José M G Vilar

List of Publications by Year in descending order

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62 4,336 26 61 papers citations h-index g-index

66 66 4894
all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	All-or-none amyloid disassembly via chaperone-triggered fibril unzipping favors clearance of $\hat{l}\pm$ -synuclein toxic species. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	15
2	Reliably quantifying the evolving worldwide dynamic state of the COVID-19 outbreak from death records, clinical parametrization, and demographic data. Scientific Reports, 2021, 11, 19952.	3.3	6
3	Ascertaining the initiation of epidemic resurgences: an application to the COVID-19 second surges in Europe and the Northeast United States. Royal Society Open Science, 2021, 8, 210773.	2.4	6
4	Extraction and Refolding Determinants of Chaperone-Driven Aggregated Protein Reactivation. Journal of Molecular Biology, 2020, 432, 3239-3250.	4.2	3
5	Regulation of Human Hsc70 ATPase and Chaperone Activities by Apg2: Role of the Acidic Subdomain. Journal of Molecular Biology, 2019, 431, 444-461.	4.2	16
6	Determinants of population responses to environmental fluctuations. Scientific Reports, 2018, 8, 887.	3.3	13
7	Clearly Detectable, Kinetically Restricted Solid–Solid Phase Transition in cis-Ceramide Monolayers. Langmuir, 2018, 34, 11749-11758.	3.5	6
8	Predicting human olfactory perception from chemical features of odor molecules. Science, 2017, 355, 820-826.	12.6	194
9	Computing at the Front-End by Receptor Networks. Cell Systems, 2017, 5, 316-318.	6.2	1
10	A Crowdsourcing Approach to Developing and Assessing Prediction Algorithms for AML Prognosis. PLoS Computational Biology, 2016, 12, e1004890.	3.2	28
11	Suppression and enhancement of transcriptional noise by DNA looping. Physical Review E, 2014, 89, 062703.	2.1	11
12	Entropy of Leukemia on Multidimensional Morphological and Molecular Landscapes. Physical Review $X,2014,4,.$	8.9	7
13	Communication: System-size scaling of Boltzmann and alternate Gibbs entropies. Journal of Chemical Physics, 2014, 140, 201101.	3.0	36
14	Critical assessment of automated flow cytometry data analysis techniques. Nature Methods, 2013, 10, 228-238.	19.0	509
15	Reliable Prediction of Complex Phenotypes from a Modular Design in Free Energy Space: An Extensive Exploration of thelacOperon. ACS Synthetic Biology, 2013, 2, 576-586.	3.8	31
16	Systems Biophysics of Gene Expression. Biophysical Journal, 2013, 104, 2574-2585.	0.5	26
17	Far-from-equilibrium processes without net thermal exchange via energy sorting. Journal of Chemical Physics, 2012, 136, 064115.	3.0	1
18	Trafficking Coordinate Description of Intracellular Transport Control of Signaling Networks. Biophysical Journal, 2011, 101, 2315-2323.	0.5	13

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19	Control of gene expression by modulated self-assembly. Nucleic Acids Research, 2011, 39, 6854-6863.	14.5	15
20	Work-Hamiltonian connection for anisoparametric processes in manipulated microsystems. Journal of Non-Equilibrium Thermodynamics, $2011, 36, .$	4.2	5
21	Optimal Resting-Growth Strategies of Microbial Populations in Fluctuating Environments. PLoS ONE, 2011, 6, e18622.	2.5	21
22	Noisy-threshold control of cell death. BMC Systems Biology, 2010, 4, 152.	3.0	4
23	Accurate Prediction of Gene Expression by Integration of DNA Sequence Statistics with Detailed Modeling of Transcription Regulation. Biophysical Journal, 2010, 99, 2408-2413.	0.5	25
24	CplexA: a <i>Mathematica</i> package to study macromolecular-assembly control of gene expression. Bioinformatics, 2010, 26, 2060-2061.	4.1	37
25	Protein–protein/DNA interaction networks: versatile macromolecular structures for the control of gene expression. IET Systems Biology, 2008, 2, 247-255.	1.5	12
26	Failure of the Work-Hamiltonian Connection for Free-Energy Calculations. Physical Review Letters, 2008, 100, 020601.	7.8	65
27	Vilar and Rubi Reply:. Physical Review Letters, 2008, 101, .	7.8	12
28	Vilar and Rubi Reply:. Physical Review Letters, 2008, 101, .	7.8	16
29	Synthetic cooperation in engineered yeast populations. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 1877-1882.	7.1	419
30	Ab initio thermodynamic modeling of distal multisite transcription regulation. Nucleic Acids Research, 2007, 36, 726-731.	14.5	38
31	Multilevel Deconstruction of the In Vivo Behavior of Looped DNA-Protein Complexes. PLoS ONE, 2007, 2, e355.	2.5	27
32	Stochastic population dynamics in turbulent fields. European Physical Journal: Special Topics, 2007, 146, 177-187.	2.6	7
33	DNA looping: the consequences and its control. Current Opinion in Structural Biology, 2006, 16, 344-350.	5.7	79
34	Signal Processing in the TGF-Î ² Superfamily Ligand-Receptor Network. PLoS Computational Biology, 2006, 2, e3.	3.2	113
35	Stochastic dynamics of macromolecularâ€assembly networks. Molecular Systems Biology, 2006, 2, 2006.0024.	7.2	47
36	Modularizing gene regulation. Molecular Systems Biology, 2006, 2, 2006.0016.	7.2	7

