Joachim Ruther

List of Publications by Year
in descending order

108 papers	3,470 citations	117625 34 h-index	182427 51 g-index
116 all docs	116 docs citations	116 times ranked	2545 citing authors

#	Article	IF	Citations
1	Cumulative effects of sex pheromone components in mate recognition of <i>Muscidifurax raptorellus</i>. Entomologia Experimentalis Et Applicata, 2022, 170, 319-326.	1.4	2
2	Silencing <i>Doublesex</i> expression triggers three-level pheromonal feminization in <i>Nasonia vitripennis</i> males. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20212002.	2.6	3
3	The biological significance of lipogenesis in <i>Nasonia vitripennis</i>. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20220208.	2.6	3
4	Pheromone biosynthesis in Nasonia. , 2021, , 237-267.		2
5	Acetone application for administration of bioactive substances has no negative effects on longevity, fitness, and sexual communication in a parasitic wasp. PLoS ONE, 2021, 16, e0245698.	2.5	10
6	Similar Is Not the Same â€“ Mate Recognition in a Parasitoid Wasp. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	7
7	De novo biosynthesis of linoleic acid is widespread in parasitic wasps. Archives of Insect Biochemistry and Physiology, 2021, 107, e21788.	1.5	5
8	Parasitic wasps do not lack lipogenesis. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210548.	2.6	8
9	Age-dependent release of and response to alarm pheromone in a ponerine ant. Journal of Experimental Biology, 2020, 223, .	1.7	7
10	Cuticular Hydrocarbons as Contact Sex Pheromone in the Parasitoid Wasp Urolepis rufipes. Frontiers in Ecology and Evolution, 2020, 8, .	2.2	21
11	Enantioselective synthesis and determination of the absolute configuration of the male sex pheromone of the parasitoid wasp <i>Urolepis rufipes</i>. Organic and Biomolecular Chemistry, 2020, 18, 3463-3465.	2.8	8
12	De novo biosynthesis of fatty acids from Î±-D-glucose in parasitoid wasps of the Nasonia group. Insect Biochemistry and Molecular Biology, 2019, 115, 103256.	2.7	16
13	Mapping key amino acid residues for the epimerase efficiency and stereospecificity of the sex pheromone biosynthetic short-chain dehydrogenases/reductases of Nasonia. Scientific Reports, 2019, 9, 330.	3.3	3
14	Chemical Ecology of the Parasitoid Wasp Genus Nasonia (Hymenoptera, Pteromalidae). Frontiers in Ecology and Evolution, 2019, 7, .	2.2	26
15	Functional characterisation of two Î”12-desaturases demonstrates targeted production of linoleic acid as pheromone precursor in<i>Nasonia</i>. Journal of Experimental Biology, 2019, 222, .	1.7	16
16	Semiochemicals Mediating Defense, Intraspecific Competition, and Mate Finding in Leptopilina ryukyuensis and L. japonica (Hymenoptera: Figitidae), Parasitoids of Drosophila. Journal of Chemical Ecology, 2019, 45, 241-252.	1.8	11
17	Male Sex Pheromone of the Parasitoid Wasp Urolepis rufipes Demonstrates Biosynthetic Switch Between Fatty Acid and Isoprenoid Metabolism Within the Nasonia Group. Frontiers in Ecology and Evolution, 2019, 7, .	2.2	14
18	Nitric oxide radicals are emitted by wasp eggs to kill mold fungi. ELife, 2019, 8, .	6.0	19

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19	Interference of chemical defence and sexual communication can shape the evolution of chemical signals. Scientific Reports, 2018, 8, 321.	3.3	12
20	Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and ecoâ€evolutionary implications. New Phytologist, 2018, 220, 739-749.	7.3	101
21	Development and Evaluation of Push-Pull Control Strategies against Aedes aegypti (Diptera: Culicidae). ACS Symposium Series, 2018, , 187-204.	0.5	2
