Goetz Hensel

List of Publications by Year
in descending order

108 papers	5,346 citations	76326 40 h-index	95266 68 g-index
125 all docs	125 docs citations	125 times ranked	5568 citing authors

#	Article	IF	Citations
1	Posttranslational modification of the RHO of plants protein RACB by phosphorylation and cross-kingdom conserved ubiquitination. PLoS ONE, 2022, 17, e0258924.	2.5	4
2	WHIRLIES Are Multifunctional DNA-Binding Proteins With Impact on Plant Development and Stress Resistance. Frontiers in Plant Science, 2022, 13, 880423.	3.6	12
3	The barley leaf rust resistance gene Rph3 encodes a predicted membrane protein and is induced upon infection by avirulent pathotypes of Puccinia hordei. Nature Communications, 2022, 13, 2386.	12.8	12
4	Enhancing cereal productivity by genetic modification of root architecture. Biotechnology Journal, 2022, 17, e2100505.	3.5	4
5	Genome editing and beyond: what does it mean for the future of plant breeding?. Planta, 2022, 255, 130.	3.2	17
6	Grain filling in barley relies on developmentally controlled programmed cell death. Communications Biology, 2021, 4, 428.	4.4	15
7	Genome editing of barley. , 2021, , 325-340.		1
8	Improving rice salt tolerance by precision breeding in a new era. Current Opinion in Plant Biology, 2021, 60, 101996.	7.1	61
9	Genome editing of barley. , 2021, , 325-340.		0
10	The Arabidopsis AAC Proteins CIL and CIA2 Are Sub-functionalized Paralogs Involved in Chloroplast Development. Frontiers in Plant Science, 2021, 12, 681375.	3.6	6
11	OMICs, Epigenetics, and Genome Editing Techniques for Food and Nutritional Security. Plants, 2021, 10, 1423.	3.5	15
12	Mutation of the ALBOSTRIANS Ohnologous Gene HvCMF3 Impairs Chloroplast Development and Thylakoid Architecture in Barley. Frontiers in Plant Science, 2021, 12, 732608.	3.6	7
13	Genetic transformation of Triticeae cereals â€“ Summary of almost three-decade's development. Biotechnology Advances, 2020, 40, 107484.	11.7	18
14	Kmasker plants â€“ a tool for assessing complex sequence space in plant species. Plant Journal, 2020, 102, 631-642.	5.7	8
15	Prime Editing: Game Changer for Modifying Plant Genomes. Trends in Plant Science, 2020, 25, 722-724.	8.8	30
16	Barley HISTIDINE KINASE 1 (HvHK1) coordinates transfer cell specification in the young endosperm. Plant Journal, 2020, 103, 1869-1884.	5.7	6
17	Prime Editing: A New Way for Genome Editing. Trends in Cell Biology, 2020, 30, 257-259.	7.9	45
18	Plastid-Targeted Cyanobacterial Flavodiiron Proteins Maintain Carbohydrate Turnover and Enhance Drought Stress Tolerance in Barley. Frontiers in Plant Science, 2020, 11, 613731.	3.6	7

