Tracking Individuals Shows Spatial Fidelity Is a Key Reg

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Citation Report

#	Article	IF	CITATIONS
1	Mitophagy: Mitofusin Recruits a Mitochondrial Killer. Current Biology, 2013, 23, R570-R572.	1.8	28
2	Tumor Angiogenesis: A New Source of Pericytes. Current Biology, 2013, 23, R565-R568.	1.8	20
3	Tolerating an infection: an indirect benefit of co-founding queen associations in the ant Lasius niger. Die Naturwissenschaften, 2013, 100, 1125-1136.	0.6	29
4	Ant genomics sheds light on the molecular regulation of social organization. Genome Biology, 2013, 14, 212.	13.9	48
5	Animal Behavior: The Truman Show for Ants. Current Biology, 2013, 23, R568-R570.	1.8	0
6	Context-dependent hierarchies in pigeons. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13049-13054.	3.3	150
7	Tracking whole colonies shows ants make career moves. Nature, 2013, , .	13.7	1
8	Worker Personality and Its Association with Spatially Structured Division of Labor. PLoS ONE, 2014, 9, e79616.	1.1	51
9	Development of a New Method to Track Multiple Honey Bees with Complex Behaviors on a Flat Laboratory Arena. PLoS ONE, 2014, 9, e84656.	1.1	25
10	Ant Colonies Prefer Infected over Uninfected Nest Sites. PLoS ONE, 2014, 9, e111961.	1.1	30
11	Biologically-Inspired Human-Swarm Interaction Metrics. Proceedings of the Human Factors and Ergonomics Society, 2014, 58, 1471-1475.	0.2	17
12	Worker senescence and the sociobiology of aging in ants. Behavioral Ecology and Sociobiology, 2014, 68, 1901-1919.	0.6	44
13	Increased grooming after repeated brood care provides sanitary benefits in a clonal ant. Behavioral Ecology and Sociobiology, 2014, 68, 1701-1710.	0.6	17
14	Comparative phenotyping across a social transition in aphids. Animal Behaviour, 2014, 96, 117-125.	0.8	8
15	Visualization of species pairwise associations: a case study of surrogacy in bird assemblages. Ecology and Evolution, 2014, 4, 3279-3289.	0.8	18
16	Ant tracking with occlusion tunnels. , 2014, , .		8
17	Animal transportation networks. Journal of the Royal Society Interface, 2014, 11, 20140334.	1.5	35
18	Response to comments on the dynamics of network dynamics. Behavioral Ecology, 2014, 25, 260-261.	1.0	О

#	Article	IF	CITATIONS
19	Molecular and social regulation of worker division of labour in fire ants. Molecular Ecology, 2014, 23, 660-672.	2.0	46
20	Brains over Brawn: Experience overcomes a size disadvantage in fish social hierarchies. Journal of Experimental Biology, 2014, 217, 1462-8.	0.8	30
21	Me and we: the interplay between individual and group behavioral variation in social collectives. Current Opinion in Insect Science, 2014, 5, 16-24.	2.2	25
22	The role of chromatin and epigenetics in the polyphenisms of ant castes. Briefings in Functional Genomics, 2014, 13, 235-245.	1.3	31
23	Social insect colony as a biological regulatory system: modelling information flow in dominance networks. Journal of the Royal Society Interface, 2014, 11, 20140951.	1.5	16
24	Organisational immunity in social insects. Current Opinion in Insect Science, 2014, 5, 1-15.	2.2	100
25	Ageing and somatic maintenance in social insects. Current Opinion in Insect Science, 2014, 5, 31-36.	2.2	32
26	Caste-specific RNA editomes in the leaf-cutting ant Acromyrmex echinatior. Nature Communications, 2014, 5, 4943.	5.8	60
27	The effects of age and past and present behavioral specialization on behavior of workers of the red wood ant Formica polyctena Först. during nestmate reunion tests. Behavioural Processes, 2014, 107, 29-41.	0.5	16
28	A Socioâ€Spatial Combined Approach Confirms a Highly Compartmentalised Structure in Honeybees. Ethology, 2014, 120, 1167-1176.	0.5	41
29	Automated image-based tracking and its application in ecology. Trends in Ecology and Evolution, 2014, 29, 417-428.	4.2	407
30	Ant trophallactic networks: simultaneous measurement of interaction patterns and food dissemination. Scientific Reports, 2015, 5, 12496.	1.6	58
31	Social, spatial and temporal organization in a complex insect society. Scientific Reports, 2015, 5, 13393.	1.6	41
32	Persistent variation in spatial behavior affects the structure and function of interaction networks. Environmental Epigenetics, 2015, 61, 98-106.	0.9	37
33	Environmental consultancy: dancing bee bioindicators to evaluate landscape "health― Frontiers in Ecology and Evolution, 0, 3, .	1.1	19
34	Automatic methods for long-term tracking and the detection and decoding of communication dances in honeybees. Frontiers in Ecology and Evolution, 2015, 3, .	1.1	49
35	Coordinated Behaviour in Pigeon Flocks. PLoS ONE, 2015, 10, e0140558.	1.1	17
36	Opposing effects of allogrooming on disease transmission in ant societies. Philosophical Transactions of the Royal Society B: Biological Sciences, 2015, 370, 20140108.	1.8	43

