Antonia Monteiro

List of Publications by Year
in descending order

118 papers	6,781 citations	87888 38 h-index	71685 76 g-index
146 all docs	146 docs citations	146 times ranked	5059 citing authors

#	Article	IF	Citations
1	RNA interference in Lepidoptera: An overview of successful and unsuccessful studies and implications for experimental design. Journal of Insect Physiology, 2011, 57, 231-245.	2.0	729
2	Development, plasticity and evolution of butterfly eyespot patterns. Nature, 1996, 384, 236-242.	27.8	505
3	The HSP90 family of genes in the human genome: Insights into their divergence and evolution. Genomics, 2005, 86, 627-637.	2.9	317
4	The generation and diversification of butterfly eyespot color patterns. Current Biology, 2001, 11, 1578-1585.	3.9	280
5	Comparative genomics and evolution of the HSP90 family of genes across all kingdoms of organisms. BMC Genomics, 2006, 7, 156.	2.8	271
6	Female Bicyclus anynana butterflies choose males on the basis of their dorsal UV-reflective eyespot pupils. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 1541-1546.	2.6	203
7	Phylogeny of Bicyclus (Lepidoptera: Nymphalidae) Inferred from COI, COII, and EF-1Î± Gene Sequences. Molecular Phylogenetics and Evolution, 2001, 18, 264-281.	2.7	200
8	The use of chemical and visual cues in female choice in the butterfly Bicyclus anynana. Proceedings of the Royal Society B: Biological Sciences, 2007, 274, 845-851.	2.6	166
9	Comparative insights into questions of lepidopteran wing pattern homology. BMC Developmental Biology, 2006, 6, 52.	2.1	159
10	Unraveling the thread of natureâ€™s tapestry: the genetics of diversity and convergence in animal pigmentation. Pigment Cell and Melanoma Research, 2012, 25, 411-433.	3.3	143
11	Developmental Plasticity in Sexual Roles of Butterfly Species Drives Mutual Sexual Ornamentation. Science, 2011, 331, 73-75.	12.6	130
12	Wings, Horns, and Butterfly Eyespots: How Do Complex Traits Evolve?. PLoS Biology, 2009, 7, e1000037.	5.6	127
13	Development and evolution on the wing. Trends in Ecology and Evolution, 2002, 17, 125-133.	8.7	122
14	Melanin Pathway Genes Regulate Color and Morphology of Butterfly Wing Scales. Cell Reports, 2018, 24, 56-65.	6.4	121
15	Evolutionary Biology for the 21st Century. PLoS Biology, 2013, 11, e1001466.	5.6	115
16	Are we there yet? Tracking the development of new model systems. Trends in Genetics, 2008, 24, 353-360.	6.7	109
17	Genetic Basis of Melanin Pigmentation in Butterfly Wings. Genetics, 2017, 205, 1537-1550.	2.9	109
18	Accommodating natural and sexual selection in butterfly wing pattern evolution. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 2369-2375.	2.6	108