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19	Effect of <i>Thiobacillus</i> and Superabsorbent on Essential Oil Components in <i>Thyme</i> Species. Journal of Essential Oil-bearing Plants: JEOP, 2019, 22, 799-810.	1.9	5
20	Orthologous receptor kinases quantitatively affect the host status of barley to leaf rust fungi. Nature Plants, 2019, 5, 1129-1135.	9.3	37
21	The nucleoid-associated protein WHIRLY1 is required for the coordinate assembly of plastid and nucleus-encoded proteins during chloroplast development. Planta, 2019, 249, 1337-1347.	3.2	18
22	More precise, more universal and more specific â€“ the next generation of RNAâ€guided endonucleases for genome editing. FEBS Journal, 2019, 286, 4657-4660.	4.7	9
23	Barley cysteine protease PAP14 plays a role in degradation of chloroplast proteins. Journal of Experimental Botany, 2019, 70, 6057-6069.	4.8	13
24	Leaf Variegation and Impaired Chloroplast Development Caused by a Truncated CCT Domain Gene in <i>albostrians</i> Barley. Plant Cell, 2019, 31, 1430-1445.	6.6	52
25	Abscisic acid is a substrate of the <scp>ABC</scp> transporter encoded by the durable wheat disease resistance gene <i>Lr34</i>. New Phytologist, 2019, 223, 853-866.	7.3	102
26	Unleashing floret fertility in wheat through the mutation of a homeobox gene. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5182-5187.	7.1	158
27	Repression of drought-induced cysteine-protease genes alters barley leaf structure and responses to abiotic and biotic stresses. Journal of Experimental Botany, 2019, 70, 2143-2155.	4.8	26
28	Genome Engineering Using TALENs. Methods in Molecular Biology, 2019, 1900, 195-215.	0.9	12
29	Targeted genome modifcation in protoplasts of a highly regenerable Siberian barley cultivar using RNA-guided Cas9 endonuclease. Vavilovskii Zhurnal Genetiki I Selektsii, 2019, 22, 1033-1039.	1.1	21
30	Silencing barley cystatins HvCPIâ€2 and HvCPIâ€4 specifically modifies leaf responses to drought stress. Plant, Cell and Environment, 2018, 41, 1776-1790.	5.7	20
31	Barley ADH-1 modulates susceptibility to Bgh and is involved in chitin-induced systemic resistance. Plant Physiology and Biochemistry, 2018, 123, 281-287.	5.8	14
32	Pathogenâ€inducible <i>Ta</i>â€<i>Lr34res</i> expression in heterologous barley confers disease resistance without negative pleiotropic effects. Plant Biotechnology Journal, 2018, 16, 245-253.	8.3	39
33	Vacuolar processing enzyme 4 contributes to maternal control of grain size in barley by executing programmed cell death in the pericarp. New Phytologist, 2018, 218, 1127-1142.	7.3	30
34	Modification of Barley Plant Productivity Through Regulation of Cytokinin Content by Reverse-Genetics Approaches. Frontiers in Plant Science, 2018, 9, 1676.	3.6	79
35	Convergent evolution of a metabolic switch between aphid and caterpillar resistance in cereals. Science Advances, 2018, 4, eaat6797.	10.3	58
36	The CRISPR/Cas revolution continues: From efficient gene editing for crop breeding to plant synthetic biology. Journal of Integrative Plant Biology, 2018, 60, 1127-1153.	8.5	109

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37	Targeted Base Editing Systems Are Available for Plants. Trends in Plant Science, 2018, 23, 955-957.	8.8	11
38	Evolutionarily conserved partial gene duplication in the Triticeae tribe of grasses confers pathogen resistance. Genome Biology, 2018, 19, 116.	8.8	9
39	The plastid-nucleus located DNA/RNA binding protein WHIRLY1 regulates microRNA-levels during stress in barley (<i>Hordeum vulgare</i> L.). RNA Biology, 2018, 15, 886-891.	3.1	25
40	Overexpression of HvIcy6 in Barley Enhances Resistance against Tetranychus urticae and Entails Partial Transcriptomic Reprogramming. International Journal of Molecular Sciences, 2018, 19, 697.	4.1	21
41	Leaf primordium size specifies leaf width and vein number among rowâ€type classes in barley. Plant Journal, 2017, 91, 601-612.	5.7	25
42	Site-Directed Mutagenesis in Barley by Expression of TALE Nuclease in Embryogenic Pollen. , 2017, , 113-128.		4
43	Agrobacterium-Mediated Transformation of Wheat Using Immature Embryos. Methods in Molecular Biology, 2017, 1679, 129-139.	0.9	12
44	Acceleration of leaf senescence is slowed down in transgenic barley plants deficient in the DNA/RNA-binding protein WHIRLY1. Journal of Experimental Botany, 2017, 68, 983-996.	4.8	30
45	An LRR/Malectin Receptor-Like Kinase Mediates Resistance to Non-adapted and Adapted Powdery Mildew Fungi in Barley and Wheat. Frontiers in Plant Science, 2016, 7, 1836.	3.6	39
46	Increasing abscisic acid levels by immunomodulation in barley grains induces precocious maturation without changing grain composition. Journal of Experimental Botany, 2016, 67, 2675-2687.	4.8	10
47	The barley (<i>Hordeum vulgare</i>) cellulose synthaseâ€like D2 gene (<i>HvCslD2</i>) mediates penetration resistance to hostâ€adapted and nonhost isolates of the powdery mildew fungus. New Phytologist, 2016, 212, 421-433.	7.3	52
48	A simple test for the cleavage activity of customized endonucleases in plants. Plant Methods, 2016, 12, 18.	4.3	43
49	HvPap-1 C1A protease actively participates in barley proteolysis mediated by abiotic stresses. Journal of Experimental Botany, 2016, 67, 4297-4310.	4.8	24
50	Stable gene replacement in barley by targeted double-strand break induction. Journal of Experimental Botany, 2016, 67, 1433-1445.	4.8	49
51	The INDETERMINATE DOMAIN Protein BROAD LEAF1 Limits Barley Leaf Width by Restricting Lateral Proliferation. Current Biology, 2016, 26, 903-909.	3.9	37
52	HvPap-1 C1A Protease and HvCPI-2 Cystatin Contribute to Barley Grain Filling and Germination. Plant Physiology, 2016, 170, 2511-2524.	4.8	33
53	Mitogen-Activated Protein Kinase Kinase 3 Regulates Seed Dormancy in Barley. Current Biology, 2016, 26, 775-781.	3.9	85
54	Polarized Defense Against Fungal Pathogens Is Mediated by the Jacalin-Related Lectin Domain of Modular Poaceae -Specific Proteins. Molecular Plant, 2016, 9, 514-527.	8.3	67

