Emilie C Snell-Rood

List of Publications by Year
in descending order

65 papers	3,381 citations	236925 25 h-index	149698 56 g-index
67 all docs	67 docs citations	67 times ranked	4382 citing authors

#	Article	IF	Citations
1	Phenotypic plasticity's impacts on diversification and speciation. Trends in Ecology and Evolution, 2010, 25, 459-467.	8.7	961
2	An overview of the evolutionary causes and consequences of behavioural plasticity. Animal Behaviour, 2013, 85, 1004-1011.	1.9	533
3	Toward a population genetic framework of developmental evolution: the costs, limits, and consequences of phenotypic plasticity. BioEssays, 2010, 32, 71-81.	2.5	226
4	Mechanisms of Plastic Rescue in Novel Environments. Annual Review of Ecology, Evolution, and Systematics, 2018, 49, 331-354.	8.3	109
5	Brain Size: A Global or Induced Cost of Learning?. Brain, Behavior and Evolution, 2009, 73, 111-128.	1.7	87
6	Interdisciplinarity: Bring biologists into biomimetics. Nature, 2016, 529, 277-278.	27.8	87
7	Brood Ball-Mediated Transmission of Microbiome Members in the Dung Beetle, Onthophagus taurus (Coleoptera: Scarabaeidae). PLoS ONE, 2013, 8, e79061.	2.5	82
8	Reproductive tradeoffs of learning in a butterfly. Behavioral Ecology, 2011, 22, 291-302.	2.2	80
9	DEVELOPMENTAL DECOUPLING OF ALTERNATIVE PHENOTYPES: INSIGHTS FROM THE TRANSCRIPTOMES OF HORN-POLYPHENIC BEETLES. Evolution; International Journal of Organic Evolution, 2011, 65, 231-245.	2.3	78
10	Anthropogenic changes in sodium affect neural and muscle development in butterflies. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10221-10226.	7.1	78
11	The effect of climate on acoustic signals: Does atmospheric sound absorption matter for bird song and bat echolocation?. Journal of the Acoustical Society of America, 2012, 131, 1650-1658.	1.1	69
12	Selective Processes in Development: Implications for the Costs and Benefits of Phenotypic Plasticity. Integrative and Comparative Biology, 2012, 52, 31-42.	2.0	64
13	Patterns of Phenotypic Plasticity in Common and Rare Environments: A Study of Host Use and Color Learning in the Cabbage White ButterflyPieris rapae. American Naturalist, 2009, 173, 615-631.	2.1	62
14	Insulin Signaling as a Mechanism Underlying Developmental Plasticity: The Role of FOXO in a Nutritional Polyphenism. PLoS ONE, 2012, 7, e34857.	2.5	57
15	Lifeâ€history evolution in the anthropocene: effects of increasing nutrients on traits and tradeâ€offs. Evolutionary Applications, 2015, 8, 635-649.	3.1	57
16	The molecular genetic basis of herbivory between butterflies and their host plants. Nature Ecology and Evolution, 2018, 2, 1418-1427.	7.8	56
17	Anthropogenic environments exert variable selection on cranial capacity in mammals. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131384.	2.6	47
18	Gene discovery in the horned beetle Onthophagus taurus. BMC Genomics, 2010, 11, 703.	2.8	40

#	Article	IF	Citations
19	Prior Residence Influences Contest Outcome in Flocks of Non-Breeding Birds. Ethology, 2005, 111, 441-454.	1.1	38
20	DNA Methylation as a Mechanism of Nutritional Plasticity: Limited Support From Horned Beetles. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2013, 320, 22-34.	1.3	35
21	Diversity breeds complementarity. Nature, 2014, 515, 44-45.	27.8	35
22	The basis of beeâ€ing different: the role of gene silencing in plasticity. Evolution & Development, 2008, 10, 511-513.	2.0	31
23	Nutrition shapes life-history evolution across species. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152764.	2.6	30
24	Ecological gradient of sexual selection: elevation and song elaboration in finches. Oecologia, 2008, 157, 545-551.	2.0	29
25	The nutritionally responsive transcriptome of the polyphenic beetle Onthophagus taurus and the importance of sexual dimorphism and body region. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20142084.	2.6	29
26	Effects of parental care on the accumulation and release of cryptic genetic variation: review of mechanisms and a case study of dung beetles. Evolutionary Ecology, 2016, 30, 251-265.	1.2	29
27	Trade-offs between fecundity and choosiness in ovipositing butterflies. Animal Behaviour, 2017, 123, 433-440.	1.9	25
28	Behaviour shapes environmental variation and selection on learning and plasticity: review of mechanisms and implications. Animal Behaviour, 2019, 147, 147-156.	1.9	22
29	Traffic influences nutritional quality of roadside plants for monarch caterpillars. Science of the Total Environment, 2020, 724, 138045.	8.0	20
30	The developmental support hypothesis: adaptive plasticity in neural development in response to cues of social support. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20190491.	4.0	19
31	Avian Communities of Created and Natural Wetlands: Bottomland Forests in Virginia. Condor, 2003, 105, 303-315.	1.6	17
32	Assessing zinc tolerance in two butterfly species: consequences for conservation in polluted environments. Insect Conservation and Diversity, 2020, 13, 201-210.	3.0	17
33	Plasticity in Learning Causes Immediate and Trans-Generational Changes in Allocation of Resources. Integrative and Comparative Biology, 2013, 53, 329-339.	2.0	15
34	Anthropogenic increases in nutrients alter sexual selection dynamics: a case study in butterflies. Behavioral Ecology, 2019, 30, 598-608.	2.2	15
35	Adult nutritional stress decreases oviposition choosiness and fecundity in female butterflies. Behavioral Ecology, 2019, 30, 852-863.	2.2	15
36	Convergent evolution of a blood-red nectar pigment in vertebrate-pollinated flowers. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	15

