Marie E Herberstein

List of Publications by Year
in descending order

156 papers	5,525 citations	61984 43 h-index	110387 64 g-index
158 all docs	158 docs citations	158 times ranked	3411 citing authors

#	Article	IF	Citations
1	An Integrative Framework for the Appraisal of Coloration in Nature. American Naturalist, 2015, 185, 705-724.	2.1	206
2	Crab-spiders manipulate flower signals. Nature, 2003, 421, 334-334.	27.8	180
3	International scientists formulate a roadmap for insect conservation and recovery. Nature Ecology and Evolution, 2020, 4, 174-176.	7.8	176
4	The functional significance of silk decorations of orbâ€web spiders: a critical review of the empirical evidence. Biological Reviews, 2000, 75, 649-669.	10.4	149
5	Sperm competition and small size advantage for males of the golden orb-web spider Nephila edulis. Journal of Evolutionary Biology, 2000, 13, 939-946.	1.7	147
6	Female control of paternity in the sexually cannibalistic spiderArgiope keyserlingi. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 2439-2443.	2.6	142
7	Genital Evolution: Why Are Females Still Understudied?. PLoS Biology, 2014, 12, e1001851.	5.6	136
8	Costs of courtship and mating in a sexually cannibalistic orb-web spider: female mating strategies and their consequences for males. Behavioral Ecology and Sociobiology, 2002, 51, 440-446.	1.4	114
9	SPATIAL AND TEMPORAL DEMOGRAPHIC VARIATION DRIVES WITHIN-SEASON FLUCTUATIONS IN SEXUAL SELECTION. Evolution; International Journal of Organic Evolution, 2008, 62, 2316-2325.	2.3	113
10	Risky mate search and mate preference in the golden orb-web spider (Nephila plumipes). Behavioral Ecology, 2007, 18, 189-195.	2.2	112
11	Changes in male mate choice in a sexually cannibalistic orb-web spider (Araneae: Araneidae). Behaviour, 2004, 141, 1197-1210.	0.8	101
12	Female praying mantids use sexual cannibalism as a foraging strategy to increase fecundity. Behavioral Ecology, 2008, 19, 710-715.	2.2	98
13	EVALUATION OF FORMULAE TO ESTIMATE THE CAPTURE AREA AND MESH HEIGHT OF ORB WEBS (ARANEOIDEA, ARANEAE). Journal of Arachnology, 2000, 28, 180-184.	0.5	97
14	Evidence for Diet Effects on the Composition of Silk Proteins Produced by Spiders. Molecular Biology and Evolution, 2000, 17, 1904-1913.	8.9	94
15	Colouration in crab spiders: substrate choice and prey attraction. Journal of Experimental Biology, 2005, 208, 1785-1792.	1.7	94
16	The role of experience in web-building spiders (Araneidae). Animal Cognition, 1999, 2, 171-177.	1.8	93
17	Reversible colour change in <scp>A</scp>rthropoda. Biological Reviews, 2014, 89, 820-848.	10.4	89
18	High-performance spider webs: integrating biomechanics, ecology and behaviour. Journal of the Royal Society Interface, 2011, 8, 457-471.	3.4	79

