Thomas E Woolley

List of Publications by Year
in descending order

63	1,389	331670 21	395702 33
papers	citations	h-index	g-index

71	71	71	1509
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Accounting for dimensional differences in stochastic domain invasion with applications to precancerous cell removal. Journal of Theoretical Biology, 2022, 541, 111024.	1.7	2
2	The association of neurodevelopmental abnormalities, congenital heart and renal defects in a tuberous sclerosis complex patient cohort. BMC Medicine, 2022, 20, 123.	5.5	4
3	Challenging molecular dogmas in human sepsis using mathematical reasoning. EBioMedicine, 2022, 80, 104031.	6.1	10
4	Covid-19 transmission modelling of students returning home from university. Health Systems, 2021, 10, 31-40.	1.2	11
5	Bespoke Turing Systems. Bulletin of Mathematical Biology, 2021, 83, 41.	1.9	30
6	Symmetry breaking of tissue mechanics in wound induced hair follicle regeneration of laboratory and spiny mice. Nature Communications, 2021, 12, 2595.	12.8	40
7	EPHA2-dependent outcompetition of KRASG12D mutant cells by wild-type neighbors in the adult pancreas. Current Biology, 2021, 31, 2550-2560.e5.	3.9	32
8	Generalised S-System-Type Equation: Sensitivity of the Deterministic and Stochastic Models for Bone Mechanotransduction. Mathematics, 2021, 9, 2422.	2.2	0
9	Further development of spinal cord retreatment dose estimation: including radiotherapy with protons and light ions. International Journal of Radiation Biology, 2021, 97, 1657-1666.	1.8	2
10	The embryonic trunk neural crest microenvironment regulates the plasticity and invasion of human neuroblastoma via TrkB signaling. Developmental Biology, 2021, 480, 78-90.	2.0	2
11	Pannexin 1 Regulates Skeletal Muscle Regeneration by Promoting Bleb-Based Myoblast Migration and Fusion Through a Novel Lipid Based Signaling Mechanism. Frontiers in Cell and Developmental Biology, 2021, 9, 736813.	3.7	7
12	Vitrifying multiple embryos in different arrangements does not alter the cooling rate. Cryobiology, 2021, 103, 22-31.	0.7	2
13	A General Computational Framework for COVID-19 Modelling with Applications to Testing Varied Interventions in Education Environments. Covid, 2021, 1, 674-703.	1.5	2
14	Solvability of a Kellerâ€“Segel system with signal-dependent sensitivity and essentially sublinear production. Applicable Analysis, 2020, 99, 2507-2525.	1.3	28
15	Turing Patterning in Stratified Domains. Bulletin of Mathematical Biology, 2020, 82, 136.	1.9	8
16	Likely cavitation and radial motion of stochastic elastic spheres. Nonlinearity, 2020, 33, 1987-2034.	1.4	6
17	From one pattern into another: analysis of Turing patterns in heterogeneous domains via WKBJ. Journal of the Royal Society Interface, 2020, 17, 20190621.	3.4	37
18	Coloured Noise from Stochastic Inflows in Reactionâ€“Diffusion Systems. Bulletin of Mathematical Biology, 2020, 82, 44.	1.9	6

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19	Time to change your mind? Modelling transient properties of cortex formation highlights the importance of evolving cell division strategies. Journal of Theoretical Biology, 2019, 481, 110-118.	1.7	2
20	A mathematical insight into cell labelling experiments for clonal analysis. Journal of Anatomy, 2019, 235, 687-696.	1.5	6
21	Likely oscillatory motions of stochastic hyperelastic solids. Transactions of Mathematics and Its Applications, 2019, 3, .	3.3	6
22	PCP and Wnt pathway components act in parallel during zebrafish mechanosensory hair cell orientation. Nature Communications, 2019, 10, 3993.	12.8	38
23	Selfâ€organizing hair pegâ€like structures from dissociated skin progenitor cells: New insights for human hair follicle organoid engineering and Turing patterning in an asymmetric morphogenetic field. Experimental Dermatology, 2019, 28, 355-366.	2.9	27
24	Likely chirality of stochastic anisotropic hyperelastic tubes. International Journal of Non-Linear Mechanics, 2019, 114, 9-20.	2.6	13
25	Likely equilibria of the stochastic Rivlin cube. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180068.	3.4	15
26	Feather arrays are patterned by interacting signalling and cell density waves. PLoS Biology, 2019, 17, e3000132.	5.6	91
27	Uncertainty quantification of elastic material responses: testing, stochastic calibration and Bayesian model selection. Mechanics of Soft Materials, 2019, 1, 1.	0.9	13
28	Radiation protraction schedules for low-grade gliomas: a comparison between different mathematical models. Journal of the Royal Society Interface, 2019, 16, 20190665.	3.4	7
29	Likely equilibria of stochastic hyperelastic spherical shells and tubes. Mathematics and Mechanics of Solids, 2019, 24, 2066-2082.	2.4	11
30	Likely Cavitation in Stochastic Elasticity. Journal of Elasticity, 2019, 137, 27-42.	1.9	12
31	The Turing Model for Biological Pattern Formation. Mathematics of Planet Earth, 2019, , 189-204.	0.1	2
32	Changes in the retreatment radiation tolerance of the spinal cord with time after the initial treatment. International Journal of Radiation Biology, 2018, 94, 515-531.	1.8	14
33	Stochastic isotropic hyperelastic materials: constitutive calibration and model selection. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170858.	2.1	29
34	Boundedness in a parabolicâ€elliptic chemotaxis system with nonlinear diffusion and sensitivity and logistic source. Mathematical Methods in the Applied Sciences, 2018, 41, 1809-1824.	2.3	27
35	Heterogeneity induces spatiotemporal oscillations in reaction-diffusion systems. Physical Review E, 2018, 97, 052206.	2.1	23
36	PLCÎ¶ Induced Ca2+ Oscillations in Mouse Eggs Involve a Positive Feedback Cycle of Ca2+ Induced InsP3 Formation From Cytoplasmic PIP2. Frontiers in Cell and Developmental Biology, 2018, 6, 36.	3.7	22

