Samuel Bernard

List of Publications by Year
in descending order

57 papers	12,293 citations	136950 32 h-index	133252 59 g-index
61 all docs	61 docs citations	61 times ranked	16419 citing authors

#	Article	IF	Citations
1	Evidence for Cardiomyocyte Renewal in Humans. Science, 2009, 324, 98-102.	12.6	2,679
2	Dynamics of fat cell turnover in humans. Nature, 2008, 453, 783-787.	27.8	1,914
3	Dynamics of Hippocampal Neurogenesis in Adult Humans. Cell, 2013, 153, 1219-1227.	28.9	1,523
4	Dynamics of Cell Generation and Turnover in the Human Heart. Cell, 2015, 161, 1566-1575.	28.9	923
5	Neurogenesis in the Striatum of the Adult Human Brain. Cell, 2014, 156, 1072-1083.	28.9	786
6	Adipocyte Turnover: Relevance to Human Adipose Tissue Morphology. Diabetes, 2010, 59, 105-109.	0.6	490
7	Spontaneous Synchronization of Coupled Circadian Oscillators. Biophysical Journal, 2005, 89, 120-129.	0.5	401
8	Dynamics of Oligodendrocyte Generation and Myelination in the Human Brain. Cell, 2014, 159, 766-774.	28.9	374
9	The Lifespan and Turnover of Microglia in the Human Brain. Cell Reports, 2017, 20, 779-784.	6.4	340
10	The Age of Olfactory Bulb Neurons in Humans. Neuron, 2012, 74, 634-639.	8.1	333
11	Dynamics of human adipose lipid turnover in health and metabolic disease. Nature, 2011, 478, 110-113.	27.8	319
12	Dynamics of oligodendrocyte generation in multiple sclerosis. Nature, 2019, 566, 538-542.	27.8	251
13	Synchronization-Induced Rhythmicity of Circadian Oscillators in the Suprachiasmatic Nucleus. PLoS Computational Biology, 2007, 3, e68.	3.2	184
14	Identification of cardiomyocyte nuclei and assessment of ploidy for the analysis of cell turnover. Experimental Cell Research, 2011, 317, 188-194.	2.6	144
15	Oscillations in cyclical neutropenia: new evidence based on mathematical modeling. Journal of Theoretical Biology, 2003, 223, 283-298.	1.7	141
16	The age and genomic integrity of neurons after cortical stroke in humans. Nature Neuroscience, 2014, 17, 801-803.	14.8	108
17	Adipose lipid turnover and long-term changes in body weight. Nature Medicine, 2019, 25, 1385-1389.	30.7	90
18	The Surprising Creativity of Digital Evolution: A Collection of Anecdotes from the Evolutionary Computation and Artificial Life Research Communities. Artificial Life, 2020, 26, 274-306.	1.3	88

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19	Modelling transcriptional feedback loops: the role of Gro/TLE1 in Hes1 oscillations. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2006, 364, 1155-1170.	3.4	83
20	Sufficient conditions for stability of linear differential equations with distributed delay. Discrete and Continuous Dynamical Systems - Series B, 2001, 1, 233-256.	0.9	81
21	Long Period Oscillations in aG0Model of Hematopoietic Stem Cells. SIAM Journal on Applied Dynamical Systems, 2005, 4, 312-332.	1.6	76
22	Transplanted Bone Marrow-Derived Cells Contribute to Human Adipogenesis. Cell Metabolism, 2015, 22, 408-417.	16.2	75
23	Analysis of Cell Kinetics Using a Cell Division Marker: Mathematical Modeling of Experimental Data. Biophysical Journal, 2003, 84, 3414-3424.	0.5	74
24	Impact of fat mass and distribution on lipid turnover in human adipose tissue. Nature Communications, 2017, 8, 15253.	12.8	71
25	A new model for the estimation of time of death from vitreous potassium levels corrected for age and temperature. Forensic Science International, 2015, 254, 158-166.	2.2	60
26	Adipocyte triglyceride turnover and lipolysis in lean and overweight subjects. Journal of Lipid Research, 2013, 54, 2909-2913.	4.2	55
27	Bifurcations in a white-blood-cell production model. Comptes Rendus - Biologies, 2004, 327, 201-210.	0.2	49
28	Cost-effective G-CSF therapy strategies for cyclical neutropenia: Mathematical modelling based hypotheses. Journal of Theoretical Biology, 2006, 238, 754-763.	1.7	48
29	Tumor Growth Rate Determines the Timing of Optimal Chronomodulated Treatment Schedules. PLoS Computational Biology, 2010, 6, e1000712.	3.2	45
30	Cardiomyocyte Renewal in Humans. Circulation Research, 2012, 110, e17-8; author reply e19-21.	4.5	45
31	Cell generation dynamics underlying naive T-cell homeostasis in adult humans. PLoS Biology, 2019, 17, e3000383.	5.6	45
32	Analysis of Radiocarbon, Stable Isotopes and DNA in Teeth to Facilitate Identification of Unknown Decedents. PLoS ONE, 2013, 8, e69597.	2.5	37
33	Implication of the Autologous Immune System in BCRâ€“ABL Transcript Variations in Chronic Myelogenous Leukemia Patients Treated with Imatinib. Cancer Research, 2015, 75, 4053-4062.	0.9	34
34	Multiscale Modeling of the Early CD8 T-Cell Immune Response in Lymph Nodes: An Integrative Study. Computation, 2014, 2, 159-181.	2.0	29
35	Regulation of mammalian cell cycle progression in the regenerating liver. Journal of Theoretical Biology, 2011, 283, 103-112.	1.7	28
36	Adipocyte Triglyceride Turnover Is Independently Associated With Atherogenic Dyslipidemia. Journal of the American Heart Association, 2012, 1, e003467.	3.7	27