#	Article	IF	CITATIONS
37	A network of sex and competition: The promiscuous mating system of an invasive weevil. Environmental Epigenetics, 2015, 61, 85-97.	0.9	30
38	A technological approach to the description of group foraging in the ant Myrmica rubra. Entomological Review, 2015, 95, 984-999.	0.1	3
39	Beyond contact-based transmission networks: the role of spatial coincidence. Journal of the Royal Society Interface, 2015, 12, 20150705.	1.5	38
40	Expression of <i>foraging</i> and <i><scp>Gp</scp>â€9</i> are associated with social organization in the fire ant <i><scp>S</scp>olenopsis invicta</i> . Insect Molecular Biology, 2015, 24, 93-104.	1.0	20
41	Social isolation causes mortality by disrupting energy homeostasis in ants. Behavioral Ecology and Sociobiology, 2015, 69, 583-591.	0.6	49
42	Nutritional ecology beyond the individual: a conceptual framework for integrating nutrition and social interactions. Ecology Letters, 2015, 18, 273-286.	3.0	92
43	Three-dimensional tracking of sensor capsules mobilised by fluid flow. Measurement Science and Technology, 2015, 26, 035302.	1.4	4
44	Workers â€~specialized' on inactivity: Behavioral consistency of inactive workers and their role in task allocation. Behavioral Ecology and Sociobiology, 2015, 69, 1459-1472.	0.6	72
45	Fungal disease dynamics in insect societies: Optimal killing rates and the ambivalent effect of high social interaction rates. Journal of Theoretical Biology, 2015, 372, 54-64.	0.8	5
46	Influence of task switching costs on colony homeostasis. Die Naturwissenschaften, 2015, 102, 36.	0.6	4
47	Venom as a Component of External Immune Defense in Hymenoptera. , 2015, , 1-17.		1
48	When doing nothing is something. How task allocation strategies compromise between flexibility, efficiency, and inactive agents. Journal of Bioeconomics, 2015, 17, 217-242.	1.5	42
49	Multiple Insect Tracking with Occlusion Sub-tunnels. , 2015, , .		2
50	Effect of Interactions between Harvester Ants on Forager Decisions. Frontiers in Ecology and Evolution, 2016, 4, .	1.1	44
51	Gene expression patterns underlying parasiteâ€induced alterations in host behaviour and life history. Molecular Ecology, 2016, 25, 648-660.	2.0	24
52	AprilTag 2: Efficient and robust fiducial detection. , 2016, , .		424
53	Variability in individual activity bursts improves ant foraging success. Journal of the Royal Society Interface, 2016, 13, 20160856.	1.5	12
54	The social mirror for division of labor: what network topology and dynamics can teach us about organization of work in insect societies. Behavioral Ecology and Sociobiology, 2016, 70, 1087-1099.	0.6	34

#	Article	IF	Citations
55	Bioimaging for quantitative phenotype analysis. Methods, 2016, 102, 20-25.	1.9	12
56	Task specialization influences nestmate recognition ability in ants. Behavioral Ecology and Sociobiology, 2016, 70, 1433-1440.	0.6	16
57	AntCounter Software: Counting Leaf-Cutting Ants Was never so Precise, fast and Easy. Journal of Insect Behavior, 2016, 29, 262-272.	0.4	2
58	Effect of exit locations on ants escaping a two-exit room stressed with repellent. Physica A: Statistical Mechanics and Its Applications, 2016, 457, 239-254.	1.2	23
59	Behaviour of Intranidal and Extranidal Major Workers of the African Carpenter AntCamponotus maculatusFabricius (Hymenoptera: Formicidae) During Dyadic Nestmate Reunion Tests. African Entomology, 2016, 24, 307-320.	0.6	2
60	Soldiers in a Stingless Bee. American Naturalist, 2016, 187, 120-129.	1.0	36
61	The Effect of Keystone Individuals on Collective Outcomes Can Be Mediated through Interactions or Behavioral Persistence. American Naturalist, 2016, 188, 240-252.	1.0	21
62	Division of labor in complex societies: a new age of conceptual expansion and integrative analysis. Behavioral Ecology and Sociobiology, 2016, 70, 995-998.	0.6	12
63	The robustness of ecosystems to the species loss of community. Scientific Reports, 2016, 6, 35904.	1.6	20
64	Uncovering Latent Behaviors in Ant Colonies. , 2016, , .		2
65	Limited flexibility and unusual longevity shape forager allocation in the Florida harvester ant (Pogonomyrmex badius). Behavioral Ecology and Sociobiology, 2016, 70, 1045-1045.	0.6	4
66	Age, worksite location, neuromodulators, and task performance in the ant Pheidole dentata. Behavioral Ecology and Sociobiology, 2016, 70, 1441-1455.	0.6	2
67	Limited flexibility and unusual longevity shape forager allocation in the Florida harvester ant (Pogonomyrmex badius). Behavioral Ecology and Sociobiology, 2016, 70, 221-235.	0.6	24
68	Resistance to nutritional stress in ants: when being fat is advantageous. Journal of Experimental Biology, 2016, 219, 824-833.	0.8	33
69	Internest food sharing within wood ant colonies: resource redistribution behavior in a complex system. Behavioral Ecology, 2016, 27, 660-668.	1.0	18
70	Dynamic Models of Animal Movement with Spatial Point Process Interactions. Journal of Agricultural, Biological, and Environmental Statistics, 2016, 21, 22-40.	0.7	19
71	Fitness costs of worker specialization for ant societies. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152572.	1.2	21
72	The behavioral ecology of variation in social insects. Current Opinion in Insect Science, 2016, 15, 40-44.	2.2	44

