David W Pfennig

List of Publications by Year
in descending order

130 papers	9,598 citations	34016 52 h-index	42291 92 g-index
150 all docs	150 docs citations	150 times ranked	7484 citing authors

#	Article	IF	Citations
1	Phenotypic plasticity's impacts on diversification and speciation. Trends in Ecology and Evolution, 2010, 25, 459-467.	4.2	961
2	Constraints on the evolution of phenotypic plasticity: limits and costs of phenotype and plasticity. Heredity, 2015, 115, 293-301.	1.2	469
3	The role of developmental plasticity in evolutionary innovation. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 2705-2713.	1.2	432
4	Evaluating â€˜Plasticity-Firstâ€™ Evolution in Nature: Key Criteria and Empirical Approaches. Trends in Ecology and Evolution, 2016, 31, 563-574.	4.2	364
5	Character Displacement: Ecological And Reproductive Responses To A Common Evolutionary Problem. Quarterly Review of Biology, 2009, 84, 253-276.	0.0	355
6	Inclusive fitness theory and eusociality. Nature, 2011, 471, E1-E4.	13.7	339
7	INDIVIDUAL-LEVEL SELECTION AS A CAUSE OF COPE'S RULE OF PHYLETIC SIZE INCREASE. Evolution; International Journal of Organic Evolution, 2004, 58, 1608-1612.	1.1	286
8	Patterns and Power of Phenotypic Selection in Nature. BioScience, 2007, 57, 561-572.	2.2	209
9	The adaptive significance of an environmentally-cued developmental switch in an anuran tadpole. Oecologia, 1990, 85, 101-107.	0.9	203
10	POLYPHENISM IN SPADEFOOT TOAD TADPOLES AS A LOCALLY ADJUSTED EVOLUTIONARILY STABLE STRATEGY. Evolution; International Journal of Organic Evolution, 1992, 46, 1408-1420.	1.1	203
11	Frequency-dependent Batesian mimicry. Nature, 2001, 410, 323-323.	13.7	198
12	Kin recognition and cannibalism in spadefoot toad tadpoles. Animal Behaviour, 1993, 46, 87-94.	0.8	170
13	Character Displacement and the Origins of Diversity. American Naturalist, 2010, 176, S26-S44.	1.0	157
14	Genetic biases for showy males: Are some genetic systems especially conducive to sexual selection?. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1089-1094.	3.3	154
15	Polyphenism in Spadefoot Toad Tadpoles as a Logically Adjusted Evolutionarily Stable Strategy. Evolution; International Journal of Organic Evolution, 1992, 46, 1408.	1.1	149
16	Genetic assimilation: a review of its potential proximate causes and evolutionary consequences. Annals of Botany, 2016, 117, 769-779.	1.4	145
17	HOW FLUCTUATING COMPETITION AND PHENOTYPIC PLASTICITY MEDIATE SPECIES DIVERGENCE. Evolution; International Journal of Organic Evolution, 2002, 56, 1217-1228.	1.1	130
18	Kinship and Cannibalism. BioScience, 1997, 47, 667-675.	2.2	128

