Johannes Spaethe

List of Publications by Year
in descending order

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69	3,346	186265	155660
papers	citations	28 h-index	55 g-index

73	73	73	2391
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Visual constraints in foraging bumblebees: Flower size and color affect search time and flight behavior. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 3898-3903.	7.1	443
2	Size variation and foraging rate in bumblebees (Bombus terrestris). Insectes Sociaux, 2002, 49, 142-146.	1.2	199
3	Interindividual variation of eye optics and single object resolution in bumblebees. Journal of Experimental Biology, 2003, 206, 3447-3453.	1.7	194
4	Comparative psychophysics of bumblebee and honeybee colour discrimination and object detection. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2008, 194, 617-627.	1.6	190
5	Size determines antennal sensitivity and behavioral threshold to odors in bumblebee workers. Die Naturwissenschaften, 2007, 94, 733-739.	1.6	152
6	Honeybee Odometry: Performance in Varying Natural Terrain. PLoS Biology, 2004, 2, e211.	5.6	126
7	Bigger is better: implications of body size for flight ability under different light conditions and the evolution of alloethism in bumblebees. Functional Ecology, 2007, 21, 1130-1136.	3.6	103
8	Molecular characterization and expression of the UV opsin in bumblebees:three ommatidial subtypes in the retina and a new photoreceptor organ in the lamina. Journal of Experimental Biology, 2005, 208, 2347-2361.	1.7	99
9	Floral colour signal increases short-range detectability of a sexually deceptive orchid to its bee pollinator. Journal of Experimental Biology, 2009, 212, 1365-1370.	1.7	86
10	Do honeybees detect colour targets using serial or parallel visual search?. Journal of Experimental Biology, 2006, 209, 987-993.	1.7	80
11	Sex and Caste-Specific Variation in Compound Eye Morphology of Five Honeybee Species. PLoS ONE, 2013, 8, e57702.	2.5	80
12	How to know which food is good for you: bumblebees use taste to discriminate between different concentrations of food differing in nutrient content. Journal of Experimental Biology, 2015, 218, 2233-2240.	1.7	79
13	Beyond 9-ODA: SEX Pheromone Communication in the European Honey Bee Apis mellifera L.. Journal of Chemical Ecology, 2006, 32, 657-667.	1.8	73
14	Visual attention in a complex search task differs between honeybees and bumblebees. Journal of Experimental Biology, 2012, 215, 2515-2523.	1.7	71
15	Early Duplication and Functional Diversification of the Opsin Gene Family in Insects. Molecular Biology and Evolution, 2004, 21, 1583-1594.	8.9	65
16	Blue colour preference in honeybees distracts visual attention for learning closed shapes. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2013, 199, 817-827.	1.6	64
17	Hungry for qualityâ€"individual bumblebees forage flexibly to collect high-quality pollen. Behavioral Ecology and Sociobiology, 2016, 70, 1209-1217.	1.4	63
18	Best be(e) on low fat: linking nutrient perception, regulation and fitness. Ecology Letters, 2020, 23, 545-554.	6.4	62

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19	The path to colour discrimination is S-shaped: behaviour determines the interpretation of colour models. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 983-997.	1.6	50
20	Ageâ€related and lightâ€induced plasticity in opsin gene expression and in primary and secondary visual centers of the nectarâ€feeding ant Camponotus rufipes. Developmental Neurobiology, 2016, 76, 1041-1057.	3.0	49
21	Integrating past and present studies on Ophrys pollination - a comment on Bradshaw etâ€ƒal.. Botanical Journal of the Linnean Society, 2011, 165, 329-335.	1.6	48
22	Body size limits dim-light foraging activity in stingless bees (Apidae: Meliponini). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2016, 202, 643-655.	1.6	48
23	Visual search and the importance of time in complex decision making by bees. Arthropod-Plant Interactions, 2007, 1, 37-44.	1.1	47
24	Behavioural evidence of colour vision in free flying stingless bees. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2014, 200, 485-496.	1.6	45
25	Bees use three-dimensional information to improve target detection. Die Naturwissenschaften, 2010, 97, 229-233.	1.6	41
26	Sexual dimorphism in the olfactory system of a solitary and a eusocial bee species. Journal of Comparative Neurology, 2013, 521, 2742-2755.	1.6	40
27	Turning blue and ultraviolet: sex-specific colour change during the mating season in the Balkan moor frog. Journal of Zoology, 2008, 276, 229-236.	1.7	39
28	Elemental and non-elemental olfactory learning using PER conditioning in the bumblebee, Bombus terrestris. Apidologie, 2014, 45, 106-115.	2.0	37
29	Pollinator or pedigree: which factors determine the evolution of pollen nutrients?. Oecologia, 2019, 191, 349-358.	2.0	34
30	Functional morphology of the visual system and mating strategies in bumblebees (Hymenoptera,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.3	32
31	Bumblebees are able to perceive amino acids via chemotactile antennal stimulation. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2019, 205, 321-331.	1.6	32
32	Innate colour preference, individual learning and memory retention in the ant Camponotus blandus. Journal of Experimental Biology, 2017, 220, 3315-3326.	1.7	30
33	Immediate early genes in social insects: a tool to identify brain regions involved in complex behaviors and molecular processes underlying neuroplasticity. Cellular and Molecular Life Sciences, 2019, 76, 637-651.	5.4	29
34	Why sexually deceptive orchids have colored flowers. Communicative and Integrative Biology, 2010, 3, 139-141.	1.4	28
35	DoesTraunsteinera globosa(the globe orchid) dupe its pollinators through generalized food deception or mimicry?. Botanical Journal of the Linnean Society, 2016, 180, 269-294.	1.6	25
36	Exploiting trap color to improve surveys of longhorn beetles. Journal of Pest Science, 2021, 94, 871-883.	3.7	25

