. Mathematical Models and Methods in Applied Sciences, 2014, 24, 327-357.	3.3	23
15	Mathematical modelling of cancer invasion: The multiple roles of TGF- β pathway on tumour proliferation and cell adhesion. Mathematical Models and Methods in Applied Sciences, 2017, 27, 1929-1962.	3.3	23
16	Memory versus effector immune responses in oncolytic virotherapies. Journal of Theoretical Biology, 2015, 377, 1-9.	1.7	22
17	Bifurcations and Chaotic Dynamics in a Tumour-Immune-Virus System. Mathematical Modelling of Natural Phenomena, 2016, 11, 65-85.	2.4	22
18	Mathematical investigation of innate immune responses to lung cancer: The role of macrophages with mixed phenotypes. Journal of Theoretical Biology, 2021, 524, 110739.	1.7	20

#	ARTICLE	IF	CITATIONS
19	Improving cancer detection through combinations of cancer and immune biomarkers: a modelling approach. <i>Journal of Translational Medicine</i> , 2018, 16, 73.	4.4	19
20	Tumour-associated macrophages and oncolytic virotherapies: a mathematical investigation into a complex dynamics. <i>Letters in Biomathematics</i> , 2018, 5, S6-S35.	0.1	18
21	Non-local kinetic and macroscopic models for self-organised animal aggregations. <i>Kinetic and Related Models</i> , 2015, 8, 413-441.	0.9	16
22	Directionality of Macrophages Movement in Tumour Invasion: A Multiscale Moving-Boundary Approach. <i>Bulletin of Mathematical Biology</i> , 2020, 82, 148.	1.9	15
23	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
24	Codimension-Two Bifurcations in Animal Aggregation Models with Symmetry. <i>SIAM Journal on Applied Dynamical Systems</i> , 2014, 13, 1542-1582.	1.6	13
25	Modelling cell movement, cell differentiation, cell sorting and proportion regulation in <i>Dictyostelium discoideum</i> aggregations. <i>Journal of Theoretical Biology</i> , 2015, 370, 135-150.	1.7	13
26	Quantitative Predictive Modelling Approaches to Understanding Rheumatoid Arthritis: A Brief Review. <i>Cells</i> , 2020, 9, 74.	4.1	13
27	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
28	A kinetic theory approach for modelling tumour and macrophages heterogeneity and plasticity during cancer progression. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020, 30, 659-683.	3.3	12
29	Simultaneous use of different communication mechanisms leads to spatial sorting and unexpected collective behaviours in animal groups. <i>Journal of Theoretical Biology</i> , 2013, 337, 42-53.	1.7	11
30	Model based analysis of the heterogeneity in the tumour size dynamics differentiates vemurafenib, dabrafenib and trametinib in metastatic melanoma. <i>Cancer Chemotherapy and Pharmacology</i> , 2018, 81, 325-332.	2.3	11
31	Investigating Macrophages Plasticity Following Tumour-Immune Interactions During Oncolytic Therapies. <i>Acta Biotheoretica</i> , 2019, 67, 321-359.	1.5	11
32	Symmetries and pattern formation in hyperbolic versus parabolic models of self-organised aggregation. <i>Journal of Mathematical Biology</i> , 2015, 71, 847-881.	1.9	10
33	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
34	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
35	Modelling the transmission of infectious diseases inside hospital bays: implications for COVID-19. <i>Mathematical Biosciences and Engineering</i> , 2020, 17, 8084-8104.	1.9	10
36	Hyperbolic and Kinetic Models for Self-organised Biological Aggregations. <i>Lecture Notes in Mathematics</i> , 2018, , .	0.2	9

