

# Ruben Perez-Carrasco

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/166814/publications.pdf>

Version: 2024-02-01

26  
papers

876  
citations

687363

13  
h-index

713466

21  
g-index

35  
all docs

35  
docs citations

35  
times ranked

881  
citing authors

#	ARTICLE	IF	CITATIONS
1	Species-specific pace of development is associated with differences in protein stability. <i>Science</i> , 2020, 369, .	12.6	163
2	Combining a Toggle Switch and a Repressilator within the AC-DC Circuit Generates Distinct Dynamical Behaviors. <i>Cell Systems</i> , 2018, 6, 521-530.e3.	6.2	96
3	Catch bond drives stator mechanosensitivity in the bacterial flagellar motor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12952-12957.	7.1	78
4	A theoretical framework for the regulation of Shh morphogen-controlled gene expression. <i>Development (Cambridge)</i> , 2014, 141, 3868-3878.	2.5	70
5	A Statistical Approach Reveals Designs for the Most Robust Stochastic Gene Oscillators. <i>ACS Synthetic Biology</i> , 2016, 5, 459-470.	3.8	61
6	Exact solution of stochastic gene expression models with bursting, cell cycle and replication dynamics. <i>Physical Review E</i> , 2020, 101, 032403.	2.1	61
7	Intrinsic Noise Profoundly Alters the Dynamics and Steady State of Morphogen-Controlled Bistable Genetic Switches. <i>PLoS Computational Biology</i> , 2016, 12, e1005154.	3.2	60
8	Effects of cell cycle variability on lineage and population measurements of messenger RNA abundance. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20200360.	3.4	59
9	Controlling spatiotemporal pattern formation in a concentration gradient with a synthetic toggle switch. <i>Molecular Systems Biology</i> , 2020, 16, e9361.	7.2	42
10	Precision of tissue patterning is controlled by dynamical properties of gene regulatory networks. <i>Development (Cambridge)</i> , 2021, 148, .	2.5	39
11	A multiscale model of epigenetic heterogeneity-driven cell fate decision-making. <i>PLoS Computational Biology</i> , 2019, 15, e1006592.	3.2	28
12	Memory functions reveal structural properties of gene regulatory networks. <i>PLoS Computational Biology</i> , 2018, 14, e1006003.	3.2	23
13	Neuronal differentiation influences progenitor arrangement in the vertebrate neuroepithelium. <i>Development (Cambridge)</i> , 2019, 146, .	2.5	19
14	Minimum Action Path Theory Reveals the Details of Stochastic Transitions Out of Oscillatory States. <i>Physical Review Letters</i> , 2018, 120, 128102.	7.8	15
15	Degradation rate uniformity determines success of oscillations in repressive feedback regulatory networks. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180157.	3.4	13
16	Theoretical Analysis of the F1-ATPase Experimental Data. <i>Biophysical Journal</i> , 2010, 98, 2591-2600.	0.5	12
17	â€˜Neighbourhood watchâ€™ model: embryonic epiblast cells assess positional information in relation to their neighbours. <i>Development (Cambridge)</i> , 2022, 149, .	2.5	8
18	Fokker-Planck approach to molecular motors. <i>Europhysics Letters</i> , 2010, 91, 60001.	2.0	6

#	ARTICLE	IF	CITATIONS
19	Physics of molecular machines operated by a particle flux. Europhysics Letters, 2012, 100, 40001.	2.0	2
20	Relaxation time asymmetry in stator dynamics of the bacterial flagellar motor. Science Advances, 2022, 8, eabl8112.	10.3	2
21	Deterministic and Stochastic Study for a Microscopic Angiogenesis Model: Applications to the Lewis Lung Carcinoma. PLoS ONE, 2016, 11, e0155553.	2.5	1
22	POWER AND EFFICIENCY OF F1-ATPase MOLECULAR MOTOR. Fluctuation and Noise Letters, 2012, 11, 1240003.	1.5	0
23	Mathematical models help explain experimental data. Response to "Transcriptional interpretation of Shh morphogen signaling: computational modeling validates empirically established models". Development (Cambridge), 2016, 143, 1640-1643.	2.5	0
24	de la Cruz et al. Reply. Physical Review Letters, 2019, 122, 059802.	7.8	0
25	Interdisciplinary approaches to dynamics in biology. Interface Focus, 2021, 11, .	3.0	0
26	Stator dynamics of the bacterial flagellar motor. Biophysical Journal, 2022, 121, 2a.	0.5	0