#	Article	IF	CITATIONS
73	Trackable life: Data, sequence, and organism in movement ecology. Studies in History and Philosophy of Science Part C:Studies in History and Philosophy of Biological and Biomedical Sciences, 2016, 57, 137-147.	0.8	17
74	Non-systemic transmission of tick-borne diseases: A network approach. Communications in Nonlinear Science and Numerical Simulation, 2016, 39, 149-155.	1.7	5
75	Epigenetic (re)programming of caste-specific behavior in the ant <i>Camponotus floridanus</i> . Science, 2016, 351, aac6633.	6.0	184
76	Parasites modulate within-colony activity and accelerate the temporal polyethism schedule of a social insect, the honey bee. Behavioral Ecology and Sociobiology, 2016, 70, 1019-1031.	0.6	70
77	A new multi-colony fairness algorithm for feature selection. Soft Computing, 2017, 21, 7141-7157.	2.1	2
78	Machine vision methods for analyzing social interactions. Journal of Experimental Biology, 2017, 220, 25-34.	0.8	125
79	The ultimate and proximate underpinnings of social behavior. Journal of Experimental Biology, 2017, 220, 4-5.	0.8	6
80	The effects of fungal infection and physiological condition on the locomotory behaviour of the ant Myrmica scabrinodis. Journal of Insect Physiology, 2017, 98, 167-172.	0.9	22
81	Measuring site fidelity and spatial segregation within animal societies. Methods in Ecology and Evolution, 2017, 8, 965-975.	2.2	18
82	When social behaviour is moulded in clay: on growth and form of social insect nests. Journal of Experimental Biology, 2017, 220, 83-91.	0.8	73
83	Camponotus fellah queens are singly mated. Insectes Sociaux, 2017, 64, 269-276.	0.7	4
84	Individual versus collective cognition in social insects. Journal of Experimental Biology, 2017, 220, 73-82.	0.8	71
85	Explaining Extraordinary Life Spans. , 2017, , 198-219.		2
86	Ants regulate colony spatial organization using multiple chemical road-signs. Nature Communications, 2017, 8, 15414.	5.8	33
87	Fast, Accurate, Small-Scale 3D Scene Capture Using a Low-Cost Depth Sensor. , 2017, 2017, 1268-1276.		10
88	Excavation and aggregation as organizing factors in de novo construction by mound-building termites. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162730.	1.2	20
89	Evolution of Venomous Animals and Their Toxins. Toxinology, 2017, , .	0.2	2
90	Intrinsic worker mortality depends on behavioral caste and the queens' presence in a social insect. Die Naturwissenschaften, 2017, 104, 34.	0.6	32

