Aurore AvarguÃ¨s-Weber

List of Publications by Year
in descending order

44 papers	1,857 citations	257450 24 h-index	276875 41 g-index
45 all docs	45 docs citations	45 times ranked	1170 citing authors

#	Article	IF	Citations
1	Learning by Observation Emerges from Simple Associations in an Insect Model. Current Biology, 2013, 23, 727-730.	3.9	163
2	Visual Cognition in Social Insects. Annual Review of Entomology, 2011, 56, 423-443.	11.8	156
3	Numerical ordering of zero in honey bees. Science, 2018, 360, 1124-1126.	12.6	145
4	Simultaneous mastering of two abstract concepts by the miniature brain of bees. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7481-7486.	7.1	135
5	Conceptual learning by miniature brains. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20131907.	2.6	128
6	Aversive Reinforcement Improves Visual Discrimination Learning in Free-Flying Honeybees. PLoS ONE, 2010, 5, e15370.	2.5	127
7	Conceptualization of above and below relationships by an insect. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 898-905.	2.6	89
8	Numerical cognition in honeybees enables addition and subtraction. Science Advances, 2019, 5, eaav0961.	10.3	84
9	Cognitive components of color vision in honey bees: how conditioning variables modulate color learning and discrimination. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2014, 200, 449-461.	1.6	57
10	Honeybees use absolute rather than relative numerosity in number discrimination. Biology Letters, 2019, 15, 20190138.	2.3	55
11	The forest or the trees: preference for global over local image processing is reversed by prior experience in honeybees. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142384.	2.6	43
12	New vistas on honey bee vision. Apidologie, 2012, 43, 244-268.	2.0	37
13	Learning context modulates aversive taste strength in honey bees. Journal of Experimental Biology, 2015, 218, 949-959.	1.7	36
14	Local enhancement or stimulus enhancement? Bumblebee social learning results in a specific pattern of flower preference. Animal Behaviour, 2014, 97, 185-191.	1.9	35
15	Transfer of Visual Learning Between a Virtual and a Real Environment in Honey Bees: The Role of Active Vision. Frontiers in Behavioral Neuroscience, 2018, 12, 139.	2.0	35
16	Bumblebee social learning can lead to suboptimal foraging choices. Animal Behaviour, 2018, 135, 209-214.	1.9	34
17	Assessing the ecological significance of bee visual detection and colour discrimination on the evolution of flower colours. Evolutionary Ecology, 2017, 31, 153-172.	1.2	33
18	Conceptualization of relative size by honeybees. Frontiers in Behavioral Neuroscience, 2014, 8, 80.	2.0	32

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19	Using virtual reality to study visual performances of honeybees. Current Opinion in Insect Science, 2017, 24, 43-50.	4.4	32
20	Observational Conditioning in Flower Choice Copying by Bumblebees (Bombus terrestris): Influence of Observer Distance and Demonstrator Movement. PLoS ONE, 2014, 9, e88415.	2.5	31
21	Associative visual learning by tethered bees in a controlled visual environment. Scientific Reports, 2017, 7, 12903.	3.3	30
22	Advances and limitations of visual conditioning protocols in harnessed bees. Journal of Physiology (Paris), 2016, 110, 107-118.	2.1	29
23	Free-flying honeybees extrapolate relational size rules to sort successively visited artificial flowers in a realistic foraging situation. Animal Cognition, 2017, 20, 627-638.	1.8	29
24	Does Holistic Processing Require a Large Brain? Insights From Honeybees and Wasps in Fine Visual Recognition Tasks. Frontiers in Psychology, 2018, 9, 1313.	2.1	29
25	Honeybees prefer novel insect-pollinated flower shapes over bird-pollinated flower shapes. Environmental Epigenetics, 2019, 65, 457-465.	1.8	28
26	Symbolic representation of numerosity by honeybees (<i>Apis mellifera</i>): matching characters to small quantities. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20190238.	2.6	28
27	Surpassing the subitizing threshold: appetitiveâ€“aversive conditioning improves discrimination of numerosities in honeybees. Journal of Experimental Biology, 2019, 222, .	1.7	24
28	Aminergic neuromodulation of associative visual learning in harnessed honey bees. Neurobiology of Learning and Memory, 2018, 155, 556-567.	1.9	22
29	Perception of contextual size illusions by honeybees in restricted and unrestricted viewing conditions. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20172278.	2.6	20
30	Spontaneous quantity discrimination of artificial flowers by foraging honeybees. Journal of Experimental Biology, 2020, 223, .	1.7	20
31	Visual learning in a virtual reality environment upregulates immediate early gene expression in the mushroom bodies of honey bees. Communications Biology, 2022, 5, 130.	4.4	16
32	Achieving arithmetic learning in honeybees and examining how individuals learn. Communicative and Integrative Biology, 2019, 12, 166-170.	1.4	13
33	Different mechanisms underlie implicit visual statistical learning in honey bees and humans. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25923-25934.	7.1	13
34	Individual recognition is associated with holistic face processing in <i>Polistes</i> paper wasps in a species-specific way. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20203010.	2.6	12
35	Higherâ€order discrimination learning by honeybees in a virtual environment. European Journal of Neuroscience, 2020, 51, 681-694.	2.6	11
36	Evidence of cognitive specialization in an insect: proficiency is maintained across elemental and higher-order visual learning but not between sensory modalities in honey bees. Journal of Experimental Biology, 2021, 224, .	1.7	11

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37	Motion cues from the background influence associative color learning of honey bees in a virtual-reality scenario. Scientific Reports, 2021, 11, 21127.	3.3	9
38	Face Recognition: Lessons from a Wasp. Current Biology, 2012, 22, R91-R93.	3.9	6
39	Sameness/difference spiking neural circuit as a relational concept precursor model: A bio-inspired robotic implementation. Biologically Inspired Cognitive Architectures, 2017, 21, 59-66.	0.9	5
40	Reply to comment on Howard et al . (2019): â€˜Nothing to dance about: unclear evidence for symbolic representations and numerical competence in honeybees'. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20200095.	2.6	4
41	The Neural Signature of Visual Learning Under Restrictive Virtual-Reality Conditions. Frontiers in Behavioral Neuroscience, 2022, 16, 846076.	2.0	4
42	Numerosity Categorization by Parity in an Insect and Simple Neural Network. Frontiers in Ecology and Evolution, 2022, 10, .	2.2	3
43	NaÃ¯ve and Experienced Honeybee Foragers Learn Normally Configured Flowers More Easily Than Non-configured or Highly Contrasted Flowers. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	2
44	Increasingly complex internal visual representations in honeybees, human infants and adults. Journal of Vision, 2019, 19, 292c.	0.3	0