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19	Signalling conflict between prey and predator attraction. Journal of Evolutionary Biology, 2008, 14, 786-794.	1.7	75
20	Web damage and feeding experience influence web site tenacity in the orb-web spider Argiope keyserlingi Karsch. Animal Behaviour, 2000, 60, 821-826.	1.9	66
21	Sperm dynamics in spiders. Behavioral Ecology, 2011, 22, 692-695.	2.2	64
22	Asymmetry in spider orb webs: a result of physical constraints?. Animal Behaviour, 1999, 58, 1241-1246.	1.9	63
23	Is the Evolution of Inaccurate Mimicry a Result of Selection by a Suite of Predators? A Case Study Using Myrmecomorphic Spiders. American Naturalist, 2011, 178, 124-134.	2.1	62
24	Model Systems, Taxonomic Bias, and Sexual Selection: Beyond Drosophila. Annual Review of Entomology, 2014, 59, 321-338.	11.8	62
25	The role of UV in crab spider signals: effects on perception by prey and predators. Journal of Experimental Biology, 2005, 208, 3925-3931.	1.7	60
26	Foraging strategies of Eriophora transmarina and Nephila plumipes (Araneae: Araneoidea): Nocturnal and diurnal orb-weaving spiders. Austral Ecology, 1994, 19, 451-457.	1.5	59
27	Spider signals: are web decorations visible to birds and bees?. Biology Letters, 2005, 1, 299-302.	2.3	58
28	Foraging behaviour in orb-web spiders (Araneidae): do web decorations increase prey capture success in Argiope keyserlingi Karsch, 1878?. Australian Journal of Zoology, 2000, 48, 217.	1.0	57
29	Genital shape correlates with sperm transfer success in the praying mantis Ciulfina klassi (Insecta:) Tj ETQq1 1 0.784314 rgBT /Overlo	1.4	57
30	Mate location, antennal morphology, and ecology in two praying mantids (Insecta: Mantodea). Biological Journal of the Linnean Society, 2007, 91, 307-313.	1.6	55
31	Pollinator Deception in the Orchid Mantis. American Naturalist, 2014, 183, 126-132.	2.1	55
32	Solid-state NMR relaxation studies of Australian spider silks. Biopolymers, 2002, 61, 287-297.	2.4	54
33	Exploitation of floral signals by crab spiders (Thomisus spectabilis, Thomisidae). Behavioral Ecology, 2004, 15, 321-326.	2.2	54
34	LABORATORY METHODS FOR MAINTAINING AND STUDYING WEB-BUILDING SPIDERS. Journal of Arachnology, 2005, 33, 205-213.	0.5	53
35	Multimodal mate assessment by male praying mantids in a sexually cannibalistic mating system. Animal Behaviour, 2010, 79, 1165-1172.	1.9	53
36	Male mate choice and patterns of paternity in the polyandrous, sexually cannibalistic orb-web spider, Nephila plumipes. Australian Journal of Zoology, 2003, 51, 357.	1.0	49

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37	Function of bright coloration in the wasp spider Argiope bruennichi (Araneae: Araneidae). Proceedings of the Royal Society B: Biological Sciences, 2008, 275, 1337-1342.	2.6	49
38	Colour mimicry and sexual deception by Tongue orchids (Cryptostylis). Die Naturwissenschaften, 2010, 97, 97-102.	1.6	49
39	Flower Symmetry Preferences in Honeybees and their Crab Spider Predators. Ethology, 2006, 112, 510-518.	1.1	48
40	Orchid Sexual Deceit Provokes Ejaculation. American Naturalist, 2008, 171, E206-E212.	2.1	48
41	Unraveling the true complexity of costly color signaling. Behavioral Ecology, 2012, 23, 233-236.	2.2	48
42	Limits to Male Copulation Frequency: Sexual Cannibalism and Sterility in St Andrew's Cross Spiders (Araneae, Araneidae). Ethology, 2005, 111, 1050-1061.	1.1	45
43	Distinctive yellow bands on a sit-and-wait predator: prey attractant or camouflage?. Behaviour, 2006, 143, 763-781.	0.8	45
44	Male mating behaviour reduces the risk of sexual cannibalism in an Australian praying mantid. Journal of Ethology, 2009, 27, 377-383.	0.8	43
45	Colour in insect thermoregulation: Empirical and theoretical tests in the colour-changing grasshopper, Kosciuscola tristis. Journal of Insect Physiology, 2013, 59, 81-90.	2.0	42
46	Sexual signals for the colourâ€blind: cryptic female mantids signal quality through brightness. Functional Ecology, 2015, 29, 531-539.	3.6	42
47	THE IMPORTANCE OF BEING LARGER: INTRASPECIFIC COMPETITION FOR PRIME WEB SITES IN ORB-WEB SPIDERS (ARANEAE, ARANEIDAE). Behaviour, 1999, 136, 669-677.	0.8	38
48	Food caching in orb-web spiders (Araneae: Araneoidea). Die Naturwissenschaften, 2001, 88, 42-45.	1.6	38
49	Dangerous mating systems: Signal complexity, signal content and neural capacity in spiders. Neuroscience and Biobehavioral Reviews, 2014, 46, 509-518.	6.1	38
50	Sperm storage and copulation duration in a sexually cannibalistic spider. Journal of Ethology, 2011, 29, 9-15.	0.8	37
51	The effect of colour variation in predators on the behaviour of pollinators: Australian crab spiders and native bees. Ecological Entomology, 2011, 36, 72-81.	2.2	37
52	Evidence for developmental plasticity in response to demographic variation in nature. Ecology, 2009, 90, 2287-2296.	3.2	36
53	The golden mimicry complex uses a wide spectrum of defence to deter a community of predators. ELife, 2017, 6, .	6.0	36
54	Specialist ant-eating spiders selectively feed on different body parts to balance nutrient intake. Animal Behaviour, 2010, 79, 1301-1306.	1.9	35

