Jan Hejatko

List of Publications by Year in descending order

101 papers	3,201 citations	236925 25 h-index	168389 53 g-index
111 all docs	111 docs citations	111 times ranked	4493 citing authors

#	Article	IF	Citations
1	Identification of factors required for m⁶A mRNA methylation in Arabidopsis reveals a role for the conserved E3 ubiquitin ligase HAKAI. New Phytologist, 2017, 215, 157-172.	7.3	301
2	Role of PIN-mediated auxin efflux in apical hook development ofArabidopsis thaliana. Development (Cambridge), 2010, 137, 607-617.	2.5	297
3	Cytokinins modulate auxin-induced organogenesis in plants via regulation of the auxin efflux. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 3609-3614.	7.1	209
4	Arabidopsis PIS1 encodes the ABCG37 transporter of auxinic compounds including the auxin precursor indole-3-butyric acid. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10749-10753.	7.1	183
5	Dirigent proteins in plants: modulating cell wall metabolism during abiotic and biotic stress exposure. Journal of Experimental Botany, 2017, 68, 3287-3301.	4.8	159
6	In situ hybridization technique for mRNA detection in whole mount Arabidopsis samples. Nature Protocols, 2006, 1, 1939-1946.	12.0	141
7	Hormone interactions at the root apical meristem. Plant Molecular Biology, 2009, 69, 383-396.	3.9	141
8	The Histidine Kinases CYTOKININ-INDEPENDENT1 and ARABIDOPSIS HISTIDINE KINASE2 and 3 Regulate Vascular Tissue Development inArabidopsisShoots. Plant Cell, 2009, 21, 2008-2021.	6.6	121
9	Xylem development â€“ from the cradle to the grave. New Phytologist, 2015, 207, 519-535.	7.3	112
10	The putative sensor histidine kinase CKI1 is involved in female gametophyte development in Arabidopsis. Molecular Genetics and Genomics, 2003, 269, 443-453.	2.1	92
11	Illuminating light, cytokinin, and ethylene signalling crosstalk in plant development: Fig. 1.. Journal of Experimental Botany, 2015, 66, 4913-4931.	4.8	90
12	Hormonal regulation of secondary cell wall formation. Journal of Experimental Botany, 2015, 66, 5015-5027.	4.8	80
13	Effects of Conditional IPT-Dependent Cytokinin Overproduction on Root Architecture of Arabidopsis Seedlings. Plant and Cell Physiology, 2008, 49, 570-582.	3.1	76
14	In situ hybridization for mRNA detection in Arabidopsis tissue sections. Nature Protocols, 2006, 1, 1462-1467.	12.0	73
15	Cytokinins influence root gravitropism via differential regulation of auxin transporter expression and localization in Arabidopsis. New Phytologist, 2016, 212, 497-509.	7.3	54
16	Proteome Analysis in Arabidopsis Reveals Shoot- and Root-Specific Targets of Cytokinin Action and Differential Regulation of Hormonal Homeostasis Â Â. Plant Physiology, 2013, 161, 918-930.	4.8	52
17	Structure and binding specificity of the receiver domain of sensor histidine kinase CKI1 from Arabidopsis thaliana. Plant Journal, 2011, 67, 827-839.	5.7	50
18	Cell wall integrity modulates Arabidopsis thaliana cell cycle gene expression in a cytokinin- and nitrate reductase-dependent manner. Development (Cambridge), 2018, 145, .	2.5	49

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19	Cell-surface receptors enable perception of extracellular cytokinins. Nature Communications, 2020, 11, 4284.	12.8	47
20	ETR1 Integrates Response to Ethylene and Cytokinins into a Single Multistep Phosphorelay Pathway to Control Root Growth. Molecular Plant, 2019, 12, 1338-1352.	8.3	43
21	Role of SH3b binding domain in a natural deletion mutant of Kayvirus endolysin LysF1 with a broad range of lytic activity. Virus Genes, 2018, 54, 130-139.	1.6	40
22	Adar RNA editing-dependent and -independent effects are required for brain and innate immune functions in Drosophila. Nature Communications, 2020, 11, 1580.	12.8	39
23	Apicalâ€“basal polarity: why plant cells don't standon their heads. Trends in Plant Science, 2006, 11, 12-14.	8.8	37