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19	Origin, Development, and Evolution of Butterfly Eyespots. Annual Review of Entomology, 2015, 60, 253-271.	11.8	107
20	Eyespots deflect predator attack increasing fitness and promoting the evolution of phenotypic plasticity. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20141531.	2.6	105
21	A Single Origin for Nymphalid Butterfly Eyespots Followed by Widespread Loss of Associated Gene Expression. PLoS Genetics, 2012, 8, e1002893.	3.5	91
22	Alternative models for the evolution of eyespots and of serial homology on lepidopteran wings. BioEssays, 2008, 30, 358-366.	2.5	74
23	Biased learning affects mate choice in a butterfly. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10948-10953.	7.1	74
24	<i>Distalâ€‹</i><scp><i>L</i></scp><i>ess</i> Regulates Eyespot Patterns and Melanization in <i>Bicyclus</i> Butterflies. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2013, 320, 321-331.	1.3	74
25	Mutants highlight the modular control of butterfly eyespot patterns. Evolution & Development, 2003, 5, 180-187.	2.0	72
26	Germline transformation of the butterfly Bicyclus anynana. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, S263-5.	2.6	70
27	Differential Expression of Ecdysone Receptor Leads to Variation in Phenotypic Plasticity across Serial Homologs. PLoS Genetics, 2015, 11, e1005529.	3.5	69
28	Distal-less activates butterfly eyespots consistent with a reaction diffusion process. Development (Cambridge), 2019, 146, .	2.5	65
29	Gene regulatory networks reused to build novel traits. BioEssays, 2012, 34, 181-186.	2.5	63
30	Artificial selection for structural color on butterfly wings and comparison with natural evolution. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12109-12114.	7.1	61
31	The evolutionary convergence of mid-Mesozoic lacewings and Cenozoic butterflies. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152893.	2.6	59
32	A high-coverage draft genome of the mycalesine butterfly Bicyclus anynana. GigaScience, 2017, 6, 1-7.	6.4	55
33	BUTTERFLY EYESPOTS: THE GENETICS AND DEVELOPMENT OF THE COLOR RINGS. Evolution; International Journal of Organic Evolution, 1997, 51, 1207-1216.	2.3	53
34	Correlations between scale structure and pigmentation in butterfly wings. Evolution & Development, 2001, 3, 415-423.	2.0	53
35	Wingless is a positive regulator of eyespot color patterns in Bicyclus anynana butterflies. Developmental Biology, 2017, 429, 177-185.	2.0	53
36	Temporal and spatial control of transgene expression using laser induction of the hsp70 promoter. BMC Developmental Biology, 2006, 6, 55.	2.1	50

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37	Nymphalid eyespot serial homologues originate as a few individualized modules. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20133262.	2.6	50
38	Phenotypic plasticity in opsin expression in a butterfly compound eye complements sex role reversal. BMC Evolutionary Biology, 2012, 12, 232.	3.2	46
39	Wound healing, calcium signaling, and other novel pathways are associated with the formation of butterfly eyespots. BMC Genomics, 2017, 18, 788.	2.8	45
40	Over-expression of Ultrabithorax alters embryonic body plan and wing patterns in the butterfly Bicyclus anynana. Developmental Biology, 2014, 394, 357-366.	2.0	43
41	Body Shape and Coloration of Silkworm Larvae Are Influenced by a Novel Cuticular Protein. Genetics, 2017, 207, 1053-1066.	2.9	43
42	Butterfly Eyespots: The Genetics and Development of the Color Rings. Evolution; International Journal of Organic Evolution, 1997, 51, 1207.	2.3	42
43	<i>apterous A</i>specifies dorsal wing patterns and sexual traits in butterflies. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20172685.	2.6	41
44	MATE PREFERENCE FOR A PHENOTYPICALLY PLASTIC TRAIT IS LEARNED, AND MAY FACILITATE PREFERENCE-PHENOTYPE MATCHING. Evolution; International Journal of Organic Evolution, 2014, 68, 1661-1670.	2.3	40
45	DaTrypsin, a novel clip-domain serine proteinase gene up-regulated during winter and summer diapauses of the onion maggot, Delia antiqua. Gene, 2005, 347, 115-123.	2.2	39
46	Butterfly eyespots evolved via cooption of an ancestral gene-regulatory network that also patterns antennae, legs, and wings. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	39
47	Scleral pigmentation leads to conspicuous, not cryptic, eye morphology in chimpanzees. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19248-19250.	7.1	37
48	On the origins of sexual dimorphism in butterflies. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 1981-1988.	2.6	36
49	Cloning and Characterization of the HSP70 Gene, and Its Expression in Response to Diapauses and Thermal Stress in the Onion Maggot, Delia antiqua. BMB Reports, 2006, 39, 749-758.	2.4	36
50	Butterfly eyespot patterns: evidence for specification by a morphogen diffusion gradient. Acta Biotheoretica, 2001, 49, 77-88.	1.5	34
51	Transcriptome-Wide Differential Gene Expression inBicyclus anynanaButterflies: Female Vision-Related Genes Are More Plastic. Molecular Biology and Evolution, 2016, 33, 79-92.	8.9	34
52	Transgenic approaches to study wing color pattern development in Lepidoptera. Molecular BioSystems, 2007, 3, 530.	2.9	33
53	Odour influences whether females learn to prefer or to avoid wing patterns of male butterflies. Animal Behaviour, 2013, 86, 1139-1145.	1.9	33
54	The Role of Learning on Insect and Spider Sexual Behaviors, Sexual Trait Evolution, and Speciation. Frontiers in Ecology and Evolution, 2019, 6, .	2.2	33