#	ARTICLE	IF	CITATIONS
37	Leadership Through Influence: What Mechanisms Allow Leaders to Steer a Swarm?. <i>Bulletin of Mathematical Biology</i> , 2021, 83, 69.	1.9	9
38	Mathematical models of transmission dynamics and vaccine strategies in Hong Kong during the 2017â€“2018 winter influenza season. <i>Journal of Theoretical Biology</i> , 2019, 476, 74-94.	1.7	8
39	Investigation into the role of macrophages heterogeneity on solid tumour aggregations. <i>Mathematical Biosciences</i> , 2020, 322, 108325.	1.9	7
40	The Effect of Different Communication Mechanisms on the Movement and Structure of Self-Organised Aggregations. <i>Mathematical Modelling of Natural Phenomena</i> , 2013, 8, 5-24.	2.4	6
41	Mathematical Modelling of Glioblastomas Invasion within the Brain: A 3D Multi-Scale Moving-Boundary Approach. <i>Mathematics</i> , 2021, 9, 2214.	2.2	6
42	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
43	Non-local Parabolic and Hyperbolic Models for Cell Polarisation in Heterogeneous Cancer Cell Populations. <i>Bulletin of Mathematical Biology</i> , 2018, 80, 2600-2632.	1.9	5
44	Modelling the effects of environmental heterogeneity within the lung on the tuberculosis life-cycle. <i>Journal of Theoretical Biology</i> , 2020, 506, 110381.	1.7	5
45	Pattern formation in a nonlocal mathematical model for the multiple roles of the TGF- β pathway in tumour dynamics. <i>Mathematical Biosciences</i> , 2017, 289, 96-115.	1.9	4
46	Modelling the collective response of heterogeneous cell populations to stationary gradients and chemical signal relay. <i>Physical Biology</i> , 2017, 14, 066003.	1.8	4
47	Multi-Dimensional Transport Equations. <i>Lecture Notes in Mathematics</i> , 2018, , 153-193.	0.2	4
48	A mathematical model for the role of macrophages in the persistence and elimination of oncolytic viruses. <i>Mathematics in Applied Sciences and Engineering</i> , 2020, 1, 126-149.	0.8	4
49	Modelling rheumatoid arthritis: A hybrid modelling framework to describe pannus formation in a small joint. <i>Immunoinformatics</i> , 2022, 6, 100014.	2.2	4
50	The Role of Avoidance and Learning Behaviours on the Formation and Movement of Biological Aggregations. <i>Mathematical Modelling of Natural Phenomena</i> , 2015, 10, 27-44.	2.4	3
51	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
52	Non-local multiscale approaches for tumour-oncolytic viruses interactions. <i>Mathematics in Applied Sciences and Engineering</i> , 2020, 1, 249-273.	0.8	3
53	Quantitative predictive approaches for Dupuytren disease: a brief review and future perspectives. <i>Mathematical Biosciences and Engineering</i> , 2022, 19, 2876-2895.	1.9	3
54	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

#	ARTICLE	IF	CITATIONS
55	Validation of multi-scale models for fibrosis. Comment on “Towards a unified approach in the modeling of fibrosis: A review with research perspectives” by M. Ben Amar and C. Bianca. <i>Physics of Life Reviews</i> , 2016, 17, 90-91.	2.8	2
56	Lyapunov-Schmidt and Centre Manifold Reduction Methods for Nonlocal PDEs Modelling Animal Aggregations. <i>Springer Proceedings in Mathematics and Statistics</i> , 2016, , 29-59.	0.2	2
57	The evolution of communication mechanisms in self-organised ecological aggregations: Impact on pattern formation. <i>Mathematical Models and Methods in Applied Sciences</i> , 2020, 30, 1917-1934.	3.3	2
58	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
59	A computational investigation of COVID-19 transmission inside hospital wards and associated costs. <i>Mathematical Biosciences and Engineering</i> , 2022, 19, 6504-6522.	1.9	2
60	The quest for a new modelling framework in mathematical biology. <i>Physics of Life Reviews</i> , 2015, 12, 72-73.	2.8	1
61	The impact of environmental noise on animal communication: pattern formation in a class of deterministic and stochastic hyperbolic models for self-organised biological aggregations. <i>Biomath</i> , 2018, 7, .	0.7	1
62	Mathematical investigation into the role of macrophage heterogeneity on the temporal and spatio-temporal dynamics of non-small cell lung cancers. <i>Journal of Theoretical Biology</i> , 2022, 549, 111207.	1.7	1
63	Nonlocal Hyperbolic Models in 1D. <i>Lecture Notes in Mathematics</i> , 2018, , 107-151.	0.2	0
64	One-Equation Local Hyperbolic Models. <i>Lecture Notes in Mathematics</i> , 2018, , 55-80.	0.2	0
65	A Short Introduction to One-Dimensional Conservation Laws. <i>Lecture Notes in Mathematics</i> , 2018, , 37-53.	0.2	0
66	Local Hyperbolic/Kinetic Systems in 1D. <i>Lecture Notes in Mathematics</i> , 2018, , 81-106.	0.2	0
67	A Few Notions of Stability and Bifurcation Theory. <i>Lecture Notes in Mathematics</i> , 2018, , 227-264.	0.2	0
68	Discussion and Further Open Problems. <i>Lecture Notes in Mathematics</i> , 2018, , 265-273.	0.2	0
69	Numerical Approaches for Kinetic and Hyperbolic Models. <i>Lecture Notes in Mathematics</i> , 2018, , 195-226.	0.2	0
70	Kinetic Models for Pattern Formation in Animal Aggregations: A Symmetry and Bifurcation Approach. <i>Modeling and Simulation in Science, Engineering and Technology</i> , 2019, , 39-64.	0.6	0