24	Cytokinin signalling regulates organ identity via AHK4 receptor in Arabidopsis. Development (Cambridge), 2018, 145, .	2.5	32
25	Statement on inÂvitro protein digestibility tests in allergenicity and protein safety assessment of genetically modified plants. EFSA Journal, 2021, 19, e06350.	1.8	32
26	Signal Integration in Plant Abiotic Stress Responses via Multistep Phosphorelay Signaling. Frontiers in Plant Science, 2021, 12, 644823.	3.6	32
27	Applicability of the EFSA Opinion on siteâ€directed nucleases type 3 for the safety assessment of plants developed using siteâ€directed nucleases type 1 and 2 and oligonucleotideâ€directed mutagenesis. EFSA Journal, 2020, 18, e06299.	1.8	31
28	Enquiry into the Topology of Plasma Membrane-Localized PIN Auxin Transport Components. Molecular Plant, 2016, 9, 1504-1519.	8.3	28
29	Structural Aspects of Multistep Phosphorelay-Mediated Signaling in Plants. Molecular Plant, 2016, 9, 71-85.	8.3	28
30	Postâ€Translational Modifications of Histones in Human Sperm. Journal of Cellular Biochemistry, 2015, 116, 2195-2209.	2.6	27
31	Light Controls Cytokinin Signaling via Transcriptional Regulation of Constitutively Active Sensor Histidine Kinase CKI1. Plant Physiology, 2017, 174, 387-404.	4.8	27
32	Identification of AHK2- and AHK3-like cytokinin receptors in Brassica napus reveals two subfamilies of AHK2 orthologues. Journal of Experimental Botany, 2015, 66, 339-353.	4.8	26
33	RNA processing in auxin and cytokinin pathways. Journal of Experimental Botany, 2015, 66, 4897-4912.	4.8	25
34	Adequacy and sufficiency evaluation of existing EFSA guidelines for the molecular characterisation, environmental risk assessment and postâ€market environmental monitoring of genetically modified insects containing engineered gene drives. EFSA Journal, 2020, 18, e06297.	1.8	23
35	Cytokinin and Auxin Interactions in Plant Development: Metabolism,Signalling, Transport and Gene Expression. Current Protein and Peptide Science, 2011, 12, 137-147.	1.4	22
36	Hormonal orchestration of root apical meristem formation and maintenance in Arabidopsis. Journal of Experimental Botany, 2021, 72, 6768-6788.	4.8	20

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37	Scientific Opinion on development needs for the allergenicity and protein safety assessment of food and feed products derived from biotechnology. EFSA Journal, 2022, 20, e07044.	1.8	20
38	Dynamics of Cell-Fate Determination and Patterning in the Vascular Bundles of Arabidopsis thaliana. PLoS ONE, 2013, 8, e63108.	2.5	16
39	Assessment of genetically modified maize MON 87427ÂÃ— MON 87460ÂÃ—ÂMON 89034ÂÃ—ÂMIR162ÂÃ—ÂNK603 and subcombinations, for food and feed uses, under Regulation (EC) NoÂ1829/2003 (application) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.8	13
40	Mutually opposing activity of PIN7 splicing isoforms is required for auxinâ€mediated tropic responses in Arabidopsis thaliana. New Phytologist, 2022, 233, 329-343.	7.3	13
41	In vivo and inÂvitro random mutagenesis techniques in plants. EFSA Journal, 2021, 19, e06611.	1.8	13
42	Assessment of genetically modified maize MONÂ87427ÂÃ—ÂMONÂ89034ÂÃ—ÂMIR162ÂÃ—ÂMONÂ87411 and subcombinations, for food and feed uses, under Regulation (EC) No 1829/2003 (application) Tj ETQq0 0 0 rgBT /Overlock 10	1.8	12
43	Evaluation of existing guidelines for their adequacy for the molecular characterisation and environmental risk assessment of genetically modified plants obtained through synthetic biology. EFSA Journal, 2021, 19, e06301.	1.8	11
44	Assessment of genetically modified soybean SYHT0H2 for food and feed uses, import and processing, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€DEâ€2012â€111). EFSA Journal, 2020, 18, e05946.	1.8	10
