Wannes Dermauw

List of Publications by Year
in descending order

80 papers	7,370 citations	76294 40 h-index	60583 81 g-index
90 all docs	90 docs citations	90 times ranked	5369 citing authors

#	Article	IF	Citations
1	Biochemical and molecular mechanisms of acaricide resistance in Dermanyssus gallinae populations from Turkey. Pesticide Biochemistry and Physiology, 2022, 180, 104985.	1.6	8
2	Combination of target site mutation and associated CYPs confers high-level resistance to pyridaben in Tetranychus urticae. Pesticide Biochemistry and Physiology, 2022, 181, 105000.	1.6	12
3	Variation of diazinon and amitraz susceptibility of Hyalomma marginatum (Acari: Ixodidae) in the Rabat-Sale-Kenitra region of Morocco. Ticks and Tick-borne Diseases, 2022, 13, 101883.	1.1	2
4	A loop-mediated isothermal amplification (LAMP) assay for rapid identification of Ceratitis capitata and related species. Current Research in Insect Science, 2022, 2, 100029.	0.8	6
5	Structural and functional characterization of Î²-cyanoalanine synthase from Tetranychus urticae. Insect Biochemistry and Molecular Biology, 2022, 142, 103722.	1.2	2
6	QTL mapping suggests that both cytochrome P450-mediated detoxification and target-site resistance are involved in fenbutatin oxide resistance in Tetranychus urticae. Insect Biochemistry and Molecular Biology, 2022, 145, 103757.	1.2	13
7	Intradiol ring cleavage dioxygenases from herbivorous spider mites as a new detoxification enzyme family in animals. BMC Biology, 2022, 20, .	1.7	14
8	Fenpyroximate resistance in Iranian populations of the European red mite Panonychus ulmi (Acari:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.7	7
9	Identification and characterization of striking multipleâ€insecticide resistance in a <i>Tetranychus urticae</i> field population from Greece. Pest Management Science, 2021, 77, 666-676.	1.7	23
10	Reduced proinsecticide activation by cytochrome P450 confers coumaphos resistance in the major bee parasite <i>Varroa destructor</i>. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	42
11	Short term transcriptional responses of P450s to phytochemicals in insects and mites. Current Opinion in Insect Science, 2021, 43, 117-127.	2.2	35
12	Whitefly hijacks a plant detoxification gene that neutralizes plant toxins. Cell, 2021, 184, 1693-1705.e17.	13.5	161
13	The genome of the extremophile Artemia provides insight into strategies to cope with extreme environments. BMC Genomics, 2021, 22, 635.	1.2	20
14	Untangling a <scp>G</scp>ordian knot: the role of a <scp>GluCl3 I321T</scp> mutation in abamectin resistance in <i>Tetranychus urticae</i>. Pest Management Science, 2021, 77, 1581-1593.	1.7	29
15	Ticks and Tick-Borne Pathogens Abound in the Cattle Population of the Rabat-Sale Kenitra Region, Morocco. Pathogens, 2021, 10, 1594.	1.2	7
16	Overexpression of an alternative allele of carboxyl/choline esterase 4 (CCE04) of <i>Tetranychus urticae</i> is associated with high levels of resistance to the ketoâ€enol acaricide spirodiclofen. Pest Management Science, 2020, 76, 1142-1153.	1.7	29
17	Identification and geographical distribution ofÂpyrethroid resistance mutations in the poultry red mite <i>Dermanyssus gallinae</i>. Pest Management Science, 2020, 76, 125-133.	1.7	33
18	Molecular and genetic analysis of resistance to METI-I acaricides in Iranian populations of the citrus red mite Panonychus citri. Pesticide Biochemistry and Physiology, 2020, 164, 73-84.	1.6	21

