Maarten A. Jongsma

List of Publications by Year
in descending order

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83 papers	5,863 citations	66343 42 h-index	74163 75 g-index
83 all docs	83 docs citations	83 times ranked	5884 citing authors

#	Article	IF	Citations
1	The adaptation of insects to plant protease inhibitors. Journal of Insect Physiology, 1997, 43, 885-895.	2.0	469
2	Terpenoid Metabolism in Wild-Type and Transgenic Arabidopsis Plants[W]. Plant Cell, 2003, 15, 2866-2884.	6.6	461
3	Adaptation of Spodoptera exigua larvae to plant proteinase inhibitors by induction of gut proteinase activity insensitive to inhibition.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 8041-8045.	7.1	433
4	Gain and Loss of Fruit Flavor Compounds Produced by Wild and Cultivated Strawberry Species. Plant Cell, 2004, 16, 3110-3131.	6.6	427
5	Volatile science? Metabolic engineering of terpenoids in plants. Trends in Plant Science, 2005, 10, 594-602.	8.8	361
6	Colorado potato beetles (leptinotarsa decemlineata) adapt to proteinase inhibitors induced in potato leaves by methyl jasmonate. Journal of Insect Physiology, 1995, 41, 1071-1078.	2.0	182
7	Genetic architecture of plant stress resistance: multiâ€trait genomeâ€wide association mapping. New Phytologist, 2017, 213, 1346-1362.	7.3	144
8	Coordinate expression of antibody subunit genes yields high levels of functional antibodies in roots of transgenic tobacco. Plant Molecular Biology, 1994, 26, 1701-1710.	3.9	124
9	AtWRKY22 promotes susceptibility to aphids and modulates salicylic acid and jasmonic acid signalling. Journal of Experimental Botany, 2016, 67, 3383-3396.	4.8	121
10	Development of late blight resistant potatoes by cisgene stacking. BMC Biotechnology, 2014, 14, 50.	3.3	120
11	Real-time imaging of microparticles and living cells with CMOS nanocapacitor arrays. Nature Nanotechnology, 2015, 10, 791-795.	31.5	120
12	Role of cucurbitacin C in resistance to spider mite (Tetranychus urticae) in cucumber (Cucumis) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30	1.8	107
13	The promoterâ€“terminator of chrysanthemum rbcS1 directs very high expression levels in plants. Planta, 2003, 216, 1003-1012.	3.2	105
14	Properties of purified gut trypsin from Helicoverpa zea, adapted to proteinase inhibitors. FEBS Journal, 2002, 270, 10-19.	0.2	100
15	Characterization of two geraniol synthases from Valeriana officinalis and Lippia dulcis: Similar activity but difference in subcellular localization. Metabolic Engineering, 2013, 20, 198-211.	7.0	82
16	Metabolic engineering of geranic acid in maize to achieve fungal resistance is compromised by novel glycosylation patterns. Metabolic Engineering, 2011, 13, 414-425.	7.0	77
17	Breeding of a tomato genotype readily accessible to genetic manipulation. Plant Science, 1986, 45, 201-208.	3.6	76
18	Automated video tracking of thrips behavior to assess host-plant resistance in multiple parallel two-choice setups. Plant Methods, 2016, 12, 1.	4.3	74