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55	Insect form vision as one potential shaping force of spider web decoration design. Journal of Experimental Biology, 2010, 213, 759-768.	1.7	35
56	Hidden in plain orange: aposematic coloration is cryptic to a colorblind insect predator. Behavioral Ecology, 2015, 26, 38-44.	2.2	35
57	How effective and persistent are fragmentsof male genitalia as mating plugs?. Behavioral Ecology, 2012, 23, 1140-1145.	2.2	34
58	Scramble Competition Polygyny in Terrestrial Arthropods. Advances in the Study of Behavior, 2017, 49, 237-295.	1.6	34
59	Effect of abiotic factors on the foraging strategy of the orb-web spider Argiope keyserlingi (Araneae:) Tj ETQq1 1 0.784314 rgBT /Over	1.5	33
60	Male courtship vibrations delay predatory behaviour in female spiders. Scientific Reports, 2013, 3, 3557.	3.3	32
61	The Influence of Vibratory Courtship on Female Mating Behaviour in Orb-Web Spiders (Argiope) Tj ETQq1 1 0.784314 rgBT /Overlock	2.5	32
62	Orientational order of Australian spider silks as determined by solid-state NMR. Biopolymers, 2006, 82, 134-143.	2.4	31
63	Taking it to extremes: what drives extreme web elongation in Australian ladder web spiders (Araneidae: Telaprocera maudae)?. Animal Behaviour, 2009, 78, 499-504.	1.9	31
64	Evidence for UV-based sensory exploitation in Australian but not European crab spiders. Evolutionary Ecology, 2009, 23, 621-634.	1.2	31
65	Spider webs: evolution, diversity and plasticity. , 0, , 57-98.		30
66	Three-dimensional printing spiders: back-and-forth glue application yields silk anchorages with high pull-off resistance under varying loading situations. Journal of the Royal Society Interface, 2017, 14, 20160783.	3.4	30
67	The perceptual similarity of orb-spider prey lures and flower colours. Evolutionary Ecology, 2017, 31, 1-20.	1.2	30
68	The Effect of Feeding History on Prey Capture Behaviour in the Orbweb Spider Argiope keyserlingi Karsch (Araneae: Araneidae). Ethology, 1998, 104, 565-571.	1.1	28
69	Fertility control in female eastern grey kangaroos using the GnRH agonist deslorelin. 2. Effects on behaviour. Wildlife Research, 2006, 33, 47.	1.4	27
70	A paternity advantage for speedy males? Sperm precedence patterns and female re-mating frequencies in a sexually cannibalistic praying mantid. Evolutionary Ecology, 2011, 25, 107-119.	1.2	27
71	Evolution of aerial spider webs coincided with repeated structural optimization of silk anchorages. Evolution; International Journal of Organic Evolution, 2019, 73, 2122-2134.	2.3	25
72	Internal reproductive anatomy of the praying mantid Ciulfina klassi (Mantodea: Liturgusidae).. Arthropod Structure and Development, 2009, 38, 60-69.	1.4	24