#	Article	IF	CITATIONS
91	The reproductive division of labour but not worker age affects spatial sorting within the nest in a paper wasp. Insectes Sociaux, 2017, 64, 379-385.	0.7	3
92	The eukaryotic genome is structurally and functionally more like a social insect colony than a book. Epigenomics, 2017, 9, 1469-1483.	1.0	2
93	Behavior, brain, and morphology in a complex insect society: trait integration and social evolution in the exceptionally polymorphic ant Pheidole rhea. Behavioral Ecology and Sociobiology, 2017, 71, 1.	0.6	19
94	Spatial organization and interactions of harvester ants during foraging activity. Journal of the Royal Society Interface, 2017, 14, 20170413.	1.5	22
95	Revealing the hidden structure of dynamic ecological networks. Royal Society Open Science, 2017, 4, 170251.	1.1	16
96	What are the Mechanisms Behind a Parasite-Induced Decline in Nestmate Recognition in Ants?. Journal of Chemical Ecology, 2017, 43, 869-880.	0.9	5
97	Genetics and Evolution of Social Behavior in Insects. Annual Review of Genetics, 2017, 51, 219-239.	3.2	43
98	Deconstructing Superorganisms and Societies to Address Big Questions in Biology. Trends in Ecology and Evolution, 2017, 32, 861-872.	4.2	45
99	Reflected Stochastic Differential Equation Models for Constrained Animal Movement. Journal of Agricultural, Biological, and Environmental Statistics, 2017, 22, 353-372.	0.7	13
100	Who Are the "Lazy―Ants? The Function of Inactivity in Social Insects and a Possible Role of Constraint: Inactive Ants Are Corpulent and May Be Young and/or Selfish. Integrative and Comparative Biology, 2017, 57, 649-667.	0.9	32
101	orco Mutagenesis Causes Loss of Antennal Lobe Glomeruli and Impaired Social Behavior in Ants. Cell, 2017, 170, 727-735.e10.	13.5	219
102	Trophallaxis-inspired model for distributed transport between randomly interacting agents. Physical Review E, 2017, 96, 022111.	0.8	4
103	Automated computer-based detection of encounter behaviours in groups of honeybees. Scientific Reports, 2017, 7, 17663.	1.6	22
104	The ecological and genetic basis of annual worker production in the desert seed harvesting ant, Veromessor pergandei. Behavioral Ecology and Sociobiology, 2017, 71, 1.	0.6	8
105	Physarum-energy optimization algorithm. Soft Computing, 2019, 23, 871.	2.1	6
106	Development of Behavior Monitoring System for Honeybees in Hive. Transactions of the Japanese Society for Artificial Intelligence, 2017, 32, B-GC2_1-11.	0.1	2
107	Automatic tracking method for multiple honeybees using backward-play movies. , 2017, , .		1
108	Short-term activity cycles impede information transmission in ant colonies. PLoS Computational Biology, 2017, 13, e1005527.	1.5	17

#	Article	IF	CITATIONS
109	Group demography affects ant colony performance and individual speed of queen and worker aging. BMC Evolutionary Biology, 2017, 17, 173.	3.2	14
110	An automated barcode tracking system for behavioural studies in birds. Methods in Ecology and Evolution, 2018, 9, 1536-1547.	2.2	52
111	Spatial fidelity of workers predicts collective response to disturbance in a social insect. Nature Communications, 2018, 9, 1201.	5.8	67
112	Automated monitoring of behavior reveals bursty interaction patterns and rapid spreading dynamics in honeybee social networks. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1433-1438.	3.3	103
113	Symmetry associated with symmetry break: Revisiting ants and humans escaping from multiple-exit rooms. Physica A: Statistical Mechanics and Its Applications, 2018, 492, 941-947.	1.2	8
114	GRAPHITE: A graphical environment for scalable <i>in situ</i> video tracking of moving insects. Methods in Ecology and Evolution, 2018, 9, 956-964.	2.2	6
115	When to choose dynamic vs. static social network analysis. Journal of Animal Ecology, 2018, 87, 128-138.	1.3	73
116	Social Immunity: Emergence and Evolution of Colony-Level Disease Protection. Annual Review of Entomology, 2018, 63, 105-123.	5.7	193
117	From inside to outside and back again: changing waste dump formation, defecation and worker localization in a clonal ant. Insectes Sociaux, 2018, 65, 133-140.	0.7	7
118	Endogenous and Exogenous Bursts in a Honey Bee Hive. , 2018, , .		1
119	Social network plasticity decreases disease transmission in a eusocial insect. Science, 2018, 362, 941-945.	6.0	202
120	Individual Activity Level and Mobility Patterns of Ants Within Nest Site. Lecture Notes in Computer Science, 2018, , 378-384.	1.0	2
121	Towards Dense Object Tracking in a 2D Honeybee Hive. , 2018, , .		23
122	Learning Distinct Chemical Labels of Nestmates in Ants. Frontiers in Behavioral Neuroscience, 2018, 12, 191.	1.0	14
123	Labour division in swarm intelligence for allocation problems: a survey. International Journal of Bio-Inspired Computation, 2018, 12, 71.	0.6	7
124	Limited size-related variation in behavioral performance among workers of the exceptionally polymorphic ant Pheidole rhea. Insectes Sociaux, 2018, 65, 431-438.	0.7	3
125	Individual crop loads provide local control for collective food intake in ant colonies. ELife, 2018, 7, .	2.8	42
126	Architecture, space and information in constructions built by humans and social insects: a conceptual review. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170244.	1.8	49

