

Massimiliano Viale

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9483281/publications.pdf>

Version: 2024-02-01

22
papers

4,602
citations

471509

17
h-index

677142

22
g-index

22
all docs

22
docs citations

22
times ranked

3003
citing authors

#	ARTICLE	IF	CITATIONS
1	Interaction ruling animal collective behavior depends on topological rather than metric distance: Evidence from a field study. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1232-1237.	7.1	1,557
2	Scale-free correlations in starling flocks. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 11865-11870.	7.1	786
3	Statistical mechanics for natural flocks of birds. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4786-4791.	7.1	519
4	Empirical investigation of starling flocks: a benchmark study in collective animal behaviour. Animal Behaviour, 2008, 76, 201-215.	1.9	397
5	Information transfer and behavioural inertia in starling flocks. Nature Physics, 2014, 10, 691-696.	16.7	268
6	Collective Behaviour without Collective Order in Wild Swarms of Midges. PLoS Computational Biology, 2014, 10, e1003697.	3.2	182
7	Social interactions dominate speed control in poising natural flocks near criticality. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7212-7217.	7.1	145
8	Finite-Size Scaling as a Way to Probe Near-Criticality in Natural Swarms. Physical Review Letters, 2014, 113, 238102.	7.8	137
9	Flocking and Turning: a New Model for Self-organized Collective Motion. Journal of Statistical Physics, 2015, 158, 601-627.	1.2	108
10	The STARFLAG handbook on collective animal behaviour: 1. Empirical methods. Animal Behaviour, 2008, 76, 217-236.	1.9	95
11	Local equilibrium in bird flocks. Nature Physics, 2016, 12, 1153-1157.	16.7	80
12	Dynamic scaling in natural swarms. Nature Physics, 2017, 13, 914-918.	16.7	75
13	Diffusion of individual birds in starling flocks. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20122484.	2.6	64
14	Emergence of collective changes in travel direction of starling flocks from individual birds' fluctuations. Journal of the Royal Society Interface, 2015, 12, 20150319.	3.4	57
15	Silent Flocks: Constraints on Signal Propagation Across Biological Groups. Physical Review Letters, 2015, 114, 218101.	7.8	37
16	GReTA-A Novel Global and Recursive Tracking Algorithm in Three Dimensions. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2015, 37, 2451-2463.	13.9	32
17	Short-range interactions versus long-range correlations in bird flocks. Physical Review E, 2015, 92, 012705.	2.1	20
18	Spatio-temporal correlations in models of collective motion ruled by different dynamical laws. Physical Biology, 2016, 13, 065001.	1.8	11

#	ARTICLE	IF	CITATIONS
19	Nonsymmetric Interactions Trigger Collective Swings in Globally Ordered Systems. Physical Review Letters, 2017, 118, 138003.	7.8	10
20	Error control in the set-up of stereo camera systems for 3d animal tracking. European Physical Journal: Special Topics, 2015, 224, 3211-3232.	2.6	9
21	Phase Transitions for the Cavity Approach to the Clique Problem on Random Graphs. Journal of Statistical Physics, 2011, 145, 1127-1155.	1.2	8
22	Vicsek model by time-interlaced compression: A dynamical computable information density. Physical Review E, 2021, 103, 062141.	2.1	5