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55	RNA-Guided Cas9-Induced Mutagenesis in Tobacco Followed by Efficient Genetic Fixation in Doubled Haploid Plants. Frontiers in Plant Science, 2016, 7, 1995.	3.6	29
56	Are PECTIN ESTERASE INHIBITOR Genes Involved in Mediating Resistance to Rhynchosporium commune in Barley?. PLoS ONE, 2016, 11, e0150485.	2.5	19
57	SYNTHETIC ENDONUCLEASES: NOVEL TOOLS FOR THE SITE-DIRECTED GENETIC MODIFICATION OF PLANTS. Acta Horticulturae, 2015, , 71-81.	0.2	0
58	The wheat resistance gene <i>Lr34</i> results in the constitutive induction of multiple defense pathways in transgenic barley. Plant Journal, 2015, 84, 202-215.	5.7	45
59	Transgenic Production of an Anti HIV Antibody in the Barley Endosperm. PLoS ONE, 2015, 10, e0140476.	2.5	41
60	Targeted Modification of Gene Function Exploiting Homology-Directed Repair of TALEN-Mediated Double-Strand Breaks in Barley. G3: Genes, Genomes, Genetics, 2015, 5, 1857-1863.	1.8	53
61	The fungal core effector <scp>P</scp>ep1 is conserved across smuts of dicots and monocots. New Phytologist, 2015, 206, 1116-1126.	7.3	100
62	Evolution of the Grain Dispersal System in Barley. Cell, 2015, 162, 527-539.	28.9	265
63	Barley (Hordeum vulgare L.) Transformation Using Immature Embryos. Methods in Molecular Biology, 2015, 1223, 71-83.	0.9	27
64	Cellular dynamics during early barley pollen embryogenesis revealed by time-lapse imaging. Frontiers in Plant Science, 2014, 5, 675.	3.6	22
65	WHIRLY1 is a major organizer of chloroplast nucleoids. Frontiers in Plant Science, 2014, 5, 432.	3.6	48
66	Domestikation im Zeitraffer: Wie die Gerste zu mehr KÃ¶rnern kam. Biologie in Unserer Zeit, 2014, 44, 11-12.	0.2	0
67	Evolutionary Conserved Function of Barley and Arabidopsis 3-KETOACYL-CoA SYNTHASES in Providing Wax Signals for Germination of Powdery Mildew Fungi Â Â. Plant Physiology, 2014, 166, 1621-1633.	4.8	76
68	Repair of Site-Specific DNA Double-Strand Breaks in Barley Occurs via Diverse Pathways Primarily Involving the Sister Chromatid. Plant Cell, 2014, 26, 2156-2167.	6.6	55
69	<i>PROTEIN DISULFIDE ISOMERASE LIKE 5-1</i> is a susceptibility factor to plant viruses. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 2104-2109.	7.1	85
70	Golden SusPtrit: a genetically well transformable barley line for studies on the resistance to rust fungi. Theoretical and Applied Genetics, 2014, 127, 325-337.	3.6	25
71	Abscisic Acid Flux Alterations Result in Differential Abscisic Acid Signaling Responses and Impact Assimilation Efficiency in Barley under Terminal Drought Stress. Plant Physiology, 2014, 164, 1677-1696.	4.8	85
72	A Distorted Circadian Clock Causes Early Flowering and Temperature-Dependent Variation in Spike Development in the <i>Eps-3Am</i> Mutant of Einkorn Wheat. Genetics, 2014, 196, 1253-1261.	2.9	88

