Nicholas A Hill

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8655333/publications.pdf

Version: 2024-02-01

45 papers	2,351 citations	257450 24 h-index	254184 43 g-index
46 all docs	46 docs citations	46 times ranked	1585 citing authors

#	Article	IF	Citations
1	Fluidâ€“structure interaction in a fully coupled three-dimensional mitralâ€“atriumâ€“pulmonary model. Biomechanics and Modeling in Mechanobiology, 2021, 20, 1267-1295.	2.8	7
2	3â€…Rationale and design of the Medical Research Council Precision medicine with Zibotentan in microvascular angina (PRIZE) trial MRI sub-study. , 2021, , .		0
3	Rationale and design of the Medical Research Council's Precision Medicine with Zibotentan in Microvascular Angina (PRIZE) trial. American Heart Journal, 2020, 229, 70-80.	2.7	40
4	Assessing model mismatch and model selection in a Bayesian uncertainty quantification analysis of a fluid-dynamics model of pulmonary blood circulation. Journal of the Royal Society Interface, 2020, 17, 20200886.	3.4	17
5	A One-Dimensional Hemodynamic Model of the Coronary Arterial Tree. Frontiers in Physiology, 2019, 10, 853.	2.8	22
6	Hemodynamic assessment of pulmonary hypertension in mice: a model-based analysis of the disease mechanism. Biomechanics and Modeling in Mechanobiology, 2019, 18, 219-243.	2.8	26
7	Modelling peeling- and pressure-driven propagation of arterial dissection. Journal of Engineering Mathematics, 2018, 109, 227-238.	1.2	25
8	MCMC methods for inference in a mathematical model of pulmonary circulation. Statistica Neerlandica, 2018, 72, 306-338.	1.6	15
9	Modeling Floppy Iris Syndrome and the Impact of Phenylephrine on Iris Buckling. International Journal of Applied Mechanics, 2018, 10, 1850048.	2.2	2
10	Propagation of dissection in a residually-stressed artery model. Biomechanics and Modeling in Mechanobiology, 2017, 16, 139-149.	2.8	28
11	18â€…Propagation of arterial dissection. Heart, 2015, 101, A6.3-A6.	2.9	0
12	Investigation of the optimal collagen fibre orientation in human iliac arteries. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 52, 108-119.	3.1	37
13	Numerical simulation of blood flow and pressure drop in the pulmonary arterial and venous circulation. Biomechanics and Modeling in Mechanobiology, 2014, 13, 1137-1154.	2.8	88
14	Anisotropic behaviour of human gallbladder walls. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 20, 363-375.	3.1	16
15	Rarefaction and blood pressure in systemic and pulmonary arteries. Journal of Fluid Mechanics, 2012, 705, 280-305.	3.4	32
16	Mathematical and computer simulation modelling of intracameral forces causing pupil block due to air bubble use in Descemet's Stripping Endothelial Keratoplasty: the mechanics of iris buckling. Clinical and Experimental Ophthalmology, 2012, 40, 182-186.	2.6	9
17	Cross-bridge apparent rate constants of human gallbladder smooth muscle. Journal of Muscle Research and Cell Motility, 2011, 32, 209-220.	2.0	4
18	A Mechanical Model for CCK-Induced Acalculous Gallbladder Pain. Annals of Biomedical Engineering, 2011, 39, 786-800.	2.5	12