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19	CHARACTER DISPLACEMENT IN POLYPHENIC TADPOLES. Evolution; International Journal of Organic Evolution, 2000, 54, 1738-1749.	1.1	122
20	Imperfect Mimicry and the Limits of Natural Selection. Quarterly Review of Biology, 2013, 88, 297-315.	0.0	117
21	Evolutionary Change in Continuous Reaction Norms. American Naturalist, 2014, 183, 453-467.	1.0	114
22	Kinship affects morphogenesis in cannibalistic salamanders. Nature, 1993, 362, 836-838.	13.7	111
23	The mechanism of nestmate discrimination in social wasps (Polistes, Hymenoptera: Vespidae). Behavioral Ecology and Sociobiology, 1983, 13, 299-305.	0.6	110
24	ECOLOGICAL OPPORTUNITY AND PHENOTYPIC PLASTICITY INTERACT TO PROMOTE CHARACTER DISPLACEMENT AND SPECIES COEXISTENCE. Ecology, 2006, 87, 769-779.	1.5	109
25	FIELD AND EXPERIMENTAL EVIDENCE FOR COMPETITION'S ROLE IN PHENOTYPIC DIVERGENCE. Evolution; International Journal of Organic Evolution, 2007, 61, 257-271.	1.1	101
26	The emergence of performance tradeâ€offs during local adaptation: insights from experimental evolution. Molecular Ecology, 2017, 26, 1720-1733.	2.0	99
27	Morphological novelty emerges from pre-existing phenotypic plasticity. Nature Ecology and Evolution, 2018, 2, 1289-1297.	3.4	96
28	Pathogens as a factor limiting the spread of cannibalism in tiger salamanders. Oecologia, 1991, 88, 161-166.	0.9	95
29	Predator Cognition Permits Imperfect Coral Snake Mimicry. American Naturalist, 2010, 176, 830-834.	1.0	95
30	Environmental Causes of Correlations between Age and Size at Metamorphosis in Scaphiopus Multiplicatus. Ecology, 1991, 72, 2240-2248.	1.5	92
31	Kin recognition and cannibalism in polyphenic salamanders. Behavioral Ecology, 1994, 5, 225-232.	1.0	92
32	Disruptive Selection in Natural Populations: The Roles of Ecological Specialization and Resource Competition. American Naturalist, 2009, 174, 268-281.	1.0	92
33	Resource polyphenism increases species richness: a test of the hypothesis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 577-591.	1.8	84
34	Diet and hormonal manipulation reveal cryptic genetic variation: implications for the evolution of novel feeding strategies. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 3569-3578.	1.2	84
35	Mimicry on the edge: why do mimics vary in resemblance to their model in different parts of their geographical range?. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 1955-1961.	1.2	83
36	Ancestral variation and the potential for genetic accommodation in larval amphibians: implications for the evolution of novel feeding strategies. Evolution & Development, 2008, 10, 316-325.	1.1	82

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37	Cannibalistic tadpoles that pose the greatest threat to kin are most likely to discriminate kin. Proceedings of the Royal Society B: Biological Sciences, 1999, 266, 57-61.	1.2	75
38	Effect of Predatorâ€Prey Phylogenetic Similarity on the Fitness Consequences of Predation: A Tradeâ€off between Nutrition and Disease?. American Naturalist, 2000, 155, 335-345.	1.0	74
39	Genetic details, optimization and phage life histories. Trends in Ecology and Evolution, 2004, 19, 76-82.	4.2	71
40	CHARACTER DISPLACEMENT AS THE "BEST OF A BAD SITUATION": FITNESS TRADE-OFFS RESULTING FROM SELECTION TO MINIMIZE RESOURCE AND MATE COMPETITION. Evolution; International Journal of Organic Evolution, 2005, 59, 2200-2208.	1.1	65
41	Kin Recognition. Scientific American, 1995, 272, 98-103.	1.0	64
42	Learned component of nestmate discrimination in workers of a social wasp, Polistes fuscatus (Hymenoptera: Vespidae). Animal Behaviour, 1983, 31, 412-416.	0.8	63
43	Competition and the origins of novelty: experimental evolution of niche-width expansion in a virus. Biology Letters, 2013, 9, 20120616.	1.0	62
44	â€œKIN RECOGNITIONâ€•AMONG SPADEFOOT TOAD TADPOLES: A SIDEâ€EFFECT OF HABITAT SELECTION?. Evolution; International Journal of Organic Evolution, 1990, 44, 785-798.	1.1	61
45	A TEST OF ALTERNATIVE HYPOTHESES FOR CHARACTER DIVERGENCE BETWEEN COEXISTING SPECIES. Ecology, 2003, 84, 1288-1297.	1.5	61
46	Cryptic Genetic Variation in Natural Populations: A Predictive Framework. Integrative and Comparative Biology, 2014, 54, 783-793.	0.9	60
47	Character displacement as the "best of a bad situation": fitness trade-offs resulting from selection to minimize resource and mate competition. Evolution; International Journal of Organic Evolution, 2005, 59, 2200-8.	1.1	60
48	Population differences in predation on Batesian mimics in allopatry with their model: selection against mimics is strongest when they are common. Behavioral Ecology and Sociobiology, 2007, 61, 505-511.	0.6	59
49	Mimics without models: causes and consequences of allopatry in Batesian mimicry complexes. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 2577-2585.	1.2	59
50	PROXIMATE CAUSES OF CANNIBALISTIC POLYPHENISM IN LARVAL TIGER SALAMANDERS. Ecology, 1999, 80, 1076-1080.	1.5	56
51	High-model abundance may permit the gradual evolution of Batesian mimicry: an experimental test. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 1041-1048.	1.2	56
52	Phenotypic plasticity, canalization, and the origins of novelty: Evidence and mechanisms from amphibians. Seminars in Cell and Developmental Biology, 2019, 88, 80-90.	2.3	56
53	Migration, local adaptation and the evolution of plasticity. Trends in Ecology and Evolution, 2002, 17, 540-541.	4.2	55
54	Selection overrides gene flow to break down maladaptive mimicry. Nature, 2008, 451, 1103-1106.	13.7	55