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55	Attack risk for butterflies changes with eyespot number and size. Royal Society Open Science, 2016, 3, 150614.	2.4	32
56	The Genetics and Development of an Eyespot Pattern in the Butterfly <i>Bicyclus anynana</i>: Response to Selection for Eyespot Shape. Genetics, 1997, 146, 287-294.	2.9	32
57	Origin of the mechanism of phenotypic plasticity in satyrid butterfly eyespots. ELife, 2020, 9, .	6.0	31
58	Multiple approaches to study color pattern evolution in butterflies. Trends in Evolutionary Biology, 2010, 2, 2.	0.4	29
59	Phenotypic plasticity in sex pheromone production in Bicyclus anynana butterflies. Scientific Reports, 2016, 6, 39002.	3.3	29
60	Molecular mechanisms of secondary sexual trait development in insects. Current Opinion in Insect Science, 2016, 17, 40-48.	4.4	29
61	Sex Differences in 20-Hydroxyecdysone Hormone Levels Control Sexual Dimorphism in Bicyclus anynana Wing Patterns. Molecular Biology and Evolution, 2018, 35, 465-472.	8.9	29
62	The combined effect of two mutations that alter serially homologous color pattern elements on the fore and hindwings of a butterfly. BMC Genetics, 2007, 8, 22.	2.7	28
63	CRISPR-Cas9 Mediated Genome Editing in Bicyclus anynana Butterflies. Methods and Protocols, 2018, 1, 16.	2.0	28
64	Both cellâ€autonomous mechanisms and hormones contribute to sexual development in vertebrates and insects. BioEssays, 2013, 35, 725-732.	2.5	27
65	Hox genes are essential for the development of eyespots in<i>Bicyclus anynana</i>butterflies. Genetics, 2021, 217, 1-9.	2.9	24
66	Nymphalid eyespots are co-opted to novel wing locations following a similar pattern in independent lineages. BMC Evolutionary Biology, 2015, 15, 20.	3.2	23
67	Male<i>Bicyclus anynana</i>Butterflies Choose Females on the Basis of Their Ventral UV-Reflective Eyespot Centers. Journal of Insect Science, 2019, 19, .	1.5	22
68	Doublesex Mediates the Development of Sex-Specific Pheromone Organs in Bicyclus Butterflies via Multiple Mechanisms. Molecular Biology and Evolution, 2020, 37, 1694-1707.	8.9	22
69	Spalt expression and the development of melanic color patterns in pierid butterflies. EvoDevo, 2013, 4, 6.	3.2	21
70	Automatic recognition and measurement of butterfly eyespot patterns. BioSystems, 2009, 95, 130-136.	2.0	20
71	The Genetic, Morphological, and Physiological Characterization of a Dark Larval Cuticle Mutation in the Butterfly, Bicyclus anynana. PLoS ONE, 2010, 5, e11563.	2.5	20
72	Male and Female Mating Behavior is Dependent on Social Context in the Butterfly Bicyclus anynana. Journal of Insect Behavior, 2014, 27, 478-495.	0.7	20

