# Marco Scianna

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8861026/publications.pdf

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| 44 | 886 | 566801 | 500791 |
|---|---|---|---|
| papers | citations | 15 h-index | 28 g-index |

| 45 | 45 | 45 | 938 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A phenotype-structured model to reproduce the avascular growth of a tumor and its interaction with the surrounding environment. Journal of Theoretical Biology, 2022, 535, 110980. | 0.8 | 3 |
| 2 | A hybrid modeling environment to describe aggregates of cells heterogeneous for genotype and behavior with possible phenotypic transitions. International Journal of Non-Linear Mechanics, 2022, 144, 104063. | 1.4 | 4 |
| 3 | Multi-level Mathematical Models for Cell Migration in Confined Environments. Springer Proceedings in Mathematics and Statistics, 2021, , 124-140. | 0.1 | 2 |
| 4 | An integro-differential non-local model for cell migration and its efficient numerical solution. Mathematics and Computers in Simulation, 2021, 180, 179-204. | 2.4 | 3 |
| 5 | A Cellular Potts Model for Analyzing Cell Migration across Constraining Pillar Arrays. Axioms, 2021, 10, 32. | 0.9 | 7 |
| 6 | A hybrid integro-differential model for the early development of the zebrafish posterior lateral line. Journal of Theoretical Biology, 2021, 514, 110578. | 0.8 | 2 |
| 7 | Modelling chase-and-run migration in heterogeneous populations. Journal of Mathematical Biology, 2020, 80, 423-456. | 0.8 | 7 |
| 8 | Collective migration and patterning during early development of zebrafish posterior lateral line. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190385. | 1.8 | 8 |
| 9 | An agent-based approach for modelling collective dynamics in animal groups distinguishing individual speed and orientation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190383. | 1.8 | 6 |
| 10 | Extension of tumor fingers: A comparison between an individual-cell based model and a measure theoretic approach. Communications in Applied and Industrial Mathematics, 2019, 10, 54-69. | 0.6 | 0 |
| 11 | A discrete particle model reproducing collective dynamics of a bee swarm. Computers in Biology and Medicine, 2018, 93, 158-174. | 3.9 | 6 |
| 12 | A particle model analysing the behavioural rules underlying the collective flight of a bee swarm towards the new nest. Journal of Biological Dynamics, 2018, 12, 632-662. | 0.8 | 9 |
| 13 | Kinesin-2 Controls the Motility of RAB5 Endosomes and Their Association with the Spindle in Mitosis. International Journal of Molecular Sciences, 2018, 19, 2575. | 1.8 | 4 |
| 14 | Adhesion and volume constraints via nonlocal interactions determine cell organisation and migration profiles. Journal of Theoretical Biology, 2018, 445, 75-91. | 0.8 | 23 |
| 15 | A discrete mathematical model for the dynamics of a crowd of gazing pedestrians with and without an evolving environmental awareness. Computational and Applied Mathematics, 2017, 36, 1113-1141. | 1.3 | 14 |
| 16 | An Innovative Assay for the Analysis of In Vitro Endothelial Remodeling: Experimental and Computational Evidence. Journal of Cellular Physiology, 2017, 232, 243-248. | 2.0 | 0 |
| 17 | TRPM8 inhibits endothelial cell migration via a non-channel function by trapping the small GTPase Rap1. Journal of Cell Biology, 2017, 216, 2107-2130. | 2.3 | 66 |
| 18 | Modelling human perception processes in pedestrian dynamics: a hybrid approach. Royal Society Open Science, 2017, 4, 160561. | 1.1 | 27 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Coherent modelling switch between pointwise and distributed representations of cell aggregates. Journal of Mathematical Biology, 2017, 74, 783-808. | 0.8 | 15 |
| 20 | A coherent modeling procedure to describe cell activation in biological systems. Communications in Applied and Industrial Mathematics, 2017, 8, 1-22. | 0.6 | 10 |
| 21 | A node-based version of the cellular Potts model. Computers in Biology and Medicine, 2016, 76, 94-112. | 3.9 | 4 |
| 22 | Mathematical Models of the Interaction of Cells and Cell Aggregates with the Extracellular Matrix. Lecture Notes in Mathematics, 2016, , 131-210. | 0.1 | 3 |
| 23 | A Cellular Potts Model of single cell migration in presence of durotaxis. Mathematical Biosciences, 2016, 275, 57-70. | 0.9 | 34 |
| 24 | Moving in a crowd: Human perception as a multiscale process. Journal of Coupled Systems and Multiscale Dynamics, 2016, 4, 25-29. | 0.2 | 4 |
| 25 | Computational Approaches for Translational Oncology: Concepts and Patents. Recent Patents on Anti-Cancer Drug Discovery, 2016, 11, 384-392. | 0.8 | 3 |
| 26 | Relevance of Cell-ECM Interactions: From a Biological Perspective to the Mathematical Modeling. ITM Web of Conferences, 2015, 5, 00004. | 0.4 | 0 |
| 27 | A Measure-Theoretic Model for Collective Cell Migration and Aggregation. Mathematical Modelling of Natural Phenomena, 2015, 10, 4-35. | 0.9 | 14 |
| 28 | Growing avascular tumours as elasto-plastic bodies by the theory of evolving natural configurations. Mechanics Research Communications, 2015, 68, 31-39. | 1.0 | 32 |
| 29 | An extended Cellular Potts Model analyzing a wound healing assay. Computers in Biology and Medicine, 2015, 62, 33-54. | 3.9 | 10 |
| 30 | A cellular Potts model analyzing differentiated cell behavior during in vivo vascularization of a hypoxic tissue. Computers in Biology and Medicine, 2015, 63, 143-156. | 3.9 | 16 |
| 31 | Differentiated cell behavior: a multiscale approach using measure theory. Journal of Mathematical Biology, 2015, 71, 1049-1079. | 0.8 | 20 |
| 32 | A cellular Potts model for the MMP-dependent and -independent cancer cell migration in matrix microtracks of different dimensions. Computational Mechanics, 2014, 53, 485-497. | 2.2 | 22 |
| 33 | Modeling the influence of nucleus elasticity on cell invasion in fiber networks and microchannels. Journal of Theoretical Biology, 2013, 317, 394-406. | 0.8 | 42 |
| 34 | A review of mathematical models for the formation of vascular networks. Journal of Theoretical Biology, 2013, 333, 174-209. | 0.8 | 131 |
| 35 | A Cellular Potts model simulating cell migration on and in matrix environments. Mathematical Biosciences and Engineering, 2013, 10, 235-261. | 1.0 | 93 |
| 36 | A Hybrid Model Describing Different Morphologies of Tumor Invasion Fronts. Mathematical Modelling of Natural Phenomena, 2012, 7, 78-104. | 0.9 | 15 |