#	Article	IF	Citations
127	The impact of the built environment on health behaviours and disease transmission in social systems. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170245.	1.8	95
128	A spatially varying stochastic differential equation model for animal movement. Annals of Applied Statistics, 2018, 12, .	0.5	14
129	Tracking All Members of a Honey Bee Colony Over Their Lifetime Using Learned Models of Correspondence. Frontiers in Robotics and Al, 2018, 5, 35.	2.0	38
130	RenderGAN: Generating Realistic Labeled Data. Frontiers in Robotics and AI, 2018, 5, 66.	2.0	79
131	An agent-based model of nest-site selection in a mass-recruiting ant. Journal of Theoretical Biology, 2018, 455, 54-63.	0.8	4
132	Interdisciplinary approaches for uncovering the impacts of architecture on collective behaviour. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170232.	1.8	23
133	Fitness benefits and emergent division of labour at the onset of group living. Nature, 2018, 560, 635-638.	13.7	80
134	Addressing RFID Misreadings to Better Infer Bee Hive Activity. IEEE Access, 2018, 6, 31935-31949.	2.6	15
135	A distributed algorithm to maintain and repair the trail networks of arboreal ants. Scientific Reports, 2018, 8, 9297.	1.6	16
136	An Efficient Multi-Object Detection Approach with Chaotic Model of Ant Colony. , 2019, , .		0
137	Network analyses reveal structure in insect social groups. Current Opinion in Insect Science, 2019, 35, 54-59.	2.2	7
138	Dude, where's my mark? Creating robust animal identification schemes informed by communication theory. Animal Behaviour, 2019, 154, 203-208.	0.8	2
139	Differential responses to chemical cues correlate with task performance in ant foragers. Behavioral Ecology and Sociobiology, 2019, 73, 1.	0.6	17
140	Division of labour in the black garden ant (Lasius niger) leads to three distinct proteomes. Journal of Insect Physiology, 2019, 117, 103907.	0.9	12
141	Radio telemetry helps record the dispersal patterns of birdwing butterflies in mountainous habitats: Golden Birdwing (Troides aeacus) as an example. Journal of Insect Conservation, 2019, 23, 729-738.	0.8	14
142	Visual Servoed Autonomous Landing on a Surface Vessel. , 2019, , .		1
143	The survival of the shyest: a computational model shows the effect of web structure on the origins of social spiders. Animal Behaviour, 2019, 155, 229-239.	0.8	2
144	Colony entropy—Allocation of goods in ant colonies. PLoS Computational Biology, 2019, 15, e1006925.	1.5	8

#	Article	IF	Citations
145	Verification of mathematical models of response threshold through statistical characterisation of the foraging activity in ant societies. Scientific Reports, 2019, 9, 8845.	1.6	7
146	The Mechanisms of Social Immunity Against Fungal Infections in Eusocial Insects. Toxins, 2019, 11, 244.	1.5	70
147	Modular structure within groups causes information loss but can improve decision accuracy. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180378.	1.8	30
148	Ants Use Multiple Spatial Memories and Chemical Pointers to Navigate Their Nest. IScience, 2019, 14, 264-276.	1.9	4
149	Ant activity-rest rhythms vary with age and interaction frequencies of workers. Behavioral Ecology and Sociobiology, 2019, 73, 1.	0.6	20
150	Social modulation of individual differences in dance communication in honey bees. Behavioral Ecology and Sociobiology, 2019, 73, 1.	0.6	21
151	Oxytocin/vasopressin-like peptide inotocin regulates cuticular hydrocarbon synthesis and water balancing in ants. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5597-5606.	3.3	29
152	A Dynamic Individual-Based Model for High-Resolution Ant Interactions. Journal of Agricultural, Biological, and Environmental Statistics, 2019, 24, 589-609.	0.7	3
153	Tracktor: Imageâ€based automated tracking of animal movement and behaviour. Methods in Ecology and Evolution, 2019, 10, 815-820.	2.2	76
154	Ignorance is Not Bliss: An Analysis of Central-Place Foraging Algorithms. , 2019, , .		5
155	Tracking Multiple Indistinguishable and Deformable Objects Based on Multi-Anchor Flow With Annular Sector Model. IEEE Access, 2019, 7, 164265-164275.	2.6	1
156	A passive, camera-based head-tracking system for real-time, three-dimensional estimation of head position and orientation in rodents. Journal of Neurophysiology, 2019, 122, 2220-2242.	0.9	11
157	Identification of the Trail Pheromone of the Carpenter Ant Camponotus modoc. Journal of Chemical Ecology, 2019, 45, 901-913.	0.9	7
158	A spatiotemporal analysis of the food dissemination process and the trophallactic network in the ant Lasius niger. Scientific Reports, 2019, 9, 15620.	1.6	10
159	Brain evolution in social insects: advocating for the comparative approach. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2019, 205, 13-32.	0.7	42
160	Parasitism and queen presence interactively shape worker behaviour and fertility in an ant host. Animal Behaviour, 2019, 148, 63-70.	0.8	8
161	Individual variation and positive feedback initiate aggregation in Lasius japonicus. Journal of Ethology, 2019, 37, 31-39.	0.4	0
162	PLANET: A radial layout algorithm for network visualization. Physica A: Statistical Mechanics and Its Applications, 2020, 539, 122948.	1.2	7

