

# Heather M Whitney

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

2,911  
citations

172207

29  
h-index

233125

45  
g-index

54  
all docs

54  
docs citations

54  
times ranked

2765  
citing authors

#	ARTICLE	IF	CITATIONS
1	Floral Iridescence, Produced by Diffractive Optics, Acts As a Cue for Animal Pollinators. <i>Science</i> , 2009, 323, 130-133.	6.0	345
2	Detection and Learning of Floral Electric Fields by Bumblebees. <i>Science</i> , 2013, 340, 66-69.	6.0	218
3	Bees associate warmth with floral colour. <i>Nature</i> , 2006, 442, 525-525.	13.7	170
4	Conical Epidermal Cells Allow Bees to Grip Flowers and Increase Foraging Efficiency. <i>Current Biology</i> , 2009, 19, 948-953.	1.8	169
5	Structural colour and iridescence in plants: the poorly studied relations of pigment colour. <i>Annals of Botany</i> , 2010, 105, 505-511.	1.4	150
6	Why do so many petals have conical epidermal cells?. <i>Annals of Botany</i> , 2011, 108, 609-616.	1.4	147
7	Mutations perturbing petal cell shape and anthocyanin synthesis influence bumblebee perception of <i>Antirrhinum majus</i> flower colour. <i>Arthropod-Plant Interactions</i> , 2007, 1, 45-55.	0.5	116
8	Photonic multilayer structure of <i>Begonia</i> chloroplasts enhances photosynthetic efficiency. <i>Nature Plants</i> , 2016, 2, 16162.	4.7	108
9	Natural Helicoidal Structures: Morphology, Self-assembly and Optical Properties. <i>Materials Today: Proceedings</i> , 2014, 1, 177-185.	0.9	100
10	The interaction of temperature and sucrose concentration on foraging preferences in bumblebees. <i>Die Naturwissenschaften</i> , 2008, 95, 845-850.	0.6	86
11	Function of blue iridescence in tropical understorey plants. <i>Journal of the Royal Society Interface</i> , 2010, 7, 1699-1707.	1.5	86
12	Virus Infection of Plants Alters Pollinator Preference: A Payback for Susceptible Hosts?. <i>PLoS Pathogens</i> , 2016, 12, e1005790.	2.1	86
13	Light-induced dynamic structural color by intracellular 3D photonic crystals in brown algae. <i>Science Advances</i> , 2018, 4, ean8917.	4.7	77
14	Functional nanomaterials to augment photosynthesis: evidence and considerations for their responsible use in agricultural applications. <i>Interface Focus</i> , 2019, 9, 20180048.	1.5	60
15	Floral Temperature and Optimal Foraging: Is Heat a Feasible Floral Reward for Pollinators?. <i>PLoS ONE</i> , 2008, 3, e2007.	1.1	59
16	The diversity of floral temperature patterns, and their use by pollinators. <i>ELife</i> , 2017, 6, .	2.8	58
17	Iridescence as Camouflage. <i>Current Biology</i> , 2020, 30, 551-555.e3.	1.8	54
18	Bumblebees Learn Polarization Patterns. <i>Current Biology</i> , 2014, 24, 1415-1420.	1.8	53