22	Previous Interspecific Courtship Impairs Female Receptivity to Conspecifics in the Parasitoid Wasp Nasonia longicornis But Not in N. vitripennis. Insects, 2018, 9, 112.	2.2	5
23	The Post-mating Switch in the Pheromone Response of Nasonia Females Is Mediated by Dopamine and Can Be Reversed by Appetitive Learning. Frontiers in Behavioral Neuroscience, 2018, 12, 14.	2.0	25
24	Territoriality and behavioural strategies at the natal host patch differ in two microsympatric Nasonia species. Animal Behaviour, 2018, 143, 113-129.	1.9	14
25	Sublethal doses of imidacloprid disrupt sexual communication and host finding in a parasitoid wasp. Scientific Reports, 2017, 7, 42756.	3.3	64
26	De novo Synthesis of Linoleic Acid in Multiple Collembola Species. Journal of Chemical Ecology, 2017, 43, 911-919.	1.8	22
27	The chemical basis of mate recognition in two parasitoid wasp species of the genus <i><scp>N</scp>asonia</i>. Entomologia Experimentalis Et Applicata, 2017, 164, 1-15.	1.4	21
28	Volatile Organic Compounds of Decaying Piglet Cadavers Perceived by Nicrophorus vespilloides. Journal of Chemical Ecology, 2016, 42, 756-767.	1.8	21
29	Epimerisation of chiral hydroxylactones by short-chain dehydrogenases/reductases accounts for sex pheromone evolution in Nasonia. Scientific Reports, 2016, 6, 34697.	3.3	15
30	A hormone-related female anti-aphrodisiac signals temporary infertility and causes sexual abstinence to synchronize parental care. Nature Communications, 2016, 7, 11035.	12.8	48
31	An insect with a delta-12 desaturase, the jewel wasp Nasonia vitripennis, benefits from nutritional supply with linoleic acid. Die Naturwissenschaften, 2016, 103, 40.	1.6	33
32	Varying importance of cuticular hydrocarbons and iridoids in the species-specific mate recognition pheromones of three closely related Leptopilina species. Frontiers in Ecology and Evolution, 2015, 3, .	2.2	34
33	Evaluation of a Push-Pull Approach for Aedes aegypti (L.) Using a Novel Dispensing System for Spatial Repellents in the Laboratory and in a Semi-Field Environment. PLoS ONE, 2015, 10, e0129878.	2.5	20
34	Species Specificity of the Putative Male Antennal Aphrodisiac Pheromone in<i>Leptopilina heterotoma</i>,<i>Leptopilina boulardi</i>, and<i>Leptopilina victoriae</i>. BioMed Research International, 2015, 2015, 1-6.	1.9	10
35	Solid Phase Micro-extraction (SPME) with In Situ Transesterification: An Easy Method for the Detection of Non-volatile Fatty Acid Derivatives on the Insect Cuticle. Journal of Chemical Ecology, 2015, 41, 584-592.	1.8	8
36	Size Exclusion High Performance Liquid Chromatography: Re-Discovery of a Rapid and Versatile Method for Clean-Up and Fractionation in Chemical Ecology. Journal of Chemical Ecology, 2015, 41, 574-583.	1.8	7

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37	Avoid mistakes when choosing a new home: Nest choice and adoption of Leptothorax ant queens. Journal of Insect Physiology, 2015, 79, 88-95.	2.0	4
38	Behavioural flexibility of the chemical defence in the parasitoid wasp Leptopilina heterotoma. Die Naturwissenschaften, 2015, 102, 67.	1.6	5
39	Nest Etiquetteâ€”Where Ants Go When Nature Calls. PLoS ONE, 2015, 10, e0118376.	2.5	18
40	High Chemical Diversity in a Wasp Pheromone: a Blend of Methyl 6-Methylsalicylate, Fatty Alcohol Acetates and Cuticular Hydrocarbons Releases Courtship Behavior in the Drosophila Parasitoid Asobara tabida. Journal of Chemical Ecology, 2014, 40, 159-168.	1.8	19
41	An Oral Male Courtship Pheromone Terminates the Response of Nasonia vitripennis Females to the Male-Produced Sex Attractant. Journal of Chemical Ecology, 2014, 40, 56-62.	1.8	22
42	Pheromone Researchâ€”Still Something to Write Home About. Journal of Chemical Ecology, 2014, 40, 215-215.	1.8	0
