Thomas C Baker

List of Publications by Year
in descending order

77 papers	3,831 citations	136950 32 h-index	138484 58 g-index
79 all docs	79 docs citations	79 times ranked	2015 citing authors

#	Article	IF	Citations
1	Odour-plume dynamics influence the brain's olfactory code. Nature, 2001, 410, 466-470.	27.8	240
2	Sexual Communication with Pheromones. , 1984, , 355-383.		186
3	Two sex pheromone components of the tobacco budworm moth,. Life Sciences, 1974, 14, 1555-1562.	4.3	150
4	Effects of intermittent and continuous pheromone stimulation on the flight behaviour of the oriental fruit moth, Grapholita molesta. Physiological Entomology, 1984, 9, 341-358.	1.5	150
5	Analysis of Pheromone-Mediated Behaviors in Male Grapholitha molesta , the Oriental Fruit Moth (Lepidoptera: Tortricidae) 1. Environmental Entomology, 1979, 8, 956-968.	1.4	143
6	Title is missing!. Journal of Chemical Ecology, 1999, 25, 1163-1177.	1.8	143
7	Endogenous and exogenous factors affecting periodicities of female calling and male sex pheromone response in Grapholitha molesta (Busck). Journal of Insect Physiology, 1979, 25, 943-950.	2.0	137
8	Courtship Behavior of the Oriental Fruit Moth (Grapholitha molesta)1: Experimental Analysis and Consideration of the Role of Sexual Selection in the Evolution of Courtship Pheromones in the Lepidoptera 2. Annals of the Entomological Society of America, 1979, 72, 173-188.	2.5	107
9	Behavioral responses of maleHeliothis virescens in a sustained-flight tunnel to combinations of seven compounds identified from female sex pheromone glands. Journal of Chemical Ecology, 1983, 9, 747-759.	1.8	106
10	â€˜Manipulationâ€™ without the parasite: altered feeding behaviour of mosquitoes is not dependent on infection with malaria parasites. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130711.	2.6	97
11	MaleHeliothis virescens maintain upwind flight in response to experimentally pulsed filaments of their sex pheromone (Lepidoptera: Noctuidae). Journal of Insect Behavior, 1992, 5, 669-687.	0.7	94
12	Visually Mediated â€˜Paratrooper Copulationsâ€™ in the Mating Behavior of Agrilus planipennis (Coleoptera: Buprestidae), a Highly Destructive Invasive Pest of North American Ash Trees. Journal of Insect Behavior, 2007, 20, 537-552.	0.7	94
13	Attraction of two lacewing species to volatiles produced by host plants and aphid prey. Die Naturwissenschaften, 2005, 92, 277-281.	1.6	90
14	Reproductive performance and longevity of female European corn borer, Ostrinia nubilalis: effects of multiple mating, delay in mating, and adult feeding. Journal of Insect Physiology, 1999, 45, 385-392.	2.0	86
15	Odor Discrimination using Insect Electroantennogram Responses from an Insect Antennal Array. Chemical Senses, 2002, 27, 343-352.	2.0	84
16	The effects of pheromone concentration on the flight behaviour of the oriental fruit moth, Grapholitha molesta. Physiological Entomology, 1982, 7, 423-434.	1.5	83
17	Mechanism for saltational shifts in pheromone communication systems. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 13368-13370.	7.1	81
18	SEX PHEROMONE DOSAGE AND BLEND SPECIFICITY OF RESPONSE BY ORIENTAL FRUIT MOTH MALES. Entomologia Experimentalis Et Applicata, 1981, 30, 269-279.	1.4	78

