Fabio Cecconi

List of Publications by Year
in descending order

85 papers	3,606 citations	279487 23 h-index	133063 59 g-index
87 all docs	87 docs citations	87 times ranked	3286 citing authors

#	Article	IF	Citations
1	Computational methods and theory for ion channel research. Advances in Physics: X, 2022, 7, .	1.5	8
2	Probability distribution functions of sub- and superdiffusive systems. Physical Review Research, 2022, 4, .	1.3	9
3	Correlated escape of active particles across a potential barrier. Journal of Chemical Physics, 2021, 155, 234902.	1.2	15
4	Effective equations for reaction coordinates in polymer transport. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 013208.	0.9	4
5	Analytical Model for Particle Capture in Nanopores Elucidates Competition among Electrophoresis, Electroosmosis, and Dielectrophoresis. ACS Nano, 2020, 14, 15816-15828.	7.3	46
6	Diffusion properties of self-propelled particles in cellular flows. Soft Matter, 2020, 16, 5431-5438.	1.2	11
7	Native-state fingerprint on the ubiquitin translocation across a nanopore. Physical Review E, 2020, 101, 032401.	0.8	2
8	How a local active force modifies the structural properties of polymers. Soft Matter, 2020, 16, 2594-2604.	1.2	9
9	Activity-controlled clogging and unclogging of microchannels. Physical Review Research, 2020, 2, .	1.3	16
10	Understanding causation via correlations and linear response theory. Physical Review Research, 2020, 2, .	1.3	16
11	Diffusive transport in highly corrugated channels. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 1084-1091.	0.9	3
12	DCA for genome-wide epistasis analysis: the statistical genetics perspective. Physical Biology, 2019, 16, 026002.	0.8	14
13	Transport of active particles in an open-wedge channel. Journal of Chemical Physics, 2019, 150, 144903.	1.2	20
14	Translocation intermediates of ubiquitin through an Î±-hemolysin nanopore: implications for detection of post-translational modifications. Nanoscale, 2019, 11, 9920-9930.	2.8	17
15	Protein sequencing via nanopore based devices: a nanofluidics perspective. Journal of Physics Condensed Matter, 2018, 30, 204002.	0.7	55
16	The Role of Data in Model Building and Prediction: A Survey Through Examples. Entropy, 2018, 20, 807.	1.1	15
17	Anomalous mobility of a driven active particle in a steady laminar flow. Journal of Physics Condensed Matter, 2018, 30, 264002.	0.7	9
18	Electroosmotic flow through an $$alpha$$ Î± -hemolysin nanopore. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	43

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19	Frequency-control of protein translocation across an oscillating nanopore. Physical Chemistry Chemical Physics, 2017, 19, 11260-11272.	1.3	8
20	Anomalous force-velocity relation of driven inertial tracers in steady laminar flows. European Physical Journal E, 2017, 40, 81.	0.7	14
21	Reaction Spreading in Systems With Anomalous Diffusion. Mathematical Modelling of Natural Phenomena, 2016, 11, 107-127.	0.9	0
22	Nonlinear Response of Inertial Tracers in Steady Laminar Flows: Differential and Absolute Negative Mobility. Physical Review Letters, 2016, 117, 174501.	2.9	51
23	The role of the number of degrees of freedom and chaos in macroscopic irreversibility. Physica A: Statistical Mechanics and Its Applications, 2016, 442, 486-497.	1.2	16
24	Nanopore tweezers: Voltage-controlled trapping and releasing of analytes. Physical Review E, 2015, 92, 032714.	0.8	27
25	Driven diffusion against electrostatic or effective energy barrier across <i>Î±</i>-hemolysin. Journal of Chemical Physics, 2015, 143, 154109.	1.2	12
26	Understanding the dependence on the pulling speed of the unfolding pathway of proteins. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P08003.	0.9	7
27	Multistep Current Signal in Protein Translocation through Graphene Nanopores. Journal of Physical Chemistry B, 2015, 119, 5815-5823.	1.2	33
28	Modulation of current through a nanopore induced by a charged globule: Implications for DNA-docking. Europhysics Letters, 2014, 108, 46002.	0.7	8
29	Coarse-grained modeling of protein unspecifically bound to DNA. Physical Biology, 2014, 11, 026003.	0.8	13
30	Transport and fluctuation-dissipation relations in asymptotic and preasymptotic diffusion across channels with variable section. Physical Review E, 2014, 90, 062110.	0.8	7
31	From the Law of Large Numbers to Large Deviation Theory in Statistical Physics: An Introduction. Lecture Notes in Physics, 2014, , 1-27.	0.3	0
32	Exploring the Unfolding Pathway of Maltose Binding Proteins: An Integrated Computational Approach. Journal of Chemical Theory and Computation, 2014, 10, 3589-3597.	2.3	11
33	Non-anomalous diffusion is not always Gaussian. European Physical Journal B, 2014, 87, 1.	0.6	13
34	Protein Transport Across Nanopores: A Statistical Mechanical Perspective From Coarse-Grained Modeling and Approaches. Protein and Peptide Letters, 2014, 21, 227-234.	0.4	12
35	Anomalous diffusion and response in branched systems: a simple analysis. Journal of Physics Condensed Matter, 2013, 25, 465106.	0.7	16
36	Protein translocation in narrow pores: Inferring bottlenecks from native structure topology. Physical Review E, 2013, 88, 022712.	0.8	18

