AngÃ©lique StÃ©phanou

List of Publications by Year
in descending order

26 papers	892 citations	623188 14 h-index	500791 28 g-index
33 all docs	33 docs citations	33 times ranked	1081 citing authors

#	Article	IF	Citations
1	The motility of normal and cancer cells in response to the combined influence of the substrate rigidity and anisotropic microstructure. Biomaterials, 2008, 29, 1541-1551.	5.7	157
2	Mathematical modelling of flow in 2D and 3D vascular networks: Applications to anti-angiogenic and chemotherapeutic drug strategies. Mathematical and Computer Modelling, 2005, 41, 1137-1156.	2.0	139
3	Mathematical modelling of the influence of blood rheological properties upon adaptative tumour-induced angiogenesis. Mathematical and Computer Modelling, 2006, 44, 96-123.	2.0	120
4	Spatiotemporal dynamics of actin-rich adhesion microdomains: influence of substrate flexibility. Journal of Cell Science, 2006, 119, 1914-1925.	1.2	95
5	A computational model of cell migration coupling the growth of focal adhesions with oscillatory cell protrusions. Journal of Theoretical Biology, 2008, 253, 701-716.	0.8	46
6	Hybrid Modelling in Biology: a Classification Review. Mathematical Modelling of Natural Phenomena, 2016, 11, 37-48.	0.9	43
7	Systems Biology, Systems Medicine, Systems Pharmacology: The What and The Why. Acta Biotheoretica, 2018, 66, 345-365.	0.7	35
8	The rigidity in fibrin gels as a contributing factor to the dynamics of in vitro vascular cord formation. Microvascular Research, 2007, 73, 182-190.	1.1	31
9	A mathematical model for the dynamics of large membrane deformations of isolated fibroblasts. Bulletin of Mathematical Biology, 2004, 66, 1119-1154.	0.9	29
10	A mathematical model of HiF-1-mediated response to hypoxia on the G1/S transition. Mathematical Biosciences, 2014, 248, 31-39.	0.9	24
11	How tumour-induced vascular changes alter angiogenesis: Insights from a computational model. Journal of Theoretical Biology, 2017, 419, 211-226.	0.8	23
12	Mathematical modelling and numerical simulations of actin dynamics in the eukaryotic cell. Journal of Mathematical Biology, 2013, 66, 547-593.	0.8	22
13	On the importance of the submicrovascular network in a computational model of tumour growth. Microvascular Research, 2012, 84, 188-204.	1.1	19
14	Towards the Design of a Patient-Specific Virtual Tumour. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-12.	0.7	15
15	pH as a potential therapeutic target to improve temozolomide antitumor efficacy : A mechanistic modeling study. Pharmacology Research and Perspectives, 2019, 7, e00454.	1.1	13
16	Cytomechanics of cell deformations and migration: from models to experiments. Comptes Rendus - Biologies, 2002, 325, 295-308.	0.1	12
17	Role of Compartmentalization on HiF-1Î± Degradation Dynamics during Changing Oxygen Conditions: A Computational Approach. PLoS ONE, 2014, 9, e110495.	1.1	10
18	Metabolic Reprogramming, Questioning, and Implications for Cancer. Biology, 2021, 10, 129.	1.3	10

#	Article	IF	Citations
19	Fluctuations of a membrane interacting with a diffusion field. Europhysics Letters, 2002, 60, 795-801.	0.7	8
20	Modelling the Impact of Pericyte Migration and Coverage of Vessels on the Efficacy of Vascular Disrupting Agents. Mathematical Modelling of Natural Phenomena, 2010, 5, 163-202.	0.9	7
21	A Computational Framework to Assess the Efficacy of Cytotoxic Molecules and Vascular Disrupting Agents against Solid Tumours. Mathematical Modelling of Natural Phenomena, 2012, 7, 49-77.	0.9	7
22	Hybrid data-based modelling in oncology: successes, challenges and hopes. Mathematical Modelling of Natural Phenomena, 2020, 15, 21.	0.9	5
23	On the Influence of Discrete Adhesive Patterns for Cell Shape and Motility: A Computational Approach. Mathematical Modelling of Natural Phenomena, 2010, 5, 56-83.	0.9	3
24	Analysis of Cell Motility Combining Cytomechanical Model Simulations and an Optical Flow Method. , 2003, , 91-112.		2
25	Reduced model for 2D tumor growth and tumor induced angiogenesis. , 2015, , .		1
26	Can major breakthroughs in cancer be achieved through theoretical models?. Physics of Life Reviews, 2022, 40, 63-64.	1.5	1