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55	A MATERNAL EFFECT MEDIATES RAPID POPULATION DIVERGENCE AND CHARACTER DISPLACEMENT IN SPADEFOOT TOADS. Evolution; International Journal of Organic Evolution, 2009, 63, 898-909.	1.1	55
56	Field and experimental evidence that competition and ecological opportunity promote resource polymorphism. Biological Journal of the Linnean Society, 0, 100, 73-88.	0.7	54
57	"Kin Recognition" Among Spadefoot Toad Tadpoles: A Side-Effect of Habitat Selection?. Evolution; International Journal of Organic Evolution, 1990, 44, 785.	1.1	51
58	Emerging model systems in eco-evo-devo: the environmentally responsive spadefoot toad. Evolution & Development, 2011, 13, 391-400.	1.1	50
59	A test of alternative hypotheses for kin recognition in cannibalistic tiger salamanders. Behavioral Ecology, 1999, 10, 436-443.	1.0	47
60	Towards a gene regulatory network perspective on phenotypic plasticity, genetic accommodation and genetic assimilation. Molecular Ecology, 2014, 23, 4438-4440.	2.0	47
61	Relaxed Genetic Constraint is Ancestral to the Evolution of Phenotypic Plasticity. Integrative and Comparative Biology, 2012, 52, 16-30.	0.9	46
62	Plasticityâ€led evolution: A survey of developmental mechanisms and empirical tests. Evolution & Development, 2020, 22, 71-87.	1.1	46
63	Character displacement: in situ evolution of novel phenotypes or sorting of pre-existing variation?. Journal of Evolutionary Biology, 2007, 20, 448-459.	0.8	45
64	Does character displacement initiate speciation? Evidence of reduced gene flow between populations experiencing divergent selection. Journal of Evolutionary Biology, 2010, 23, 854-865.	0.8	44
65	Neighbor Recognition and Contextâ€dependent Aggression in a Solitary Wasp, Sphecius speciosus (Hymenoptera: Sphecidae). Ethology, 1989, 80, 1-18.	0.5	42
66	Inbreeding and reproductive performance in Standardbred horses. Journal of Heredity, 1984, 75, 220-224.	1.0	39
67	KINâ€MEDIATED MORPHOGENESIS IN FACULTATIVELY CANNIBALISTIC TADPOLES. Evolution; International Journal of Organic Evolution, 1997, 51, 1993-1999.	1.1	39
68	Maternal Investment Influences Expression of Resource Polymorphism in Amphibians: Implications for the Evolution of Novel Resource-Use Phenotypes. PLoS ONE, 2010, 5, e9117.	1.1	38
69	Stress hormones and the fitness consequences associated with the transition to a novel diet in larval amphibians. Journal of Experimental Biology, 2009, 212, 3743-3750.	0.8	33
70	Plasticity-led evolution: evaluating the key prediction of frequency-dependent adaptation. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182754.	1.2	33
71	Development and evolution of character displacement. Annals of the New York Academy of Sciences, 2012, 1256, 89-107.	1.8	32
72	AN EXPERIMENTAL TEST OF CHARACTER DISPLACEMENT'S ROLE IN PROMOTING POSTMATING ISOLATION BETWEEN CONSPECIFIC POPULATIONS IN CONTRASTING COMPETITIVE ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 2007, 61, 2433-2443.	1.1	31

