Michael Kaspari

List of Publications by Year
in descending order

140 papers	7,795 citations	53751 45 h-index	58549 82 g-index
145 all docs	145 docs citations	145 times ranked	7414 citing authors

#	Article	IF	Citations
1	How and why grasshopper community maturation rates are slowing on a North American tall grass prairie. Biology Letters, 2022, 18, 20210510.	1.0	6
2	Sodium-enriched floral nectar increases pollinator visitation rate and diversity. Biology Letters, 2022, 18, 20220016.	1.0	15
3	Tropical ant community responses to experimental soil warming. Biology Letters, 2022, 18, 20210518.	1.0	4
4	Robust metagenomic evidence that local assemblage richness increases with latitude in groundâ€active invertebrates of North America. Oikos, 2022, 2022, .	1.2	5
5	Diurnal and nocturnal foraging specialisation in Neotropical army ants. Ecological Entomology, 2021, 46, 352-359.	1.1	2
6	Tracking nutrients in space and time: Interactions between grazing lawns and drought drive abundances of tallgrass prairie grasshoppers. Ecology and Evolution, 2021, 11, 5413-5423.	0.8	9
7	Dietary sodium levels affect grasshopper growth and performance. Ecosphere, 2021, 12, e03392.	1.0	14
8	Studies of insect temporal trends must account for the complex sampling histories inherent to many long-term monitoring efforts. Nature Ecology and Evolution, 2021, 5, 589-591.	3.4	32
9	Salt of Life: High Sodium Diets Produce Longerâ€Jumping, Smaller Grasshoppers. Bulletin of the Ecological Society of America, 2021, 102, e01861.	0.2	0
10	Sodium addition increases leaf herbivory and fungal damage across four grasslands. Functional Ecology, 2021, 35, 1212-1221.	1.7	15
11	Thermal traits predict the winners and losers under climate change: an example from North American ant communities. Ecosphere, 2021, 12, e03645.	1.0	20
12	The Invisible Hand of the Periodic Table: How Micronutrients Shape Ecology. Annual Review of Ecology, Evolution, and Systematics, 2021, 52, 199-219.	3.8	39
13	How and why plant ionomes vary across North American grasslands and its implications for herbivore abundance. Ecology, 2021, 102, e03459.	1.5	12
14	Trophic differences regulate grassland food webs: herbivores track food quality and predators select for habitat volume. Ecology, 2021, 102, e03453.	1.5	6
15	Activity density at a continental scale: What drives invertebrate biomass moving across the soil surface?. Ecology, 2021, , e03542.	1.5	6
16	Testing the role of body size and litter depth on invertebrate diversity across six forests in North America. Ecology, 2021, , e03601.	1.5	1
17	The nutritional geography of ants: Gradients of sodium and sugar limitation across North American grasslands. Journal of Animal Ecology, 2020, 89, 276-284.	1.3	19
18	Micronutrients enhance macronutrient effects in a metaâ€analysis of grassland arthropod abundance. Global Ecology and Biogeography, 2020, 29, 2273-2288.	2.7	18