45	Assessment of genetically modified maize 1507ÂÃ—ÂMIR162 Ã—ÂMON810ÂÃ—ÂNK603 and subcombinations, for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2015â€127). EFSA Journal, 2021, 19, e06348.	1.8	10
46	Expansin-mediated developmental and adaptive responses: A matter of cell wall biomechanics?. Quantitative Plant Biology, 2022, 3, .	2.0	10
47	Molecular Mechanisms of Signalling Specificity Via Phosphorelay Pathways in Arabidopsis. Current Protein and Peptide Science, 2011, 12, 126-136.	1.4	9
48	Cloning, expression, purification, crystallization and preliminary X-ray diffraction analysis of AHP2, a signal transmitter protein fromArabidopsis thaliana. Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 158-161.	0.7	9
49	Conformational dynamics are a key factor in signaling mediated by the receiver domain of a sensor histidine kinase from Arabidopsis thaliana. Journal of Biological Chemistry, 2017, 292, 17525-17540.	3.4	9
50	Auxin transport and conjugation caught together. Journal of Experimental Botany, 2017, 68, 4409-4412.	4.8	9
51	Assessment of genetically modified maize MON 87427ÂÃ—ÂMON 89034ÂÃ—ÂMIR162ÂÃ—ÂNK603 and subcombinations, for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2016â€131). EFSA Journal, 2019, 17, e05734.	1.8	9
52	Assessment of genetically modified soybean MONÂ87751ÂÃ—ÂMONÂ87701ÂÃ—ÂMONÂ87708ÂÃ—ÂMONÂ89788 for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2016â€128). EFSA Journal, 2019, 17, e05847.	1.8	9
53	Antibody-mediated modulation of cytokinins in tobacco: organ-specific changes in cytokinin homeostasis. Journal of Experimental Botany, 2018, 69, 441-454.	4.8	8
54	Assessment of genetically modified maize MZIR098 for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€DEâ€2017â€142). EFSA Journal, 2020, 18, e06171.	1.8	8

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55	Assessment of genetically modified maize NK603â€‰Ã—â€‰T25â€‰Ã—â€‰DASâ€40278â€9 and subcombinations, for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2019â€164). EFSA Journal, 2021, 19, e06942.	1.8	8
56	Assessment of genetically modified maize MZHG0JG for food and feed uses, import and processing under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€DEâ€2016â€133). EFSA Journal, 2018, 16, e05469.	1.8	7
57	Assessment of genetically modified maize Bt11ÂÃ—ÂMIR162ÂÃ—ÂMIR604ÂÃ—Â1507ÂÃ—Â5307ÂÃ—ÂGA21 and subcombinations, for food and feed uses, under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€DEâ€2011â€103). EFSA Journal, 2019, 17, e05635.	1.8	7
58	Mixed Models as a Tool for Comparing Groups of Time Series in Plant Sciences. Plants, 2021, 10, 362.	3.5	7
59	Targeted In Vivo Inhibition of Specific Proteinâ€“Protein Interactions Using Recombinant Antibodies. PLoS ONE, 2014, 9, e109875.	2.5	7
60	Spatiotemporal aspect of cytokinin-auxin interaction in hormonal regulation of the root meristem. Plant Signaling and Behavior, 2009, 4, 156-157.	2.4	6
61	Cloning, purification, crystallization and preliminary X-ray analysis of the receiver domain of the histidine kinase CKI1 fromArabidopsis thaliana. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 478-481.	0.7	6
62	Assessment of genetically modified soybean MON 87708ÂÃ—ÂMON 89788ÂÃ—ÂA5547â€127, for food and feed uses, under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€NLâ€2016â€135). EFSA Journal, 2019, 17, e05733.	1.8	6
63	Assessment of genetically modified maize MONÂ89034ÂÃ—Â1507ÂÃ—ÂMONÂ88017ÂÃ—Â59122ÂÃ—ÂDASâ€40278â€9 and subcombinations independently of their origin for food and feed uses, import and processing under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€NLâ€2013â€113). EFSA Journal, 2019, 17, e05521.	1.8	6
64	Assessment of genetically modified maize MONÂ89034ÂÃ—Â1507ÂÃ—ÂNK603ÂÃ—ÂDASâ€40278â€9 and subcombinations independently of their origin for food and feed uses, import and processing, under Regulation (EC) NoÂ1829â€2003 (application EFSAâ€GMOâ€NLâ€2013â€112). EFSA Journal, 2019, 17, e05522.	1.8	6