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73	An inducible offense: carnivore morph tadpoles induced by tadpole carnivory. Ecology and Evolution, 2015, 5, 1405-1411.	0.8	30
74	Analysis of range expansion in two species undergoing character displacement: why might invaders generally â€˜winâ€™ during character displacement?. Journal of Evolutionary Biology, 2008, 21, 696-704.	0.8	28
75	A Batesian mimic and its model share color production mechanisms. Environmental Epigenetics, 2012, 58, 658-667.	0.9	27
76	Egg-dumping lace bugs preferentially oviposit with kin. Animal Behaviour, 2000, 59, 379-383.	0.8	26
77	More than mimicry? Evaluating scope for flicker-fusion as a defensive strategy in coral snake mimics. Environmental Epigenetics, 2014, 60, 123-130.	0.9	26
78	Parallel evolution and ecological selection: replicated character displacement in spadefoot toads. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 4189-4196.	1.2	25
79	Increased competition as a cost of specialization during the evolution of resource polymorphism. Biological Journal of the Linnean Society, 2012, 107, 845-853.	0.7	24
80	Widespread disruptive selection in the wild is associated with intense resource competition. BMC Evolutionary Biology, 2012, 12, 136.	3.2	24
81	Evolutionary rescue and the coexistence of generalist and specialist competitors: an experimental test. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151932.	1.2	24
82	Intraspecific adaptive radiation: Competition, ecological opportunity, and phenotypic diversification within species. Evolution; International Journal of Organic Evolution, 2017, 71, 2496-2509.	1.1	24
83	EVOLUTION OF CHARACTER DISPLACEMENT IN SPADEFOOT TOADS: DIFFERENT PROXIMATE MECHANISMS IN DIFFERENT SPECIES. Evolution; International Journal of Organic Evolution, 2010, 64, no-no.	1.1	23
84	Competition and the evolution of imperfect mimicry. Environmental Epigenetics, 2012, 58, 608-619.	0.9	23
85	Behavioral Plasticity and the Origins of Novelty: The Evolution of the Rattlesnake Rattle. American Naturalist, 2016, 188, 475-483.	1.0	23
86	Genome ofSpea multiplicata, a Rapidly Developing, Phenotypically Plastic, and Desert-Adapted Spadefoot Toad. G3: Genes, Genomes, Genetics, 2019, 9, 3909-3919.	0.8	23
87	EVALUATING THE TARGETS OF SELECTION DURING CHARACTER DISPLACEMENT. Evolution; International Journal of Organic Evolution, 2011, 65, 2946-2958.	1.1	22
88	Rapid evolution of mimicry following local model extinction. Biology Letters, 2014, 10, 20140304.	1.0	22
89	The role of transgenerational epigenetic inheritance in diversification and speciation. Non-Genetic Inheritance, 2013, 1, .	0.8	20
90	Kin-Mediated Morphogenesis in Facultatively Cannibalistic Tadpoles. Evolution; International Journal of Organic Evolution, 1997, 51, 1993.	1.1	19

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91	CHARACTER DISPLACEMENT AS THE â€œBEST OF A BAD SITUATIONâ€• FITNESS TRADE-OFFS RESULTING FROM SELECTION TO MINIMIZE RESOURCE AND MATE COMPETITION. Evolution; International Journal of Organic Evolution, 2005, 59, 2200.	1.1	19
92	Evaluating the utility of camera traps in field studies of predation. PeerJ, 2019, 7, e6487.	0.9	19
93	Absence of joint nesting advantage in desert seed harvester ants: evidence from a field experiment. Animal Behaviour, 1995, 49, 567-575.	0.8	18
94	Mimicry's palette: widespread use of conserved pigments in the aposematic signals of snakes. Evolution & Development, 2014, 16, 61-67.	1.1	16
95	Nestmate and nest discrimination among workers from neighboring colonies of social wasps Polistes exclamans. Canadian Journal of Zoology, 1990, 68, 268-271.	0.4	15
96	Male sexual signal predicts phenotypic plasticity in offspring: implications for the evolution of plasticity and local adaptation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180179.	1.8	15
97	Innovation and Diversification Via Plasticity-Led Evolution. , 2021, , 211-240.		14
98	Inviable immigrants drive diversification in the sea. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3713-3714.	3.3	13
99	Coevolutionary arms races in Batesian mimicry? A test of the chase-away hypothesis. Biological Journal of the Linnean Society, 2018, 124, 668-676.	0.7	13
100	Evolutionary rescue via transgenerational plasticity: Evidence and implications for conservation. Evolution & Development, 2021, 23, 292-307.	1.1	13
101	Dominance as a Predictor of Cofoundress Disappearance Order in Social Wasps (<i>Polistes) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.2	12
102	Inducible competitors and adaptive diversification. Environmental Epigenetics, 2013, 59, 537-552.	0.9	12
103	Batesian mimicry promotes pre- and postmating isolation in a snake mimicry complex. Evolution; International Journal of Organic Evolution, 2015, 69, 1085-1090.	1.1	11
104	CHARACTER DISPLACEMENT IN POLYPHENIC TADPOLES. Evolution; International Journal of Organic Evolution, 2000, 54, 1738.	1.1	10
105	HOW FLUCTUATING COMPETITION AND PHENOTYPIC PLASTICITY MEDIATE SPECIES DIVERGENCE. Evolution; International Journal of Organic Evolution, 2002, 56, 1217.	1.1	10
106	How stabilizing selection and nongenetic inheritance combine to shape the evolution of phenotypic plasticity. Journal of Evolutionary Biology, 2019, 32, 706-716.	0.8	10
107	An experimental investigation of how intraspecific competition and phenotypic plasticity can promote the evolution of novel, complex phenotypes. Biological Journal of the Linnean Society, 2020, 131, 76-87.	0.7	9
108	Antipredator Behavior Promotes Diversification of Feeding Strategies. Integrative and Comparative Biology, 2012, 52, 53-63.	0.9	8

