Ioannis Sgouralis

List of Publications by Year
in descending order

35 papers	757 citations	516710 16 h-index	580821 25 g-index
43 all docs	43 docs citations	43 times ranked	510 citing authors

#	Article	IF	Citations
1	Diffraction-limited molecular cluster quantification with Bayesian nonparametrics. Nature Computational Science, 2022, 2, 102-111.	8.0	22
2	Modeling Non-additive Effects in Neighboring Chemically Identical Fluorophores. Journal of Physical Chemistry B, 2022, 126, 4216-4225.	2.6	3
3	Generalizing HMMs to Continuous Time for Fast Kinetics: Hidden Markov Jump Processes. Biophysical Journal, 2021, 120, 409-423.	0.5	23
4	Extraction of rapid kinetics from smFRET measurements using integrative detectors. Cell Reports Physical Science, 2021, 2, 100409.	5.6	17
5	Residence time analysis of RNA polymerase transcription dynamics: A Bayesian sticky HMM approach. Biophysical Journal, 2021, 120, 1665-1679.	0.5	3
6	RNA Polymerase Dynamics and Other Single-Molecule Continuous Time Problems. Biophysical Journal, 2020, 118, 544a.	0.5	2
7	Pitching Single-Focus Confocal Data Analysis One Photon at a Time with Bayesian Nonparametrics. Physical Review X, 2020, 10, .	8.9	21
8	Direct Photon-by-Photon Analysis of Time-Resolved Pulsed Excitation Data using Bayesian Nonparametrics. Cell Reports Physical Science, 2020, 1, 100234.	5.6	15
9	Inferring effective forces for Langevin dynamics using Gaussian processes. Journal of Chemical Physics, 2020, 152, 124106.	3.0	16
10	An alternative framework for fluorescence correlation spectroscopy. Nature Communications, 2019, 10, 3662.	12.8	53
11	A method for single molecule tracking using a conventional single-focus confocal setup. Journal of Chemical Physics, 2019, 150, 114108.	3.0	29
12	A Bayesian Nonparametric Approach to Single Molecule FÃ¶rster Resonance Energy Transfer. Journal of Physical Chemistry B, 2019, 123, 675-688.	2.6	35
13	Single molecule force spectroscopy at high data acquisition: A Bayesian nonparametric analysis. Journal of Chemical Physics, 2018, 148, 123320.	3.0	35
14	A Multicellular Vascular Model of the Renal Myogenic Response. Processes, 2018, 6, 89.	2.8	1
15	Renal medullary and urinary oxygen tension during cardiopulmonary bypass in the rat. Mathematical Medicine and Biology, 2017, 34, dqw010.	1.2	30
16	Global sensitivity analysis in a mathematical model of the renal interstitium. Involve, 2017, 10, 625-649.	0.2	0
17	ICON: An Adaptation of Infinite HMMs for Time Traces with Drift. Biophysical Journal, 2017, 112, 2117-2126.	0.5	41
18	An Introduction to Infinite HMMs for Single-Molecule Data Analysis. Biophysical Journal, 2017, 112, 2021-2029.	0.5	79

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19	A Bayesian Topological Framework for the Identification and Reconstruction of Subcellular Motion. SIAM Journal on Imaging Sciences, 2017, 10, 871-899.	2.2	15
20	Modeling Blood Flow and Oxygenation in a Diabetic Rat Kidney. Association for Women in Mathematics Series, 2017, , 101-113.	0.4	0
21	Bladder urine oxygen tension for assessing renal medullary oxygenation in rabbits: experimental and modeling studies. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R532-R544.	1.8	33
22	Transfer Function Analysis of Dynamic Blood Flow Control in the Rat Kidney. Bulletin of Mathematical Biology, 2016, 78, 923-960.	1.9	2
23	Conduction of feedback-mediated signal in a computational model of coupled nephrons. Mathematical Medicine and Biology, 2016, 33, 87-106.	1.2	4
24	Mathematical modeling of renal hemodynamics in physiology and pathophysiology. Mathematical Biosciences, 2015, 264, 8-20.	1.9	24
25	Renal hemodynamics, function, and oxygenation during cardiac surgery performed on cardiopulmonary bypass: a modeling study. Physiological Reports, 2015, 3, e12260.	1.7	40
26	Impact of renal medullary three-dimensional architecture on oxygen transport. American Journal of Physiology - Renal Physiology, 2014, 307, F263-F272.	2.7	61
27	Theoretical assessment of renal autoregulatory mechanisms. American Journal of Physiology - Renal Physiology, 2014, 306, F1357-F1371.	2.7	40
28	Computing Viscous Flow in an Elastic Tube. Numerical Mathematics, 2014, 7, 555-574.	1.3	2
29	Control and Modulation of Fluid Flow in the Rat Kidney. Bulletin of Mathematical Biology, 2013, 75, 2551-2574.	1.9	18
30	Nephrovascular interactions in a mathematical model of rat renal autoregulation. FASEB Journal, 2013, 27, 1110.5.	0.5	0
31	Autoregulation and conduction of vasomotor responses in a mathematical model of the rat afferent arteriole. American Journal of Physiology - Renal Physiology, 2012, 303, F229-F239.	2.7	44
32	Interactions between Tubuloglomerular Feedback and the Myogenic Mechanism of the Afferent Arteriole. FASEB Journal, 2012, 26, 690.2.	0.5	0
33	A mathematical model of the myogenic response to systolic pressure in the afferent arteriole. American Journal of Physiology - Renal Physiology, 2011, 300, F669-F681.	2.7	45
34	Propagation of vasoconstrictive responses in a mathematical model of the rat afferent arteriole. FASEB Journal, 2011, 25, 665.20.	0.5	0
35	Computational Proposal for Tracking Multiple Molecules in a Multifocus Confocal Setup. ACS Photonics, 0, , .	6.6	2