Eric Bertin

List of Publications by Year
in descending order

38 papers	1,269 citations	430874 18 h-index	361022 35 g-index
39 all docs	39 docs citations	39 times ranked	928 citing authors

#	Article	IF	Citations
1	Dynamics of microstructure anisotropy and rheology of soft jammed suspensions. Soft Matter, 2022, 18, 328-339.	2.7	3
2	Absorbing phase transitions in systems with mediated interactions. Physical Review E, 2022, 105, L032602.	2.1	0
3	Derivation of a constitutive model for the rheology of jammed soft suspensions from particle dynamics. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 033206.	2.3	1
4	Models of Social Agents. Springer Series in Synergetics, 2021, , 129-158.	0.4	0
5	Nonequilibrium grand-canonical ensemble built from a physical particle reservoir. Physical Review E, 2021, 103, 022107.	2.1	3
6	Microscopic Theory for the Rheology of Jammed Soft Suspensions. Physical Review Letters, 2021, 127, 218003.	7.8	8
7	Emergence of Simple Characteristics for Heterogeneous Complex Social Agents. Symmetry, 2020, 12, 1281.	2.2	1
8	Non-additive large deviation function for the particle densities of driven systems in contact. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 063209.	2.3	1
9	Dense active matter model of motion patterns in confluent cell monolayers. Nature Communications, 2020, 11, 1405.	12.8	86
10	Giant fluctuations in the flow of fluidised soft glassy materials: an elasto-plastic modelling approach. JPhys Materials, 2020, 3, 025010.	4.2	7
11	Deflection of phototactic microswimmers through obstacle arrays. Physical Review Fluids, 2020, 5, .	2.5	16
12	Criticality at a Finite Strain Rate in Fluidized Soft Glassy Materials. Physical Review Letters, 2019, 123, 108003.	7.8	6
13	In social complex systems, the whole can be more or less than (the sum of) the parts. Comptes Rendus Physique, 2019, 20, 329-335.	0.9	2
14	Lack of an equation of state for the nonequilibrium chemical potential of gases of active particles in contact. Journal of Chemical Physics, 2019, 150, 094108.	3.0	17
15	Effective diffusivity of microswimmers in a crowded environment. Journal of Chemical Physics, 2019, 150, 104901.	3.0	23
16	Understanding Dense Active Nematics from Microscopic Models. Physical Review Letters, 2019, 123, 258001.	7.8	22
17	Nonequilibrium chemical potentials of steady-state lattice gas models in contact: A large-deviation approach. Physical Review E, 2019, 100, 052125.	2.1	3
18	Large deviations and chemical potential in bulk-driven systems in contact. Europhysics Letters, 2018, 123, 10002.	2.0	9

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19	Nonlinear Rheology in a Model Biological Tissue. Physical Review Letters, 2017, 118, 158105.	7.8	41
20	A mass transport model with a simple non-factorized steady-state distribution. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 063201.	2.3	6
21	Photofocusing: Light and flow of phototactic microswimmer suspension. Physical Review E, 2016, 93, 051101.	2.1	18
22	Pressure of a gas of underdamped active dumbbells. Physical Review E, 2016, 93, 032605.	2.1	38
23	Comparison between Smoluchowski and Boltzmann approaches for self-propelled rods. Physical Review E, 2015, 92, 042141.	2.1	32
24	Large-Scale Chaos and Fluctuations in Active Nematics. Physical Review Letters, 2014, 113, 038302.	7.8	74
25	On the existence of a glass transition in a random energy model. Journal of Physics A: Mathematical and Theoretical, 2013, 46, 315002.	2.1	1
26	Mesoscopic theory for fluctuating active nematics. New Journal of Physics, 2013, 15, 085032.	2.9	101
27	Matrix products for the synthesis of stationary time series with a priori prescribed joint distributions. , 2012, , .		2
28	Nonlinear Field Equations for Aligning Self-Propelled Rods. Physical Review Letters, 2012, 109, 268701.	7.8	121
29	The influence of flux balance on the generalized chemical potential in mass transport models. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P09012.	2.3	5
30	Dependence of the Fluctuation-Dissipation Temperature on the Choice of Observable. Physical Review Letters, 2009, 103, 260602.	7.8	20
31	Competition between collective and individual dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20622-20626.	7.1	95
32	Intensive thermodynamic parameters in nonequilibrium systems. Physical Review E, 2007, 75, 031120.	2.1	44
33	Boltzmann and hydrodynamic description for self-propelled particles. Physical Review E, 2006, 74, 022101.	2.1	289
34	Definition and Relevance of Nonequilibrium Intensive Thermodynamic Parameters. Physical Review Letters, 2006, 96, 120601.	7.8	46
35	Global Fluctuations and Gumbel Statistics. Physical Review Letters, 2005, 95, 170601.	7.8	64
36	Subdiffusion and Dynamical Heterogeneities in a Lattice Glass Model. Physical Review Letters, 2005, 95, 015702.	7.8	22

#	Article	IF	Citations
37	Nonequilibrium temperatures in steady-state systems with conserved energy. Physical Review E, 2005, 71, 046140.	2.1	15
38	Temperature in Nonequilibrium Systems with Conserved Energy. Physical Review Letters, 2004, 93, 230601.	7.8	27