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73	Chirally dimorphic male genitalia in praying mantids (Ciulfina: Liturgusidae). Journal of Morphology, 2010, 271, 1176-1184.	1.2	24
74	Ferocious Fighting between Male Grasshoppers. PLoS ONE, 2012, 7, e49600.	2.5	23
75	Post-copulation mate guarding in the sexually cannibalistic St Andrew's Cross spider (Araneae) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.4	22
76	Perceived risk of sperm competition affects juvenile development and ejaculate expenditure in male praying mantids. Animal Behaviour, 2011, 82, 1201-1206.	1.9	22
77	Mechanisms of Color Production in a Highly Variable Shield-Back Stinkbug, Tectocoris diopthalmus (Heteroptera: Scutelleridae), and Why It Matters. PLoS ONE, 2013, 8, e64082.	2.5	22
78	Insincere Flattery? Understanding the Evolution of Imperfect Deceptive Mimicry. Quarterly Review of Biology, 2019, 94, 395-415.	0.1	22
79	Web placement in sympatric linyphiid spiders (Arachnida, Araneae): Individual foraging decisions reveal inter-specific competition. Acta Oecologica, 1998, 19, 67-71.	1.1	21
80	DOES THE PRESENCE OF POTENTIAL PREY AFFECT WEB DESIGN IN ARGIOPE KEYSERLINGI (ARANEAE,) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.5	21
81	Preference for habitats with low structural complexity in the praying mantid Ciulfina sp. (Mantidae). Acta Oecologica, 2004, 26, 1-7.	1.1	21
82	Why aren't warning signals everywhere? On the prevalence of aposematism and mimicry in communities. Biological Reviews, 2021, 96, 2446-2460.	10.4	21
83	The influence of visual obstructions on the vigilance and escape behaviour of house sparrows, Passer domesticus. Australian Journal of Zoology, 2000, 48, 259.	1.0	21
84	Web decoration polymorphism inArgiopeAudouin, 1826 (Araneidae) spiders: ontogenetic and interspecific variation. Journal of Natural History, 2005, 39, 3833-3845.	0.5	19
85	Picking the right spot: crab spiders position themselves on flowers to maximize prey attraction. Behaviour, 2006, 143, 957-968.	0.8	19
86	Male copulation frequency, sperm competition and genital damage in the golden orb-web spider (Nephila plumipes). Australian Journal of Zoology, 2008, 56, 233.	1.0	19
87	Producers and scroungers: feeding-type composition changes with group size in a socially foraging spider. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160114.	2.6	19
88	Are males more scared of predators? Differential change in metabolic rate between males and females under predation risk. Physiology and Behavior, 2017, 173, 110-115.	2.1	19
89	Three new species of Ciulfina Giglio-Tos (Mantodea: Liturgusidae) Âfrom north-eastern Australia. Zootaxa, 2007, 1583, .	0.5	18
90	A quantitative test of the â€˜economicâ€™ and â€˜optimalâ€™ models of escape behaviour. Animal Behaviour, 2014, 97, 221-227.	1.9	18

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91	Towards establishment of a centralized spider traits database. Journal of Arachnology, 2020, 48, .	0.5	18
92	Calculation of Capture Thread Length in Orb Webs: Evaluation of New Formulae. Annals of the Entomological Society of America, 1998, 91, 135-138.	2.5	17
93	The aggregating behaviour of Argiope radon, with special reference to web decorations. Journal of Ethology, 2009, 27, 35-42.	0.8	17
94	Families hunt more successfully: effect of group composition on hunting and communal feeding. Animal Behaviour, 2014, 91, 171-178.	1.9	17
95	Cryptic Female Choice Within the Genus Argiope: A Comparative Approach. , 2015, , 55-77.		17
96	Frequency, composition and variation in external food stores constructed by orb-web spiders: Nephila edulis and Nephila plumipes (Araneae : Araneoidea). Australian Journal of Zoology, 2003, 51, 119.	1.0	16
97	Bright turquoise as an intraspecific signal in the chameleon grasshopper (Kosciuscola tristis). Behavioral Ecology and Sociobiology, 2013, 67, 439-447.	1.4	16
98	Sperm competition when transfer is dangerous. Philosophical Transactions of the Royal Society B: Biological Sciences, 2020, 375, 20200073.	4.0	16
99	Positioning at the hub: does it matter on which side of the web orb-web spiders sit?. Journal of Zoology, 2001, 255, 157-163.	1.7	15
100	Offspring dynamics affect food provisioning, growth and mortality in a brood-caring spider. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132180.	2.6	15
101	AnimalTraits - a curated animal trait database for body mass, metabolic rate and brain size. Scientific Data, 2022, 9, .	5.3	15
102	Hunted hunters? Effect of group size on predation risk and growth in the Australian subsocial crab spider Diaea ergandros. Behavioral Ecology and Sociobiology, 2013, 67, 785-794.	1.4	14
103	Assassin bug requires dangerous ant prey to bite first. Current Biology, 2014, 24, R220-R221.	3.9	14
104	Extreme short-term repeatability of male courtship performance in a tropical orb-web spider. Behavioral Ecology, 2014, 25, 1083-1088.	2.2	14
105	Distinct spinning patterns gain differentiated loading tolerance of silk thread anchorages in spiders with different ecology. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20171124.	2.6	14
106	Ontogenetic colour change signals sexual maturity in a nonâ€territorial damselfly. Ethology, 2020, 126, 51-58.	1.1	14
107	Dissecting the variation of a visual trait: the proximate basis of <scp>UV</scp>â€visible reflectance in crab spiders (Thomisidae). Functional Ecology, 2015, 29, 44-54.	3.6	13
108	Sexually dimorphic blue bands are intrasexual aposematic signals in nonterritorial damselflies. Animal Behaviour, 2019, 156, 21-29.	1.9	13