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19	Electroantennographic and coupled gas chromatographic-electroantennographic responses of the mediterranean fruit fly,Ceratitis capitata, to male-produced volatiles and mango odor. Journal of Chemical Ecology, 1995, 21, 1823-1836.	1.8	72
20	Oriental fruit moth pheromone component emission rates measured after collection by glass-surface adsorption. Journal of Chemical Ecology, 1980, 6, 749-758.	1.8	70
21	Balanced Olfactory Antagonism as a Concept for Understanding Evolutionary Shifts in Moth Sex Pheromone Blends. Journal of Chemical Ecology, 2008, 34, 971-81.	1.8	67
22	Chemical communication in heliothine moths. VII. Correlation between diminished responses to point-source plumes and single filaments similarly tainted with a behavioral antagonist. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1997, 180, 523-536.	1.6	65
23	Characterization of chemicals mediating ovipositional host-plant finding byAmyelois transitella females. Journal of Chemical Ecology, 1991, 17, 599-613.	1.8	64
24	Behavioral Evidence for a Contact Sex Pheromone Component of the Emerald Ash Borer, Agrilus Planipennis Fairmaire. Journal of Chemical Ecology, 2009, 35, 104-110.	1.8	52
25	Responses of Carpophilus hemipterus (Coleoptera: Nitidulidae) and Other Sap Beetles to the Pheromone of C. hemipterus and Host-Related Coattractants in California Field Tests. Environmental Entomology, 1992, 21, 1143-1153.	1.4	51
26	Male-produced aggregation pheromone ofCarpophilus mutilatus (Coleoptera: Nitidulidae). Journal of Chemical Ecology, 1993, 19, 107-118.	1.8	49
27	Effects of varying sex pheromone component ratios on the zigzagging flight movements of the oriental fruit moth,Grapholita molesta. Journal of Insect Behavior, 1988, 1, 357-371.	0.7	44
28	Reduction of the response to sex pheromone in the oriental fruit moth,Grapholita molesta (Lepidoptera: Tortricidae) following successive pheromonal exposures. Journal of Insect Behavior, 1992, 5, 347-363.	0.7	43
29	Behavioral responses of maleHeliothis zea moths in sustained-flight tunnel to combinations of 4 compounds identified from female sex pheromone gland. Journal of Chemical Ecology, 1984, 10, 193-202.	1.8	41
30	Helicoverpa zea males (Lepidoptera: Noctuidae) respond to the intermittent fine structure of their sex pheromone plume and an antagonist in a flight tunnel. Physiological Entomology, 1997, 22, 316-324.	1.5	37
31	Pheromone puffs suppress mating by Plodia interpunctella and Sitotroga cerealella in an infested corn store. Entomologia Experimentalis Et Applicata, 2002, 102, 239-251.	1.4	36
32	Influence of Pheromone Dose, Trap Height, and Septum Age on Effectiveness of Pheromones for Carpophilus mutilatus and C. hemipterus (Coleoptera: Nitidulidae) in a California Date Garden. Journal of Economic Entomology, 1994, 87, 667-675.	1.8	34
33	Glomerular Targets of Heliothis subflexa Male Olfactory Receptor Neurons Housed within Long Trichoid Sensilla. Chemical Senses, 2006, 31, 821-834.	2.0	34
34	Reduction in host-finding behaviour in fungus-infected mosquitoes is correlated with reduction in olfactory receptor neuron responsiveness. Malaria Journal, 2011, 10, 219.	2.3	34
35	Antennal lobe projection destinations of Helicoverpa zea male olfactory receptor neurons responsive to heliothine sex pheromone components. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2006, 192, 351-363.	1.6	33
36	Comparison of manoeuvres used by walking versus flying Grapholita molesta males during pheromone-mediated upwind movement. Journal of Insect Physiology, 1987, 33, 875-883.	2.0	32

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37	Title is missing!. Journal of Insect Behavior, 1999, 12, 701-710.	0.7	32
38	Adaptation of male moth antennal neurons in a pheromone plume is associated with cessation of pheromone-mediated flight. Chemical Senses, 1989, 14, 439-448.	2.0	31
39	Visual feedback in the control of pheromone-mediated flight ofHeliothis virescens males (Lepidoptera:) Tj ETQq1 1 0.784314 rgBT /Over	0.7	31
40	Improvement of signal-to-noise ratio in electroantennogram responses using multiple insect antennae. Journal of Insect Physiology, 2002, 48, 1139-1145.	2.0	31
41	Identification of volatile compounds from fungusâ€infected date fruit that stimulate upwind flight in female Ectomyelois ceratoniae. Entomologia Experimentalis Et Applicata, 1994, 72, 233-238.	1.4	30
42	Mating Disruption of European Corn Borer, Ostrinia nubilalis by Using Two Types of Sex Pheromone Dispensers Deployed in Grassy Aggregation Sites in Iowa Cornfields. Journal of Asia-Pacific Entomology, 1999, 2, 121-132.	0.9	30
43	Field observations of visual attraction of three European oak buprestid beetles toward conspecific and heterospecific models. Entomologia Experimentalis Et Applicata, 2011, 140, 112-121.	1.4	30
44	Detecting emerald ash borers (Agrilus planipennis) using branch traps baited with 3D-printed beetle decoys. Journal of Pest Science, 2015, 88, 267-279.	3.7	30
45	Evidence of olfactory antagonistic imposition as a facilitator of evolutionary shifts in pheromone blend usage in Ostrinia spp. (Lepidoptera: Crambidae). Journal of Insect Physiology, 2007, 53, 488-496.	2.0	28
46	Neurophysiological mechanisms underlying sex- and maturation-related variation in pheromone responses in honey bees (Apis mellifera). Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2015, 201, 731-739.	1.6	28
47	Responses of maleHelicoverpa zeato single pulses of sex pheromone and behavioural antagonist. Physiological Entomology, 2001, 26, 106-115.	1.5	27
48	Trapping of <scp>E</scp>uropean buprestid beetles in oak forests using visual and olfactory cues. Entomologia Experimentalis Et Applicata, 2013, 148, 116-129.	1.4	27
49	Bioreplicated visual features of nanofabricated buprestid beetle decoys evoke stereotypical male mating flights. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 14106-14111.	7.1	27
50	Responses to Aggregation Pheromones for Five Carpophilus Species (Coleoptera: Nitidulidae) in a California Date Garden. Environmental Entomology, 1994, 23, 1534-1543.	1.4	26
51	Flight of Heliothis virescens males in the field in response to sex pheromone. Physiological Entomology, 1997, 22, 277-285.	1.5	26
52	Differences in cuticular lipid composition of the antennae of Helicoverpa zea, Heliothis virescens, and Manduca sexta. Journal of Insect Physiology, 2008, 54, 1385-1391.	2.0	26
53	The effects of unilateral antennectomy on the flight behaviour of male Heliothis virescens in a pheromone plume. Physiological Entomology, 1991, 16, 497-506.	1.5	22
54	Altered olfactory receptor neuron responsiveness in rare Ostrinia nubilalis males attracted to the O. furnacalis pheromone blend. Journal of Insect Physiology, 2007, 53, 1063-1071.	2.0	22