#	Article	IF	Citations
19	Robust and simplified machine learning identification of pitfall trapâ€collected ground beetles at the continental scale. Ecology and Evolution, 2020, 10, 13143-13153.	0.8	15
20	Seasonal Plasticity of Thermal Tolerance in Ants. Bulletin of the Ecological Society of America, 2020, 101, e01708.	0.2	0
21	The seventh macronutrient: how sodium shortfall ramifies through populations, food webs and ecosystems. Ecology Letters, 2020, 23, 1153-1168.	3.0	80
22	Salty, mild, and low plant biomass grasslands increase topâ€heaviness of invertebrate trophic pyramids. Global Ecology and Biogeography, 2020, 29, 1474-1485.	2.7	20
23	Thermal diversity of North American ant communities: Cold tolerance but not heat tolerance tracks ecosystem temperature. Global Ecology and Biogeography, 2020, 29, 1486-1494.	2.7	33
24	Nutrient dilution and climate cycles underlie declines in a dominant insect herbivore. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 7271-7275.	3.3	97
25	Bottomâ€up when it is not topâ€down: Predators and plants control biomass of grassland arthropods. Journal of Animal Ecology, 2020, 89, 1286-1294.	1.3	25
26	Species Energy and Thermal Performance Theory Predict 20â€Year Changes in Ant Community Abundance and Richness. Bulletin of the Ecological Society of America, 2020, 101, e01623.	0.2	0
27	Abiotic factors and plant biomass, not plant diversity, strongly shape grassland arthropods under drought conditions. Ecology, 2020, 101, e03033.	1.5	39
28	Seasonal plasticity of thermal tolerance in ants. Ecology, 2020, 101, e03051.	1.5	48
29	Continental scale structuring of forest and soil diversity via functional traits. Nature Ecology and Evolution, 2019, 3, 1298-1308.	3.4	34
30	A Distributed Experiment Demonstrates Widespread Sodium Limitation in Grassland Food Webs. Bulletin of the Ecological Society of America, 2019, 100, e01509.	0.2	0
31	Species energy and Thermal Performance Theory predict 20â€yr changes in ant community abundance and richness. Ecology, 2019, 100, e02888.	1.5	20
32	Antibiotics as chemical warfare across multiple taxonomic domains and trophic levels in brown food webs. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191536.	1.2	8
33	On the geography of activity: productivity but not temperature constrains discovery rates by ectotherm consumers. Ecosphere, 2019, 10, e02536.	1.0	8
34	Thermal disruption of soil bacterial assemblages decreases diversity and assemblage similarity. Ecosphere, 2019, 10, e02598.	1.0	2
35	In a globally warming world, insects act locally to manipulate their own microclimate. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5220-5222.	3.3	7
36	A distributed experiment demonstrates widespread sodium limitation in grassland food webs. Ecology, 2019, 100, e02600.	1.5	42

#	Article	IF	Citations
37	Plants regulate grassland arthropod communities through biomass, quality, and habitat heterogeneity. Ecosphere, 2019, 10, e02909.	1.0	23
38	Biogeochemistry and forest composition shape nesting patterns of a dominant canopy ant. Oecologia, 2019, 189, 221-230.	0.9	0
39	Plant responses to fertilization experiments in lowland, speciesâ€rich, tropical forests. Ecology, 2018, 99, 1129-1138.	1.5	105
40	Fifty Years of Mountain Passes: A Perspective on Dan Janzenâ€™s Classic Article. American Naturalist, 2018, 191, 553-565.	1.0	85
41	Disturbance Mediates Homogenization of Above and Belowground Invertebrate Communities. Environmental Entomology, 2018, 47, 545-550.	0.7	13
42	Toward a theory for diversity gradients: the abundanceâ€“adaptation hypothesis. Ecography, 2018, 41, 255-264.	2.1	36
43	Taxonomic decomposition of the latitudinal gradient in species diversity of North American floras. Journal of Biogeography, 2018, 45, 418-428.	1.4	22
44	Nutrient transfer supports a beneficial relationship between the canopy ant, <scp><i>Azteca trigona</i></scp>, and its host tree. Ecological Entomology, 2018, 43, 621-628.	1.1	5
45	The role of temperature in competition and persistence of an invaded ant assemblage. Ecological Entomology, 2018, 43, 774-781.	1.1	22
46	Using metabolic and thermal ecology to predict temperature dependent ecosystem activity: a test with prairie ants. Ecology, 2018, 99, 2113-2121.	1.5	29
47	Thermal constraints on foraging of tropical canopy ants. Oecologia, 2017, 183, 1007-1017.	0.9	44
48	The microbiome of the antâ€built home: the microbial communities of a tropical arboreal ant and its nest. Ecosphere, 2017, 8, e01639.	1.0	31
49	Biogeochemistry drives diversity in the prokaryotes, fungi, and invertebrates of a Panama forest. Ecology, 2017, 98, 2019-2028.	1.5	46
50	Correspondence: Reply to â€˜Analytical flaws in a continental-scale forest soil microbial diversity studyâ€™. Nature Communications, 2017, 8, 15583.	5.8	4
51	Sodium coâ€limits and catalyzes macronutrients in a prairie food web. Ecology, 2017, 98, 315-320.	1.5	40
52	A global database of ant species abundances. Ecology, 2017, 98, 883-884.	1.5	37
53	Nutrition modifies critical thermal maximum of a dominant canopy ant. Journal of Insect Physiology, 2017, 102, 1-6.	0.9	45
54	Towards a geography of omnivory: Omnivores increase carnivory when sodium is limiting. Journal of Animal Ecology, 2017, 86, 1523-1531.	1.3	30

