Jochen Zeil

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8053635/publications.pdf

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66	3,263	147801	168389
papers	citations	31 h-index	53 g-index

67	67	67	1579
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Catchment areas of panoramic snapshots in outdoor scenes. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 450.	1.5	258
2	Visual homing: an insect perspective. Current Opinion in Neurobiology, 2012, 22, 285-293.	4.2	212
3	The visual ecology of fiddler crabs. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2006, 192, 1-25.	1.6	195
4	The information content of panoramic images I: The rotational errors and the similarity of views in rectangular experimental arenas.. Journal of Experimental Psychology, 2008, 34, 1-14.	1.7	114
5	Mapping the navigational knowledge of individually foraging ants,Myrmecia croslandi. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130683.	2.6	111
6	Depth, contrast and view-based homing in outdoor scenes. Biological Cybernetics, 2007, 96, 519-531.	1.3	104
7	Polarised skylight and the landmark panorama provide night-active bull ants with compass information during route following. Journal of Experimental Biology, 2011, 214, 363-370.	1.7	102
8	Sexual dimorphism in the visual system of flies: The compound eyes and neural superposition in bibionidae (Diptera). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1983, 150, 379-393.	1.6	98
9	How Wasps Acquire and Use Views for Homing. Current Biology, 2016, 26, 470-482.	3.9	90
10	The properties of the visual system in the Australian desert ant Melophorus bagoti. Arthropod Structure and Development, 2011, 40, 128-134.	1.4	86
11	Homing in fiddler crabs (Uca lactea annulipes and Uca vomeris â€Š: Ocypodidae). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1998, 183, 367-377.	1.6	85
12	The information content of panoramic images II: View-based navigation in nonrectangular experimental arenas.. Journal of Experimental Psychology, 2008, 34, 15-30.	1.7	82
13	Different effects of temperature on foraging activity schedules in sympatric Myrmecia ants. Journal of Experimental Biology, 2011, 214, 2730-2738.	1.7	81
14	Looking and homing: how displaced ants decide where to go. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20130034.	4.0	73
15	Eye structure correlates with distinct foraging-bout timing in primitive ants. Current Biology, 2007, 17, R879-R880.	3.9	71
16	Fiddler Crabs Use the Visual Horizon to Distinguish Predators from Conspecifics: A Review of the Evidence. Journal of the Marine Biological Association of the United Kingdom, 1997, 77, 43-54.	0.8	68
17	Caste-specific visual adaptations to distinct daily activity schedules in AustralianMyrmeciaants. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 1141-1149.	2.6	68
18	Still no convincing evidence for cognitive map use by honeybees. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4396-7.	7.1	61

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19	Robust judgement of inter-object distance by an arthropod. Nature, 2003, 421, 160-163.	27.8	60
20	How Ants Use Vision When Homing Backward. Current Biology, 2017, 27, 401-407.	3.9	55
21	Insect learning flights and walks. Current Biology, 2018, 28, R984-R988.	3.9	55
22	A glimpse into crabworld. Vision Research, 1997, 37, 3417-3426.	1.4	53
23	Signals from â€˜crabworldâ€™: cuticular reflections in a fiddler crab colony. Journal of Experimental Biology, 2001, 204, 2561-2569.	1.7	51
24	Vision and the organization of behaviour. Current Biology, 2008, 18, R320-R323.	3.9	50
25	Three-dimensional models of natural environments and the mapping of navigational information. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2015, 201, 563-584.	1.6	46
26	The choreography of learning walks in the Australian jack jumper antMyrmecia croslandi. Journal of Experimental Biology, 2018, 221, .	1.7	46
27	Flights of Learning. Current Directions in Psychological Science, 1996, 5, 149-155.	5.3	43
28	Polarisation Vision in Ants, Bees and Wasps. , 2014, , 41-60.		43
29	Image motion environments: background noise for movement-based animal signals. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2008, 194, 441-456.	1.6	41
30	Path Integration in Fiddler Crabs and Its Relation to Habitat and Social Life. , 2002, , 227-246.		39
31	Natural visual cues eliciting predator avoidance in fiddler crabs. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3584-3592.	2.6	39
32	Fiddler crabs. Current Biology, 2006, 16, R40-R41.	3.9	36
33	Variability of a dynamic visual signal: the fiddler crab claw-waving display. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2009, 195, 55-67.	1.6	34
34	Feed-forward and visual feed-back control of head roll orientation in wasps (Polistes humilis,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	1.7	33
35	Three spectrally distinct photoreceptors in diurnal and nocturnal Australian ants. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20150673.	2.6	33
36	Differences in context and function of two distinct waving displays in the fiddler crab, Uca perplexa (Decapoda: Ocypodidae). Behavioral Ecology and Sociobiology, 2007, 62, 137-148.	1.4	32