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37	Predicting the future from the past: An old problem from a modern perspective. American Journal of Physics, 2012, 80, 1001-1008.	0.3	43
38	Role of Denaturation in Maltose Binding Protein Translocation Dynamics. Journal of Physical Chemistry B, 2012, 116, 4255-4262.	1.2	25
39	Thermally induced directed currents in hard rod systems. Granular Matter, 2012, 14, 111-114.	1.1	0
40	Computational analysis of maltose binding protein translocation. Philosophical Magazine, 2011, 91, 2034-2048.	0.7	18
41	Coarse Grained Modeling and Approaches to Protein Folding. Current Bioinformatics, 2010, 5, 217-240.	0.7	13
42	Translocation process of structured polypeptides across nanopores. Spectroscopy, 2010, 24, 421-426.	0.8	1
43	A Statistical Model for Translocation of Structured Polypeptide Chains through Nanopores. Journal of Physical Chemistry B, 2009, 113, 10348-10356.	1.2	44
44	Temperature Dependence of Normal Mode Reconstructions of Protein Dynamics. Physical Review Letters, 2009, 102, 218104.	2.9	7
45	Computational analysis of folding and mutation properties of C5 domain of myosin binding protein C. Proteins: Structure, Function and Bioinformatics, 2008, 70, 1313-1322.	1.5	5
46	Analyzing pathogenic mutations of C5 domain from cardiac myosin binding protein C through MD simulations. European Biophysics Journal, 2008, 37, 683-691.	1.2	5
47	Stability and Kinetic Properties of C5-Domain from Myosin Binding Protein C and its Mutants. Biophysical Journal, 2008, 94, 1403-1411.	0.2	8
48	Beyond dynamic density functional theory: the role of inertia. Journal of Physics Condensed Matter, 2008, 20, 494233.	0.7	17
49	Sedimentation speed of inertial particles in laminar and turbulent flows. Europhysics Letters, 2008, 84, 40005.	0.7	86
50	Clustering and coalescence from multiplicative noise: the Kraichnan ensemble. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 235003.	0.7	1
51	Theory of thermostatted inhomogeneous granular fluids: A self-consistent density functional description. Journal of Chemical Physics, 2007, 126, 164904.	1.2	27
52	Diffusion, super-diffusion and coalescence from a single step. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P10007-P10007.	0.9	4
53	Transport properties of chaotic and non-chaotic many particle systems. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P12001-P12001.	0.9	17
54	Computational characterization of the mutation impact on domain C5 of Myosin Binding Protein C. , 2007, , .		0