#	Article	IF	Citations
55	From cryptic herbivore to predator: stable isotopes reveal consistent variability in trophic levels in an ant population. Ecology, 2017, 98, 297-303.	1.5	33
56	Biogeochemical drivers of Neotropical ant activity and diversity. Ecosphere, 2016, 7, e01597.	1.0	11
57	Temperature mediates continental-scale diversity of microbes in forest soils. Nature Communications, 2016, 7, 12083.	5.8	419
58	Desiccation resistance in tropical insects: causes and mechanisms underlying variability in a Panama ant community. Ecology and Evolution, 2016, 6, 6282-6291.	0.8	86
59	Biogeochemistry and Geographical Ecology: Embracing All Twenty-Five Elements Required to Build Organisms. American Naturalist, 2016, 188, S62-S73.	1.0	134
60	The energetic and carbon economic origins of leaf thermoregulation. Nature Plants, 2016, 2, 16129.	4.7	178
61	Thermal adaptation and phosphorus shape thermal performance in an assemblage of rainforest ants. Ecology, 2016, 97, 1038-1047.	1.5	34
62	Biogeographic patterns of soil diazotrophic communities across six forests in the North America. Molecular Ecology, 2016, 25, 2937-2948.	2.0	76
63	Thermal adaptation and phosphorus shape thermal performance in an assemblage of rainforest ants. Ecology, 2016, , .	1.5	0
64	Urine as an important source of sodium increases decomposition in an inland but not coastal tropical forest. Oecologia, 2015, 177, 571-579.	0.9	29
65	Plant Thermoregulation: Energetics, Traitâ€"Environment Interactions, and Carbon Economics. Trends in Ecology and Evolution, 2015, 30, 714-724.	4.2	154
66	Thermal adaptation generates a diversity of thermal limits in a rainforest ant community. Global Change Biology, 2015, 21, 1092-1102.	4.2	254
67	Metabolism and the Rise of Fungus Cultivation by Ants. American Naturalist, 2014, 184, 364-373.	1.0	26
68	Road salt offers insights into the connections between diet and neural development. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10033-10034.	3.3	5
69	Short-term sodium inputs attract microbi-detritivores and their predators. Soil Biology and Biochemistry, 2014, 75, 248-253.	4.2	40
70	Sodium fertilization increases termites and enhances decomposition in an Amazonian forest. Ecology, 2014, 95, 795-800.	1.5	82
71	Meet the New Boss, Same as the Old Boss. Science, 2014, 343, 974-975.	6.0	2
72	A carbohydrate-rich diet increases social immunity in ants. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132374.	1.2	37

#	Article	IF	Citations
73	Nutrient enrichment increased species richness of leaf litter fungal assemblages in a tropical forest. Molecular Ecology, 2013, 22, 2827-2838.	2.0	61
74	Manna from heaven: Refuse from an arboreal ant links aboveground and belowground processes in a lowland tropical forest. Ecosphere, 2013, 4, 1-15.	1.0	24
75	The life history continuum hypothesis links traits of male ants with life outside the nest. Entomologia Experimentalis Et Applicata, 2013, 149, 99-109.	0.7	19
76	Towards a general life-history model of the superorganism: predicting the survival, growth and reproduction of ant societies. Biology Letters, 2012, 8, 1059-1062.	1.0	69
77	Using nutritional ecology to predict community structure: a field test in Neotropical ants. Ecosphere, 2012, 3, 1-15.	1.0	35
78	Distributional (In)Congruence of Biodiversityâ€"Ecosystem Functioning. Advances in Ecological Research, 2012, 46, 1-88.	1.4	52
79	Variable Responses of Lowland Tropical Forest Nutrient Status to Fertilization and Litter Manipulation. Ecosystems, 2012, 15, 387-400.	1.6	91
80	Energy, taxonomic aggregation, and the geography of ant abundance. Ecography, 2012, 35, 65-72.	2.1	17
81	Lust for Salt in the Western <scp>A</scp>mazon. Biotropica, 2012, 44, 6-9.	0.8	57
82	Diet composition does not affect ant colony tempo. Functional Ecology, 2012, 26, 317-323.	1.7	20
83	A life history continuum in the males of a Neotropical ant assemblage: refuting the sperm vessel hypothesis. Die Naturwissenschaften, 2012, 99, 191-197.	0.6	12
84	Adventures among Ants: A Global Safari with a Cast of Trillions. By Mark W.ÂMoffett. Berkeley (California): University of California Press. $29.95. vii + 280 p.; ill.; index. ISBN: 978â€0â€520â€26199â€0. 2010.. Quarterly Review of Biology, 2011, 86, 359-360.	0.0	0
85	Potassium, phosphorus, or nitrogen limit root allocation, tree growth, or litter production in a lowland tropical forest. Ecology, 2011, 92, 1616-1625.	1.5	478
86	Predation and patchiness in the tropical litter: do swarm-raiding army ants skim the cream or drain the bottle?. Journal of Animal Ecology, 2011, 80, 818-823.	1.3	38
87	Preliminary Assessment of Metabolic Costs of the Nematode Myrmeconema neotropicum on its Host, the Tropical Ant Cephalotes atratus. Journal of Parasitology, 2011, 97, 958-959.	0.3	6
88	More food, less habitat: how necromass and leaf litter decomposition combine to regulate a litter ant community. Ecological Entomology, 2010, 35, 158-165.	1.1	27
89	Trees as templates for tropical litter arthropod diversity. Oecologia, 2010, 164, 201-211.	0.9	52
90	Canopy and litter ant assemblages share similar climateâ€"species density relationships. Biology Letters, 2010, 6, 769-772.	1.0	23