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19	Acaricide resistance status and identification of resistance mutations in populations of the two-spotted spider mite Tetranychus urticae from Ethiopia. Experimental and Applied Acarology, 2020, 82, 475-491.	0.7	16
20	Genome-enabled insights into the biology of thrips as crop pests. BMC Biology, 2020, 18, 142.	1.7	54
21	Diversity and evolution of the P450 family in arthropods. Insect Biochemistry and Molecular Biology, 2020, 127, 103490.	1.2	109
22	Geographical distribution and molecular insights into abamectin and milbemectin crossâ€resistance in European field populations of <i>Tetranychus urticae</i>. Pest Management Science, 2020, 76, 2569-2581.	1.7	47
23	Targeted mutagenesis using CRISPR-Cas9 in the chelicerate herbivore Tetranychus urticae. Insect Biochemistry and Molecular Biology, 2020, 120, 103347.	1.2	49
24	Significance and interpretation of molecular diagnostics for insecticide resistance management of agricultural pests. Current Opinion in Insect Science, 2020, 39, 69-76.	2.2	64
25	Metabolic mechanisms of resistance to spirodiclofen and spiromesifen in Iranian populations of Panonychus ulmi. Crop Protection, 2020, 134, 105166.	1.0	21
26	Genome streamlining in a minute herbivore that manipulates its host plant. ELife, 2020, 9, .	2.8	33
27	Characterization of abamectin resistance in Iranian populations of European red mite, Panonychus ulmi Koch (Acari: Tetranychidae). Crop Protection, 2019, 125, 104903.	1.0	21
28	Resistance incidence and presence of resistance mutations in populations of Tetranychus urticae from vegetable crops in Turkey. Experimental and Applied Acarology, 2019, 78, 343-360.	0.7	30
29	High-resolution QTL mapping in Tetranychus urticae reveals acaricide-specific responses and common target-site resistance after selection by different METI-I acaricides. Insect Biochemistry and Molecular Biology, 2019, 110, 19-33.	1.2	62
30	Point mutations in the voltage-gated sodium channel gene associated with pyrethroid resistance in Iranian populations of the European red mite Panonychus ulmi. Pesticide Biochemistry and Physiology, 2019, 157, 80-87.	1.6	16
31	Long-Term Population Studies Uncover the Genome Structure and Genetic Basis of Xenobiotic and Host Plant Adaptation in the Herbivore <i>Tetranychus urticae</i>. Genetics, 2019, 211, 1409-1427.	1.2	70
32	Substrate specificity and promiscuity of horizontally transferred UDP-glycosyltransferases in the generalist herbivore Tetranychus urticae. Insect Biochemistry and Molecular Biology, 2019, 109, 116-127.	1.2	38
33	Genomeâ€wide gene expression profiling reveals that cuticle alterations and P450 detoxification are associated with deltamethrin and DDT resistance in <i>Anopheles arabiensis</i> populations from Ethiopia. Pest Management Science, 2019, 75, 1808-1818.	1.7	42
34	A massive incorporation of microbial genes into the genome of <i>Tetranychus urticae</i>, a polyphagous arthropod herbivore. Insect Molecular Biology, 2018, 27, 333-351.	1.0	40
35	Does host plant adaptation lead to pesticide resistance in generalist herbivores?. Current Opinion in Insect Science, 2018, 26, 25-33.	2.2	74
36	Molecular characterization of pyrethroid resistance in the olive fruit fly Bactrocera oleae. Pesticide Biochemistry and Physiology, 2018, 148, 1-7.	1.6	16