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37	Multiprotein DNA Looping. Physical Review Letters, 2006, 96, 238103.	7.8	26
38	Inferring the in vivo looping properties of DNA. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17642-17645.	7.1	54
39	DNA looping in gene regulation: from the assembly of macromolecular complexes to the control of transcriptional noise. Current Opinion in Genetics and Development, 2005, 15, 136-144.	3.3	129
40	The Mesoscopic Dynamics of Thermodynamic Systems. Journal of Physical Chemistry B, 2005, 109, 21502-21515.	2.6	196
41	Signal processing in the TGF- \hat{l}^2 superfamily ligand-receptor network. PLoS Computational Biology, 2005, preprint, e3.	3.2	0
42	From molecular noise to behavioural variability in a single bacterium. Nature, 2004, 428, 574-578.	27.8	405
43	On the origin of plankton patchiness. Physica A: Statistical Mechanics and Its Applications, 2003, 317, 239-246.	2.6	29
44	Modeling network dynamics. Journal of Cell Biology, 2003, 161, 471-476.	5.2	195
45	DNA Looping and Physical Constraints on Transcription Regulation. Journal of Molecular Biology, 2003, 331, 981-989.	4.2	173
46	Mechanisms of noise-resistance in genetic oscillators. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5988-5992.	7.1	518
47	Field-induced force-suppression in ferromagnetic colloids. Physica A: Statistical Mechanics and Its Applications, 2001, 293, 51-58.	2.6	1
48	Thermodynamics "beyond" local equilibrium. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 11081-11084.	7.1	122
49	Noise Suppression by Noise. Physical Review Letters, 2001, 86, 950-953.	7.8	65
50	Ordering periodic spatial structures by non-equilibrium fluctuations. Physica A: Statistical Mechanics and Its Applications, 2000, 277, 327-334.	2.6	11
51	The rheology of field-responsive suspensions. Journal of Physics Condensed Matter, 2000, 12, A75-A84.	1.8	8
52	Noise and periodic modulations in neural excitable media. Physical Review E, 1999, 59, 5920-5927.	2.1	6
53	A mesoscopic approach to the "negative―viscosity effect in ferrofluids. Physica A: Statistical Mechanics and Its Applications, 1999, 270, 403-412.	2.6	12
54	Scaling concepts in periodically modulated noisy systems. Physica A: Statistical Mechanics and Its Applications, 1999, 264, 1-14.	2.6	17

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55	Effects of Noise in Symmetric Two-Species Competition. Physical Review Letters, 1998, 80, 4099-4102.	7.8	85
56	Stochastic Resonance in Noisy Nondynamical Systems. Physical Review Letters, 1998, 81, 14-17.	7.8	44
57	Effect of the output of the system in signal detection. Physical Review E, 1997, 56, R32-R35.	2.1	4
58	Spatiotemporal Stochastic Resonance in the Swift-Hohenberg Equation. Physical Review Letters, 1997, 78, 2886-2889.	7.8	111
59	Stochastic Multiresonance. Physical Review Letters, 1997, 78, 2882-2885.	7.8	130
60	Divergent Signal-to-Noise Ratio and Stochastic Resonance in Monostable Systems. Physical Review Letters, 1996, 77, 2863-2866.	7.8	108
61	Stochastic resonance in a dipole. Physical Review E, 1996, 54, 6929-6932.	2.1	11
62	On cellular automata models for quantum systems. Journal of Physics A, 1996, 29, 8169-8171.	1.6	1