43	Oleic acid is a precursor of linoleic acid and the male sex pheromone in Nasonia vitripennis. Insect Biochemistry and Molecular Biology, 2014, 51, 33-40.	2.7	45
44	Pheromone Diversification and Age-Dependent Behavioural Plasticity Decrease Interspecific Mating Costs in Nasonia. PLoS ONE, 2014, 9, e89214.	2.5	27
45	A nonspecific defensive compound evolves into a competition avoidance cue and a female sex pheromone. Nature Communications, 2013, 4, 2767.	12.8	51
46	Larvae of the parasitoid wasp <i>Ampulex compressa</i> sanitize their host, the American cockroach, with a blend of antimicrobials. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 1369-1374.	7.1	41
47	Behavioural and genetic analyses of Nasonia shed light on the evolution of sex pheromones. Nature, 2013, 494, 345-348.	27.8	110
48	Elucidating Structure-Bioactivity Relationships of Methyl-Branched Alkanes in the Contact Sex Pheromone of the Parasitic Wasp Lariophagus distinguendus. Insects, 2013, 4, 743-760.	2.2	23
49	Laboratory Evaluation Techniques to Investigate the Spatial Potential of Repellents for Push and Pull Mosquito Control Systems. Journal of Medical Entomology, 2012, 49, 1387-1397.	1.8	12
50	Composition of cuticular lipids in the pteromalid wasp Lariophagus distinguendus is host dependent. Bulletin of Entomological Research, 2012, 102, 610-617.	1.0	15
51	Deciphering the signature of cuticular lipids with contact sex pheromone function in a parasitic wasp. Journal of Experimental Biology, 2012, 215, 2471-2478.	1.7	53
52	The composition of carcass volatile profiles in relation to storage time and climate conditions. Forensic Science International, 2012, 223, 64-71.	2.2	53
53	Cuticular lipid profiles of fertile and non-fertile Cardiocondyla ant queens. Journal of Insect Physiology, 2012, 58, 1245-1249.	2.0	8
54	The attraction of virgin female hide beetles (Dermestes maculatus) to cadavers by a combination of decomposition odour and male sex pheromones. Frontiers in Zoology, 2012, 9, 18.	2.0	31

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55	Body size influences male pheromone signals but not the outcome of mating contests in Nasonia vitripennis. Animal Behaviour, 2012, 84, 1557-1563.	1.9	27
56	Stereoselective Chemical Defense in the Drosophila Parasitoid Leptopilina heterotoma is Mediated by (âˆ’)-Iridomyrmecin and (+)-Isoiridomyrmecin. Journal of Chemical Ecology, 2012, 38, 331-339.	1.8	32
57	Cuticular hydrocarbons as contact sex pheromone in the parasitoid Dibrachys cavus. Entomologia Experimentalis Et Applicata, 2011, 140, 59-68.	1.4	49
58	The importance of carcass volatiles as attractants for the hide beetle Dermestes maculatus (De Geer). Forensic Science International, 2011, 212, 173-179.	2.2	58
59	Pheromone Communication in Nasonia vitripennis: Abdominal Sex Attractant Mediates Site Fidelity of Releasing Males. Journal of Chemical Ecology, 2011, 37, 161-165.	1.8	17
60	Structure, chemical composition and putative function of the postpharyngeal gland of the emerald cockroach wasp, Ampulex compressa (Hymenoptera, Ampulicidae). Zoology, 2011, 114, 36-45.	1.2	15
61	How parasitoid females produce sexy sons: a causal link between oviposition preference, dietary lipids and mate choice in Nasonia. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3286-3293.	2.6	57
62	Behavioural switch in the sex pheromone response of Nasonia vitripennis females is linked to receptivity signalling. Animal Behaviour, 2010, 80, 1035-1040.	1.9	37
63	How important is sex for females of a haplodiploid species under local mate competition?. Behavioral Ecology, 2009, 20, 570-574.	2.2	35
