Cyril Piou

List of Publications by Year in descending order

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51 papers	3,519 citations	361413 20 h-index	189892 50 g-index
51 all docs	51 docs citations	51 times ranked	4250 citing authors

#	Article	IF	Citations
1	A standard protocol for describing individual-based and agent-based models. Ecological Modelling, 2006, 198, 115-126.	2.5	2,219
2	Competition among plants: Concepts, individual-based modelling approaches, and a proposal for a future research strategy. Perspectives in Plant Ecology, Evolution and Systematics, 2008, 9, 121-135.	2.7	150
3	Advances and limitations of individual-based models to analyze and predict dynamics of mangrove forests: A review. Aquatic Botany, 2008, 89, 260-274.	1.6	124
4	Zonation Patterns of Belizean Offshore Mangrove Forests 41 Years After a Catastrophic Hurricane1. Biotropica, 2006, 38, 365-374.	1.6	95
5	Climateâ€driven geographic distribution of the desert locust during recession periods: Subspeciesâ€™ niche differentiation and relative risks under scenarios of climate change. Global Change Biology, 2017, 23, 4739-4749.	9.5	69
6	A demo-genetic individual-based model for Atlantic salmon populations: Model structure, parameterization and sensitivity. Ecological Modelling, 2012, 231, 37-52.	2.5	53
7	On the relative role of climate change and management in the current desert locust outbreak in East Africa. Global Change Biology, 2020, 26, 3753-3755.	9.5	52
8	Contrasting effects of climate change in continental vs. oceanic environments on population persistence and microevolution of Atlantic salmon. Global Change Biology, 2013, 19, 711-723.	9.5	47
9	Coupling historical prospection data and a remotely-sensed vegetation index for the preventative control of Desert locusts. Basic and Applied Ecology, 2013, 14, 593-604.	2.7	44
10	Proposing an information criterion for individual-based models developed in a pattern-oriented modelling framework. Ecological Modelling, 2009, 220, 1957-1967.	2.5	42
11	Effect of vegetation on density thresholds of adult desert locust gregarization from survey data in Mauritania. Entomologia Experimentalis Et Applicata, 2013, 149, 159-165.	1.4	40
12	Simulating cryptic movements of a mangrove crab: Recovery phenomena after small scale fishery. Ecological Modelling, 2007, 205, 110-122.	2.5	39
13	Soil moisture from remote sensing to forecast desert locust presence. Journal of Applied Ecology, 2019, 56, 966-975.	4.0	36
14	Importance of solitarious desert locust population dynamics: lessons from historical survey data in <scp>A</scp>lgeria. Entomologia Experimentalis Et Applicata, 2016, 161, 168-180.	1.4	32
15	Investigating the role of impoundment and forest structure on the resistance and resilience of mangrove forests to hurricanes. Aquatic Botany, 2012, 97, 24-29.	1.6	30
16	Mapping the spatiotemporal distributions of the Desert Locust in Mauritania and Morocco to improve preventive management. Basic and Applied Ecology, 2017, 25, 37-47.	2.7	29
17	Improving preventive locust management: insights from a multiâ€agent model. Pest Management Science, 2018, 74, 46-58.	3.4	26
18	Latitudinal Patterns of Herbivory in Mangrove Forests: Consequences of Nutrient Over-Enrichment. Ecosystems, 2013, 16, 1203-1215.	3.4	24