#	Article	IF	Citations
19	A multiscale maximum entropy moment closure for locally regulated spaceâ€“time point process models of population dynamics. Journal of Mathematical Biology, 2011, 62, 605-653.	1.9	47
20	Evolving mechanical properties of a model of abdominal aortic aneurysm. Biomechanics and Modeling in Mechanobiology, 2009, 8, 25-42.	2.8	109
21	Non-Newtonian Bile Flow in Elastic Cystic Duct: One- and Three-Dimensional Modeling. Annals of Biomedical Engineering, 2008, 36, 1893-1908.	2.5	26
22	Correlation of Mechanical Factors and Gallbladder Pain. Computational and Mathematical Methods in Medicine, 2008, 9, 27-45.	1.3	16
23	On the mechanical behavior of the human biliary system. World Journal of Gastroenterology, 2007, 13, 1384.	3.3	35
24	Sampling rate effects on measurements of correlated and biased random walks. Journal of Theoretical Biology, 2005, 233, 573-588.	1.7	91
25	Bioconvection. Fluid Dynamics Research, 2005, 37, 1-20.	1.3	224
26	Calculating spatial statistics for velocity jump processes with experimentally observed reorientation parameters. Journal of Mathematical Biology, 2005, 51, 527-556.	1.9	17
27	A mathematical model for the growth of the abdominal aortic aneurysm. Biomechanics and Modeling in Mechanobiology, 2004, 3, 98-113.	2.8	181
28	Random walk models for the movement and recruitment of reef fish larvae. Marine Ecology - Progress Series, 2004, 279, 215-224.	1.9	74
29	Axisymmetric Bioconvection in a Cylinder. Journal of Theoretical Biology, 2002, 219, 137-152.	1.7	20
30	Wavelengths of Gyrotactic Plumes in Bioconvection. Bulletin of Mathematical Biology, 2000, 62, 429-450.	1.9	59
31	Control Strategies for the Polarotactic Orientation of the Microorganism Euglena gracilis. Journal of Theoretical Biology, 2000, 203, 357-365.	1.7	7
32	Spatiotemporal irregularity in an excitable medium with shear flow. Physical Review E, 1999, 60, 1897-1900.	2.1	21
33	Non-linear bioconvection in a deep suspension of gyrotactic swimming micro-organisms. Journal of Mathematical Biology, 1999, 38, 135-168.	1.9	31
34	Development and stability of gyrotactic plumes in bioconvection. Journal of Fluid Mechanics, 1999, 400, 1-31.	3.4	98
35	Sedimenting particles and swimming microorganisms in a rotating fluid. Advances in Space Research, 1998, 21, 1269-1275.	2.6	10
36	Analytical approximations for the orientation distribution of small dipolar particles in steady shear flows. Journal of Mathematical Biology, 1998, 36, 269-298.	1.9	45

#	Article	IF	Citations
37	Excitation Wave Breaking in Excitable Media with Linear Shear Flow. Physical Review Letters, 1998, 81, 2815-2818.	7.8	34
38	A Biased Random Walk Model for the Trajectories of Swimming Micro-organisms. Journal of Theoretical Biology, 1997, 186, 503-526.	1.7	185
39	Bioconvection in a suspension of phototactic algae. Journal of Fluid Mechanics, 1996, 327, 343-371.	3.4	73
40	A Simple Model and Strategies for Orientation in Phototactic Microorganisms. Journal of Theoretical Biology, 1993, 163, 223-235.	1.7	14
41	Hydrodynamic diffusion of a sphere sedimenting through a dilute suspension of neutrally buoyant spheres. Journal of Fluid Mechanics, 1992, 236, 513-533.	3.4	31
42	ORIENTATION OF SWIMMING FLAGELLATES BY SIMULTANEOUSLY ACTING EXTERNAL FACTORS1. Journal of Phycology, 1992, 28, 816-822.	2.3	51
43	Growth of bioconvection patterns in a suspension of gyrotactic micro-organisms in a layer of finite depth. Journal of Fluid Mechanics, 1989, 208, 509-543.	3.4	157
44	Numerical studies of â€œside-by-sideâ€•and other modes for the Taylor problem in a finite annulus. Computers and Fluids, 1988, 16, 445-458.	2.5	7
45	The growth of bioconvection patterns in a uniform suspension of gyrotactic micro-organisms. Journal of Fluid Mechanics, 1988, 195, 223.	3.4	308