Jean-Christophe Sandoz

List of Publications by Year
in descending order

98	4,488	87843 38	118793 62
papers	citations	h-index	g-index

103	103	103	2399
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Invertebrate learning and memory: Fifty years of olfactory conditioning of the proboscis extension response in honeybees. Learning and Memory, 2012, 19, 54-66.	0.5	327
2	Perceptual and Neural Olfactory Similarity in Honeybees. PLoS Biology, 2005, 3, e60.	2.6	272
3	Aversive Learning in Honeybees Revealed by the Olfactory Conditioning of the Sting Extension Reflex. PLoS ONE, 2007, 2, e288.	1.1	261
4	Revisiting olfactory classical conditioning of the proboscis extension response in honey bees: A step toward standardized procedures. Journal of Neuroscience Methods, 2012, 211, 159-167.	1.3	204
5	Long-Term Memory Leads to Synaptic Reorganization in the Mushroom Bodies: A Memory Trace in the Insect Brain?. Journal of Neuroscience, 2010, 30, 6461-6465.	1.7	170
6	Neural representation of olfactory mixtures in the honeybee antennal lobe. European Journal of Neuroscience, 2006, 24, 1161-1174.	1.2	137
7	Neural substrate for higher-order learning in an insect: Mushroom bodies are necessary for configural discriminations. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5854-62.	3.3	110
8	Learning and Discrimination of Individual Cuticular Hydrocarbons by Honeybees (Apis mellifera). Chemical Senses, 2005, 30, 327-335.	1.1	107
9	Individual olfactory learning in Camponotus ants. Animal Behaviour, 2006, 72, 1081-1091.	0.8	102
10	Behavioral and Neurophysiological Study of Olfactory Perception and Learning in Honeybees. Frontiers in Systems Neuroscience, 2011, 5, 98.	1.2	97
11	Antennal Lobe Processing Increases Separability of Odor Mixture Representations in the Honeybee. Journal of Neurophysiology, 2010, 103, 2185-2194.	0.9	95
12	Olfactory conditioning of the proboscis extension in bumble bees. Entomologia Experimentalis Et Applicata, 1999, 90, 123-129.	0.7	77
13	Olfactory information transfer in the honeybee: compared efficiency of classical conditioning and early exposure. Animal Behaviour, 2000, 59, 1025-1034.	0.8	76
14	Side-specific olfactory conditioning leads to more specific odor representation between sides but not within sides in the honeybee antennal lobes. Neuroscience, 2003, 120, 1137-1148.	1.1	72
15	A Modified Version of the Unique Cue Theory Accounts for Olfactory Compound Processing in Honeybees. Learning and Memory, 2003, 10, 199-208.	0.5	72
16	Long-term memory shapes the primary olfactory center of an insect brain. Learning and Memory, 2009, 16, 607-615.	0.5	71
17	Odour-evoked responses to queen pheromone components and to plant odours using optical imaging in the antennal lobe of the honey bee drone Apis mellifera L.. Journal of Experimental Biology, 2006, 209, 3587-3598.	0.8	70
18	Non-elemental processing in olfactory discrimination tasks needs bilateral input in honeybees. Behavioural Brain Research, 2003, 145, 135-143.	1.2	69