#	ARTICLE	IF	CITATIONS
19	Bumblebees distinguish floral scent patterns, and can transfer these to corresponding visual patterns. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2018, 285, 20180661.	1.2	51
20	Field Margins, Foraging Distances and Their Impacts on Nesting Pollinator Success. <i>PLoS ONE</i> , 2011, 6, e25971.	1.1	48
21	Biomechanics of plant–insect interactions. <i>Current Opinion in Plant Biology</i> , 2013, 16, 105-111.	3.5	48
22	Colour as a backup for scent in the presence of olfactory noise: testing the efficacy backup hypothesis using bumblebees ( <i>Bombus terrestris</i> ). <i>Royal Society Open Science</i> , 2017, 4, 170996.	1.1	46
23	Flower Iridescence Increases Object Detection in the Insect Visual System without Compromising Object Identity. <i>Current Biology</i> , 2016, 26, 802-808.	1.8	43
24	Flower movement increases pollinator preference for flowers with better grip. <i>Functional Ecology</i> , 2012, 26, 941-947.	1.7	38
25	Reporting of thermography parameters in biology: a systematic review of thermal imaging literature. <i>Royal Society Open Science</i> , 2018, 5, 181281.	1.1	37
26	Effects of pollinator density-dependent preferences on field margin visitations in the midst of agricultural monocultures: A modelling approach. <i>Ecological Modelling</i> , 2010, 221, 1310-1316.	1.2	35
27	Floral epidermal structure and flower orientation: getting to grips with awkward flowers. <i>Arthropod-Plant Interactions</i> , 2011, 5, 279-285.	0.5	32
28	Photosynthesis and crop productivity are enhanced by glucose-functionalised carbon dots. <i>New Phytologist</i> , 2021, 229, 783-790.	3.5	32
29	Morphology and development of floral features recognised by pollinators. <i>Arthropod-Plant Interactions</i> , 2007, 1, 147-158.	0.5	30
30	Determining the Contribution of Epidermal Cell Shape to Petal Wettability Using Isogenic Antirrhinum Lines. <i>PLoS ONE</i> , 2011, 6, e17576.	1.1	30
31	Contributions of iridescence to floral patterning. <i>Communicative and Integrative Biology</i> , 2009, 2, 230-232.	0.6	29
32	Surface functionalisation significantly changes the physical and electronic properties of carbon nano-dots. <i>Nanoscale</i> , 2018, 10, 13908-13912.	2.8	28
33	Grip and slip. <i>Communicative and Integrative Biology</i> , 2009, 2, 505-508.	0.6	25
34	Nectar discovery speeds and multimodal displays: assessing nectar search times in bees with radiating and non-radiating guides. <i>Evolutionary Ecology</i> , 2017, 31, 899-912.	0.5	24
35	Iridescence impairs object recognition in bumblebees. <i>Scientific Reports</i> , 2018, 8, 8095.	1.6	24
36	Floral Humidity in Flowering Plants: A Preliminary Survey. <i>Frontiers in Plant Science</i> , 2020, 11, 249.	1.7	19

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37	Cross-modal transfer in visual and nonvisual cues in bumblebees. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2019, 205, 427-437.	0.7	16
38	Floral temperature patterns can function as floral guides. <i>Arthropod-Plant Interactions</i> , 2020, 14, 193-206.	0.5	16
39	Bumblebees can detect floral humidity. <i>Journal of Experimental Biology</i> , 2021, 224, .	0.8	16
40	A Technique for Measuring Petal Gloss, with Examples from the Namaqualand Flora. <i>PLoS ONE</i> , 2012, 7, e29476.	1.1	15
41	THE CONTRIBUTION OF EPIDERMAL STRUCTURE TO FLOWER COLOUR IN THE SOUTH AFRICAN FLORA. <i>Curtis's Botanical Magazine</i> , 2011, 28, 349-371.	0.1	14
42	Characterization of chloroplast iridescence in <i>Selaginella erythropus</i> . <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180559.	1.5	13
43	Structural colours in the frond of <i>Microsorium thailandicum</i> . <i>Interface Focus</i> , 2019, 9, 20180055.	1.5	9
44	Isolation and expression pattern of two putative acyl-ACP desaturase cDNAs from <i>Bassia scoparia</i> . <i>Journal of Experimental Botany</i> , 2004, 55, 787-789.	2.4	8
45	Beetle iridescence induces an avoidance response in naïve avian predators. <i>Animal Behaviour</i> , 2022, 188, 45-50.	0.8	4
46	The Godmother Protocols. <i>Nature</i> , 2006, 444, 970-970.	13.7	0
47	Unusual honey pot building behaviour in captive reared bumble bees <i>Bombus terrestris</i> . <i>Journal of Apicultural Research</i> , 2010, 49, 345-347.	0.7	0