Heather A Harrington

List of Publications by Citations

34 papers	960 citations	14 h-index	30 g-index
37 ext. papers	1,305 ext. citations	6.5 avg, IF	4.3 L-index

#	Paper	IF	Citations
34	Coronary intraplaque hemorrhage evokes a novel atheroprotective macrophage phenotype. *American Journal of Pathology*, **2009**, 174, 1097-108	5.8	240
33	A roadmap for the computation of persistent homology. *EPJ Data Science*, **2017**, 6, 17	3.4	188
32	Clinical drug resistance linked to interconvertible phenotypic and functional states of tumor-propagating cells in multiple myeloma. *Blood*, **2013**, 121, 318-28	2.2	100
31	Nuclear to cytoplasmic shuttling of ERK promotes differentiation of muscle stem/progenitor cells. *Development (Cambridge)*, **2014**, 141, 2611-20	6.6	59
30	Persistent homology of time-dependent functional networks constructed from coupled time series. *Chaos*, **2017**, 27, 047410	3.3	51
29	Cellular compartments cause multistability and allow cells to process more information. *Biophysical Journal*, **2013**, 104, 1824-31	2.9	35
28	Algebraic Systems Biology: A Case Study for the Wnt Pathway. *Bulletin of Mathematical Biology*, **2016**, 78, 21-51	2.1	34
27	Bistability in apoptosis by receptor clustering. *PLoS Computational Biology*, **2010**, 6, e1000956	5	29
26	The role of the Hes1 crosstalk hub in Notch-Wnt interactions of the intestinal crypt. *PLoS Computational Biology*, **2017**, 13, e1005400	5	29
25	Parameter-free methods distinguish Wnt pathway models and guide design of experiments. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 2652-7	11.5	23
24	Skin barrier homeostasis in atopic dermatitis: feedback regulation of kallikrein activity. *PLoS ONE*, **2011**, 6, e19895	3.7	22
23	Parameter-free model discrimination criterion based on steady-state coplanarity. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 15746-51	11.5	20
22	A blood atlas of COVID-19 defines hallmarks of disease severity and specificity.. *Cell*, **2022**, 185, 916-938.e58	5.62	17
21	Role of seasonality on predator-prey-subsidy population dynamics. *Journal of Theoretical Biology*, **2016**, 396, 163-81	2.3	15
20	Nanog Fluctuations in Embryonic Stem Cells Highlight the Problem of Measurement in Cell Biology. *Biophysical Journal*, **2017**, 112, 2641-2652	2.9	13
19	Stratifying Multiparameter Persistent Homology. *SIAM Journal on Applied Algebra and Geometry*, **2019**, 3, 439-471	1.5	9
18	Commentary: Teach network science to teenagers. *Network Science*, **2013**, 1, 226-247	2.9	9

List of Publications

17	Numerical algebraic geometry for model selection and its application to the life sciences. *Journal of the Royal Society Interface*, **2016**, 13,	4.1	9
16	Linear Compartmental Models: Input-Output Equations and Operations That Preserve Identifiability. *SIAM Journal on Applied Mathematics*, **2019**, 79, 1423-1447	1.8	8
15	Reduction of dimension for nonlinear dynamical systems. *Nonlinear Dynamics*, **2017**, 88, 715-734	5	7
14	Joining and decomposing reaction networks. *Journal of Mathematical Biology*, **2020**, 80, 1683-1731	2	6
13	Multiparameter persistent homology landscapes identify immune cell spatial patterns in tumors. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5
12	Geometric anomaly detection in data. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 19664-19669	11.5	5
11	Phosphorelay of non-orthodox two component systems functions through a bi-molecular mechanism in vivo: the case of ArcB. *Molecular BioSystems*, **2015**, 11, 1348-59		4
10	Epithelial-Mesenchymal Transition in Metastatic Cancer Cell Populations Affects Tumor Dormancy in a Simple Mathematical Model. *Biomedicines*, **2014**, 2, 384-402	4.8	4
9	A blood atlas of COVID-19 defines hallmarks of disease severity and specificity		4
8	Tensor clustering with algebraic constraints gives interpretable groups of crosstalk mechanisms in breast cancer. *Journal of the Royal Society Interface*, **2019**, 16, 20180661	4.1	3
7	Topological data analysis of task-based fMRI data from experiments on schizophrenia. *Journal of Physics Complexity*, **2021**, 2, 035006	1.8	3
6	A Parameter-Free Model Comparison Test Using Differential Algebra. *Complexity*, **2019**, 2019, 1-15	1.6	2
5	Grid diagrams as tools to investigate knot spaces and topoisomerase-mediated simplification of DNA topology. *Science Advances*, **2020**, 6, eaay1458	14.3	2
4	Coloured Noise from Stochastic Inflows in Reaction-Diffusion Systems. *Bulletin of Mathematical Biology*, **2020**, 82, 44	2.1	2
3	Graph-facilitated resonant mode counting in stochastic interaction networks. *Journal of the Royal Society Interface*, **2017**, 14,	4.1	2
2	Topological data analysis distinguishes parameter regimes in the Anderson-Chaplain model of angiogenesis. *PLoS Computational Biology*, **2021**, 17, e1009094	5	1
1	Quantification of vascular networks in photoacoustic mesoscopy.. *Photoacoustics*, **2022**, 26, 100357	9	0