Pearu Peterson

List of Publications by Year
in descending order

21 papers	29,026 citations	623734 14 h-index	794594 19 g-index
22 all docs	22 docs citations	22 times ranked	33054 citing authors

#	Article	IF	Citations
1	Array programming with NumPy. Nature, 2020, 585, 357-362.	27.8	10,143
2	SciPy 1.0: fundamental algorithms for scientific computing in Python. Nature Methods, 2020, 17, 261-272.	19.0	17,539
3	Restricted ADP movement in cardiomyocytes: Cytosolic diffusion obstacles are complemented with a small number of open mitochondrial voltage-dependent anion channels. Journal of Molecular and Cellular Cardiology, 2016, 97, 197-203.	1.9	30
4	Cross-Bridge Group Ensembles Describing Cooperativity in Thermodynamically Consistent Way. PLoS ONE, 2015, 10, e0137438.	2.5	3
5	Tight Coupling of Na^+/K^+-ATPase with Glycolysis Demonstrated in Permeabilized Rat Cardiomyocytes. PLoS ONE, 2014, 9, e99413.	2.5	29
6	Real-time determination of sarcomere length of a single cardiomyocyte during contraction. American Journal of Physiology - Cell Physiology, 2013, 304, C519-C531.	4.6	22
7	Sensitivity Analysis of Flux Determination in Heart by $H_2^{18}O$ -provided Labeling Using a Dynamic Isotopologue Model of Energy Transfer Pathways. PLoS Computational Biology, 2012, 8, e1002795.	3.2	0
8	Molecular Dynamics Simulations of Creatine Kinase and Adenine Nucleotide Translocase in Mitochondrial Membrane Patch. Journal of Biological Chemistry, 2012, 287, 7467-7476.	3.4	20
9	Analysis of Molecular Movement Reveals Latticelike Obstructions to Diffusion in Heart Muscle Cells. Biophysical Journal, 2012, 102, 739-748.	0.5	31
10	Incorporating Cooperativity into Huxley-Type Cross-Bridge Models in Thermodynamically Consistent Way. Biophysical Journal, 2012, 102, 357a.	0.5	0
11	Mapping Diffusion Coefficients of Fluorescent Dyes in Cardiomyocytes. Biophysical Journal, 2011, 100, 470a.	0.5	0
12	Application of regularized Richardson-Lucy algorithm for deconvolution of confocal microscopy images. Journal of Microscopy, 2011, 243, 124-140.	1.8	75
13	Symbolic flux analysis for genome-scale metabolic networks. BMC Systems Biology, 2011, 5, 81.	3.0	3
14	Bidirectionality and Compartmentation of Metabolic Fluxes Are Revealed in the Dynamics of Isotopomer Networks. International Journal of Molecular Sciences, 2009, 10, 1697-1718.	4.1	12
15	F2PY: a tool for connecting Fortran and Python programs. International Journal of Computational Science and Engineering, 2009, 4, 296.	0.5	186
16	On the long-time behaviour of soliton ensembles. Mathematics and Computers in Simulation, 2003, 62, 137-147.	4.4	24
17	Long-time behaviour of soliton ensembles. Part II—Periodical patterns of trajectories. Chaos, Solitons and Fractals, 2003, 15, 29-40.	5.1	23
18	Long-time behaviour of soliton ensembles. Part I—Emergence of ensembles. Chaos, Solitons and Fractals, 2002, 14, 1413-1424.	5.1	29

#	Article	IF	Citations
19	Reconstruction of multi-soliton interactions using crest data for (2+1)-dimensional KdV type equations. Physica D: Nonlinear Phenomena, 2002, 171, 221-235.	2.8	5
20	Sensitivity of the inverse wave crest problem. Wave Motion, 2001, 34, 391-399.	2.0	14
21	A direct and inverse problem for wave crests modelled by interactions of two solitons. Physica D: Nonlinear Phenomena, 2000, 141, 316-332.	2.8	21