#	Article	IF	CITATIONS
163	Social influence and interaction bias can drive emergent behavioural specialization and modular social networks across systems. Journal of the Royal Society Interface, 2020, 17, 20190564.	1.5	12
164	An Automated Cell Tracking Approach With Multi-Bernoulli Filtering and Ant Colony Labor Division. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021, 18, 1850-1863.	1.9	8
165	Worker demography and behavior in a supercolonial ant colony: The case of the desert ant <i>Cataglyphis niger</i> . Ethology, 2020, 126, 59-67.	0.5	3
166	Microbial associates and social behavior in ants. Artificial Life and Robotics, 2020, 25, 552-560.	0.7	5
167	SPiDbox: design and validation of an open-source "Skinner-box―system for the study of jumping spiders. Journal of Neuroscience Methods, 2020, 346, 108925.	1.3	6
168	Experimental capabilities and limitations of a position-based control algorithm for swarm robotics. Adaptive Behavior, 2022, 30, 19-35.	1.1	9
169	OnlineBTD: Streaming Algorithms to Track the Block Term Decomposition of Large Tensors. , 2020, , .		5
170	Cooperative Breeding in the Ambrosia Beetle Xyleborus affinis and Management of Its Fungal Symbionts. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	12
171	Functional Heterogeneity in Superorganisms: Emerging Trends and Concepts. Annals of the Entomological Society of America, 2021, 114, 562-574.	1.3	14
172	Construction, comparison and evolution of networks in life sciences and other disciplines. Journal of the Royal Society Interface, 2020, 17, 20190610.	1.5	12
173	Why behavioral neuroscience still needs diversity?: A curious case of a persistent need. Neuroscience and Biobehavioral Reviews, 2020, 116, 130-141.	2.9	16
174	Task Allocation Into a Foraging Task With a Series of Subtasks in Swarm Robotic System. IEEE Access, 2020, 8, 107549-107561.	2.6	17
175	Superorganism Immunity: A Major Transition in Immune System Evolution. Frontiers in Ecology and Evolution, 2020, 8, .	1.1	19
176	Accounting for space and uncertainty in realâ€time location systemâ€derived contact networks. Ecology and Evolution, 2020, 10, 4702-4715.	0.8	4
177	Online tracking of ants based on deep association metrics: method, dataset and evaluation. Pattern Recognition, 2020, 103, 107233.	5.1	18
178	The gut microbiota — brain axis of insects. Current Opinion in Insect Science, 2020, 39, 6-13.	2.2	52
179	Dynamics of social interactions, in the flow of information and disease spreading in social insects colonies: Effects of environmental events and spatial heterogeneity. Journal of Theoretical Biology, 2020, 492, 110191.	0.8	12
180	Hierarchical networks of food exchange in the black garden ant Lasius niger. Insect Science, 2021, 28, 825-838.	1.5	12

#	Article	IF	CITATIONS
181	Observing the unwatchable: Integrating automated sensing, naturalistic observations and animal social network analysis in the age of big data. Journal of Animal Ecology, 2021, 90, 62-75.	1.3	66
182	Analysis and experimental evaluation of the Needleman-Wunsch algorithm for trajectory comparison. Expert Systems With Applications, 2021, 165, 114068.	4.4	7
183	Caste: Worker Polyethism in Social Hymenoptera. , 2021, , 205-216.		1
184	Bipartite network analysis of ant-task associations reveals task groups and absence of colonial daily activity. Royal Society Open Science, 2021, 8, 201637.	1.1	1
185	Task syndromes: linking personality and task allocation in social animal groups. Behavioral Ecology, 2021, 32, 1-17.	1.0	22
186	Spatio-temporal variation influences the division of labour in Pseudomyrmex concolor Smith (Formicidae: Pseudomyrmecinae). Journal of Ethology, 2021, 39, 205-215.	0.4	0
187	Hierarchical Approach for Comparing Collective Behavior Across Scales: Cellular Systems to Honey Bee Colonies. Frontiers in Ecology and Evolution, 2021, 9, .	1.1	8
188	TRex, a fast multi-animal tracking system with markerless identification, and 2D estimation of posture and visual fields. ELife, 2021, 10, .	2.8	132
189	Social networks predict the life and death of honey bees. Nature Communications, 2021, 12, 1110.	5.8	60
190	Integrating real-time data analysis into automatic tracking of social insects. Royal Society Open Science, 2021, 8, 202033.	1.1	7
191	Markerless tracking of an entire honey bee colony. Nature Communications, 2021, 12, 1733.	5.8	20
194	Individual Ants Do Not Show Activity-Rest Rhythms in Nest Conditions. Journal of Biological Rhythms, 2021, 36, 297-310.	1.4	7
196	Animal social networks: an introduction for complex systems scientists. Journal of Complex Networks, 2021, 9, .	1.1	8
197	Ant behavioral maturation is mediated by a stochastic transition between two fundamental states. Current Biology, 2021, 31, 2253-2260.e3.	1.8	19
198	Worker ants promote outbreeding by transporting young queens to alien nests. Communications Biology, 2021, 4, 515.	2.0	11
199	Multi-level social organization and nest-drifting behaviour in a eusocial insect. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210275.	1.2	0
200	Scale-free movement patterns in termites emerge from social interactions and preferential attachments. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	10
201	Worker Dimorphism in Nasute Termites Reflects Different Tasks during Food Collection. Journal of Insect Behavior, 2021, 34, 96-105.	0.4	3

