Andrew M Hein

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1061325/publications.pdf

Version: 2024-02-01

26 papers	1,156 citations	430874 18 h-index	552781 26 g-index
27 all docs	27 docs citations	27 times ranked	1984 citing authors

#	Article	IF	Citations
1	Challenges and solutions for studying collective animal behaviour in the wild. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170005.	4.0	163
2	Energetic and biomechanical constraints on animal migration distance. Ecology Letters, 2012, 15, 104-110.	6.4	127
3	Social Information Links Individual Behavior to Population and Community Dynamics. Trends in Ecology and Evolution, 2018, 33, 535-548.	8.7	122
4	Nuclear DNA Content Varies with Cell Size across Human Cell Types. Cold Spring Harbor Perspectives in Biology, 2015, 7, a019091.	5.5	95
5	The evolution of distributed sensing and collective computation in animal populations. ELife, 2015, 4, e10955.	6.0	77
6	Sensing and decision-making in random search. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12070-12074.	7.1	56
7	Social interactions among grazing reef fish drive material flux in a coral reef ecosystem. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4703-4708.	7.1	54
8	Conserved behavioral circuits govern high-speed decision-making in wild fish shoals. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12224-12228.	7.1	52
9	Natural search algorithms as a bridge between organisms, evolution, and ecology. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9413-9420.	7.1	44
10	An Algorithmic Approach to Natural Behavior. Current Biology, 2020, 30, R663-R675.	3.9	35
11	Larval dispersal drives trophic structure across Pacific coral reefs. Nature Communications, 2014, 5, 5575.	12.8	33
12	Neurally Encoding Time for Olfactory Navigation. PLoS Computational Biology, 2016, 12, e1004682.	3.2	33
13	Predators, prey, and transient states in the assembly of spatially structured communities. Ecology, 2011, 92, 549-555.	3.2	32
14	Information limitation and the dynamics of coupled ecological systems. Nature Ecology and Evolution, 2020, 4, 82-90.	7.8	31
15	Fast behavioral feedbacks make ecosystems sensitive to pace and not just magnitude of anthropogenic environmental change. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25580-25589.	7.1	26
16	The dynamics of assembling food webs. Ecology Letters, 2014, 17, 606-613.	6.4	24
17	Physical limits on bacterial navigation in dynamic environments. Journal of the Royal Society Interface, 2016, 13, 20150844.	3.4	24
18	Smelling Time: A Neural Basis for Olfactory Scene Analysis. Trends in Neurosciences, 2016, 39, 649-655.	8.6	22

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19	Reverse-engineering ecological theory from data. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180422.	2.6	22
20	The rising cost of warming waters: effects of temperature on the cost of swimming in fishes. Biology Letters, 2012, 8, 266-269.	2.3	19
21	Sensory Information and Encounter Rates of Interacting Species. PLoS Computational Biology, 2013, 9, e1003178.	3.2	18
22	Cutting Through the Noise: Bacterial Chemotaxis in Marine Microenvironments. Frontiers in Marine Science, 2020, 7, .	2.5	12
23	Disease and fire interact to influence transitions between savannaâ€“forest ecosystems over a multiâ€decadal experiment. Ecology Letters, 2021, 24, 1007-1017.	6.4	11
24	Merging computational fluid dynamics and machine learning to reveal animal migration strategies. Methods in Ecology and Evolution, 2021, 12, 1186-1200.	5.2	10
25	Informational constraints on predatorâ€“prey interactions. Oikos, 2022, 2022, .	2.7	6
26	Ecological decision-making: From circuit elements to emerging principles. Current Opinion in Neurobiology, 2022, 74, 102551.	4.2	6