Lorenzo Caprini

List of Publications by Citations

29 papers	476 citations	14 h-index	21 g-index
29 ext. papers	674 ext. citations	3.6 avg, IF	5.31 L-index

#	Paper	IF	Citations
29	Spontaneous Velocity Alignment in Motility-Induced Phase Separation. *Physical Review Letters*, **2020**, 124, 078001	7.4	56
28	Active particles under confinement and effective force generation among surfaces. *Soft Matter*, **2018**, 14, 9044-9054	3.6	55
27	The entropy production of Ornstein–Uhlenbeck active particles: a path integral method for correlations. *Journal of Statistical Mechanics: Theory and Experiment*, **2019**, 2019, 053203	1.9	40
26	Linear response and correlation of a self-propelled particle in the presence of external fields. *Journal of Statistical Mechanics: Theory and Experiment*, **2018**, 2018, 033203	1.9	37
25	Active escape dynamics: The effect of persistence on barrier crossing. *Journal of Chemical Physics*, **2019**, 150, 024902	3.9	34
24	Activity induced delocalization and freezing in self-propelled systems. *Scientific Reports*, **2019**, 9, 1386	4.9	32
23	Active chiral particles under confinement: surface currents and bulk accumulation phenomena. *Soft Matter*, **2019**, 15, 2627-2637	3.6	28
22	Inertial self-propelled particles. *Journal of Chemical Physics*, **2021**, 154, 024902	3.9	24
21	Hidden velocity ordering in dense suspensions of self-propelled disks. *Physical Review Research*, **2020**, 2,	3.9	21
20	Comment on "Entropy Production and Fluctuation Theorems for Active Matter". *Physical Review Letters*, **2018**, 121, 139801	7.4	19
19	Spatial velocity correlations in inertial systems of active Brownian particles. *Soft Matter*, **2021**, 17, 4109-4121	3.6	18
18	A comparative study between two models of active cluster crystals. *Scientific Reports*, **2019**, 9, 16687	4.9	17
17	Time-dependent properties of interacting active matter: Dynamical behavior of one-dimensional systems of self-propelled particles. *Physical Review Research*, **2020**, 2,	3.9	15
16	Transport of active particles in an open-wedge channel. *Journal of Chemical Physics*, **2019**, 150, 144903	3.9	14
15	Fluctuation–Dissipation Relations in Active Matter Systems. *Symmetry*, **2021**, 13, 81	2.7	11
14	Activity-controlled clogging and unclogging of microchannels. *Physical Review Research*, **2020**, 2,	3.9	10
13	Active matter at high density: Velocity distribution and kinetic temperature. *Journal of Chemical Physics*, **2020**, 153, 184901	3.9	8

List of Publications

12	Diffusion properties of self-propelled particles in cellular flows. *Soft Matter*, **2020**, 16, 5431-5438	3.6	7
11	Irreversibility and typicality: A simple analytical result for the Ehrenfest model. *Physica A: Statistical Mechanics and Its Applications*, **2019**, 524, 422-429	3.3	6
10	Fourier Law in a Generalized Piston Model. *Entropy*, **2017**, 19, 350	2.8	4
9	Generalized fluctuation dissipation relations holding in non-equilibrium dynamics. *Journal of Statistical Mechanics: Theory and Experiment*, **2021**, 2021, 063202	1.9	4
8	How a local active force modifies the structural properties of polymers. *Soft Matter*, **2020**, 16, 2594-2604	3.6	3
7	Dynamics of active particles with space-dependent swim velocity.. *Soft Matter*, **2022**,	3.6	3
6	Correlated escape of active particles across a potential barrier.. *Journal of Chemical Physics*, **2021**, 155, 234902	3.9	3
5	Collective effects in confined active Brownian particles. *Journal of Chemical Physics*, **2021**, 154, 244901	3.9	3
4	The parental active model: A unifying stochastic description of self-propulsion.. *Journal of Chemical Physics*, **2022**, 156, 071102	3.9	2
3	Handy fluctuation-dissipation relation to approach generic noisy systems and chaotic dynamics. *Physical Review E*, **2021**, 104, L032101	2.4	1
2	Hydrodynamics of simple active liquids: the emergence of velocity correlations. *New Journal of Physics*,	2.9	1
1	Excess and loss of entropy production for different levels of coarse graining. *Physical Review E*, **2021**, 104, 024140	2.4	0