Joachim Ruther

List of Publications by Year
in descending order

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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	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
2	Behavioural and genetic analyses of Nasonia shed light on the evolution of sex pheromones. Nature, 2013, 494, 345-348.	27.8	110
3	Retention index database for identification of general green leaf volatiles in plants by coupled capillary gas chromatographyâˆ’mass spectrometry. Journal of Chromatography A, 2000, 890, 313-319.	3.7	103
4	Characterization of a Female-Produced Courtship Pheromone in the Parasitoid Nasonia vitripennis. Journal of Chemical Ecology, 2006, 32, 1687-1702.	1.8	102
5	Covariation and phenotypic integration in chemical communication displays: biosynthetic constraints and ecoâ€evolutionary implications. New Phytologist, 2018, 220, 739-749.	7.3	101
6	Rich in phenomena-lacking in terms. A classification of kairomones. Chemoecology, 2002, 12, 161-167.	1.1	92
7	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
8	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
9	Nestmate recognition in social wasps: manipulation of hydrocarbon profiles induces aggression in the European hornet. Die Naturwissenschaften, 2002, 89, 111-114.	1.6	79
10	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
11	Sublethal doses of imidacloprid disrupt sexual communication and host finding in a parasitoid wasp. Scientific Reports, 2017, 7, 42756.	3.3	64
12	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
13	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
14	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
15	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
16	Female-derived sex pheromone mediates courtship behaviour in the parasitoid Lariophagus distinguendus. Entomologia Experimentalis Et Applicata, 2000, 96, 265-274.	1.4	53
17	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
18	The composition of carcass volatile profiles in relation to storage time and climate conditions. Forensic Science International, 2012, 223, 64-71.	2.2	53

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19	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
20	Alcoholism in cockchafers: orientation of male Melolontha melolontha towards green leaf alcohols. Die Naturwissenschaften, 2002, 89, 265-269.	1.6	51
21	A nonspecific defensive compound evolves into a competition avoidance cue and a female sex pheromone. Nature Communications, 2013, 4, 2767.	12.8	51
22	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
23	Cuticular hydrocarbons as contact sex pheromone in the parasitoid Dibrachys cavus. Entomologia Experimentalis Et Applicata, 2011, 140, 59-68.	1.4	49
24	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
25	Cuticular lipids as trail pheromone in a social wasp. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 385-391.	2.6	47
26	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
27	Mechanism and Behavioral Context of Male Sex Pheromone Release in Nasonia vitripennis. Journal of Chemical Ecology, 2009, 35, 416-421.	1.8	46
28	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
29	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
30	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
31	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
32	Host habitat assessment by a parasitoid using fungal volatiles. Frontiers in Zoology, 2007, 4, 3.	2.0	41
33	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
34	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
35	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
36	Costs of female odour in males of the parasitic wasp Lariophagus distinguendus (Hymenoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	1.6	35

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37	How important is sex for females of a haplodiploid species under local mate competition?. Behavioral Ecology, 2009, 20, 570-574.	2.2	35
38	(R)-acetoin-female sex pheromone of the summer chafer Amphimallon solstitiale (L.). Journal of Chemical Ecology, 2003, 29, 1045-1050.	1.8	34
39	Olfactory host finding, intermediate memory and its potential ecological adaptation in Nasonia vitripennis. Die Naturwissenschaften, 2009, 96, 383-391.	1.6	34
40	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
41	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
42	Title is missing!. Journal of Chemical Ecology, 2000, 26, 1205-1217.	1.8	32
43	Stereoselective Chemical Defense in the Drosophila Parasitoid Leptopilina heterotoma is Mediated by (â˘)-Iridomyrmecin and (+)-Isoiridomyrmecin. Journal of Chemical Ecology, 2012, 38, 331-339.	1.8	32
44	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
45	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
46	Chemicals Used for Host Recognition by the Granary Weevil Parasitoid Lariophagus distinguendus. Journal of Chemical Ecology, 2000, 26, 2665-2675.	1.8	29
47	Response of garden chafer, Phyllopertha horticola , to plant volatiles: from screening to application. Entomologia Experimentalis Et Applicata, 2005, 115, 51-59.	1.4	29
48	Specific foraging kairomones used by a generalist parasitoid. Journal of Chemical Ecology, 2003, 29, 131-143.	1.8	28
49	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
50	Pheromone Diversification and Age-Dependent Behavioural Plasticity Decrease Interspecific Mating Costs in Nasonia. PLoS ONE, 2014, 9, e89214.	2.5	27
51	Chemical Ecology of the Parasitoid Wasp Genus Nasonia (Hymenoptera, Pteromalidae). Frontiers in Ecology and Evolution, 2019, 7, .	2.2	26
52	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
53	Quinones in cockchafers: additional function of a sex attractant as an antimicrobial agent. Chemoecology, 2001, 11, 225-229.	1.1	24
54	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

