Mathieu Lihoreau

List of Publications by Year
in descending order

78	2,766	172457 29	206112 48
papers	citations	h-index	g-index

91	91	91	2818
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Why Bees Are So Vulnerable to Environmental Stressors. Trends in Ecology and Evolution, 2017, 32, 268-278.	8.7	177
2	Gut Microbiota Modifies Olfactory-Guided Microbial Preferences and Foraging Decisions in Drosophila. Current Biology, 2017, 27, 2397-2404.e4.	3.9	156
3	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
4	Recent Advances in the Integrative Nutrition of Arthropods. Annual Review of Entomology, 2015, 60, 293-311.	11.8	123
5	The repeatability of cognitive performance: a meta-analysis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170281.	4.0	114
6	Travel Optimization by Foraging Bumblebees through Readjustments of Traplines after Discovery of New Feeding Locations. American Naturalist, 2010, 176, 744-757.	2.1	108
7	An Exploration of the Social Brain Hypothesis in Insects. Frontiers in Physiology, 2012, 3, 442.	2.8	95
8	Nutritional ecology beyond the individual: a conceptual framework for integrating nutrition and social interactions. Ecology Letters, 2015, 18, 273-286.	6.4	92
9	Kin recognition via cuticular hydrocarbons shapes cockroach social life. Behavioral Ecology, 2009, 20, 46-53.	2.2	85
10	Kin recognition and incest avoidance in a group-living insect. Behavioral Ecology, 2007, 18, 880-887.	2.2	83
11	Tradeâ€off between travel distance and prioritization of highâ€reward sites in traplining bumblebees. Functional Ecology, 2011, 25, 1284-1292.	3.6	74
12	Tactile stimuli trigger group effects in cockroach aggregations. Animal Behaviour, 2008, 75, 1965-1972.	1.9	64
13	The weight of the clan: Even in insects, social isolation can induce a behavioural syndrome. Behavioural Processes, 2009, 82, 81-84.	1.1	60
14	Drosophila females trade off good nutrition with high quality oviposition sites when choosing foods. Journal of Experimental Biology, 2016, 219, 2514-24.	1.7	58
15	Collective selection of food patches in Drosophila. Journal of Experimental Biology, 2016, 219, 668-675.	1.7	55
16	Bees do not use nearest-neighbour rules for optimization of multi-location routes. Biology Letters, 2012, 8, 13-16.	2.3	54
17	Mutual Mate Choice: When it Pays Both Sexes to Avoid Inbreeding. PLoS ONE, 2008, 3, e3365.	2.5	53
18	Honey bees increase their foraging performance and frequency of pollen trips through experience. Scientific Reports, 2019, 9, 6778.	3.3	51

#	Article	IF	Citations
19	The Central Complex as a Potential Substrate for Vector Based Navigation. Frontiers in Psychology, 2019, 10, 690.	2.1	48
20	Current permissible levels of metal pollutants harm terrestrial invertebrates. Science of the Total Environment, 2021, 779, 146398.	8.0	48
21	Behavioral Microbiomics: A Multi-Dimensional Approach to Microbial Influence on Behavior. Frontiers in Microbiology, 2015, 6, 1359.	3.5	44
22	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
23	Inter-individual variability in the foraging behaviour of traplining bumblebees. Scientific Reports, 2017, 7, 4561.	3.3	43
24	Collective foraging decision in a gregarious insect. Behavioral Ecology and Sociobiology, 2010, 64, 1577-1587.	1.4	42
25	Modelling nutrition across organizational levels: From individuals to superorganisms. Journal of Insect Physiology, 2014, 69, 2-11.	2.0	42
26	Collective foraging in spatially complex nutritional environments. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160238.	4.0	41
27	Bumblebees adjust protein and lipid collection rules to the presence of brood. Environmental Epigenetics, 2019, 65, 437-446.	1.8	40
28	Evidence of trapline foraging in honeybees. Journal of Experimental Biology, 2016, 219, 2426-2429.	1.7	39
29	An Overlooked Consequence of Dietary Mixing: A Varied Diet Reduces Interindividual Variance in Fitness. American Naturalist, 2015, 186, 649-659.	2.1	38
30	Do Insects Have Emotions? Some Insights from Bumble Bees. Frontiers in Behavioral Neuroscience, 2017, 11, 157.	2.0	31
31	Unravelling the mechanisms of trapline foraging in bees. Communicative and Integrative Biology, 2013, 6, e22701.	1.4	30
32	Metal pollutants have additive negative effects on honey bee cognition. Journal of Experimental Biology, 2021, 224, .	1.7	30
33	Evolving Nutritional Strategies in the Presence of Competition: A Geometric Agent-Based Model. PLoS Computational Biology, 2015, 11, e1004111.	3.2	28
34	Signatures of a globally optimal searching strategy in the three-dimensional foraging flights of bumblebees. Scientific Reports, 2016, 6, 30401.	3.3	28
35	Effects of parasites and pathogens on bee cognition. Ecological Entomology, 2017, 42, 51-64.	2.2	27
36	Automated monitoring of bee behaviour using connected hives: Towards a computational apidology. Apidologie, 2020, 51, 356-368.	2.0	27