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19	Expression of Sea Anemone Equistatin in Potato. Effects of Plant Proteases on Heterologous Protein Production. Plant Physiology, 2003, 133, 379-390.	4.8	72
20	Engineered multidomain cysteine protease inhibitors yield resistance against western flower thrips (Frankliniella occidentalis) in greenhouse trials. Plant Biotechnology Journal, 2004, 2, 449-458.	8.3	72
21	Mapping of the S. demissum late blight resistance gene R8 to a new locus on chromosome IX. Theoretical and Applied Genetics, 2011, 123, 1331-1340.	3.6	70
22	The cysteine protease activity of Colorado potato beetle (Leptinotarsa decemlineata Say) guts, which is insensitive to potato protease inhibitors, is inhibited by thyroglobulin type-1 domain inhibitors. Insect Biochemistry and Molecular Biology, 1998, 28, 549-560.	2.7	69
23	Optimization of the Expression of Equistatin in Pichia pastoris. Protein Expression and Purification, 2002, 24, 18-24.	1.3	65
24	Combatting inhibitor-insensitive proteases of insect pests. Trends in Biotechnology, 1996, 14, 331-333.	9.3	64
25	Structural basis of the resistance of an insect carboxypeptidase to plant protease inhibitors. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16602-16607.	7.1	64
26	Association mapping of plant resistance to insects. Trends in Plant Science, 2012, 17, 311-319.	8.8	63
27	Molecular basis of Colorado potato beetle adaptation to potato plant defence at the level of digestive cysteine proteinases. Insect Biochemistry and Molecular Biology, 2004, 34, 365-375.	2.7	62
28	Bidirectional Secretions from Glandular Trichomes of Pyrethrum Enable Immunization of Seedlings. Plant Cell, 2012, 24, 4252-4265.	6.6	62
29	Effects of light, hydropriming and abiotic stress on seed germination, and shoot and root growth of pyrethrum (Tanacetum cinerariifolium). Industrial Crops and Products, 2011, 34, 1543-1549.	5.2	59
30	Biosynthesis of Sesquiterpene Lactones in Pyrethrum (Tanacetum cinerariifolium). PLoS ONE, 2013, 8, e65030.	2.5	57
31	Biosensor-based detection of tuberculosis. RSC Advances, 2016, 6, 17759-17771.	3.6	56
32	Selection by phage display of a variant mustard trypsin inhibitor toxic against aphids. Plant Journal, 2003, 33, 557-566.	5.7	54
33	Specific cysteine protease inhibitors act as deterrents of western flower thrips, Frankliniella occidentalis (Pergande), in transgenic potato. Plant Biotechnology Journal, 2004, 2, 439-448.	8.3	53
34	Potato virus Y induced changes in the gene expression of potato (Solanum tuberosum L.). Physiological and Molecular Plant Pathology, 2005, 67, 237-247.	2.5	53
35	Characterisation of cysteine proteinases responsible for digestive proteolysis in guts of larval western corn rootworm (Diabrotica virgifera) by expression in the yeast Pichia pastoris. Insect Biochemistry and Molecular Biology, 2004, 34, 305-320.	2.7	52
36	Co-Evolution of Insect Proteases and Plant Protease Inhibitors. Current Protein and Peptide Science, 2011, 12, 437-447.	1.4	51