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37	Stability Analysis of a Model of Interaction Between the Immune System and Cancer Cells in Chronic Myelogenous Leukemia. Bulletin of Mathematical Biology, 2018, 80, 1084-1110.	1.9	26
38	Hybrid Model of Erythropoiesis and Leukemia Treatment with Cytosine Arabinoside. SIAM Journal on Applied Mathematics, 2011, 71, 2246-2268.	1.8	24
39	Meningioma growth dynamics assessed by radiocarbon retrospective birth dating. EBioMedicine, 2018, 27, 176-181.	6.1	22
40	A mathematical model for the interpretation of nuclear bomb test derived 14C incorporation in biological systems. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 1295-1298.	1.4	20
41	Modeling circadian clockâ€“cell cycle interaction effects on cell population growth rates. Journal of Theoretical Biology, 2014, 363, 318-331.	1.7	19
42	Mathematical Modeling in Chronobiology. Handbook of Experimental Pharmacology, 2013, , 335-357.	1.8	18
43	Why do cells cycle with a 24 hour period?. Genome Informatics, 2006, 17, 72-9.	0.4	18
44	First passage times in homogeneous nucleation: Dependence on the total number of particles. Journal of Chemical Physics, 2016, 144, 034106.	3.0	13
45	Complex dynamics in the Oregonator model with linear delayed feedback. Chaos, 2008, 18, 023126.	2.5	12
46	A Model for Genome Size Evolution. Bulletin of Mathematical Biology, 2014, 76, 2249-2291.	1.9	12
47	Phenotypic noise and the cost of complexity. Evolution; International Journal of Organic Evolution, 2020, 74, 2221-2237.	2.3	9
48	Optimal linear stability condition for scalar differential equations with distributed delay. Discrete and Continuous Dynamical Systems - Series B, 2015, 20, 1855-1876.	0.9	7
49	Death of neuronal clusters contributes to variance of age at onset in Huntingtonâ€™s disease. Neurogenetics, 2006, 7, 21-25.	1.4	4
50	How to Build a Multiscale Model in Biology. Acta Biotheoretica, 2013, 61, 291-303.	1.5	4
51	Moving the Boundaries of Granulopoiesis Modelling. Bulletin of Mathematical Biology, 2016, 78, 2358-2363.	1.9	4
52	A multiscale modelling approach for the regulation of the cell cycle by the circadian clock. Journal of Theoretical Biology, 2017, 426, 117-125.	1.7	4
53	Estimates and impact of lymphocyte division parameters from CFSE data using mathematical modelling. PLoS ONE, 2017, 12, e0179768.	2.5	4
54	Radioprotective effects of induced astronaut torpor and advanced propulsion systems during deep space travel. Life Sciences in Space Research, 2020, 26, 105-113.	2.3	4

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55	Dynamics of Fat Cell Turnover in Humans. Obstetrical and Gynecological Survey, 2008, 63, 577-578.	0.4	3
56	Long-term treatment effects in chronic myeloid leukemia. Journal of Mathematical Biology, 2017, 75, 733-758.	1.9	3
57	Modeling Biological Rhythms in Cell Populations. Mathematical Modelling of Natural Phenomena, 2012, 7, 107-125.	2.4	1