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37	A Gene Family Coding for Salivary Proteins (SHOT) of the Polyphagous Spider Mite <i>Tetranychus urticae</i> Exhibits Fast Host-Dependent Transcriptional Plasticity. Molecular Plant-Microbe Interactions, 2018, 31, 112-124.	1.4	29
38	Transcriptomic Plasticity in the Arthropod Generalist Tetranychus urticae Upon Long-Term Acclimation to Different Host Plants. G3: Genes, Genomes, Genetics, 2018, 8, 3865-3879.	0.8	36
39	Transcriptomic responses of the olive fruit fly Bactrocera oleae and its symbiont Candidatus Erwinia dacicola to olive feeding. Scientific Reports, 2017, 7, 42633.	1.6	58
40	A mutation in the PSST homologue of complex I (NADH:ubiquinone oxidoreductase) from Tetranychus urticae is associated with resistance to METI acaricides. Insect Biochemistry and Molecular Biology, 2017, 80, 79-90.	1.2	82
41	A glutathione-S-transferase (TuGSTd05) associated with acaricide resistance in Tetranychus urticae directly metabolizes the complex II inhibitor cyflumetofen. Insect Biochemistry and Molecular Biology, 2017, 80, 101-115.	1.2	68
42	The effect of insecticide synergist treatment on genome-wide gene expression in a polyphagous pest. Scientific Reports, 2017, 7, 13440.	1.6	32
43	The relative contribution of target-site mutations in complex acaricide resistant phenotypes as assessed by marker assisted backcrossing in Tetranychus urticae. Scientific Reports, 2017, 7, 9202.	1.6	81
44	A G326E substitution in the glutamateâ€gated chloride channel 3 (GluCl3) of the twoâ€spotted spider mite <i>Tetranychus urticae</i> abolishes the agonistic activity of macrocyclic lactones. Pest Management Science, 2017, 73, 2413-2418.	1.7	50
45	Disruption of a horizontally transferred phytoene desaturase abolishes carotenoid accumulation and diapause in<i>Tetranychus urticae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5871-E5880.	3.3	114
46	Protocols for the delivery of small molecules to the two-spotted spider mite, Tetranychus urticae. PLoS ONE, 2017, 12, e0180658.	1.1	40
47	Combined Activity of DCL2 and DCL3 Is Crucial in the Defense against Potato Spindle Tuber Viroid. PLoS Pathogens, 2016, 12, e1005936.	2.1	58
48	Complex Evolutionary Dynamics of Massively Expanded Chemosensory Receptor Families in an Extreme Generalist Chelicerate Herbivore. Genome Biology and Evolution, 2016, 8, 3323-3339.	1.1	42
49	The Salivary Protein Repertoire of the Polyphagous Spider Mite Tetranychus urticae: A Quest for Effectors. Molecular and Cellular Proteomics, 2016, 15, 3594-3613.	2.5	113
50	Salivary proteins of spider mites suppress defenses in <i>Nicotiana benthamiana</i> and promote mite reproduction. Plant Journal, 2016, 86, 119-131.	2.8	149
51	The Molecular Evolution of Xenobiotic Metabolism and Resistance in Chelicerate Mites. Annual Review of Entomology, 2016, 61, 475-498.	5.7	227
52	Molecular analysis of cyenopyrafen resistance in the twoâ€spotted spider mite <i>Tetranychus urticae</i>. Pest Management Science, 2016, 72, 103-112.	1.7	60
53	A link between host plant adaptation and pesticide resistance in the polyphagous spider mite<i>Tetranychus urticae</i>. , 2016, , .		0
54	The economic importance of acaricides in the control of phytophagous mites and an update on recent acaricide mode of action research. Pesticide Biochemistry and Physiology, 2015, 121, 12-21.	1.6	238