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109	Carryover effects and the evolution of polyphenism. Biological Journal of the Linnean Society, 2020, 131, 622-631.	0.7	8
110	A condition-dependent male sexual signal predicts adaptive predator-induced plasticity in offspring. Behavioral Ecology and Sociobiology, 2021, 75, 1.	0.6	8
111	To mimicry and back again. Nature, 2016, 534, 184-185.	13.7	7
112	Identification of candidate loci for adaptive phenotypic plasticity in natural populations of spadefoot toads. Ecology and Evolution, 2020, 10, 8976-8988.	0.8	6
113	Brotherly love benefits females. Nature, 2014, 505, 626-627.	13.7	4
114	Multiple models generate a geographical mosaic of resemblance in a Batesian mimicry complex. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191519.	1.2	4
115	Character displacement. Current Biology, 2020, 30, R1023-R1024.	1.8	4
116	Dead Spadefoot Tadpoles Adaptively Modify Development in Future Generations: A Novel Form of Nongenetic Inheritance?. Copeia, 2020, 108, 116.	1.4	4
117	Evolution: Ancestral Plasticity Promoted Extreme Temperature Adaptation in Thermophilic Bacteria. Current Biology, 2020, 30, R68-R70.	1.8	3
118	Microevolutionary change in mimicry? Potential erosion of rattling behaviour among nonvenomous snakes on islands lacking rattlesnakes. Ethology Ecology and Evolution, 2021, 33, 125-136.	0.6	3
119	Adaptive Plasticity as a Fitness Benefit of Mate Choice. Trends in Ecology and Evolution, 2021, 36, 294-307.	4.2	3
120	Transcriptomic bases of a polyphenism. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2021, 336, 482-495.	0.6	3
121	I.14 Phenotypic Selection. , 2009, , 101-108.		2
122	Life imperfectly imitates life. Nature, 2012, 483, 410-411.	13.7	2
123	Sexual selection's impacts on ecological specialization: an experimental test. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150217.	1.2	2
124	Stress hormones and the fitness consequences associated with the transition to a novel diet in larval amphibians. Journal of Experimental Biology, 2010, 213, 2547-2547.	0.8	1
125	Phenotypic plasticity and the origins of novelty. , 2020, , 443-458.		1
126	K. G. Ross and R. W. Matthews (eds) 1991: "The Social Biology of Wasps" Cornell University Press, Ithaca, New York, xvii, 678 pp., illus. $72.50 (cloth); $34.95 (paper) ISBN: 0-8014-9906-2.. Journal of Evolutionary Biology, 1992, 5, 729-731.	0.8	0

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127	Elgar, M. A. and Crespi, B. J. (eds.) 1992. Cannibalism. Ecology and evolution among diverse taxa. Oxford University Press, Oxford, viii + 361 pp., illus. $75.00 (cloth), ISBN: 9-854-4650-4.. Journal of Evolutionary Biology, 1994, 7, 121-123.	0.8	0
128	The Evolution of Selflessness and Selfishness Survival Strategies: Cooperation and Conflict in Animal Societies Raghavendra Gadagkar. BioScience, 1998, 48, 956-958.	2.2	0
129	DARWIN IN THE TWENTY-FIRST CENTURY1. Evolution; International Journal of Organic Evolution, 2011, 65, 2130-2132.	1.1	0
130	Evolution and the Flexible Organism. American Scientist, 2022, 110, 94.	0.1	0