Mathieu Lihoreau

List of Publications by Year
in descending order

78 papers	2,766 citations	172457 29 h-index	206112 48 g-index
91 all docs	91 docs citations	91 times ranked	2818 citing authors

#	Article	IF	Citations
1	Honey bees cannot sense harmful concentrations of metal pollutants in food. Chemosphere, 2022, 297, 134089.	8.2	9
2	Navigation by Honey Bees. , 2022, , 4565-4573.		0
3	Aggregation. , 2022, , 127-130.		0
4	Insect Diet. , 2022, , 3471-3479.		0
5	The gut parasite <i>Nosema ceranae</i> impairs olfactory learning in bumblebees. Journal of Experimental Biology, 2022, 225, .	1.7	6
6	Analysis of temporal patterns in animal movement networks. Methods in Ecology and Evolution, 2021, 12, 101-113.	5.2	21
7	Nutrition in Social Insects. , 2021, , 670-675.		0
8	Artificial Diets Modulate Infection Rates by Nosema ceranae in Bumblebees. Microorganisms, 2021, 9, 158.	3.6	12
9	Animal social networks: Towards an integrative framework embedding social interactions, space and time. Methods in Ecology and Evolution, 2021, 12, 4-9.	5.2	21
10	Editorial: Context-Dependent Plasticity in Social Species: Feedback Loops Between Individual and Social Environment. Frontiers in Psychology, 2021, 12, 645191.	2.1	6
11	Chronic exposure to trace lead impairs honey bee learning. Ecotoxicology and Environmental Safety, 2021, 212, 112008.	6.0	24
12	Metal pollutants have additive negative effects on honey bee cognition. Journal of Experimental Biology, 2021, 224, .	1.7	30
13	A model of resource partitioning between foraging bees based on learning. PLoS Computational Biology, 2021, 17, e1009260.	3.2	10
14	Current permissible levels of metal pollutants harm terrestrial invertebrates. Science of the Total Environment, 2021, 779, 146398.	8.0	48
15	Poor adult nutrition impairs learning and memory in a parasitoid wasp. Scientific Reports, 2021, 11, 16220.	3.3	1
16	Bumble bees strategically use ground level linear features in navigation. Animal Behaviour, 2021, 179, 147-160.	1.9	17
17	A Non-Invasive Millimetre-Wave Radar Sensor for Automated Behavioural Tracking in Precision Farmingâ€"Application to Sheep Husbandry. Sensors, 2021, 21, 8140.	3.8	3
18	Automated monitoring of bee behaviour using connected hives: Towards a computational apidology. Apidologie, 2020, 51, 356-368.	2.0	27

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19	Mechanisms of Nutritional Resource Exploitation by Insects. Insects, 2020, 11, 570.	2.2	7
20	Pesticide dosing must be guided by ecological principles. Nature Ecology and Evolution, 2020, 4, 1575-1577.	7.8	10
21	The miticide thymol in combination with trace levels of the neonicotinoid imidacloprid reduces visual learning performance in honey bees (Apis mellifera). Apidologie, 2020, 51, 499-509.	2.0	21
22	Open Data for Open Questions in Comparative Nutrition. Insects, 2020, 11, 236.	2.2	7
23	Nutrition in Social Insects. , 2020, , 1-5.		0
24	3D Trajectories of Multiple Untagged Flying Insects from Millimetre-wave Beamscanning Radar. , 2020, , .		3
25	Bumblebees learn foraging routes through exploitationâ€“exploration cycles. Journal of the Royal Society Interface, 2019, 16, 20190103.	3.4	25
26	The Central Complex as a Potential Substrate for Vector Based Navigation. Frontiers in Psychology, 2019, 10, 690.	2.1	48
27	Bumblebees adjust protein and lipid collection rules to the presence of brood. Environmental Epigenetics, 2019, 65, 437-446.	1.8	40
28	Honey bees increase their foraging performance and frequency of pollen trips through experience. Scientific Reports, 2019, 9, 6778.	3.3	51
29	A spatial network analysis of resource partitioning between bumblebees foraging on artificial flowers in a flight cage. Movement Ecology, 2019, 7, 4.	2.8	16
30	Putting the ecology back into insect cognition research. Advances in Insect Physiology, 2019, , 1-25.	2.7	15
31	Quantifying Nutritional Trade-Offs across Multidimensional Performance Landscapes. American Naturalist, 2019, 193, E168-E181.	2.1	17
32	Insect Diet. , 2019, , 1-9.		10
33	Aggregation. , 2019, , 1-4.		1
34	A theoretical exploration of dietary collective medication in social insects. Journal of Insect Physiology, 2018, 106, 78-87.	2.0	8
35	AUTOMATED MONITORING OF LIVESTOCK BEHAVIOR USING FREQUENCY-MODULATED CONTINUOUS-WAVE RADARS. Progress in Electromagnetics Research M, 2018, 69, 151-160.	0.9	6
36	Exploring Interactions between the Gut Microbiota and Social Behavior through Nutrition. Genes, 2018, 9, 534.	2.4	22