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109	Small behavioral adaptations enable more effective prey capture by producing 3D-structured spider threads. Scientific Reports, 2019, 9, 17273.	3.3	13
110	Can males detect the strength of sperm competition and presence of genital plugs during mate choice?. Behavioral Ecology, 2014, 25, 716-722.	2.2	12
111	Correlated evolution between coloration and ambush site in predators with visual prey lures. Evolution; International Journal of Organic Evolution, 2017, 71, 2010-2021.	2.3	12
112	A natural history of web decorations in the St Andrew's Cross spider (Argiope keyserlingi). Australian Journal of Zoology, 2007, 55, 9.	1.0	11
113	Stingless bee response to spider webs is dependent on the context of encounter. Behavioral Ecology and Sociobiology, 2008, 63, 209-216.	1.4	11
114	Relationship between colouration and body condition in a crab spider that lures pollinators. Journal of Experimental Biology, 2012, 215, 1128-1136.	1.7	10
115	Deception down under: is Australia a hot spot for deception?. Behavioral Ecology, 2014, 25, 12-16.	2.2	10
116	Measuring mimicry: methods for quantifying visual similarity. Animal Behaviour, 2021, 178, 115-126.	1.9	10
117	The influence of predator cues on orb-web spider foraging behaviour. Ethology Ecology and Evolution, 2006, 18, 91-98.	1.4	9
118	Optical surface profiling of orb-web spider capture silks. Bioinspiration and Biomimetics, 2010, 5, 036004.	2.9	9
119	Molecular evidence for variation in polyandry among praying mantids (Mantodea: Ciulfina). Journal of Zoology, 2011, 284, 40-45.	1.7	9
120	The sterile male technique: Irradiation negatively affects male fertility but not male courtship. Journal of Insect Physiology, 2015, 75, 85-90.	2.0	9
121	Habitat selection in a deceptive predator: maximizing resource availability and signal efficacy. Behavioral Ecology, 2015, 26, 194-199.	2.2	9
122	Spider silk colour covaries with thermal properties but not protein structure. Journal of the Royal Society Interface, 2019, 16, 20190199.	3.4	9
123	The effect of predator-prey distance and prey profitability on the attack behaviour of the orb-web spider Argiope keyserlingi (Araneidae). Australian Journal of Zoology, 2001, 49, 213.	1.0	9
124	Introduction: spider biology. , 0, , 1-30.		8
125	Prevalence and Molecular Identification of Nematode and Dipteran Parasites in an Australian Alpine Grasshopper (Kosciuscola tristis). PLoS ONE, 2015, 10, e0121685.	2.5	8
126	The role of ultraviolet colour in the assessment of mimetic accuracy between Batesian mimics and their models: a case study using ant-mimicking spiders. Die Naturwissenschaften, 2016, 103, 90.	1.6	8