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37	Characterization and partial purification of gut proteinases of Spodoptera exigua HÃ¼bner (Lepidoptera: Noctuidae). Insect Biochemistry and Molecular Biology, 1996, 26, 185-193.	2.7	48
38	Chrysanthemyl Diphosphate Synthase Operates in Planta as a Bifunctional Enzyme with Chrysanthemol Synthase Activity. Journal of Biological Chemistry, 2014, 289, 36325-36335.	3.4	48
39	The diamondback moth, Plutella xylostella, specifically inactivates Mustard Trypsin Inhibitor 2 (MTI2) to overcome host plant defence. Insect Biochemistry and Molecular Biology, 2009, 39, 55-61.	2.7	47
40	Self-assembling protein arrays on DNA chips by auto-labeling fusion proteins with a single DNA address. Proteomics, 2006, 6, 2650-2655.	2.2	46
41	Chrysanthemum expressing a linalool synthase gene â€˜smells goodâ€™, but â€˜tastes badâ€™ to western flower thrips. Plant Biotechnology Journal, 2013, 11, 875-882.	8.3	45
42	Quantitative Determination of Serine Proteinase Inhibitor Activity Using a Radial Diffusion Assay. Analytical Biochemistry, 1993, 212, 79-84.	2.4	44
43	Crystal structure of a novel Mid-gut procarboxypeptidase from the cotton pest Helicoverpa armigera. Journal of Molecular Biology, 2001, 313, 629-638.	4.2	42
44	A COMPLEX OF GENES INVOLVED IN ADAPTATION OF Leptinotarsa decemlineata LARVAE TO INDUCED POTATO DEFENSE. Archives of Insect Biochemistry and Physiology, 2012, 79, 153-181.	1.5	41
45	Characterization of potato proteinase inhibitorâ€ƒII reactive site mutants. FEBS Journal, 2000, 267, 1975-1984.	0.2	40
46	Tomato protoplast DNA transformation: physical linkage and recombination of exogenous DNA sequences. Plant Molecular Biology, 1987, 8, 383-394.	3.9	39
47	Equistatin, a Protease Inhibitor from the Sea Anemone Actinia equina, Is Composed of Three Structural and Functional Domains. Biochemical and Biophysical Research Communications, 2000, 269, 732-736.	2.1	38
48	Orientation of llama antibodies strongly increases sensitivity of biosensors. Biosensors and Bioelectronics, 2014, 60, 130-136.	10.1	38
49	Characterization of recombinant mustard trypsin inhibitor 2 (MTI2) expressed inPichia pastoris. FEBS Letters, 2000, 468, 137-141.	2.8	37
50	Pyrethrins Protect Pyrethrum Leaves Against Attack by Western Flower Thrips, Frankliniella occidentalis. Journal of Chemical Ecology, 2012, 38, 370-377.	1.8	36
51	A phagemid vector using the E. coli phage shock promoter facilitates phage display of toxic proteins. Gene, 1999, 228, 23-31.	2.2	34
52	Response of the digestive system of Helicoverpa zea to ingestion of potato carboxypeptidase inhibitor and characterization of an uninhibited carboxypeptidase B. Insect Biochemistry and Molecular Biology, 2006, 36, 654-664.	2.7	34
53	Pyrethric acid of natural pyrethrin insecticide: complete pathway elucidation and reconstitution in Nicotiana benthamiana. New Phytologist, 2019, 223, 751-765.	7.3	34
54	Digestive Duet: Midgut Digestive Proteinases of Manduca sexta Ingesting Nicotiana attenuata with Manipulated Trypsin Proteinase Inhibitor Expression. PLoS ONE, 2008, 3, e2008.	2.5	32