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37	Social nutrition: an emerging field in insect science. Current Opinion in Insect Science, 2018, 28, 73-80.	4.4	16
38	The repeatability of cognitive performance: a meta-analysis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170281.	4.0	114
39	Why Bees Are So Vulnerable to Environmental Stressors. Trends in Ecology and Evolution, 2017, 32, 268-278.	8.7	177
40	Effects of parasites and pathogens on bee cognition. Ecological Entomology, 2017, 42, 51-64.	2.2	27
41	Analysing plantâ€“pollinator interactions with spatial movement networks. Ecological Entomology, 2017, 42, 4-17.	2.2	21
42	Collective foraging in spatially complex nutritional environments. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160238.	4.0	41
43	Gut Microbiota Modifies Olfactory-Guided Microbial Preferences and Foraging Decisions in Drosophila. Current Biology, 2017, 27, 2397-2404.e4.	3.9	156
44	Inter-individual variability in the foraging behaviour of traplining bumblebees. Scientific Reports, 2017, 7, 4561.	3.3	43
45	Do Insects Have Emotions? Some Insights from Bumble Bees. Frontiers in Behavioral Neuroscience, 2017, 11, 157.	2.0	31
46	Subsocial Cockroaches Nauphoeta cinerea Mate Indiscriminately with Kin Despite High Costs of Inbreeding. PLoS ONE, 2016, 11, e0162548.	2.5	9
47	Social Network Analysis and Nutritional Behavior: An Integrated Modeling Approach. Frontiers in Psychology, 2016, 7, 18.	2.1	16
48	Commentary: Do Bees Play the Producer-Scrounger Game?. Frontiers in Psychology, 2016, 7, 1355.	2.1	0
49	Adaptive collective foraging in groups with conflicting nutritional needs. Royal Society Open Science, 2016, 3, 150638.	2.4	11
50	Signatures of a globally optimal searching strategy in the three-dimensional foraging flights of bumblebees. Scientific Reports, 2016, 6, 30401.	3.3	28
51	<i>Drosophila</i> females trade off good nutrition with high quality oviposition sites when choosing foods. Journal of Experimental Biology, 2016, 219, 2514-24.	1.7	58
52	Evidence of trapline foraging in honeybees. Journal of Experimental Biology, 2016, 219, 2426-2429.	1.7	39
53	Collective selection of food patches in <i>Drosophila</i>. Journal of Experimental Biology, 2016, 219, 668-675.	1.7	55
54	Monitoring Flower Visitation Networks and Interactions between Pairs of Bumble Bees in a Large Outdoor Flight Cage. PLoS ONE, 2016, 11, e0150844.	2.5	27

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55	Behavioral Microbiomics: A Multi-Dimensional Approach to Microbial Influence on Behavior. Frontiers in Microbiology, 2015, 6, 1359.	3.5	44
56	Recent Advances in the Integrative Nutrition of Arthropods. Annual Review of Entomology, 2015, 60, 293-311.	11.8	123
57	Nutritional ecology beyond the individual: a conceptual framework for integrating nutrition and social interactions. Ecology Letters, 2015, 18, 273-286.	6.4	92
58	Evolving Nutritional Strategies in the Presence of Competition: A Geometric Agent-Based Model. PLoS Computational Biology, 2015, 11, e1004111.	3.2	28
59	An Overlooked Consequence of Dietary Mixing: A Varied Diet Reduces Interindividual Variance in Fitness. American Naturalist, 2015, 186, 649-659.	2.1	38
60	Modelling nutrition across organizational levels: From individuals to superorganisms. Journal of Insect Physiology, 2014, 69, 2-11.	2.0	42
61	Unravelling the mechanisms of trapline foraging in bees. Communicative and Integrative Biology, 2013, 6, e22701.	1.4	30
62	A Simple Iterative Model Accurately Captures Complex Trapline Formation by Bumblebees Across Spatial Scales and Flower Arrangements. PLoS Computational Biology, 2013, 9, e1002938.	3.2	43
63	Bee positive: the importance of electroreception in pollinator cognitive ecology. Frontiers in Psychology, 2013, 4, 445.	2.1	2
64	An Exploration of the Social Brain Hypothesis in Insects. Frontiers in Physiology, 2012, 3, 442.	2.8	95
65	Radar Tracking and Motion-Sensitive Cameras on Flowers Reveal the Development of Pollinator Multi-Destination Routes over Large Spatial Scales. PLoS Biology, 2012, 10, e1001392.	5.6	127
66	Bees do not use nearest-neighbour rules for optimization of multi-location routes. Biology Letters, 2012, 8, 13-16.	2.3	54
67	Inbreeding and the evolution of sociality in arthropods. Die Naturwissenschaften, 2012, 99, 779-788.	1.6	25
68	Food, â€œCulture,â€•and Sociality in Drosophila. Frontiers in Psychology, 2012, 3, 165.	2.1	2
69	Local Enhancement Promotes Cockroach Feeding Aggregations. PLoS ONE, 2011, 6, e22048.	2.5	17
70	Tradeâ€off between travel distance and prioritization of highâ€reward sites in traplining bumblebees. Functional Ecology, 2011, 25, 1284-1292.	3.6	74
71	Collective foraging decision in a gregarious insect. Behavioral Ecology and Sociobiology, 2010, 64, 1577-1587.	1.4	42
72	German cockroach males maximize their inclusive fitness by avoiding mating with kin. Animal Behaviour, 2010, 80, 303-309.	1.9	19

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73	Travel Optimization by Foraging Bumblebees through Readjustments of Traplines after Discovery of New Feeding Locations. American Naturalist, 2010, 176, 744-757.	2.1	108
74	Kin recognition via cuticular hydrocarbons shapes cockroach social life. Behavioral Ecology, 2009, 20, 46-53.	2.2	85
75	The weight of the clan: Even in insects, social isolation can induce a behavioural syndrome. Behavioural Processes, 2009, 82, 81-84.	1.1	60
76	Tactile stimuli trigger group effects in cockroach aggregations. Animal Behaviour, 2008, 75, 1965-1972.	1.9	64
77	Mutual Mate Choice: When it Pays Both Sexes to Avoid Inbreeding. PLoS ONE, 2008, 3, e3365.	2.5	53
78	Kin recognition and incest avoidance in a group-living insect. Behavioral Ecology, 2007, 18, 880-887.	2.2	83