#	Article	IF	Citations
37	Butterflies do not alter oviposition or larval foraging in response to anthropogenic increases in sodium. Animal Behaviour, 2019, 154, 121-129.	1.9	14
38	Horns and the role of development in the evolution of beetle contests. , 2013, , 178-198.		13
39	Genomic adaptation to agricultural environments: cabbage white butterflies (Pieris rapae) as a case study. BMC Genomics, 2017, 18, 412.	2.8	13
40	Rapid Assessment of Roadsides as Potential Habitat for Monarchs and Other Pollinators. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	11
41	Nickel Exposure Has Complex Transgenerational Effects in a Butterfly. Integrative and Comparative Biology, 2018, 58, 1008-1017.	2.0	10
42	Learning signals within sensory environments: Does host cue learning in butterflies depend on background?. Animal Biology, 2006, 56, 173-192.	1.0	9
43	Experience drives the development of movement-cognition correlations in a butterfly. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	9
44	Developmental lead exposure has mixed effects on butterfly cognitive processes. Animal Cognition, 2017, 20, 87-96.	1.8	8
45	Specialization and accuracy of host-searching butterflies in complex and simple environments. Behavioral Ecology, 2018, 29, 486-495.	2.2	7
46	Evaluating costs of heavy metal tolerance in a widely distributed, invasive butterfly. Evolutionary Applications, 2021, 14, 1390-1402.	3.1	7
47	Reciprocal plasticity and the diversification of communication systems. Animal Behaviour, 2021, 179, 297-306.	1.9	7
48	Memory flies sooner from flies that learn faster. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13539-13540.	7.1	6
49	Tolerance of Novel Toxins through Generalized Mechanisms: Simulating Gradual Host Shifts of Butterflies. American Naturalist, 2020, 195, 485-503.	2.1	6
50	Nutritional constraints on brain evolution: Sodium and nitrogen limit brain size. Evolution; International Journal of Organic Evolution, 2020, 74, 2304-2319.	2.3	6
51	Genetic Variation Influences Tolerance to a Neonicotinoid Insecticide in 3 Butterfly Species. Environmental Toxicology and Chemistry, 2020, 39, 2228-2236.	4.3	6
52	Bioinspiration as a method of problemâ€based STEM education: A case study with a class structured around the COVIDâ€19 crisis. Ecology and Evolution, 2021, 11, 16374-16386.	1.9	6
53	Lessons from movement ecology for the return to work: Modeling contacts and the spread of COVID-19. PLoS ONE, 2021, 16, e0242955.	2.5	6
54	A Molecular Signaling Approach to Linking Intraspecific Variation and Macro-evolutionary Patterns. Integrative and Comparative Biology, 2014, 54, 805-821.	2.0	5

#	Article	IF	Citations
55	Evolutionary and Ecological Genomics of Developmental Plasticity: Novel Approaches and First Insights From the Study of Horned Beetles. Advances in Experimental Medicine and Biology, 2014, 781, 127-148.	1.6	4
56	Butterflies Do Not Alter Conspecific Avoidance in Response to Variation in Density. Integrative and Comparative Biology, 2017, 57, 396-406.	2.0	4
57	Asymmetric interspecific competition drives shifts in signalling traits in fan-throated lizards. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20202141.	2.6	4
58	Anthropogenic Zinc Exposure Increases Mortality and Antioxidant Gene Expression in Monarch Butterflies with Low Access to Dietary Macronutrients. Environmental Toxicology and Chemistry, 2022, 41, 1286-1296.	4.3	4
59	Monarch caterpillars are robust to combined exposure to the roadside micronutrients sodium and zinc. , 2021, 9, coab061.		3
60	Plasticity paves the way in an adaptive radiation. Molecular Ecology, 2016, 25, 6009-6011.	3.9	2
61	Phenotypic Plasticity. , 2020, , 3911-3915.		1
62	Plasticity, Robustness, Development and Evolution. By Patrick Bateson and Peter Gluckman. Cambridge and New York: Cambridge University Press. $115.00 (hardcover); $45.00 (paper). ix + 156 p.; ill.; index. ISBN: 978-0-521-51629-7 (hc); 978-0-521-73620-6 (pb). 2011.. Quarterly Review of Biology, 2012, 87, 255-255.	0.1	0
63	Information integration. Nature Ecology and Evolution, 2018, 2, 1205-1206.	7.8	0
64	Phenotypic Plasticity. , 2017, , 1-5.		0
65	No Effect of Early Adult Experience on the Development of Individual Specialization in Host-Searching Cabbage White Butterflies. Ecologies, 2022, 3, 1-11.	1.6	0