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55	Kinetics of self-induced aggregation in Brownian particles. Physical Review E, 2007, 75, 031111.	0.8	7
56	Diffusion-Limited Unbinding of Small Peptides from PDZ Domains. Journal of Physical Chemistry B, 2007, 111, 11057-11063.	1.2	5
57	Role of Chaos for the Validity of Statistical Mechanics Laws: Diffusion and Conduction. , 2007, , 123-149.		1
58	Testing Simplified Proteins Models of the hPin1 WW Domain. Biophysical Journal, 2006, 91, 694-704.	0.2	21
59	Inelastic Takahashi hard-rod gas. Journal of Chemical Physics, 2006, 124, 044507.	1.2	2
60	Transport of a heated granular gas in a washboard potential. Journal of Chemical Physics, 2006, 125, 204711.	1.2	2
61	Analysis of PIN1 WW domain through a simple statistical mechanics model. Biophysical Chemistry, 2005, 115, 153-158.	1.5	6
62	Models of fluidized granular materials: examples of non-equilibrium stationary states. Journal of Physics Condensed Matter, 2005, 17, S2715-S2730.	0.7	9
63	Brownian motion and diffusion: From stochastic processes to chaos and beyond. Chaos, 2005, 15, 026102.	1.0	33
64	Functional Dynamics of PDZ Binding Domains: A Normal-Mode Analysis. Biophysical Journal, 2005, 89, 14-21.	0.2	124
65	Simple Models for Compartmentalized Sand. , 2005, , 579-584.		0
66	Defining and identifying communities in networks. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2658-2663.	3.3	2,029
67	Inelastic hard rods in a periodic potential. Journal of Chemical Physics, 2004, 121, 5125-5132.	1.2	19
68	Topological thermal instability and length of proteins. Proteins: Structure, Function and Bioinformatics, 2004, 55, 529-535.	1.5	56
69	Fluid-like behavior of a one-dimensional granular gas. Journal of Chemical Physics, 2004, 120, 35-42.	1.2	38
70	Minimal Stochastic Model for Fermiâ€™s Acceleration. Physical Review Letters, 2004, 92, 040601.	2.9	27
71	The origin of diffusion: the case of non-chaotic systems. Physica D: Nonlinear Phenomena, 2003, 180, 129-139.	1.3	29
72	Noise Activated Granular Dynamics. Physical Review Letters, 2003, 90, 064301.	2.9	28

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73	Mean-field approach for a statistical mechanical model of proteins. Journal of Chemical Physics, 2003, 119, 1248-1256.	1.2	7
74	Short-period attractors and non-ergodic behavior in the deterministic fixed-energy sandpile model. Europhysics Letters, 2003, 63, 512-518.	0.7	21
75	Diffusion, Peer Pressure, and Tailed Distributions. Physical Review Letters, 2002, 89, 088102.	2.9	22
76	Crucial stages of protein folding through a solvable model: Predicting target sites for enzyme-inhibiting drugs. Protein Science, 2002, 11, 1878-1887.	3.1	16
77	Synchronization of non-chaotic dynamical systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 282, 9-17.	0.9	27
78	Molecular dynamics studies on HIV-1 protease: Drug resistance and folding pathways. Proteins: Structure, Function and Bioinformatics, 2001, 43, 365-372.	1.5	35
79	Molecular dynamics studies on HIV-1 protease drug resistance and folding pathways. Proteins: Structure, Function and Bioinformatics, 2001, 43, 365-72.	1.5	12
80	Scaling behavior in a nonlocal and nonlinear diffusion equation. Physical Review E, 2000, 62, R5879-R5882.	0.8	5
81	An analytic estimate of the maximum Lyapunov exponent in products of tridiagonal random matrices. Journal of Physics A, 1999, 32, 7603-7621.	1.6	9
82	Fuzzy transition region in a one-dimensional coupled-stable-map lattice. Physical Review E, 1998, 57, 2703-2712.	0.8	23
83	n-tree approximation for the largest Lyapunov exponent of a coupled-map lattice. Physical Review E, 1997, 56, 4998-5003.	0.8	5
84	Approximation of chaotic systems in terms of Markovian processes. Physics Letters, Section A: General, Atomic and Solid State Physics, 1995, 201, 326-332.	0.9	5
85	Sporadicity and synchronization in one-dimensional asymmetrically coupled maps. Journal of Physics A, 1995, 28, 4727-4732.	1.6	1