65	Assessment of genetically modified soybean MONÂ87705ÂÃ—ÂMONÂ87708ÂÃ—ÂMONÂ89788, for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2015â€126). EFSA Journal, 2020, 18, e06111.	1.8	5
66	Assessment of genetically modified maize DP4114â€‰Ã—â€‰MON 810â€‰Ã—â€‰MIR604â€‰Ã—â€‰NK603 and subcombinatio food and feed uses, under Regulation (EC) Noâ€‰1829/2003 (application EFSAâ€GMOâ€NLâ€2018â€150). EFSA Journal, 2022, 20, e07134.	1.8	5
67	Assessment of genetically modified maize MONÂ89034 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€RXâ€015). EFSA Journal, 2019, 17, e05845.	1.8	4
68	Steady-State Levels of Cytokinins and Their Derivatives May Serve as a Unique Classifier of Arabidopsis Ecotypes. Plants, 2020, 9, 116.	3.5	4
69	Assessment of genetically modified maize MON 87427 Ã— MON 87460 Ã— MON 89034 Ã— 1507 Ã— MON 87411 Ã— 59122 and subcombinations, for food and feed uses, under Regulation (EC) No 1829/2003 (application) Tj ETQq1 1 0.784314 rgBT /Ov	1.8	4
70	Scientific Opinion on application EFSAâ€GMOâ€NLâ€2016â€132 for authorisation of genetically modified of insectâ€resistant and herbicideâ€tolerant soybean DASâ€“81419â€“2ÂÃ—ÂDASâ€“44406â€“6 for food and feed uses, import and processing submitted in accordance with Regulation (EC) No 1829/2003 by DowÂAgrosciencesÂLLC. EFSA Journal, 2020, 18, e06302.	1.8	4
71	Towards Automated Analysis of Grain Spikes in Greenhouse Images Using Neural Network Approaches: A Comparative Investigation of Six Methods. Sensors, 2021, 21, 7441.	3.8	4
72	Effects of Conditional IPT-Dependent Cytokinin Overproduction on Root Architecture of Arabidopsis Seedlings. Plant and Cell Physiology, 2008, 49, 1001-1001.	3.1	3

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73	Assessment of genetically modified soybean MONÂ89788 forÂrenewal of authorisation under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€RXâ€011). EFSA Journal, 2018, 16, e05468.	1.8	3
74	Assessment of genetically modified maize MIR604 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€RXâ€013). EFSA Journal, 2019, 17, e05846.	1.8	3
75	Statement complementing the EFSA Scientific Opinion on application (EFSAâ€GMOâ€UKâ€2006â€34) for authorisation of food and feed containing, consisting of and produced from genetically modified maize 3272. EFSA Journal, 2019, 17, e05844.	1.8	3
76	Assessment of genetically modified oilseed rape MS11 for food and feed uses, import and processing, under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€BEâ€2016â€138). EFSA Journal, 2020, 18, e06112.	1.8	3
77	Assessment of genetically modified maize Bt11 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (applicationÂEFSAâ€GMOâ€RXâ€016). EFSA Journal, 2021, 19, e06347.	1.8	3
78	Assessment of genetically modified soybean GMB151 for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2018â€153). EFSA Journal, 2021, 19, e06424.	1.8	3
79	Assessment of genetically modified oilseed rape 73496 for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€NLâ€2012â€109). EFSA Journal, 2021, 19, e06610.	1.8	3
80	Antibodies against CKI1RD, a receiver domain of the sensor histidine kinase in Arabidopsis thaliana: From antigen preparation to in planta immunolocalization. Phytochemistry, 2014, 100, 6-15.	2.9	2
81	MAMP (microbe-associated molecular pattern)-induced changes in plasma membrane-associated proteins. Journal of Plant Physiology, 2017, 210, 51-57.	3.5	2
82	Cytokinin and Ethylene Signaling. , 2018, , 165-200.		2
83	Assessment of genetically modified oilseed rape GT73 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (applicationÂEFSAâ€GMOâ€RXâ€002). EFSA Journal, 2020, 18, e06199.	1.8	2
84	Assessment of genetically modified maize MONÂ88017ÂÃ—ÂMONÂ810 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (applicationÂEFSAâ€GMOâ€RXâ€017). EFSA Journal, 2021, 19, e06375.	1.8	2