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55	High-throughput phenotyping of plant resistance to aphids by automated video tracking. Plant Methods, 2015, 11, 4.	4.3	31
56	Shoot organogenesis in leaf explants of Hydrangea macrophylla â€˜Hyd1â€™ and assessing genetic stability of regenerants using ISSR markers. Plant Cell, Tissue and Organ Culture, 2011, 104, 111-117.	2.3	29
57	Defense of pyrethrum flowers: repelling herbivores and recruiting carnivores by producing aphid alarm pheromone. New Phytologist, 2019, 223, 1607-1620.	7.3	29
58	Cloning of the chrysanthemum UEP1 promoter and comparative expression in florets and leaves of Dendranthema grandiflora. Transgenic Research, 2002, 11, 437-445.	2.4	28
59	Functional Expression on Bacteriophage of the Mustard Trypsin Inhibitor MTI-2. Biochemical and Biophysical Research Communications, 2001, 280, 813-817.	2.1	27
60	Effects of cysteine protease inhibitors on oviposition rate of the western flower thrips, Frankliniella occidentalis. Journal of Insect Physiology, 2002, 48, 701-706.	2.0	25
61	Phage display of a double-headed proteinase inhibitor: Analysis of the binding domains of potato proteinase inhibitor II. Molecular Breeding, 1995, 1, 181-191.	2.1	22
62	A Trichomeâ€Specific Linoleate Lipoxygenase Expressed During Pyrethrin Biosynthesis in Pyrethrum. Lipids, 2013, 48, 1005-1015.	1.7	22
63	Insect oviposition behavior affects the evolution of adaptation to Bt crops: consequences for refuge policies. Evolutionary Ecology, 2010, 24, 1017-1030.	1.2	20
64	A Broad Set of Different Llama Antibodies Specific for a 16 kDa Heat Shock Protein of Mycobacterium tuberculosis. PLoS ONE, 2011, 6, e26754.	2.5	20
65	Comparison of the chemical composition of three species of smartweed (genus Persicaria) with a focus on drimane sesquiterpenoids. Phytochemistry, 2014, 108, 129-136.	2.9	19
66	Comparative antifeedant activities of polygodial and pyrethrins against whiteflies (Bemisia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	3.4	19
67	Structural characterization of thyroglobulin type-1 domains of equistatin. FEBS Letters, 2003, 539, 120-124.	2.8	18
68	Expression, Purification, and Characterization of Equistatin in Pichia pastoris. Protein Expression and Purification, 2000, 19, 329-334.	1.3	17
69	Comparative analysis of pyrethrin content improvement by mass selection, family selection and polycross in pyrethrum [Tanacetum cinerariifolium (Trevir.) Sch.Bip.] populations. Industrial Crops and Products, 2014, 53, 268-273.	5.2	16
70	Identification and characterization of digestive serine proteases from inhibitor-resistant Helicoverpa zea larval midgutâ€†. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2006, 833, 26-32.	2.3	15
71	Identification of a drimenol synthase and drimenol oxidase from Persicaria hydropiper, involved in the biosynthesis of insect deterrent drimanes. Plant Journal, 2017, 90, 1052-1063.	5.7	15
72	Cloning, functional expression in Pichia pastoris, and purification of potato cystatin and multicystatin. Journal of Bioscience and Bioengineering, 2003, 95, 118-123.	2.2	12

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73	A generic microfluidic biosensor of G protein-coupled receptor activationâ€"monitoring cytoplasmic [Ca2+] changes in human HEK293 cells. Biosensors and Bioelectronics, 2013, 47, 436-444.	10.1	11
74	Molecular cloning and characterization of the trichome specific chrysanthemyl diphosphate/chrysanthemol synthase promoter from Tanacetum cinerariifolium. Scientia Horticulturae, 2015, 185, 193-199.	3.6	11
75	An Agrobacterium-mediated transformation system of pyrethrum (Tanacetum cinerariifolium) based on leaf explants. Scientia Horticulturae, 2013, 150, 130-134.	3.6	10
76	Isolation and molecular characterization of cathepsin L-like cysteine protease cDNAs from western flower thrips (Frankliniella occidentalis). Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2004, 139, 65-75.	1.6	9
77	16 kDa Heat Shock Protein from Heat-Inactivated Mycobacterium tuberculosis Is a Homodimer â€" Suitability for Diagnostic Applications with Specific Llama VHH Monoclonals. PLoS ONE, 2013, 8, e64040.	2.5	8
78	Automated high-throughput individual tracking system for insect behavior: Applications on memory retention in parasitic wasps. Journal of Neuroscience Methods, 2018, 309, 208-217.	2.5	8
79	The Sectoral Innovation System of the Dutch Vegetable Breeding Industry. Njas - Wageningen Journal of Life Sciences, 2015, 74-75, 27-39.	7.7	7
80	Metabolomics meets functional assays: coupling LCâ€"MS and microfluidic cell-based receptor-ligand analyses. Metabolomics, 2016, 12, 115.	3.0	6
81	Calcium Imaging of GPCR Activation Using Arrays of Reverse Transfected HEK293 Cells in a Microfluidic System. Sensors, 2018, 18, 602.	3.8	2
82	Statistical models discriminating between complex samples measured with microfluidic receptor-cell arrays. PLoS ONE, 2019, 14, e0214878.	2.5	2
83	Silicon nanowire FET arrays for real time detection of chemical activation of cells. , 2012, , .		1