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37	The organization of honeybee ocelli: Regional specializations and rhabdom arrangements. Arthropod Structure and Development, 2011, 40, 509-520.	1.4	32
38	Towards an Ecology of Motion Vision. , 2001, , 333-369.		32
39	Light and dark adaptation mechanisms in the compound eyes of Myrmecia ants that occupy discrete temporal niches. Journal of Experimental Biology, 2016, 219, 2435-2442.	1.7	30
40	Visual Homing in Insects and Robots. , 2009, , 87-100.		30
41	Cyclic nature of the REM sleep-like state in the cuttlefish Sepia officinalis. Journal of Experimental Biology, 2019, 222, .	1.7	29
42	The role of attractive and repellent scene memories in ant homing (Myrmecia croslandi). Journal of Experimental Biology, 2019, 223, .	1.7	29
43	Multisensory control of eye-stalk orientation in space: crabs from different habitats rely on different senses. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1989, 165, 643-649.	1.6	27
44	Sounds of Modified Flight Feathers Reliably Signal Danger in a Pigeon. Current Biology, 2017, 27, 3520-3525.e4.	3.9	26
45	Spatial Vision in a Flat World: Optical and Neural Adaptations in Arthropods. , 1989, , 123-137.		26
46	Interactions of visual odometry and landmark guidance during food search in honeybees. Journal of Experimental Biology, 2005, 208, 4123-4135.	1.7	25
47	Sex, size and colour in a semi-terrestrial crab, Heloecius cordiformis (H. Milne Edwards, 1837). Journal of Experimental Marine Biology and Ecology, 2004, 302, 1-15.	1.5	22
48	Functional anatomy of the fiddler crab compound eye (Uca vomeris: Ocypodidae, Brachyura,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.6	22
49	The antennal sensory array of the nocturnal bull ant Myrmecia pyriformis. Arthropod Structure and Development, 2014, 43, 543-558.	1.4	19
50	Short communication: Substratum Slope and the Alignment of Acute Zones in Semi-Terrestrial Crabs (Ocypode Ceratophthalmus). Journal of Experimental Biology, 1990, 152, 573-576.	1.7	19
51	Head roll stabilisation in the nocturnal bull ant Myrmecia pyriformis: Implications for visual navigation. Journal of Experimental Biology, 2016, 219, 1449-57.	1.7	18
52	Systematic variations in microvilli banding patterns along fiddler crab rhabdoms. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2013, 199, 99-113.	1.6	17
53	Quantifying navigational information: The catchment volumes of panoramic snapshots in outdoor scenes. PLoS ONE, 2017, 12, e0187226.	2.5	16
54	Diversity and common themes in the organization of ocelli in Hymenoptera, Odonata and Diptera. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2018, 204, 505-517.	1.6	13

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55	The Antarium: A Reconstructed Visual Reality Device for Ant Navigation Research. Frontiers in Behavioral Neuroscience, 2020, 14, 599374.	2.0	13
56	Regional differences in the preferred e-vector orientation of honeybee ocellar photoreceptors. Journal of Experimental Biology, 2017, 220, 1701-1708.	1.7	12
57	Anesthesia disrupts distance, but not direction, of path integration memory. Current Biology, 2022, 32, 445-452.e4.	3.9	12
58	The sensory arrays of the ant, Temnothorax rugatulus. Arthropod Structure and Development, 2017, 46, 552-563.	1.4	10
59	An insect-inspired model for acquiring views for homing. Biological Cybernetics, 2019, 113, 439-451.	1.3	10
60	The visual system of the Australian â€˜Redeyeâ€™ cicada (Psaltoda moerens). Arthropod Structure and Development, 2015, 44, 574-586.	1.4	9
61	Fractal dimension and the navigational information provided by natural scenes. PLoS ONE, 2018, 13, e0196227.	2.5	7
62	Threeâ€dimensional visualization of ocellar interneurons of the orchid bee Euglossa imperialis using micro Xâ€ray computed tomography. Journal of Comparative Neurology, 2017, 525, 3581-3595.	1.6	5
63	Ground-Nesting Insects Could Use Visual Tracking for Monitoring Nest Position during Learning Flights. Lecture Notes in Computer Science, 2014, , 108-120.	1.3	5
64	Three-dimensional visualization of ocellar interneurons of the orchid bee Euglossa imperialis using micro X-ray computed tomography. Journal of Comparative Neurology, 2017, 525, spc1-spc1.	1.6	0
65	Orientation, Navigation, and Search. , 2019, , 290-300.		0
66	Crabs and Their Visual World. , 2019, , 201-212.		0