Alessandro Taloni

List of Publications by Year
in descending order

37 papers	1,032 citations	516710 16 h-index	414414 32 g-index
38 all docs	38 docs citations	38 times ranked	1023 citing authors

#	Article	IF	Citations
1	The role of pressure in cancer growth. European Physical Journal Plus, 2015, 130, 1.	2.6	186
2	Foundation of fractional Langevin equation: Harmonization of a many-body problem. Physical Review E, 2010, 81, 051118.	2.1	120
3	Single-File Diffusion on a Periodic Substrate. Physical Review Letters, 2006, 96, 020601.	7.8	72
4	Size effects on the fracture of microscale and nanoscale materials. Nature Reviews Materials, 2018, 3, 211-224.	48.7	72
5	Generalized Elastic Model Yields a Fractional Langevin Equation Description. Physical Review Letters, 2010, 104, 160602.	7.8	67
6	Entropy-Driven Single Molecule Tug-of-War of DNA at Microâ˜Nanofluidic Interfaces. Nano Letters, 2012, 12, 1597-1602.	9.1	60
7	Langevin formulation for single-file diffusion. Physical Review E, 2008, 78, 051116.	2.1	59
8	Subdiffusion and Long-Time Anticorrelations in a Stochastic Single File. Physical Review Letters, 2006, 97, 106101.	7.8	44
9	Single file dynamics in soft materials. Soft Matter, 2017, 13, 1096-1106.	2.7	37
10	Volume Changes During Active Shape Fluctuations in Cells. Physical Review Letters, 2015, 114, 208101.	7.8	34
11	On single-file and less dense processes. Europhysics Letters, 2008, 83, 20004.	2.0	31
12	Diffusion of interacting Brownian particles: Jamming and anomalous diffusion. Physical Review E, 2006, 74, 021119.	2.1	29
13	Mechanical Properties of Growing Melanocytic Nevi and the Progression to Melanoma. PLoS ONE, 2014, 9, e94229.	2.5	22
14	Correlations in a generalized elastic model: Fractional Langevin equation approach. Physical Review E, 2010, 82, 061104.	2.1	21
15	Generalized elastic model: Thermal vs. non-thermal initial conditions â€"Universal scaling, roughening, ageing and ergodicity. Europhysics Letters, 2012, 97, 30001.	2.0	18
16	Local Analysis of Heterogeneous Intracellular Transport: Slow and Fast Moving Endosomes. Entropy, 2021, 23, 958.	2.2	18
17	Machine learning classifier to identify clinical and radiological features relevant to disability progression in multiple sclerosis. Journal of Neurology, 2021, 268, 4834-4845.	3.6	16
18	Unusual response to a localized perturbation in a generalized elastic model. Physical Review E, 2011, 84, 021101.	2.1	15

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19	Scaling Theory of Stretched Polymers in Nanoslits. Macromolecules, 2013, 46, 7989-8002.	4.8	15
20	Scalar model for frictional precursors dynamics. Scientific Reports, 2015, 5, 8086.	3.3	14
21	Theory connecting nonlocal sediment transport, earth surface roughness, and the Sadler effect. Geophysical Research Letters, 2017, 44, 2281-2289.	4.0	14
22	Interacting Single-File System: Fractional Langevin Formulation Versus Diffusion-Noise Approach. Biophysical Reviews and Letters, 2014, 09, 381-396.	0.8	13
23	Generalized Elastic Model: Fractional Langevin Description, Fluctuation Relation and Linear Response. Mathematical Modelling of Natural Phenomena, 2013, 8, 127-143.	2.4	12
24	Fracture Size Effects in Nanoscale Materials: The Case of Graphene. Physical Review Applied, 2015, 4, .	3.8	11
25	Protein-driven lipid domain nucleation in biological membranes. Physical Review E, 2019, 100, 042410.	2.1	8
26	Conformal approach to cylindrical DLA. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P09004-P09004.	2.3	7
27	Atomic-Scale Front Propagation at the Onset of Frictional Sliding. Journal of Physical Chemistry Letters, 2017, 8, 5438-5443.	4.6	4
28	Cell Migration in Microfluidic Devices: Invadosomes Formation in Confined Environments. Advances in Experimental Medicine and Biology, 2019, 1146, 79-103.	1.6	3
29	Nanoconfinement-Induced DNA Reptating Motion and Analogy to Fluctuating Interfaces. Macromolecules, 2020, 53, 1001-1013.	4.8	3
30	Collisional statistics and dynamics of two-dimensional hard-disk systems: From fluid to solid. Physical Review E, 2015, 92, 022131.	2.1	2
31	Kubo Fluctuation Relations in the Generalized Elastic Model. Advances in Mathematical Physics, 2016, 2016, 1-16.	0.8	2
32	Probing spermiogenesis: a digital strategy for mouse acrosome classification. Scientific Reports, 2017, 7, 3748.	3.3	2
33	Stationary Growth and Unique Invariant Harmonic Measure of Cylindrical Diffusion Limited Aggregation. Physical Review Letters, 2012, 109, 065501.	7.8	1
34	Fluctuations in Protein Aggregation: Design of Preclinical Screening for Early Diagnosis of Neurodegenerative Disease. Physical Review Applied, 2016, 6, .	3.8	0
35	From the Underdamped Generalized Elastic Model to the Single Particle Langevin Description. Mathematics, 2017, 5, 3.	2.2	0
36	Extreme value theory and the St. Petersburg paradox in the failure statistics of wires. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 053401.	2.3	0

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37	Abstract 364: Mechanical properties of growing melanocytic nevi and the progression to melanoma. , 2014, , .		0