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73	Differential Involvement of Hedgehog Signaling in Butterfly Wing and Eyespot Development. PLoS ONE, 2012, 7, e51087.	2.5	20
74	Haze smoke impacts survival and development of butterflies. Scientific Reports, 2018, 8, 15667.	3.3	19
75	Early-exposure to new sex pheromone blends alters mate preference in female butterflies and in their offspring. Nature Communications, 2020, 11, 53.	12.8	19
76	Transgenerational inheritance of learned preferences for novel host plant odors in<i>Bicyclus anynana</i>butterflies. Evolution; International Journal of Organic Evolution, 2019, 73, 2401-2414.	2.3	18
77	Male Courtship Rate Plasticity in the Butterfly Bicyclus anynana Is Controlled by Temperature Experienced during the Pupal and Adult Stages. PLoS ONE, 2013, 8, e64061.	2.5	17
78	Molecular mechanisms underlying simplification of venation patterns in holometabolous insects. Development (Cambridge), 2020, 147, .	2.5	17
79	Pogostick: A New Versatile piggyBac Vector for Inducible Gene Over-Expression and Down-Regulation in Emerging Model Systems. PLoS ONE, 2011, 6, e18659.	2.5	14
80	Temporal Gene Expression Variation Associated with Eyespot Size Plasticity in Bicyclus anynana. PLoS ONE, 2013, 8, e65830.	2.5	13
81	Eco-evo-devo advances with butterfly eyespots. Current Opinion in Genetics and Development, 2021, 69, 6-13.	3.3	13
82	Visualization of early embryos of the butterfly Bicyclus anynana. Zygote, 2005, 13, 139-144.	1.1	12
83	Rearing Temperature Influences Adult Response to Changes in Mating Status. PLoS ONE, 2016, 11, e0146546.	2.5	12
84	Yellow and the Novel Aposematic Signal, Red, Protect Delias Butterflies from Predators. PLoS ONE, 2017, 12, e0168243.	2.5	12
85	Diversity in Primate External Eye Morphology: Previously Undescribed Traits and Their Potential Adaptive Value. Symmetry, 2021, 13, 1270.	2.2	12
86	A Survey of Eyespot Sexual Dimorphism across Nymphalid Butterflies. International Journal of Evolutionary Biology, 2013, 2013, 1-6.	1.0	11
87	Antennapedia and optix regulate metallic silver wing scale development and cell shape in Bicyclus anynana butterflies. Cell Reports, 2022, 40, 111052.	6.4	11
88	Tracking genome-editing and associated molecular perturbations by SWATH mass spectrometry. Scientific Reports, 2019, 9, 15240.	3.3	10
89	The Hox gene <i>Antennapedia</i> is essential for wing development in insects. Development (Cambridge), 2022, 149, .	2.5	10
90	<i>Distal-less</i>homeobox genes of insects and spiders: genomic organization, function, regulation and evolution. Insect Science, 2016, 23, 335-352.	3.0	9