#	Article	IF	Citations
19	Social Contact Acts as Appetitive Reinforcement and Supports Associative Learning in Honeybees. Current Biology, 2019, 29, 1407-1413.e3.	1.8	66
20	Differential Interactions of Sex Pheromone and Plant Odour in the Olfactory Pathway of a Male Moth. PLoS ONE, 2012, 7, e33159.	1.1	64
21	The trial-spacing effect in olfactory patterning discriminations in honeybees. Behavioural Brain Research, 2007, 176, 314-322.	1.2	62
22	A Locomotor Deficit Induced by Sublethal Doses of Pyrethroid and Neonicotinoid Insecticides in the Honeybee Apis mellifera. PLoS ONE, 2015, 10, e0144879.	1.1	62
23	Odour aversion after olfactory conditioning of the sting extension reflex in honeybees. Journal of Experimental Biology, 2009, 212, 620-626.	0.8	59
24	Color modulates olfactory learning in honeybees by an occasion-setting mechanism. Learning and Memory, 2011, 18, 144-155.	0.5	58
25	Reappraising Social Insect Behavior through Aversive Responsiveness and Learning. PLoS ONE, 2009, 4, e4197.	1.1	57
26	Side-Specificity of Olfactory Learning in the Honeybee: Generalization between Odors and Sides. Learning and Memory, 2001, 8, 286-294.	0.5	55
27	Understanding the logics of pheromone processing in the honeybee brain: from labeled-lines to across-fiber patterns. Frontiers in Behavioral Neuroscience, 2007, 1, 5.	1.0	55
28	Neural Organization and Visual Processing in the Anterior Optic Tubercle of the Honeybee Brain. Journal of Neuroscience, 2011, 31, 11443-11456.	1.7	54
29	Olfactory Coding in the Honeybee Lateral Horn. Current Biology, 2014, 24, 561-567.	1.8	53
30	Asymmetrical generalisation between pheromonal and floral odours in appetitive olfactory conditioning of the honey bee (Apis mellifera L.). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2001, 187, 559-568.	0.7	51
31	Olfactory conditioning of the sting extension reflex in honeybees: Memory dependence on trial number, interstimulus interval, intertrial interval, and protein synthesis. Learning and Memory, 2009, 16, 761-765.	0.5	49
32	Chromatic Processing in the Anterior Optic Tubercle of the Honey Bee Brain. Journal of Neuroscience, 2013, 33, 4-16.	1.7	49
33	Two waves of transcription are required for long-term memory in the honeybee. Learning and Memory, 2013, 20, 29-33.	0.5	47
34	Early olfactory experience induces structural changes in the primary olfactory center of an insect brain. European Journal of Neuroscience, 2012, 35, 682-690.	1.2	46
35	Differential Combinatorial Coding of Pheromones in Two Olfactory Subsystems of the Honey Bee Brain. Journal of Neuroscience, 2015, 35, 4157-4167.	1.7	46
36	Early olfactory experience modifies neural activity in the antennal lobe of a social insect at the adult stage. European Journal of Neuroscience, 2009, 30, 1498-1508.	1.2	45

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37	Dynamics of odour learning in Leptopilina boulardi, a hymenopterous parasitoid. Animal Behaviour, 2003, 66, 1077-1084.	0.8	43
38	Associative learning of plant odorants activating the same or different receptor neurones in the moth Heliothis virescens. Journal of Experimental Biology, 2005, 208, 787-796.	0.8	43
39	Side-Specificity of Olfactory Learning in the Honeybee: US Input Side. Learning and Memory, 2002, 9, 337-348.	0.5	41
40	Could learning of pollen odours by honey bees (Apis mellifera) play a role in their foraging behaviour?. Physiological Entomology, 2005, 30, 164-174.	0.6	41
41	Early calcium increase triggers the formation of olfactory long-term memory in honeybees. BMC Biology, 2009, 7, 30.	1.7	41
42	Olfactory Attraction of the Hornet Vespa velutina to Honeybee Colony Odors and Pheromones. PLoS ONE, 2014, 9, e115943.	1.1	41
43	Partial unilateral lesions of the mushroom bodies affect olfactory learning in honeybeesApis melliferaL.. European Journal of Neuroscience, 2005, 21, 477-485.	1.2	37
44	Effect of fipronil on side-specific antennal tactile learning in the honeybee. Journal of Insect Physiology, 2009, 55, 1099-1106.	0.9	37
45	Cyclic nucleotideâ€“gated channels, calmodulin, adenylyl cyclase, and calcium/calmodulin-dependent protein kinase II are required for late, but not early, long-term memory formation in the honeybee. Learning and Memory, 2014, 21, 272-286.	0.5	37
46	Differential coding by two olfactory subsystems in the honeybee brain. Journal of Neurophysiology, 2012, 108, 1106-1121.	0.9	34
47	Spontaneous Recovery After Extinction of the Conditioned Proboscis Extension Response in the Honeybee. Learning and Memory, 2004, 11, 586-597.	0.5	31
48	Associative visual learning by tethered bees in a controlled visual environment. Scientific Reports, 2017, 7, 12903.	1.6	30
49	Ants learn fast and do not forget: associative olfactory learning, memory and extinction inFormica fusca. Royal Society Open Science, 2019, 6, 190778.	1.1	30
50	Effect of Conditioning on Discrimination of Oilseed Rape Volatiles by the Honeybee: Use of a Combined Gas Chromatography-Proboscis Extension Behavioural Assay. Chemical Senses, 1997, 22, 391-398.	1.1	27
51	Effects of two bitter substances on olfactory conditioning in the moth Heliothis virescens. Journal of Experimental Biology, 2007, 210, 2563-2573.	0.8	25
52	Calcium imaging in the ant Camponotus fellah reveals a conserved odour-similarity space in insects and mammals. BMC Neuroscience, 2010, 11, 28.	0.8	24
53	Olfactory pathway of the hornet Vespa velutina: New insights into the evolution of the hymenopteran antennal lobe. Journal of Comparative Neurology, 2016, 524, 2335-2359.	0.9	24
54	Azadirachtin effects on mating success, gametic abnormalities and progeny survival in Drosophila melanogaster (Diptera). Pest Management Science, 2018, 74, 174-180.	1.7	24