85	Assessment of genetically modified cotton GHB811 for food and feed uses, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€ESâ€2018â€154). EFSA Journal, 2021, 19, e06781.	1.8	2
86	Statement complementing the EFSA Scientific Opinion on the assessment of genetically modified oilseed rape MS11 for food and feed uses, import and processing, under Regulation (EC) No 1829/2003 (application EFSAâ€GMOâ€BEâ€2016â€138). EFSA Journal, 2022, 20, e07190.	1.8	2
87	An improved method for the visualization of conductive vessels in Arabidopsis thaliana inflorescence stems. Frontiers in Plant Science, 2015, 6, 211.	3.6	1
88	Assessment of genetically modified soybean A2704â€12 for renewal of authorisation under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€RXâ€009). EFSA Journal, 2019, 17, e05523.	1.8	1
89	Assessment of genetically modified maize MONÂ88017 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (applicationÂEFSAâ€GMOâ€RXâ€014). EFSA Journal, 2020, 18, e06008.	1.8	1
90	Statement complementing the EFSA Scientific Opinion on application (EFSAâ€GMOâ€NLâ€2010â€85) for authorisation of food and feed containing, consisting of and produced from genetically modified soybean MON 87769ÂÃ—ÂMON 89788. EFSA Journal, 2021, 19, e06589.	1.8	1

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91	A High-Throughput Strategy for Recombinant Protein Expression and Solubility Screen in Escherichia coli : A Case of Sensor Histidine Kinase. Methods in Molecular Biology, 2020, 2077, 19-36.	0.9	1
92	Molecular Mechanisms of Signalling Specificity Via Phosphorelay Pathways in Arabidopsis. Current Protein and Peptide Science, 2011, 999, 1-11.	1.4	1
93	Outcome of the public consultation on the draft Scientific Opinion on the applicability of the EFSA Opinion on siteâ€directed nucleases type 3 for the safety assessment of plants developed using siteâ€directed nucleases type 1 and 2 and oligonucleotideâ€directed mutagenesis. EFSA Supporting Publications, 2020, 17, 1972E.	0.7	1
94	Automated Microscopy in Forward Genetic Screening of Arabidopsis. Methods in Molecular Biology, 2014, 1080, 53-66.	0.9	1
95	Exploring molecular recognition mechanisms in the multistep phosphorelay signaling in plants: crystal structure of His phosphotransmitter AHP2 and modeling of its interaction with sensor histidine kinase CKI1. Acta Crystallographica Section A: Foundations and Advances, 2015, 71, s277-s277.	0.1	0
96	Assessment of genetically modified LLCotton25 for renewal of authorisation under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€RXâ€010). EFSA Journal, 2018, 16, e05473.	1.8	0
97	Assessment of genetically modified oilseed rape T45 forÂrenewal of authorisation under Regulation (EC) NoÂ1829/2003 (application EFSAâ€GMOâ€RXâ€012). EFSA Journal, 2019, 17, e05597.	1.8	0
98	Statement complementing the EFSA Scientific Opinion on application (EFSAâ€GMOâ€NLâ€2009â€75) for placing on the market of genetically modified oilseed rape Ms8ÂÃ—ÂRf3ÂÃ—ÂGT73 and subcombinations, which have not been authorised previously (i.e. Ms8ÂÃ—ÂGT73 and Rf3ÂÃ—ÂGT73) independently of their origin, for food and feed uses, import and processing, with the exception of isolated seed protein for food, under	1.8	0
99	18, e06200. Assessment of genetically modified cotton GHB614 for renewal authorisation under Regulation (EC) NoÂ1829/2003 (applicationÂEFSAâ€“GMOâ€“RXâ€“018). EFSA Journal, 2021, 19, e06671.	1.8	0
100	Cytokinin and Auxin Interactions in Plant Development: Metabolism, Signalling, Transport and Gene Expression. Current Protein and Peptide Science, 2011, 999, 1-11.	1.4	0
101	Assessment of genetically modified soybean A5547â€127 for renewal authorisation under Regulation (EC) Noâ€‰1829/2003 (applicationâ€‰EFSAâ€GMOâ€RXâ€020). EFSA Journal, 2022, 20, .	1.8	0