Luca Giuggioli

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3508836/publications.pdf

Version: 2024-02-01

44	1,490	279701	330025
papers	citations	23 h-index	37 g-index

45	45	45	1903
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Closed-form solutions to the dynamics of confined biased lattice random walks in arbitrary dimensions. Physical Review E, 2020, 102, 062124.	0.8	9
2	Exact Spatiotemporal Dynamics of Confined Lattice Random Walks in Arbitrary Dimensions: A Century after Smoluchowski and PÃ³lya. Physical Review X, 2020, 10, .	2.8	24
3	Toward Engineering Biosystems With Emergent Collective Functions. Frontiers in Bioengineering and Biotechnology, 2020, 8, 705.	2.0	22
4	Toward Controllable Morphogenesis in Large Robot Swarms. IEEE Robotics and Automation Letters, 2019, 4, 3386-3393.	3.3	9
5	Fokkerâ€“Planck representations of non-Markov Langevin equations: application to delayed systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180131.	1.6	6
6	Anderson-like localization transition of random walks with resetting. Journal of Statistical Mechanics: Theory and Experiment, 2019, 2019, 053204.	0.9	17
7	From Micro-to-Macro: How the Movement Statistics of Individual Walkers Affect the Formation of Segregated Territories in the Territorial Random Walk Model. Frontiers in Physics, 2019, 7, .	1.0	5
8	Comparison of two models of tethered motion. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 075001.	0.7	24
9	Making ecological models adequate. Ecology Letters, 2018, 21, 153-166.	3.0	100
10	From Ants to Birds: A Novel Bio-Inspired Approach to Online Area Coverage. Springer Proceedings in Advanced Robotics, 2018, , 31-43.	0.9	7
11	Visual analytics of delays and interaction in movement data. International Journal of Geographical Information Science, 2017, 31, 320-345.	2.2	19
12	Measuring site fidelity and spatial segregation within animal societies. Methods in Ecology and Evolution, 2017, 8, 965-975.	2.2	18
13	Bumblebees can discriminate between scent-marks deposited by conspecifics. Scientific Reports, 2017, 7, 43872.	1.6	32
14	Localization Transition Induced by Learning in Random Searches. Physical Review Letters, 2017, 119, 140603.	2.9	59
15	Identifying influential neighbors in animal flocking. PLoS Computational Biology, 2017, 13, e1005822.	1.5	56
16	Flying foxes create extensive seed shadows and enhance germination success of pioneer plant species in deforested Madagascan landscapes. PLoS ONE, 2017, 12, e0184023.	1.1	37
17	Fokkerâ€“Planck description for a linear delayed Langevin equation with additive Gaussian noise. Journal of Physics A: Mathematical and Theoretical, 2016, 49, 384002.	0.7	18
18	Langevin analysis for time-nonlocal Brownian motion with algebraic memories and delay interactions. European Physical Journal B, 2016, 89, 1.	0.6	2

#	Article	IF	Citations
19	Analyzing delays in trajectories. , 2015, , .		0
20	Delayed Response and Biosonar Perception Explain Movement Coordination in Trawling Bats. PLoS Computational Biology, 2015, 11, e1004089.	1.5	36
21	Exact dynamics of stochastic linear delayed systems: Application to spatiotemporal coordination of comoving agents. Physical Review E, 2014, 90, 042135.	0.8	17
22	Consequences of animal interactions on their dynamics: emergence of home ranges and territoriality. Movement Ecology, 2014, 2, 20.	1.3	28
23	A milestone for movement ecology research. Movement Ecology, 2013, 1, 1.	1.3	75
24	Quasi-one-dimensional waves in rodent populations in heterogeneous habitats: A consequence of elevational gradients on spatio-temporal dynamics. Journal of Theoretical Biology, 2013, 319, 96-101.	0.8	8
25	Quantifying Behavioral Changes in Territorial Animals Caused by Sudden Population Declines. American Naturalist, 2013, 182, E73-E82.	1.0	54
26	Stigmergy, collective actions, and animal social spacing. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 16904-16909.	3.3	43
27	Encounter Times in Overlapping Domains: Application to Epidemic Spread in a Population of Territorial Animals. Physical Review Letters, 2013, 110, 058103.	2.9	25
28	Predicting oscillatory dynamics in the movement of territorial animals. Journal of the Royal Society Interface, 2012, 9, 1529-1543.	1.5	15
29	Linking animal movement to site fidelity. Journal of Mathematical Biology, 2012, 64, 647-656.	0.8	22
30	Territorial Dynamics and Stable Home Range Formation for Central Place Foragers. PLoS ONE, 2012, 7, e34033.	1.1	38
31	Bacterial Secretion and the Role of Diffusive and Subdiffusive First Passage Processes. PLoS ONE, 2012, 7, e41421.	1.1	1
32	Animal Interactions and the Emergence of Territoriality. PLoS Computational Biology, 2011, 7, e1002008.	1.5	100
33	Fishery Discards Impact on Seabird Movement Patterns at Regional Scales. Current Biology, 2010, 20, 215-222.	1.8	147
34	Animal movement, search strategies and behavioural ecology: a crossâ€disciplinary way forward. Journal of Animal Ecology, 2010, 79, 906-909.	1.3	55
35	A generalized master equation approach to modelling anomalous transport in animal movement. Journal of Physics A: Mathematical and Theoretical, 2009, 42, 434004.	0.7	32
36	Experimental evidence for group hunting via eavesdropping in echolocating bats. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 2721-2728.	1.2	150

#	Article	IF	Citations
37	Vertically structured prokaryotic community can control the efficiency of the biological pump in the oceans. Theoretical Ecology, 2009, 2, 199-216.	0.4	5
38	Theory of hantavirus infection spread incorporating localized adult and itinerant juvenile mice. European Physical Journal B, 2007, 55, 461-470.	0.6	31
39	Diffusion and home range parameters for rodents: Peromyscus maniculatus in New Mexico. Ecological Complexity, 2006, 3, 64-70.	1.4	33
40	Theory of home range estimation from displacement measurements of animal populations. Journal of Theoretical Biology, 2006, 240, 126-135.	0.8	55
41	Diffusion and home range parameters from rodent population measurements in Panama. Bulletin of Mathematical Biology, 2005, 67, 1135-1149.	0.9	37
42	UV Filaments: Great Potential for Long Distance Waveguides in Air. , 2001, , .		1
43	Tests of laser-induced discharge of high dc voltage using high-power femtosecond UV pulses. , 2000, 3886, 158.		1
44	The defect technique for partially absorbing and reflecting boundaries: Application to the Ornsteinâ€“Uhlenbeck process. International Journal of Modern Physics B, 0, , .	1.0	2