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55	Hornets Have It: A Conserved Olfactory Subsystem for Social Recognition in Hymenoptera?. Frontiers in Neuroanatomy, 2017, 11, 48.	0.9	22
56	Aminergic neuromodulation of associative visual learning in harnessed honey bees. Neurobiology of Learning and Memory, 2018, 155, 556-567.	1.0	22
57	Peripheral taste detection in honey bees: What do taste receptors respond to?. European Journal of Neuroscience, 2021, 54, 4417-4444.	1.2	22
58	Differential Processing by Two Olfactory Subsystems in the Honeybee Brain. Neuroscience, 2018, 374, 33-48.	1.1	21
59	Discrimination of oilseed rape volatiles by the honeybee: combined chemical and biological approaches. Entomologia Experimentalis Et Applicata, 1997, 83, 87-92.	0.7	20
60	Visual conditioning of the sting extension reflex in harnessed honeybees. Journal of Experimental Biology, 2011, 214, 3577-3587.	0.8	20
61	Odourant dominance in olfactory mixture processing: what makes a strong odourant?. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20142562.	1.2	20
62	Appetitive but not aversive olfactory conditioning modifies antennal movements in honeybees. Learning and Memory, 2015, 22, 604-616.	0.5	20
63	Decoding antsâ€™ olfactory system sheds light on the evolution of social communication. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8911-8913.	3.3	20
64	Honeybee drones are attracted by groups of consexuals in a walking simulator. Journal of Experimental Biology, 2014, 217, 1278-85.	0.8	19
65	Genotypic Influence on Aversive Conditioning in Honeybees, Using a Novel Thermal Reinforcement Procedure. PLoS ONE, 2014, 9, e97333.	1.1	19
66	Sexual dimorphism and phenotypic plasticity in the antennal lobe of a stingless bee, Melipona scutellaris. Journal of Comparative Neurology, 2015, 523, 1461-1473.	0.9	18
67	Molecular characterization and functional expression of the Apis mellifera voltage-dependent Ca2+ channels. Insect Biochemistry and Molecular Biology, 2015, 58, 12-27.	1.2	18
68	Ants detect cancer cells through volatile organic compounds. IScience, 2022, 25, 103959.	1.9	17
69	Parallel Olfactory Processing in the Honey Bee Brain: Odor Learning and Generalization under Selective Lesion of a Projection Neuron Tract. Frontiers in Integrative Neuroscience, 2015, 9, 75.	1.0	16
70	Heat Perception and Aversive Learning in Honey Bees: Putative Involvement of the Thermal/Chemical Sensor AmHsTRPA. Frontiers in Physiology, 2015, 6, 316.	1.3	15
71	Learning and discrimination of honey odours by the honey bee. Apidologie, 2003, 34, 147-159.	0.9	14
72	Optical imaging of concealed brain activity using a gold mirror in honeybees. Journal of Insect Physiology, 2012, 58, 743-749.	0.9	14