#	Article	IF	Citations
91	Salted roads and sodium limitation in a northern forest ant community. Ecological Entomology, 2010, 35, 543-548.	1.1	30
92	Energetic basis of colonial living in social insects. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 3634-3638.	3.3	123
93	Eusocial insects as superorganisms. Communicative and Integrative Biology, 2010, 3, 360-362.	0.6	35
94	Scaling community structure: how bacteria, fungi, and ant taxocenes differentiate along a tropical forest floor. Ecology, 2010, 91, 2221-2226.	1.5	23
95	An Ant Cornucopia, Translated. BioScience, 2010, 60, 78-79.	2.2	0
96	Species and site differences in Neotropical army ant emigration behaviour. Ecological Entomology, 2009, 34, 476-482.	1.1	16
97	Gliding hexapods and the origins of insect aerial behaviour. Biology Letters, 2009, 5, 510-512.	1.0	55
98	Climatic drivers of hemispheric asymmetry in global patterns of ant species richness. Ecology Letters, 2009, 12, 324-333.	3.0	233
99	Sodium shortage as a constraint on the carbon cycle in an inland tropical rainforest. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19405-19409.	3.3	144
100	Biogeochemistry and the structure of tropical brown food webs. Ecology, 2009, 90, 3342-3351.	1.5	104
101	Multiple nutrients limit litterfall and decomposition in a tropical forest. Ecology Letters, 2008, 11, 35-43.	3.0	369
102	Biogeography of litter depth in tropical forests: evaluating the phosphorus growth rate hypothesis. Functional Ecology, 2008, 22, 919-923.	1.7	46
103	On the biogeography of salt limitation: A study of ant communities. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17848-17851.	3.3	114
104	Evolutionary ecology, antibiosis, and all that rot. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19027-19028.	3.3	5
105	Knowing Your Warblers: Thoughts on the 50th Anniversary of Macarthur (1958)[*]. Bulletin of the Ecological Society of America, 2008, 89, 448-458.	0.2	1
106	The size?grain hypothesis: do macroarthropods see a fractal world?. Ecological Entomology, 2007, 32, 279-282.	1.1	36
107	Army ants in four forests: geographic variation in raid rates and species composition. Journal of Animal Ecology, 2007, 76, 580-589.	1.3	58
108	Bottom-up and top-down regulation of decomposition in a tropical forest. Oecologia, 2007, 153, 163-172.	0.9	58