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|---|---|---|---|
| 37 | Multiscale Developments of the Cellular Potts Model. Multiscale Modeling and Simulation, 2012, 10, 342-382. | 0.6 | 75 |
| 38 | Multilevel complexity of calcium signaling: Modeling angiogenesis. World Journal of Biological Chemistry, 2012, 3, 121. | 1.7 | 13 |
| 39 | A Multiscale Hybrid Model for Pro-angiogenic Calcium Signals in a Vascular Endothelial Cell. Bulletin of Mathematical Biology, 2012, 74, 1253-1291. | 0.9 | 10 |
| 40 | Hybrid Cellular Potts Model for Solid Tumor Growth. SIMAI Springer Series, 2012, , 205-224. | 0.4 | 2 |
| 41 | A multiscale hybrid approach for vasculogenesis and related potential blocking therapies. Progress in Biophysics and Molecular Biology, 2011, 106, 450-462. | 1.4 | 51 |
| 42 | Multiscale model of tumor-derived capillary-like network formation. Networks and Heterogeneous Media, 2011, 6, 597-624. | 0.5 | 4 |
| 43 | Individual Cell-Based Model for In-Vitro Mesothelial Invasion of Ovarian Cancer. Mathematical Modelling of Natural Phenomena, 2010, 5, 203-223. | 0.9 | 31 |
| 44 | Individual cell-based models of cell scatter of ARO and MLP-29 cells in response to hepatocyte growth factor. Journal of Theoretical Biology, 2009, 260, 151-160. | 0.8 | 19 |