#	Article	IF	CITATIONS
204	A Generalization of the Importance of Vertices for an Undirected Weighted Graph. Symmetry, 2021, 13, 902.	1.1	6
205	Response thresholds alone cannot explain empirical patterns of division of labor in social insects. PLoS Biology, 2021, 19, e3001269.	2.6	29
206	Dualâ€fluorescence imaging and automated trophallaxis detection for studying multiâ€nutrient regulation in superorganisms. Methods in Ecology and Evolution, 2021, 12, 1441-1457.	2.2	7
207	Influence of Labor Conditions and Interaction Among Individuals on Circadian Activity Rhythms in the Ant <i>Camponotus Japonicus</i> . Journal of Robotics and Mechatronics, 2021, 33, 582-589.	0.5	Ο
208	An oxytocin/vasopressin-related neuropeptide modulates social foraging behavior in the clonal raider ant. PLoS Biology, 2021, 19, e3001305.	2.6	16
209	A guide to choosing and implementing reference models for social network analysis. Biological Reviews, 2021, 96, 2716-2734.	4.7	29
210	Protection Strategy against an Epidemic Disease on Edge-Weighted Graphs Applied to a COVID-19 Case. Biology, 2021, 10, 667.	1.3	2
212	Immune challenges increase network centrality in a queenless ant. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20211456.	1.2	11
213	Naked moleâ€rats (<i>Heterocephalus glaber</i>) do not specialise in cooperative tasks. Ethology, 2021, 127, 850-864.	0.5	15
214	Multilayer network analysis: new opportunities and challenges for studying animal social systems. Environmental Epigenetics, 2021, 67, 45-48.	0.9	7
216	Motion Planning of the Cooperative Robot with Visual Markers. Advances in Intelligent Systems and Computing, 2020, , 206-215.	0.5	2
217	Venom as a Component of External Immune Defense in Hymenoptera. Toxinology, 2017, , 213-233.	0.2	9
218	The effect of nest topology on spatial organization and recruitment in the red ant Myrmica rubra. Die Naturwissenschaften, 2020, 107, 23.	0.6	8
219	Network-based diffusion analysis reveals context-specific dominance of dance communication in foraging honeybees. Nature Communications, 2020, 11, 625.	5.8	17
220	Movement, Encounter Rate, and Collective Behavior in Ant Colonies. Annals of the Entomological Society of America, 2021, 114, 541-546.	1.3	11
229	Automated Analysis of Two-Dimensional Positions and Body Lengths of Earthworms (Oligochaeta); MimizuTrack. PLoS ONE, 2014, 9, e97986.	1.1	6
230	Behavior of Ants Escaping from a Single-Exit Room. PLoS ONE, 2015, 10, e0131784.	1.1	29
231	BEEtag: A Low-Cost, Image-Based Tracking System for the Study of Animal Behavior and Locomotion. PLoS ONE, 2015, 10, e0136487.	1.1	109

# 232	ARTICLE Plasticity of Daily Behavioral Rhythms in Foragers and Nurses of the Ant Camponotus rufipes: Influence of Social Context and Feeding Times. PLoS ONE, 2017, 12, e0169244.	IF 1.1	Citations 28
233	Vertical organization of the division of labor within nests of the Florida harvester ant, Pogonomyrmex badius. PLoS ONE, 2017, 12, e0188630.	1.1	13
234	Within the fortress: A specialized parasite is not discriminated against in a social insect society. PLoS ONE, 2018, 13, e0193536.	1,1	8
235	Oral transfer of chemical cues, growth proteins and hormones in social insects. ELife, 2016, 5, .	2.8	100
236	Ant colonies maintain social homeostasis in the face of decreased density. ELife, 2019, 8, .	2.8	12
237	anTraX, a software package for high-throughput video tracking of color-tagged insects. ELife, 2020, 9,	2.8	31
238	Individual differences in honey bee behavior enabled by plasticity in brain gene regulatory networks. ELife, 2020, 9, .	2.8	27
239	Three-Dimensional Tracking of Multiple Small Insects by a Single Camera. Journal of Insect Science, 2021, 21, .	0.6	4
246	A Novel Energetic Ant Optimization Algorithm for Routing Network Analysis. Lecture Notes in Computer Science, 2018, , 705-716.	1.0	0
252	Worker-dependent gut symbiosis in an ant. ISME Communications, 2021, 1, .	1.7	6
253	Biomarkers in a socially exchanged fluid reflect colony maturity, behavior, and distributed metabolism. ELife, 2021, 10, .	2.8	11
254	Caste: Worker Polyethism in Social Hymenoptera. , 2020, , 1-12.		0
262	Research Techniques Used in the Study of Social Wasps. , 2021, , 337-372.		2
263	Social capital: an independent dimension of healthy ageing. , 0, 1, .		4
264	Modularity and connectivity of nest structure scale with colony size. Evolution; International Journal of Organic Evolution, 2022, 76, 101-113.	1.1	3
266	Temporal Network Prediction and Interpretation. IEEE Transactions on Network Science and Engineering, 2022, 9, 1215-1224.	4.1	6
267	Time-course RNASeq of Camponotus floridanus forager and nurse ant brains indicate links between plasticity in the biological clock and behavioral division of labor. BMC Genomics, 2022, 23, 57.	1.2	19
268	The build-up of dominance hierarchies in eusocial insects. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20200437.	1.8	16