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37	Mathematical Modeling of Cortical Neurogenesis Reveals that the Founder Population does not Necessarily Scale with Neurogenic Output. Cerebral Cortex, 2018, 28, 2540-2550.	2.9	25
38	Predicting neuroblastoma using developmental signals and a logic-based model. Biophysical Chemistry, 2018, 238, 30-38.	2.8	11
39	Turingâ€™s Theory of Morphogenesis: Where We Started, Where We Are and Where We Want to Go. Theory and Applications of Computability, 2017, , 219-235.	1.3	11
40	Random blebbing motion: A simple model linking cell structural properties to migration characteristics. Physical Review E, 2017, 96, 012409.	2.1	10
41	Graph-facilitated resonant mode counting in stochastic interaction networks. Journal of the Royal Society Interface, 2017, 14, 20170447.	3.4	2
42	Pattern production through a chiral chasing mechanism. Physical Review E, 2017, 96, 032401.	2.1	11
43	Eventual smoothness and asymptotic behaviour of solutions to a chemotaxis system perturbed by a logistic growth. Discrete and Continuous Dynamical Systems - Series B, 2017, 22, 47-47.	0.9	4
44	Further Development of Spinal Tissue Radiotherapy Retreatment Modelling, with inclusion of Hadrontherapy.. Radiotherapy and Oncology, 2016, 118, S55.	0.6	0
45	Dissecting the self-assembly kinetics of multimeric pore-forming toxins. Journal of the Royal Society Interface, 2016, 13, 20150762.	3.4	12
46	Membrane shrinkage and cortex remodelling are predicted to work in harmony to retract blebs. Royal Society Open Science, 2015, 2, 150184.	2.4	14
47	Global contraction or local growth, bleb shape depends on more than just cell structure. Journal of Theoretical Biology, 2015, 380, 83-97.	1.7	20
48	Three mechanical models for blebbing and multi-blebbing. IMA Journal of Applied Mathematics, 2014, 79, 636-660.	1.6	15
49	Mathematical modelling of digit specification by a sonic hedgehog gradient. Developmental Dynamics, 2014, 243, 290-298.	1.8	18
50	Is pigment cell pattern formation in zebrafish a game of cops and robbers?. Pigment Cell and Melanoma Research, 2014, 27, 686-687.	3.3	19
51	Cellular blebs: pressure-driven, axisymmetric, membrane protrusions. Biomechanics and Modeling in Mechanobiology, 2014, 13, 463-476.	2.8	24
52	Modelling biological invasions: Individual to population scales at interfaces. Journal of Theoretical Biology, 2013, 334, 1-12.	1.7	29
53	Noise-induced temporal dynamics in Turing systems. Physical Review E, 2013, 87, 042719.	2.1	18
54	Effects of intrinsic stochasticity on delayed reaction-diffusion patterning systems. Physical Review E, 2012, 85, 051914.	2.1	25

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55	Turing's model for biological pattern formation and the robustness problem. Interface Focus, 2012, 2, 487-496.	3.0	192
56	Nonlinear effects on Turing patterns: Time oscillations and chaos. Physical Review E, 2012, 86, 026201.	2.1	34
57	Age-Related Changes in Speed and Mechanism of Adult Skeletal Muscle Stem Cell Migration. Stem Cells, 2012, 30, 1182-1195.	3.2	68
58	Interactions between Shh, Sostdc1 and Wnt signaling and a new feedback loop for spatial patterning of the teeth. Development (Cambridge), 2011, 138, 1807-1816.	2.5	107
59	Stochastic reaction and diffusion on growing domains: Understanding the breakdown of robust pattern formation. Physical Review E, 2011, 84, 046216.	2.1	59
60	Power spectra methods for a stochastic description of diffusion on deterministically growing domains. Physical Review E, 2011, 84, 021915.	2.1	27
61	Influence of stochastic domain growth on pattern nucleation for diffusive systems with internal noise. Physical Review E, 2011, 84, 041905.	2.1	15
62	Analysis of stationary droplets in a generic Turing reaction-diffusion system. Physical Review E, 2010, 82, 051929.	2.1	21
63	Turing's Theory of Developmental Pattern Formation. , 0, , 131-143.		2