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37	Visual discrimination between two sexually deceptive Ophrys species by a bee pollinator. Arthropod-Plant Interactions, 2010, 4, 141-148.	1.1	24
38	Floral visual signal increases reproductive success in a sexually deceptive orchid. Arthropod-Plant Interactions, 2012, 6, 671-681.	1.1	23
39	Color preference and spatial distribution of glaphyrid beetles suggest a key role in the maintenance of the color polymorphism in the peacock anemone (Anemone pavonina, Ranunculaceae) in Northern Greece. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2019, 205, 735-743.	1.6	23
40	Species composition and elevational distribution of bumble bees (Hymenoptera, Apidae, Bombus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.1	23
41	Molecular and biochemical characterization of the major royal jelly protein in bumblebees suggest a non-nutritive function. Insect Biochemistry and Molecular Biology, 2012, 42, 647-654.	2.7	22
42	Dumb and Lazy? A Comparison of Color Learning and Memory Retrieval in Drones and Workers of the Buff-Tailed Bumblebee, Bombus terrestris, by Means of PER Conditioning. PLoS ONE, 2015, 10, e0134248.	2.5	22
43	Functional Significance of Labellum Pattern Variation in a Sexually Deceptive Orchid (Ophrys) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.5	22
44	Royal jelly-like protein localization reveals differences in hypopharyngeal glands buildup and conserved expression pattern in brains of bumblebees and honeybees. Biology Open, 2014, 3, 281-288.	1.2	20
45	Effect of Trap Color on Captures of Bark- and Wood-Boring Beetles (Coleoptera; Buprestidae and) Tj ETQq1 1 0.784314 rgBT /Overlo	2.2	20
46	Honey Bees Can Taste Amino and Fatty Acids in Pollen, but Not Sterols. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	20
47	Does Fine Color Discrimination Learning in Free-Flying Honeybees Change Mushroom-Body Calyx Neuroarchitecture?. PLoS ONE, 2016, 11, e0164386.	2.5	20
48	Opsin expression patterns coincide with photoreceptor development during pupal development in the honey bee, Apis mellifera. BMC Developmental Biology, 2018, 18, 1.	2.1	19
49	Distributed plasticity in ant visual pathways following colour learning. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182813.	2.6	19
50	Learning performance and brain structure of artificially-reared honey bees fed with different quantities of food. PeerJ, 2017, 5, e3858.	2.0	19
51	Impact of light and alarm pheromone on immediate early gene expression in the European honeybee, <scp>Apis mellifera</scp>. Entomological Science, 2017, 20, 122-126.	0.6	18
52	Neuronal Plasticity in the Mushroomâ€Body Calyx of Bumble Bee Workers During Early Adult Development. Developmental Neurobiology, 2019, 79, 287-302.	3.0	14
53	Do honeybees (Apis mellifera) differentiate between different pollen types?. PLoS ONE, 2018, 13, e0205821.	2.5	13
54	Caution with colour calculations: spectral purity is a poor descriptor of flower colour visibility. Annals of Botany, 2022, 130, 1-9.	2.9	11

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55	Extracting the Behaviorally Relevant Stimulus: Unique Neural Representation of Farnesol, a Component of the Recruitment Pheromone of Bombus terrestris. PLoS ONE, 2015, 10, e0137413.	2.5	10
56	Pitfalls of using confocal-microscopy based automated quantification of synaptic complexes in honeybee mushroom bodies (response to Peng and Yang 2016). Scientific Reports, 2017, 7, 9786.	3.3	10
57	Length of stimulus presentation and visual angle are critical for efficient visual PER conditioning in the restrained honey bee, Apis mellifera. Journal of Experimental Biology, 2018, 221, .	1.7	10
58	Adding Amino Acids to a Sucrose Diet Is Not Sufficient to Support Longevity of Adult Bumble Bees. Insects, 2020, 11, 247.	2.2	10
59	Learning of monochromatic stimuli in Apis cerana and Apis mellifera by means of PER conditioning. Journal of Insect Physiology, 2019, 114, 30-34.	2.0	8
60	Mechanisms of Nutritional Resource Exploitation by Insects. Insects, 2020, 11, 570.	2.2	7
61	Young bumblebees may rely on both direct pollen cues and early experience when foraging. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20201615.	2.6	7
62	Strategies of the honeybee Apis mellifera during visual search for vertical targets presented at various heights: a role for spatial attention?. F1000Research, 2014, 3, 174.	1.6	6
63	Evidence for UV-green dichromacy in the basal hymenopteran Sirex noctilio (Siricidae). Scientific Reports, 2021, 11, 15601.	3.3	4
64	Flower Color as Predictor for Nectar Reward Quantity in an Alpine Flower Community. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	4
65	Social Information in the Stingless Bee, Trigona corvina Cockerell (Hymenoptera: Apidae): The Use of Visual and Olfactory Cues at the Food Site. Sociobiology, 2015, 61, .	0.5	3
66	A scientific note on peripheral compound eye morphology of small and normal-sized honey bee drones. Journal of Apicultural Research, 2015, 54, 59-61.	1.5	2
67	Honeybees (Apis mellifera)Âexhibit flexible visual search strategies for vertical targets presented at various heights. F1000Research, 0, 3, 174.	1.6	2
68	Does quantity matter to a stingless bee?. Animal Cognition, 2021, , 1.	1.8	2
69	Functional morphology of the visual system and mating strategies in bumblebees (Hymenoptera,) Tj ETQq1 1 0.784314 rgBT /Overloc	2.3	0