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73	Evolutionary Dynamics of the OR Gene Repertoire in Teleost Fishes: Evidence of an Association with Changes in Olfactory Epithelium Shape. Molecular Biology and Evolution, 2021, 38, 3742-3753.	3.5	14
74	The short neuropeptide F regulates appetitive but not aversive responsiveness in a social insect. IScience, 2022, 25, 103619.	1.9	13
75	Genotypic trade-off between appetitive and aversive capacities in honeybees. Scientific Reports, 2019, 9, 10313.	1.6	12
76	LPS perception through taste-induced reflex in Drosophila melanogaster. Journal of Insect Physiology, 2019, 112, 39-47.	0.9	12
77	Searching for learning-dependent changes in the antennal lobe: simultaneous recording of neural activity and aversive olfactory learning in honeybees. Frontiers in Behavioral Neuroscience, 2010, 4, .	1.0	11
78	Azadirachtin impact on mate choice, female sexual receptivity and male activity in Drosophila melanogaster (Diptera: Drosophilidae). Pesticide Biochemistry and Physiology, 2017, 143, 95-101.	1.6	11
79	Virgin queen attraction toward males in honey bees. Scientific Reports, 2017, 7, 6293.	1.6	11
80	Degradation of an appetitive olfactory memory via devaluation of sugar reward is mediated by 5-HT signaling in the honey bee. Neurobiology of Learning and Memory, 2020, 173, 107278.	1.0	10
81	Sexual dimorphism in visual and olfactory brain centers in the perfumeâ€collecting orchid bee Euglossa dilemma (Hymenoptera, Apidae). Journal of Comparative Neurology, 2018, 526, 2068-2077.	0.9	9
82	Marked interspecific differences in the neuroanatomy of the male olfactory system of honey bees (genus Apis). Journal of Comparative Neurology, 2018, 526, 3020-3034.	0.9	8
83	The short neuropeptide F (sNPF) promotes the formation of appetitive visual memories in honey bees. Biology Letters, 2022, 18, 20210520.	1.0	8
84	The neuroethology of olfactory sex communication in the honeybee Apis mellifera L.. Cell and Tissue Research, 2021, 383, 177-194.	1.5	7
85	Olfaction in Honey Bees: From Molecules to Behavior. , 2012, , 235-252.		6
86	Age-specific olfactory attraction between Western honey bee drones (Apis mellifera) and its chemical basis. PLoS ONE, 2017, 12, e0185949.	1.1	6
87	Configural perception of a binary olfactory mixture in honey bees as in humans, rodents and newborn rabbits. Journal of Experimental Biology, 2020, 223, .	0.8	6
88	Antenna movements as a function of odorantsâ€™ biological value in honeybees (Apis mellifera L.). Scientific Reports, 2022, 12, .	1.6	6
89	Honeybee locomotion is impaired by Am-CaV3 low voltage-activated Ca2+ channel antagonist. Scientific Reports, 2017, 7, 41782.	1.6	5
90	Olfactory coding in the antennal lobe of the bumble bee Bombus terrestris. Scientific Reports, 2021, 11, 10947.	1.6	4

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91	Biological constraints on configural odour mixture perception. Journal of Experimental Biology, 2022, 225, .	0.8	3
92	Brain size and behavioral specialization in the jataÃ-stingless bee (Tetragonisca angustula). Journal of Comparative Neurology, 2022, 530, 2304-2314.	0.9	3
93	Neurobiology of olfactory communication in the honeybee. , 2008, , 119-138.		2
94	Neural Correlates of Olfactory Learning in the Primary Olfactory Center of the Honeybee Brain. Handbook of Behavioral Neuroscience, 2013, , 416-432.	0.7	1
95	Interspecific variation of antennal lobe composition among four hornet species. Scientific Reports, 2021, 11, 20883.	1.6	1
96	Classical Conditioning of the Proboscis Extension Reflex in the Honeybee. , 2013, , 15-35.		1
97	CNG channel, calmodulin and CaMKII underlie olfactory long-term memory formation in the honeybee. Neuroscience Research, 2007, 58, S227.	1.0	0
98	Unraveling the motivational secrets of honey bee foraging during the COVID pandemic. IScience, 2022, 25, 104116.	1.9	0