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127	Advantages of social foraging in crab spiders: Groups capture more and larger prey despite the absence of a web. Ethology, 2018, 124, 695-705.	1.1	8
128	Mimicry in motion and morphology: do information limitation, trade-offs or compensation relax selection for mimetic accuracy?. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210815.	2.6	8
129	Deceptive signals in spiders. , 2011, , 190-214.		7
130	Plastic material investment in load-bearing silk attachments in spiders. Zoology, 2018, 131, 45-47.	1.2	7
131	Maleâ€“male interactions select for conspicuous male coloration in damselflies. Animal Behaviour, 2021, 176, 157-166.	1.9	7
132	Optics of spider "sticky" orb webs. , 2011, , .		6
133	Within-season variability of fighting behaviour in an Australian alpine grasshopper. PLoS ONE, 2017, 12, e0171697.	2.5	6
134	Age-Specific Reproductive Investment and Offspring Performance in an Orb-web Spider, Argiope radon. Evolutionary Biology, 2019, 46, 207-215.	1.1	6
135	Limits of piriform silk adhesionâ€”similar effects of substrate surface polarity on silk anchor performance in two spider species with disparate microhabitat use. Die Naturwissenschaften, 2020, 107, 31.	1.6	6
136	Building behavior does not drive rates of phenotypic evolution in spiders. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	6
137	Consistent variation in yolk androgens in the Australian Brush-turkey, a species without sibling competition or parental care. General and Comparative Endocrinology, 2008, 155, 742-748.	1.8	5
138	Functional diversity of ladder-webs: moth specialization or optimal area use?. Journal of Arachnology, 2010, 38, 119-122.	0.5	5
139	UV and Camouflage in Crab Spiders (Thomisidae). , 2013, , 349-359.		5
140	Microsatellite markers for the praying mantid Ciulfina rentzi (Liturgusidae). Molecular Ecology Resources, 2009, 9, 1480-1482.	4.8	4
141	Optimal web investment in sub-optimal foraging conditions. Die Naturwissenschaften, 2012, 99, 65-70.	1.6	4
142	Predatory chemical cues decrease attack time and increase metabolic rate in an orb-web spider. Journal of Experimental Biology, 2019, 222, .	1.7	4
143	Parasiteâ€mediated sexual selection in a damselfly. Ethology, 2022, 128, 572-579.	1.1	4
144	Plenty of sex, but no sexuality in biology undergraduate curricula. BioEssays, 2011, 33, 899-902.	2.5	3

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145	Short and fast vs long and slow: age changes courtship in male orb-web spiders (Argiope keyserlingi). Die Naturwissenschaften, 2018, 105, 3.	1.6	3
146	Ontogenetic habitat shifts reduce costly maleâ€“male interactions. Evolutionary Ecology, 2020, 34, 735-743.	1.2	3
147	The Effect of Predator Population Dynamics on Batesian Mimicry Complexes. American Naturalist, 2022, 199, 406-419.	2.1	3
148	Male courtship reduces the risk of female aggression in web-building spiders but varies in structure. Behavioral Ecology, 2022, 33, 280-287.	2.2	3
149	Male mate choice in the chameleon grasshopper (Kosciuscola tristis). Ethology, 2018, 124, 751-759.	1.1	2
150	Courtship and copula duration influence paternity success in a spider. Animal Behaviour, 2020, 165, 1-9.	1.9	2
151	A Clearer View from Fuzzy Images. Science, 2012, 335, 409-410.	12.6	1
152	Is resting metabolic rate related to reproductive output in an orbâ€web spider, Argiope radon ?. Ecological Entomology, 2020, 45, 1044-1052.	2.2	1
153	Novel decorating behaviour of silk retreats in a challenging habitat. PeerJ, 2022, 10, e12839.	2.0	1
154	Aggressive behaviour in the skyhoppers of the Australian Alps. Evolutionary Ecology, 0, , .	1.2	1
155	Sexual and developmental variations of ecto-parasitism in damselflies. PLoS ONE, 2022, 17, e0261540.	2.5	1
156	Double stranded RNA is processed differently in two oyster species. Developmental and Comparative Immunology, 2017, 76, 285-291.	2.3	0