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91	Dissection of Larval and Pupal Wings of Bicyclus anynana Butterflies. Methods and Protocols, 2020, 3, 5.	2.0	9
92	A Transcriptomic Atlas Underlying Developmental Plasticity of Seasonal Forms of <i>Bicyclus anynana</i> Butterflies. Molecular Biology and Evolution, 2022, 39, .	8.9	9
93	Experimental field tests of Batesian mimicry in the swallowtail butterfly <i>Papilio polytes</i>. Ecology and Evolution, 2018, 8, 7657-7666.	1.9	8
94	Predation favours <i>Bicyclus anynana</i> butterflies with fewer forewing eyespots. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20202840.	2.6	8
95	Steroid hormone signaling during development has a latent effect on adult male sexual behavior in the butterfly Bicyclus anynana. PLoS ONE, 2017, 12, e0174403.	2.5	8
96	In situ Protocol for Butterfly Pupal Wings Using Riboprobes. Journal of Visualized Experiments, 2007, , 208.	0.3	7
97	Physiology and Evolution of Wing Pattern Plasticity in Bicyclus Butterflies: A Critical Review of the Literature. , 2017, , 91-105.		7
98	Expression of Multiple engrailed Family Genes in Eyespots of Bicyclus anynana Butterflies Does Not Implicate the Duplication Events in the Evolution of This Morphological Novelty. Frontiers in Ecology and Evolution, 2020, 8, .	2.2	7
99	Ancient Wings: animating the evolution of butterfly wing patterns. BioSystems, 2003, 71, 289-295.	2.0	6
100	In Vivo Electroporation of DNA into the Wing Epidermis of the Butterfly,Bicyclus anynana. Journal of Insect Science, 2007, 7, 1-8.	1.5	6
101	What's in a band? The function of the color and banding pattern of the Banded Swallowtail. Ecology and Evolution, 2020, 10, 2021-2029.	1.9	6
102	Distinguishing serial homologs from novel traits: Experimental limitations and ideas for improvements. BioEssays, 2021, 43, e2000162.	2.5	6
103	Distal-less and spalt are distal organisers of pierid wing patterns. EvoDevo, 2022, 13, .	3.2	6
104	Butterfly wings: Colour patterns and now gene expression patterns. BioEssays, 1994, 16, 789-791.	2.5	5
105	Males Become Choosier in Response to Manipulations of Female Wing Ornaments in Dry Season Bicyclus anynana Butterflies. Journal of Insect Science, 2017, 17, .	1.5	5
106	Interacting Effects of Eyespot Number and Ultraviolet Reflectivity on Predation Risk in Bicyclus anynana (Lepidoptera: Nymphalidae). Journal of Insect Science, 2019, 19, .	1.5	5
107	Natural Loss of eyeless/Pax6 Expression in Eyes of Bicyclus anynana Adult Butterflies Likely Leads to Exponential Decrease of Eye Fluorescence in Transgenics. PLoS ONE, 2015, 10, e0132882.	2.5	5
108	Inheritance of Acquired Traits in Insects and Other Animals and the Epigenetic Mechanisms That Break the Weismann Barrier. Journal of Developmental Biology, 2021, 9, 41.	1.7	5

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109	The<i>yellow</i>gene regulates behavioural plasticity by repressing male courtship in<i>Bicyclus anynana</i>butterflies. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212665.	2.6	5
110	Evolutionary Reduction of the First Thoracic Limb in Butterflies. Journal of Insect Science, 2011, 11, 1-9.	1.5	4
111	Multiple Loci Control Eyespot Number Variation on the Hindwings of<i>Bicyclus anynana</i>Butterflies. Genetics, 2020, 214, 1059-1078.	2.9	4
112	Cell Dissociation from Butterfly Pupal Wing Tissues for Single-Cell RNA Sequencing. Methods and Protocols, 2020, 3, 72.	2.0	3
113	Dorsal Forewing White Spots of Male Papilio polytes(Lepidoptera: Papilionidae) not Maintained by Female Mate Choice. Journal of Insect Behavior, 2018, 31, 29-41.	0.7	2
114	Evolution of modular and pleiotropic enhancers. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2023, 340, 105-115.	1.3	1
115	Developmental Biology Meets Ecology. Cell, 2009, 138, 421-422.	28.9	0
116	A Method for Inducible Gene Over-Expression and Down-Regulation in Emerging Model Species Using Pogostick. Methods in Molecular Biology, 2014, 1101, 249-266.	0.9	0
117	Dissections of Larval, Pupal and Adult Butterfly Brains for Immunostaining and Molecular Analysis. Methods and Protocols, 2021, 4, 53.	2.0	0
118	Artificial Selection for Structural Color on Butterfly Wings and Comparison to Natural Evolution. , 2014, , .		0