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55	Detection and Discrimination of Mixed Odor Strands in Overlapping Plumes Using an Insect-Antenna-Based Chemosensor System. Journal of Chemical Ecology, 2009, 35, 118-130.	1.8	22
56	Title is missing!. Journal of Chemical Ecology, 1999, 25, 51-66.	1.8	21
57	Support for (Z)-11-Hexadecanal as a Pheromone Antagonist in Ostrinia nubilalis: Flight Tunnel and Single Sensillum Studies with a New York Population. Journal of Chemical Ecology, 2007, 33, 909-921.	1.8	21
58	Interspecific Pheromone Plume Interference Among Sympatric Heliothine Moths: A Wind Tunnel Test Using Live, Calling Females. Journal of Chemical Ecology, 2008, 34, 725-733.	1.8	18
59	Field investigation of mating behaviour of Agrilus cyanescens and Agrilus subcinctus. Canadian Entomologist, 2011, 143, 370-379.	0.8	18
60	Identification of (Z)-4-tridecene from Defensive Secretion of Green Lacewing, Chrysoperla carnea. Journal of Chemical Ecology, 2000, 26, 2421-2434.	1.8	17
61	Learning the Language of Insectsâ€"and How to Talk Back. American Entomologist, 1993, 39, 212-220.	0.2	15
62	Fabrication of Polymeric Visual Decoys for the Male Emerald Ash Borer (Agrilus planipennis). Journal of Bionic Engineering, 2013, 10, 129-138.	5.0	15
63	Isolation of a Female-Emitted Sex Pheromone Component of the Fungus Gnat, Lycoriella ingenua, Attractive to Males. Journal of Chemical Ecology, 2015, 41, 1127-1136.	1.8	13
64	Altered Olfactory Receptor Neuron Responsiveness Is Correlated with a Shift in Behavioral Response in an Evolved Colony of the Cabbage Looper Moth, Trichoplusia ni. Journal of Chemical Ecology, 2009, 35, 405-415.	1.8	12
65	ORIENTAL FRUIT MOTH PHEROMONE: ATTRACTION OF FEMALES BY AN HERBAL ESSENCE. , 1985, , 47-64.		11
66	Use of pheromones in IPM. , 0, , 273-285.		11
67	Interaction of Visual and Chemical CUES in Promoting Attraction of Agrilus planipennis. Journal of Chemical Ecology, 2016, 42, 490-496.	1.8	11
68	Behavioral Reaction Times of Male Moths to Pheromone Filaments and Visual Stimuli: Determinants of Flight Track Shape and Direction. , 1994, , 838-841.		10
69	Differences in spectral selectivity between stages of visually-guided mating approaches in a buprestid beetle. Journal of Experimental Biology, 2016, 219, 2837-2843.	1.7	9
70	Incomplete electrical isolation of sex-pheromone responsive olfactory receptor neurons from neighboring sensilla. Journal of Insect Physiology, 2008, 54, 663-671.	2.0	7
71	Insect Pheromones: Useful Lessons for Crustacean Pheromone Programs?. , 2010, , 531-550.		4
72	Dialkyl phosphorofluoridates and alkyl methylphosphonofluoridates as disruptants of moth sex pheromone-mediated behavior. Pest Management Science, 1991, 32, 35-46.	0.4	3

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73	Little effect of delayed mating on fecundity or fertility of female fungus gnats Lycoriella ingenua. Physiological Entomology, 2019, 44, 60-64.	1.5	3
74	Toward pest control via mass production of realistic decoys of insects. , 2012, , .		2
75	Fine-scale features on bioreplicated decoys of the emerald ash borer provide necessary visual verisimilitude. Proceedings of SPIE, 2014, , .	0.8	1
76	Host condition effects upon Agrilus planipennis (Coleoptera: Buprestidae) captures on decoy-baited branch traps. European Journal of Entomology, 0, 113, 438-445.	1.2	1
77	Fabrication and testing of artificial emerald ash borer visual decoys. , 2013, , .		0