

Ioannis Sgouralis

List of Publications by Year in descending order

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35
papers

757
citations

516710

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all docs

43
docs citations

43
times ranked

510
citing authors

#	ARTICLE	IF	CITATIONS
1	An Introduction to Infinite HMMs for Single-Molecule Data Analysis. <i>Biophysical Journal</i> , 2017, 112, 2021-2029.	0.5	79
2	Impact of renal medullary three-dimensional architecture on oxygen transport. <i>American Journal of Physiology - Renal Physiology</i> , 2014, 307, F263-F272.	2.7	61
3	An alternative framework for fluorescence correlation spectroscopy. <i>Nature Communications</i> , 2019, 10, 3662.	12.8	53
4	A mathematical model of the myogenic response to systolic pressure in the afferent arteriole. <i>American Journal of Physiology - Renal Physiology</i> , 2011, 300, F669-F681.	2.7	45
5	Autoregulation and conduction of vasomotor responses in a mathematical model of the rat afferent arteriole. <i>American Journal of Physiology - Renal Physiology</i> , 2012, 303, F229-F239.	2.7	44
6	ICON: An Adaptation of Infinite HMMs for Time Traces with Drift. <i>Biophysical Journal</i> , 2017, 112, 2117-2126.	0.5	41
7	Theoretical assessment of renal autoregulatory mechanisms. <i>American Journal of Physiology - Renal Physiology</i> , 2014, 306, F1357-F1371.	2.7	40
8	Renal hemodynamics, function, and oxygenation during cardiac surgery performed on cardiopulmonary bypass: a modeling study. <i>Physiological Reports</i> , 2015, 3, e12260.	1.7	40
9	Single molecule force spectroscopy at high data acquisition: A Bayesian nonparametric analysis. <i>Journal of Chemical Physics</i> , 2018, 148, 123320.	3.0	35
10	A Bayesian Nonparametric Approach to Single Molecule Förster Resonance Energy Transfer. <i>Journal of Physical Chemistry B</i> , 2019, 123, 675-688.	2.6	35
11	Bladder urine oxygen tension for assessing renal medullary oxygenation in rabbits: experimental and modeling studies. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2016, 311, R532-R544.	1.8	33
12	Renal medullary and urinary oxygen tension during cardiopulmonary bypass in the rat. <i>Mathematical Medicine and Biology</i> , 2017, 34, dqw010.	1.2	30
13	A method for single molecule tracking using a conventional single-focus confocal setup. <i>Journal of Chemical Physics</i> , 2019, 150, 114108.	3.0	29
14	Mathematical modeling of renal hemodynamics in physiology and pathophysiology. <i>Mathematical Biosciences</i> , 2015, 264, 8-20.	1.9	24
15	Generalizing HMMs to Continuous Time for Fast Kinetics: Hidden Markov Jump Processes. <i>Biophysical Journal</i> , 2021, 120, 409-423.	0.5	23
16	Diffraction-limited molecular cluster quantification with Bayesian nonparametrics. <i>Nature Computational Science</i> , 2022, 2, 102-111.	8.0	22
17	Pitching Single-Focus Confocal Data Analysis One Photon at a Time with Bayesian Nonparametrics. <i>Physical Review X</i> , 2020, 10, .	8.9	21
18	Control and Modulation of Fluid Flow in the Rat Kidney. <i>Bulletin of Mathematical Biology</i> , 2013, 75, 2551-2574.	1.9	18

#	ARTICLE	IF	CITATIONS
19	Extraction of rapid kinetics from smFRET measurements using integrative detectors. Cell Reports Physical Science, 2021, 2, 100409.	5.6	17
20	Inferring effective forces for Langevin dynamics using Gaussian processes. Journal of Chemical Physics, 2020, 152, 124106.	3.0	16
21	A Bayesian Topological Framework for the Identification and Reconstruction of Subcellular Motion. SIAM Journal on Imaging Sciences, 2017, 10, 871-899.	2.2	15
22	Direct Photon-by-Photon Analysis of Time-Resolved Pulsed Excitation Data using Bayesian Nonparametrics. Cell Reports Physical Science, 2020, 1, 100234.	5.6	15
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	Residence time analysis of RNA polymerase transcription dynamics: A Bayesian sticky HMM approach. Biophysical Journal, 2021, 120, 1665-1679.	0.5	3
25	Modeling Non-additive Effects in Neighboring Chemically Identical Fluorophores. Journal of Physical Chemistry B, 2022, 126, 4216-4225.	2.6	3
26	Transfer Function Analysis of Dynamic Blood Flow Control in the Rat Kidney. Bulletin of Mathematical Biology, 2016, 78, 923-960.	1.9	2
27	RNA Polymerase Dynamics and Other Single-Molecule Continuous Time Problems. Biophysical Journal, 2020, 118, 544a.	0.5	2
28	Computing Viscous Flow in an Elastic Tube. Numerical Mathematics, 2014, 7, 555-574.	1.3	2
29	Computational Proposal for Tracking Multiple Molecules in a Multifocus Confocal Setup. ACS Photonics, 0, , .	6.6	2
30	A Multicellular Vascular Model of the Renal Myogenic Response. Processes, 2018, 6, 89.	2.8	1
31	Global sensitivity analysis in a mathematical model of the renal interstitium. Involve, 2017, 10, 625-649.	0.2	0
32	Propagation of vasoconstrictive responses in a mathematical model of the rat afferent arteriole. FASEB Journal, 2011, 25, 665.20.	0.5	0
33	Interactions between Tubuloglomerular Feedback and the Myogenic Mechanism of the Afferent Arteriole. FASEB Journal, 2012, 26, 690.2.	0.5	0
34	Nephrovascular interactions in a mathematical model of rat renal autoregulation. FASEB Journal, 2013, 27, 1110.5.	0.5	0
35	Modeling Blood Flow and Oxygenation in a Diabetic Rat Kidney. Association for Women in Mathematics Series, 2017, , 101-113.	0.4	0