64	Quantity matters: male sex pheromone signals mate quality in the parasitic wasp <i>Nasonia vitripennis</i>. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 3303-3310.	2.6	80
65	Mechanism and Behavioral Context of Male Sex Pheromone Release in Nasonia vitripennis. Journal of Chemical Ecology, 2009, 35, 416-421.	1.8	46
66	Olfactory host finding, intermediate memory and its potential ecological adaptation in Nasonia vitripennis. Die Naturwissenschaften, 2009, 96, 383-391.	1.6	34
67	4-Methylquinazoline is a Minor Component of the Male Sex Pheromone in Nasonia vitripennis. Journal of Chemical Ecology, 2008, 34, 99-102.	1.8	50
68	Costs of female odour in males of the parasitic wasp Lariophagus distinguendus (Hymenoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	1.6	35
69	Mating with spermâ€depleted males does not increase female mating frequency in the parasitoid <i>Lariophagus distinguendus</i>. Entomologia Experimentalis Et Applicata, 2008, 126, 131-137.	1.4	44
70	An epoxide hydrolase involved in the biosynthesis of an insect sex attractant and its use to localize the production site. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 8914-8919.	7.1	52
71	A male sex pheromone in a parasitic wasp and control of the behavioral response by the female's mating status. Journal of Experimental Biology, 2007, 210, 2163-2169.	1.7	84
72	Host habitat assessment by a parasitoid using fungal volatiles. Frontiers in Zoology, 2007, 4, 3.	2.0	41

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73	Host-associated kairomones used for habitat orientation in the parasitoid Lariophagus distinguendus (Hymenoptera: Pteromalidae). Journal of Stored Products Research, 2007, 43, 587-593.	2.6	31
74	Courtship Pheromones in Parasitic Wasps: Comparison of Bioactive and Inactive Hydrocarbon Profiles by Multivariate Statistical Methods. Journal of Chemical Ecology, 2007, 33, 825-838.	1.8	39
75	A Male Sex Pheromone in a Scorpionfly. Journal of Chemical Ecology, 2007, 33, 1249-1256.	1.8	18
76	Optimized trap lure for male Melolontha cockchafers. Journal of Applied Entomology, 2006, 130, 171-176.	1.8	13
77	Pre-copulatory isolation in sympatric Melolontha species (Coleoptera: Scarabaeidae). Agricultural and Forest Entomology, 2006, 8, 289-293.	1.3	6
78	Characterization of a Female-Produced Courtship Pheromone in the Parasitoid Nasonia vitripennis. Journal of Chemical Ecology, 2006, 32, 1687-1702.	1.8	102
79	Mating System of the European Hornet Vespa crabro: Male Seeking Strategies and Evidence for the Involvement of a Sex Pheromone. Journal of Chemical Ecology, 2006, 32, 2777-2788.	1.8	24
80	Emission of Herbivore-induced Volatiles in Absence of a Herbivore - Response of Zea mays to Green Leaf Volatiles and Terpenoids. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2005, 60, 743-756.	1.4	46
81	Response of garden chafer, Phyllopertha horticola , to plant volatiles: from screening to application. Entomologia Experimentalis Et Applicata, 2005, 115, 51-59.	1.4	29
82	Electrophysiological and behavioural responses of Melolontha melolontha to saturated and unsaturated aliphatic alcohols. Entomologia Experimentalis Et Applicata, 2005, 115, 33-40.	1.4	23
83	Female sex pheromone in immature insect malesâ€"a case of pre-emergence chemical mimicry?. Behavioral Ecology and Sociobiology, 2005, 58, 111-120.	1.4	57
84	Plantâ€"Plant Signaling: Ethylene Synergizes Volatile Emission In Zea mays Induced by Exposure to (Z)-3-Hexen-1-ol. Journal of Chemical Ecology, 2005, 31, 2217-2222.	1.8	171
85	Attraction of garden chafer, Phyllopertha horticola, to floral Japanese beetle lure. Journal of Applied Entomology, 2004, 128, 158-160.	1.8	8