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19	Spatial structure of a leaf-removing crab population in a mangrove of North-Brazil. Wetlands Ecology and Management, 2009, 17, 93-106.	1.5	23
20	SMOS based high resolution soil moisture estimates for desert locust preventive management. Remote Sensing Applications: Society and Environment, 2018, 11, 140-150.	1.5	22
21	Estimation of density threshold of gregarization of desert locust hoppers from field sampling in Mauritania. Entomologia Experimentalis Et Applicata, 2015, 156, 136-148.	1.4	20
22	Keeping modelling notebooks with TRACE: Good for you and good for environmental research and management support. Environmental Modelling and Software, 2021, 136, 104932.	4.5	19
23	Testing the intermediate disturbance hypothesis in speciesâ€poor systems: A simulation experiment for mangrove forests. Journal of Vegetation Science, 2008, 19, 417-424.	2.2	17
24	The mountain environment, a driver for adaptation to climate change. Land Use Policy, 2015, 48, 51-62.	5.6	17
25	The limitations of locust preventive management faced with spatial uncertainty: exploration with a multiâ€agent model. Pest Management Science, 2020, 76, 1094-1102.	3.4	17
26	The desert locust, Schistocerca gregaria, plastically manipulates egg size by regulating both egg numbers and production rate according to population density. Journal of Insect Physiology, 2020, 122, 104020.	2.0	16
27	Applications of Remote Sensing to Locust Management. , 2016, , 263-293.		14
28	A general model of the thermal constraints on the worldâ€™s most destructive locust,Schistocerca gregaria. Ecological Applications, 2021, 31, e02310.	3.8	14
29	Effects of starvation and Vegetation Distribution on Locust Collective Motion. Journal of Insect Behavior, 2019, 32, 207-217.	0.7	13
30	Comparing the influence of large- and small-scale disturbances on forest heterogeneity: A simulation study for mangroves. Ecological Complexity, 2014, 20, 107-115.	2.9	12
31	Modelling the interactive effects of selective fishing and environmental change on Atlantic salmon demogenetics. Journal of Applied Ecology, 2015, 52, 1629-1637.	4.0	12
32	Plant Size-dependent Escaping Behavior of Gregarious Nymphs of the Desert Locust, Schistocerca gregaria. Journal of Insect Behavior, 2013, 26, 623-633.	0.7	11
33	Eggs and hatchlings variations in desert locusts: phase related characteristics and starvation tolerance. Frontiers in Physiology, 2013, 4, 345.	2.8	11
34	Self-organized spatial structures of locust groups emerging from local interaction. Ecological Modelling, 2017, 361, 26-40.	2.5	11
35	A Review of the Biology, Ecology, and Management of the South American Locust, Schistocerca cancellata (Serville, 1838), and Future Prospects. Agronomy, 2022, 12, 135.	3.0	11
36	Obstacles to migration constrain nest distribution of Atlantic salmon. Ecology of Freshwater Fish, 2011, 20, 400-408.	1.4	10

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37	Identifying Ant-Mirid Spatial Interactions to Improve Biological Control in Cacao-Based Agroforestry System. Environmental Entomology, 2018, 47, 551-558.	1.4	9
38	Extra Molting and Selection on Nymphal Growth in the Desert Locust. PLoS ONE, 2016, 11, e0155736.	2.5	9
39	Band movement and thermoregulation in Schistocerca cancellata. Journal of Insect Physiology, 2022, 136, 104328.	2.0	9
40	An agent-based model to simulate the boosted Sterile Insect Technique for fruit fly management. Ecological Modelling, 2022, 468, 109951.	2.5	9
41	Field Observations of the Sheltering Behavior of the Solitarious Phase of the Desert Locust, Schistocerca gregaria, with Particular Reference to Antipredator Strategies. Japan Agricultural Research Quarterly, 2012, 46, 339-345.	0.4	8
42	Characterizing phaseâ€related differences in behaviour of <scp>S</scp>chistocerca gregaria with spatial distribution analysis. Entomologia Experimentalis Et Applicata, 2015, 156, 128-135.	1.4	8
43	Density-dependent mating behaviors reduce male mating harassment in locusts. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	8
44	Twoâ€compartment ageâ€structured model of solitarious and gregarious locust population dynamics. Mathematical Methods in the Applied Sciences, 2018, 41, 8636-8672.	2.3	7
45	Importance of human capital, field knowledge and experience to improve pest locust management. Pest Management Science, 2021, 77, 5463-5474.	3.4	7
46	Cartographie des zones de reproduction et de grÃ©garisation du criquet pÃ¨lerin au Tchad. Cahiers Agricultures, 2020, 29, 14.	0.9	7
47	Seeing the locust in the swarm: accounting for spatiotemporal hierarchy improves ecological models of insect populations. Ecography, 2022, 2022, .	4.5	6
48	Mutual aid: When does resource scarcity favour group cooperation?. Ecological Complexity, 2019, 40, 100790.	2.9	3
49	Additive genetic variance for traits least related to fitness increases with environmental stress in the desert locust,Schistocerca gregaria. Ecology and Evolution, 2021, 11, 13930-13947.	1.9	3
50	Allocation of more reproductive resource to egg size rather than clutch size of gregarious desert locust (Schistocerca gregaria) through increasing oogenesis period and oosorption rate. Journal of Insect Physiology, 2022, 136, 104331.	2.0	3
51	Cooperative root graft networks benefit mangrove trees under stress. Communications Biology, 2021, 4, 513.	4.4	2