#	Article	IF	Citations
109	Ecological morphospace of New World ants. Ecological Entomology, 2006, 31, 131-142.	1.1	116
110	Directed aerial descent in canopy ants. Nature, 2005, 433, 624-626.	13.7	123
111	Extraordinary Predation by the Neotropical Army Ant Cheliomyrmex andicola: Implications for the Evolution of the Army Ant Syndrome1. Biotropica, 2005, 37, 706-709.	0.8	20
112	Interactions between granivorous and omnivorous ants in a desert grassland: results from a long-term experiment. Ecological Entomology, 2005, 30, 116-121.	1.1	12
113	Global energy gradients and size in colonial organisms: Worker mass and worker number in ant colonies. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5079-5083.	3.3	69
114	Energy gradients and the geographic distribution of local ant diversity. Oecologia, 2004, 140, 407-413.	0.9	117
115	USING THE METABOLIC THEORY OF ECOLOGY TO PREDICT GLOBAL PATTERNS OF ABUNDANCE. Ecology, 2004, 85, 1800-1802.	1.5	33
116	Spatial Grain and the Causes of Regional Diversity Gradients in Ants. American Naturalist, 2003, 161, 459-477.	1.0	139
117	On Ectotherm Abundance in a Seasonal Environment-Studies of a Desert Ant Assemblage. Ecology, 2002, 83, 2991.	1.5	0
118	ON ECTOTHERM ABUNDANCE IN A SEASONAL ENVIRONMENTâ€"STUDIES OF A DESERT ANT ASSEMBLAGE. Ecology, 2002, 83, 2991-2996.	1.5	27
119	The reproductive flight phenology of a neotropical ant assemblage. Ecological Entomology, 2001, 26, 245-257.	1.1	41
120	The phenology of a Neotropical ant assemblage: evidence for continuous and overlapping reproduction. Behavioral Ecology and Sociobiology, 2001, 50, 382-390.	0.6	50
121	Taxonomic level, trophic biology and the regulation of local abundance. Global Ecology and Biogeography, 2001, 10, 229-244.	2.7	57
122	Bait Use in Tropical Litter and Canopy Antsâ€"Evidence of Differences in Nutrient Limitation1. Biotropica, 2001, 33, 207.	0.8	42
123	Energy, Density, and Constraints to Species Richness: Ant Assemblages along a Productivity Gradient. American Naturalist, 2000, 155, 280-293.	1.0	256
124	Do Imported Fire Ants Impact Canopy Arthropods? Evidence from Simple Arboreal Pitfall Traps. Southwestern Naturalist, 2000, 45, 118.	0.1	33
125	Three energy variables predict ant abundance at a geographical scale. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 485-489.	1.2	145
126	Ant Activity along Moisture Gradients in a Neotropical Forest1. Biotropica, 2000, 32, 703.	0.8	109

#	Article	IF	Citations
127	Ant Activity along Moisture Gradients in a Neotropical Forest¹. Biotropica, 2000, 32, 703-711.	0.8	21
128	Forest Litter Insect Communities: Biology and Chemical Ecology.T. N. Ananthakrishnan. Quarterly Review of Biology, 1997, 72, 104-104.	0.0	0
129	Litter ant patchiness at the 1-m2 scale: disturbance dynamics in three Neotropical forests. Oecologia, 1996, 107, 265-273.	0.9	88
130	Testing Resource-Based Models of Patchiness in Four Neotropical Litter Ant Assemblages. Oikos, 1996, 76, 443.	1.2	123
131	Colony Size as a Buffer Against Seasonality: Bergmann's Rule in Social Insects. American Naturalist, 1995, 145, 610-632.	1.0	203
132	Caste allocation in litter Pheidole: lessons from plant defense theory. Behavioral Ecology and Sociobiology, 1995, 37, 255-263.	0.6	49
133	Caste allocation in litter Pheidole : lessons from plant defense theory. Behavioral Ecology and Sociobiology, 1995, 37, 255-263.	0.6	9
134	Body size and microclimate use in Neotropical granivorous ants. Oecologia, 1993, 96, 500-507.	0.9	146
135	Removal of seeds from Neotropical frugivore droppings. Oecologia, 1993, 95, 81-88.	0.9	93
136	Prey Choice by Three Insectivorous Grassland Birds: Reevaluating Opportunism. Oikos, 1993, 68, 414.	1.2	68
137	Prey preparation as a way that grasshopper sparrows (Ammodramus savannarum) increase the nutrient concentration of their prey. Behavioral Ecology, 1991, 2, 234-241.	1.0	22
138	Central Place Foraging in Grasshopper Sparrows: Opportunism or Optimal Foraging in a Variable Environment?. Oikos, 1991, 60, 307.	1.2	20
139	Species-Specific Nest Selection by Birds in Ant-Acacia Trees. Biotropica, 1990, 22, 310.	0.8	44
140	Prey preparation and the determinants of handling time. Animal Behaviour, 1990, 40, 118-126.	0.8	48