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55	The use of general foraging kairomones in a generalist parasitoid. Oikos, 2001, 95, 78-86.	2.7	23
56	Electrophysiological and behavioural responses of Melolontha melolontha to saturated and unsaturated aliphatic alcohols. Entomologia Experimentalis Et Applicata, 2005, 115, 33-40.	1.4	23
57	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
58	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
59	De novo Synthesis of Linoleic Acid in Multiple Collembola Species. Journal of Chemical Ecology, 2017, 43, 911-919.	1.8	22
60	Volatile Organic Compounds of Decaying Piglet Cadavers Perceived by Nicrophorus vespilloides. Journal of Chemical Ecology, 2016, 42, 756-767.	1.8	21
61	Cuticular Hydrocarbons as Contact Sex Pheromone in the Parasitoid Wasp Urolepis rufipes. Frontiers in Ecology and Evolution, 2020, 8, .	2.2	21
62	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
63	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
64	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
65	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
66	Nitric oxide radicals are emitted by wasp eggs to kill mold fungi. ELife, 2019, 8, .	6.0	19
67	A Male Sex Pheromone in a Scorpionfly. Journal of Chemical Ecology, 2007, 33, 1249-1256.	1.8	18
68	Nest Etiquetteâ€"Where Ants Go When Nature Calls. PLoS ONE, 2015, 10, e0118376.	2.5	18
69	Sulfur-Containing Furans in Commercial Meat Flavorings. Journal of Agricultural and Food Chemistry, 1994, 42, 2254-2259.	5.2	17
70	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
71	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
72	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

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73	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
74	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
75	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
76	Composition of cuticular lipids in the pteromalid wasp Lariophagus distinguendus is host dependent. Bulletin of Entomological Research, 2012, 102, 610-617.	1.0	15
77	Epimerisation of chiral hydroxylactones by short-chain dehydrogenases/reductases accounts for sex pheromone evolution in Nasonia. Scientific Reports, 2016, 6, 34697.	3.3	15
78	Territoriality and behavioural strategies at the natal host patch differ in two microsympatric Nasonia species. Animal Behaviour, 2018, 143, 113-129.	1.9	14
79	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
80	Optimized trap lure for male Melolontha cockchafers. Journal of Applied Entomology, 2006, 130, 171-176.	1.8	13
81	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
82	Interference of chemical defence and sexual communication can shape the evolution of chemical signals. Scientific Reports, 2018, 8, 321.	3.3	12
83	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
84	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
85	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
86	A Versatile Method for On-Line Analysis of Volatile Compounds from Living Samples. Journal of Chemical Ecology, 1998, 24, 525-534.	1.8	9
87	Attraction of garden chafer, Phyllopertha horticola, to floral Japanese beetle lure. Journal of Applied Entomology, 2004, 128, 158-160.	1.8	8
88	Cuticular lipid profiles of fertile and non-fertile Cardiocondyla ant queens. Journal of Insect Physiology, 2012, 58, 1245-1249.	2.0	8
89	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
90	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

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91	Parasitic wasps do not lack lipogenesis. Proceedings of the Royal Society B: Biological Sciences, 2021, 288, 20210548.	2.6	8
92	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
93	Age-dependent release of and response to alarm pheromone in a ponerine ant. Journal of Experimental Biology, 2020, 223, .	1.7	7
94	Similar Is Not the Same â€“ Mate Recognition in a Parasitoid Wasp. Frontiers in Ecology and Evolution, 2021, 9, .	2.2	7
95	Pre-copulatory isolation in sympatric Melolontha species (Coleoptera: Scarabaeidae). Agricultural and Forest Entomology, 2006, 8, 289-293.	1.3	6
96	Behavioural flexibility of the chemical defence in the parasitoid wasp Leptopilina heterotoma. Die Naturwissenschaften, 2015, 102, 67.	1.6	5
97	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
98	De novo biosynthesis of linoleic acid is widespread in parasitic wasps. Archives of Insect Biochemistry and Physiology, 2021, 107, e21788.	1.5	5
99	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
100	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
101	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
102	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
103	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
104	The biological significance of lipogenesis in <i>Nasonia vitripennis</i>. Proceedings of the Royal Society B: Biological Sciences, 2022, 289, 20220208.	2.6	3
105	Development and Evaluation of Push-Pull Control Strategies against Aedes aegypti (Diptera: Culicidae). ACS Symposium Series, 2018, , 187-204.	0.5	2
106	Pheromone biosynthesis in Nasonia. , 2021, , 237-267.		2
107	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
108	Pheromone Researchâ€"Still Something to Write Home About. Journal of Chemical Ecology, 2014, 40, 215-215.	1.8	0