#	Article	IF	CITATIONS
269	Decoding alarm signal propagation of seed-harvester ants using automated movement tracking and supervised machine learning. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212176.	1.2	5
270	Using Flies to Understand Social Networks. Frontiers in Neural Circuits, 2021, 15, 755093.	1.4	7
271	Semi-automatic detection of honeybee brood hygiene—an example of artificial learning to facilitate ethological studies on social insects. Biology Methods and Protocols, 2022, 7, bpac005.	1.0	1
273	Siamese Network-Based All-Purpose-Tracker, a Model-Free Deep Learning Tool for Animal Behavioral Tracking. Frontiers in Behavioral Neuroscience, 2022, 16, 759943.	1.0	1
274	Context-dependent influence of threat on honey bee social network dynamics and brain gene expression. Journal of Experimental Biology, 2022, 225, .	0.8	2
275	A simple tool for linking photo-identification with multimedia data to track mammal behaviour. Mammalian Biology, 2022, 102, 983-993.	0.8	3
276	Differential time allocation of foraging workers in the subterranean termite. Frontiers in Zoology, 2021, 18, 61.	0.9	14
281	Long-term tracking and quantification of individual behavior in bumble bee colonies. Artificial Life and Robotics, 2022, 27, 401-406.	0.7	2
282	Visual Servoed Autonomous Landing of an UAV on a Catamaran in a Marine Environment. Sensors, 2022, 22, 3544.	2.1	4
283	Influence of caste and subcaste characteristics in ant locomotion (<i>Camponotus fellah</i>). Journal of Experimental Biology, 0, , .	0.8	1
284	Interactions and information: exploring task allocation in ant colonies using network analysis. Animal Behaviour, 2022, 189, 69-81.	0.8	5
285	From dyads to collectives: a review of honeybee signalling. Behavioral Ecology and Sociobiology, 2022, 76, .	0.6	3
286	The gut microbiota affects the social network of honeybees. Nature Ecology and Evolution, 2022, 6, 1471-1479.	3.4	24
287	Behavioral variation across the days and lives of honey bees. IScience, 2022, 25, 104842.	1.9	14
288	Effect of interaction network structure in a response threshold model. Artificial Life and Robotics, 2022, 27, 743-750.	0.7	2
289	Flocking dynamics mediated by weighted social networks. Physical Review E, 2022, 106, .	0.8	2
290	Examining the limits of the Condorcet Jury Theorem: Tradeoffs in hierarchical information aggregation systems. , 2022, 1, 263391372211334.		1
292	A Data-Driven Simulation of the Trophallactic Network and Intranidal Food Flow Dissemination in Ants. Animals, 2022, 12, 2963.	1.0	2

#	Article	IF	CITATIONS
293	Behaviour Real-Time Spatial Tracking Identification (BeRSTID) used for Cat Behaviour Monitoring in an Animal Shelter. Scientific Reports, 2022, 12, .	1.6	3
294	Intergenerational genotypic interactions drive collective behavioural cycles in a social insect. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, .	1.2	4
295	A New Type ofÂAnomaly Detection Problem inÂDynamic Graphs: An Ant Colony Optimization Approach. Lecture Notes in Computer Science, 2022, , 46-53.	1.0	2
296	Two simple movement mechanisms for spatial division of labour in social insects. Nature Communications, 2022, 13, .	5.8	4
297	Experimental identification of individual insect visual tracking delays in free flight and their effects on visual swarm patterns. PLoS ONE, 2022, 17, e0278167.	1.1	4
298	Gigapixel imaging with a novel multi-camera array microscope. ELife, 0, 11, .	2.8	14
299	A Review of Ant Nests and Their Implications for Architecture. Buildings, 2022, 12, 2225.	1.4	6
300	Scaling of ant colony interaction networks. Frontiers in Ecology and Evolution, 0, 10, .	1.1	0
303	Automated monitoring of honey bees with barcodes and artificial intelligence reveals two distinct social networks from a single affiliative behavior. Scientific Reports, 2023, 13, .	1.6	4
304	Behavioural defences against parasites across host social structures. Functional Ecology, 2023, 37, 809-820.	1.7	5
305	How do neonicotinoids affect social bees? Linking proximate mechanisms to ecological impacts. Advances in Insect Physiology, 2023, , 191-253.	1.1	2
306	Emergent regulation of ant foraging frequency through a computationally inexpensive forager movement rule. ELife, 0, 12, .	2.8	4

307 Maintenance mechanisms of the division of labor in social insects. Hikaku Seiri Seikagaku(Comparative) Tj ETQq0 0.0 rgBT /Overlock 10