#	Article	IF	Citations
37	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
38	Inbreeding and the evolution of sociality in arthropods. Die Naturwissenschaften, 2012, 99, 779-788.	1.6	25
39	Bumblebees learn foraging routes through exploitationâ€“exploration cycles. Journal of the Royal Society Interface, 2019, 16, 20190103.	3.4	25
40	Chronic exposure to trace lead impairs honey bee learning. Ecotoxicology and Environmental Safety, 2021, 212, 112008.	6.0	24
41	Exploring Interactions between the Gut Microbiota and Social Behavior through Nutrition. Genes, 2018, 9, 534.	2.4	22
42	Analysing plantâ€“pollinator interactions with spatial movement networks. Ecological Entomology, 2017, 42, 4-17.	2.2	21
43	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
44	Analysis of temporal patterns in animal movement networks. Methods in Ecology and Evolution, 2021, 12, 101-113.	5.2	21
45	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
46	German cockroach males maximize their inclusive fitness by avoiding mating with kin. Animal Behaviour, 2010, 80, 303-309.	1.9	19
47	Local Enhancement Promotes Cockroach Feeding Aggregations. PLoS ONE, 2011, 6, e22048.	2.5	17
48	Quantifying Nutritional Trade-Offs across Multidimensional Performance Landscapes. American Naturalist, 2019, 193, E168-E181.	2.1	17
49	Bumble bees strategically use ground level linear features in navigation. Animal Behaviour, 2021, 179, 147-160.	1.9	17
50	Social Network Analysis and Nutritional Behavior: An Integrated Modeling Approach. Frontiers in Psychology, 2016, 7, 18.	2.1	16
51	Social nutrition: an emerging field in insect science. Current Opinion in Insect Science, 2018, 28, 73-80.	4.4	16
52	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
53	Putting the ecology back into insect cognition research. Advances in Insect Physiology, 2019, , 1-25.	2.7	15
54	Artificial Diets Modulate Infection Rates by Nosema ceranae in Bumblebees. Microorganisms, 2021, 9, 158.	3.6	12

#	Article	IF	Citations
55	Adaptive collective foraging in groups with conflicting nutritional needs. Royal Society Open Science, 2016, 3, 150638.	2.4	11
56	Pesticide dosing must be guided by ecological principles. Nature Ecology and Evolution, 2020, 4, 1575-1577.	7.8	10
57	A model of resource partitioning between foraging bees based on learning. PLoS Computational Biology, 2021, 17, e1009260.	3.2	10
58	Insect Diet. , 2019, , 1-9.		10
59	Subsocial Cockroaches Nauphoeta cinerea Mate Indiscriminately with Kin Despite High Costs of Inbreeding. PLoS ONE, 2016, 11, e0162548.	2.5	9
60	Honey bees cannot sense harmful concentrations of metal pollutants in food. Chemosphere, 2022, 297, 134089.	8.2	9
61	A theoretical exploration of dietary collective medication in social insects. Journal of Insect Physiology, 2018, 106, 78-87.	2.0	8
62	Mechanisms of Nutritional Resource Exploitation by Insects. Insects, 2020, 11, 570.	2.2	7
63	Open Data for Open Questions in Comparative Nutrition. Insects, 2020, 11, 236.	2.2	7
64	AUTOMATED MONITORING OF LIVESTOCK BEHAVIOR USING FREQUENCY-MODULATED CONTINUOUS-WAVE RADARS. Progress in Electromagnetics Research M, 2018, 69, 151-160.	0.9	6
65	Editorial: Context-Dependent Plasticity in Social Species: Feedback Loops Between Individual and Social Environment. Frontiers in Psychology, 2021, 12, 645191.	2.1	6
66	The gut parasite Nosema ceranae impairs olfactory learning in bumblebees. Journal of Experimental Biology, 2022, 225, .	1.7	6
67	3D Trajectories of Multiple Untagged Flying Insects from Millimetre-wave Beamscanning Radar. , 2020, , .		3
68	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
69	Food, â€œCulture,â€• and Sociality in Drosophila. Frontiers in Psychology, 2012, 3, 165.	2.1	2
70	Bee positive: the importance of electroreception in pollinator cognitive ecology. Frontiers in Psychology, 2013, 4, 445.	2.1	2
71	Poor adult nutrition impairs learning and memory in a parasitoid wasp. Scientific Reports, 2021, 11, 16220.	3.3	1
72	Aggregation. , 2019, , 1-4.		1

#	Article	IF	Citations
73	Commentary: Do Bees Play the Producer-Scrounger Game?. Frontiers in Psychology, 2016, 7, 1355.	2.1	0
74	Nutrition in Social Insects. , 2021, , 670-675.		0
75	Nutrition in Social Insects. , 2020, , 1-5.		0
76	Navigation by Honey Bees. , 2022, , 4565-4573.		0
77	Aggregation. , 2022, , 127-130.		0
78	Insect Diet. , 2022, , 3471-3479.		0