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55	Mechanisms and ecological consequences of plant defence induction and suppression in herbivore communities. Annals of Botany, 2015, 115, 1015-1051.	1.4	244
56	Transcriptome profiling of a spirodiclofen susceptible and resistant strain of the European red mite Panonychus ulmi using strand-specific RNA-seq. BMC Genomics, 2015, 16, 974.	1.2	54
57	Genotype to phenotype, the molecular and physiological dimensions of resistance in arthropods. Pesticide Biochemistry and Physiology, 2015, 121, 61-77.	1.6	237
58	Genome sequence of the Asian Tiger mosquito, <i>Aedes albopictus</i> , reveals insights into its biology, genetics, and evolution. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E5907-15.	3.3	251
59	Abamectin is metabolized by CYP392A16, a cytochrome P450 associated with high levels of acaricide resistance in Tetranychus urticae. Insect Biochemistry and Molecular Biology, 2014, 46, 43-53.	1.2	155
60	Bacterial origin of a diverse family of UDP-glycosyltransferase genes in the Tetranychus urticae genome. Insect Biochemistry and Molecular Biology, 2014, 50, 43-57.	1.2	59
61	The ABC gene family in arthropods: Comparative genomics and role inÂinsecticide transport and resistance. Insect Biochemistry and Molecular Biology, 2014, 45, 89-110.	1.2	462
62	A gene horizontally transferred from bacteria protects arthropods from host plant cyanide poisoning. ELife, 2014, 3, e02365.	2.8	135
63	Spider mite control and resistance management: does a genome help?. Pest Management Science, 2013, 69, 156-159.	1.7	50
64	A burst of ABC genes in the genome of the polyphagous spider mite Tetranychus urticae. BMC Genomics, 2013, 14, 317.	1.2	118
65	Genome wide gene-expression analysis of facultative reproductive diapause in the two-spotted spider mite Tetranychus urticae. BMC Genomics, 2013, 14, 815.	1.2	92
66	Molecular analysis of resistance to acaricidal spirocyclic tetronic acids in Tetranychus urticae: CYP392E10 metabolizes spirodiclofen, but not its corresponding enol. Insect Biochemistry and Molecular Biology, 2013, 43, 544-554.	1.2	107
67	A link between host plant adaptation and pesticide resistance in the polyphagous spider mite <i>Tetranychus urticae</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E113-22.	3.3	347
68	Analysis of the Olive Fruit Fly Bactrocera oleae Transcriptome and Phylogenetic Classification of the Major Detoxification Gene Families. PLoS ONE, 2013, 8, e66533.	1.1	55
69	Population bulk segregant mapping uncovers resistance mutations and the mode of action of a chitin synthesis inhibitor in arthropods. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4407-4412.	3.3	240
70	On the mode of action of bifenazate: New evidence for a mitochondrial target site. Pesticide Biochemistry and Physiology, 2012, 104, 88-95.	1.6	39
71	The cys-loop ligand-gated ion channel gene family of Tetranychus urticae: Implications for acaricide toxicology and a novel mutation associated with abamectin resistance. Insect Biochemistry and Molecular Biology, 2012, 42, 455-465.	1.2	161
72	A horizontally transferred cyanase gene in the spider mite Tetranychus urticae is involved in cyanate metabolism and is differentially expressed upon host plant change. Insect Biochemistry and Molecular Biology, 2012, 42, 881-889.	1.2	40

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73	The genome of Tetranychus urticae reveals herbivorous pest adaptations. Nature, 2011, 479, 487-492.	13.7	897
74	Parallel evolution of cytochrome <i>b</i> mediated bifenazate resistance in the citrus red mite <i>Panonychus citri</i>. Insect Molecular Biology, 2011, 20, 135-140.	1.0	51
75	Acaricide resistance mechanisms in the two-spotted spider mite Tetranychus urticae and other important Acari: A review. Insect Biochemistry and Molecular Biology, 2010, 40, 563-572.	1.2	626
76	Mitochondrial genome analysis of the predatory mite<i>Phytoseiulus persimilis</i>and a revisit of the<i>Metaseiulus occidentalis</i>mitochondrial genome. Genome, 2010, 53, 285-301.	0.9	35
77	The complete mitochondrial genome of the house dust mite Dermatophagoides pteronyssinus (Trouessart): a novel gene arrangement among arthropods. BMC Genomics, 2009, 10, 107.	1.2	69
78	<i>Wolbachia </i>induces strong cytoplasmic incompatibility in the predatory bug <i>Macrolophus pygmaeus</i>. Insect Molecular Biology, 2009, 18, 373-381.	1.0	20
79	Systemic toxicity of spinosad to the greenhouse whiteflyTrialeurodes vaporariorum and to the cotton leaf wormSpodoptera littoralis. Phytoparasitica, 2006, 34, 102-108.	0.6	10
80	Systemic Use of Spinosad to Control the Two-spotted Spider Mite (Acari: Tetranychidae) on Tomatoes Grown in Rockwool. Experimental and Applied Acarology, 2005, 37, 93-105.	0.7	39