86	Male-biassed response of garden chafer, Phyllopertha horticola L., to leaf alcohol and attraction of both sexes to floral plant volatiles. Chemoecology, 2004, 14, 187.	1.1	20
87	(R)-acetoin-female sex pheromone of the summer chafer Amphimallon solstitiale (L.). Journal of Chemical Ecology, 2003, 29, 1045-1050.	1.8	34
88	Specific foraging kairomones used by a generalist parasitoid. Journal of Chemical Ecology, 2003, 29, 131-143.	1.8	28
89	Attraction of forest cockchafer Melolontha hippocastani to (Z)-3-hexen-1-ol and 1,4-benzoquinone: application aspects. Entomologia Experimentalis Et Applicata, 2003, 107, 141-147.	1.4	16
90	Cuticular lipids as trail pheromone in a social wasp. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 385-391.	2.6	47

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91	Phenol â˜' Another Cockchafer Attractant Shared by Melolontha hippocastani Fabr. and M. melolontha L.. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2002, 57, 910-913.	1.4	17
92	Plant volatiles in the sexual communication of Melolontha hippocastani : response towards time-dependent bouquets and novel function of (Z)-3-hexen-1-ol as a sexual kairomone. Ecological Entomology, 2002, 27, 76-83.	2.2	65
93	Nestmate recognition in social wasps: manipulation of hydrocarbon profiles induces aggression in the European hornet. Die Naturwissenschaften, 2002, 89, 111-114.	1.6	79
94	Alcoholism in cockchafers: orientation of male Melolontha melolontha towards green leaf alcohols. Die Naturwissenschaften, 2002, 89, 265-269.	1.6	51
95	Rich in phenomena-lacking in terms. A classification of kairomones. Chemoecology, 2002, 12, 161-167.	1.1	92
96	â€œAllohormonesâ€• a new class of bioactive substances or old wine in new skins?. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2002, 188, 161-162.	1.6	3
97	The scent of food and defence: green leaf volatiles and toluquinone as sex attractant mediate mate finding in the European cockchafer Melolontha melolontha. Ecology Letters, 2002, 5, 257-263.	6.4	45
98	Quinones in cockchafers: additional function of a sex attractant as an antimicrobial agent. Chemoecology, 2001, 11, 225-229.	1.1	24
99	Make love not war: a common arthropod defence compound as sex pheromone in the forest cockchafer Melolontha hippocastani. Oecologia, 2001, 128, 44-47.	2.0	56
100	The use of general foraging kairomones in a generalist parasitoid. Oikos, 2001, 95, 78-86.	2.7	23
101	Retention index database for identification of general green leaf volatiles in plants by coupled capillary gas chromatographyâ˜'mass spectrometry. Journal of Chromatography A, 2000, 890, 313-319.	3.7	103
102	Female-derived sex pheromone mediates courtship behaviour in the parasitoid Lariophagus distinguendus. Entomologia Experimentalis Et Applicata, 2000, 96, 265-274.	1.4	53
103	Title is missing!. Journal of Chemical Ecology, 2000, 26, 1205-1217.	1.8	32
104	Chemicals Used for Host Recognition by the Granary Weevil Parasitoid Lariophagus distinguendus. Journal of Chemical Ecology, 2000, 26, 2665-2675.	1.8	29
105	A Versatile Method for On-Line Analysis of Volatile Compounds from Living Samples. Journal of Chemical Ecology, 1998, 24, 525-534.	1.8	9
106	Response of the pollen beetle Meligethes aeneus to volatiles emitted by intact plants and conspecifics. Entomologia Experimentalis Et Applicata, 1997, 84, 183-188.	1.4	43
107	Analysis of purine compounds and creatinine by ion-pair high-performance liquid chromatography (HPLC) as a method for the detection of yeast extracts in commercial meat flavourings. Zeitschrift Fur Lebensmittel-Untersuchung Und -Forschung, 1994, 199, 307-310.	0.6	3
108	Sulfur-Containing Furans in Commercial Meat Flavorings. Journal of Agricultural and Food Chemistry, 1994, 42, 2254-2259.	5.2	17