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73	True-Breeding Targeted Gene Knock-Out in Barley Using Designer TALE-Nuclease in Haploid Cells. PLoS ONE, 2014, 9, e92046.	2.5	91
74	The wheat <i><scp>L</scp>r34</i> gene provides resistance against multiple fungal pathogens in barley. Plant Biotechnology Journal, 2013, 11, 847-854.	8.3	116
75	The elimination of a selectable marker gene in the doubled haploid progeny of co-transformed barley plants. Plant Molecular Biology, 2013, 81, 149-160.	3.9	37
76	Divergence of expression pattern contributed to neofunctionalization of duplicated <scp>HD</scp>â€‹<scp>Z</scp>ip <scp>I</scp> transcription factor in barley. New Phytologist, 2013, 197, 939-948.	7.3	67
77	A Conserved Apomixis-Specific Polymorphism Is Correlated with Exclusive Exonuclease Expression in Premeiotic Ovules of Apomictic Boechera Species. Plant Physiology, 2013, 163, 1660-1672.	4.8	71
78	Structural Changes During The Initiation Of Pollen Embryogenesis In Barley: Ultrastructure Analysis And Live Cell Imaging. Microscopy and Microanalysis, 2012, 18, 258-259.	0.4	0
79	Time-lapse imaging of the initiation of pollen embryogenesis in barley (Hordeum vulgare L.). Journal of Experimental Botany, 2012, 63, 6017-6021.	4.8	14
80	Analysis of T-DNA integration and generative segregation in transgenic winter triticale (x) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (	3.6	22
81	Telomere-mediated truncation of barley chromosomes. Chromosoma, 2012, 121, 181-190.	2.2	41
82	Transgene expression systems in the Triticeae cereals. Journal of Plant Physiology, 2011, 168, 30-44.	3.5	39
83	Induction of telomereâ€mediated chromosomal truncation and stability of truncated chromosomes in <i>Arabidopsis thaliana</i>. Plant Journal, 2011, 68, 28-39.	5.7	44
84	A Barley ROP GTPase ACTIVATING PROTEIN Associates with Microtubules and Regulates Entry of the Barley Powdery Mildew Fungus into Leaf Epidermal Cells Â. Plant Cell, 2011, 23, 2422-2439.	6.6	127
85	RBOHF2 of Barley Is Required for Normal Development of Penetration Resistance to the Parasitic Fungus <i>Blumeria graminis</i> f. sp. <i>hordei</i>. Molecular Plant-Microbe Interactions, 2010, 23, 1143-1150.	2.6	60
86	Whirly1 in chloroplasts associates with intron containing RNAs and rarely co-localizes with nucleoids. Planta, 2010, 232, 471-481.	3.2	65
87	BAX INHIBITOR-1 Is Required for Full Susceptibility of Barley to Powdery Mildew. Molecular Plant-Microbe Interactions, 2010, 23, 1217-1227.	2.6	84
88	Promoters of the Barley Germin-Like<i>GER4</i>Gene Cluster Enable Strong Transgene Expression in Response to Pathogen Attack Â. Plant Cell, 2010, 22, 937-952.	6.6	100
89	HIGS: Host-Induced Gene Silencing in the Obligate Biotrophic Fungal Pathogen <i>Blumeria graminis</i> Â Â. Plant Cell, 2010, 22, 3130-3141.	6.6	663
90	Triticeae Cereals. Biotechnology in Agriculture and Forestry, 2010, , 287-306.	0.2	3

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91	Genetic transformation technology in the Triticeae. Breeding Science, 2009, 59, 553-560.	1.9	22
92	<i>Agrobacterium</i>-Mediated Gene Transfer to Cereal Crop Plants: Current Protocols for Barley, Wheat, Triticale, and Maize. International Journal of Plant Genomics, 2009, 2009, 1-9.	2.2	128
93	Constitutively activated barley ROPs modulate epidermal cell size, defense reactions and interactions with fungal leaf pathogens. Plant Cell Reports, 2008, 27, 1877-1887.	5.6	65
94	Efficient generation of transgenic barley: The way forward to modulate plantâ€"microbe interactions. Journal of Plant Physiology, 2008, 165, 71-82.	3.5	135
95	A Set of Modular Binary Vectors for Transformation of Cereals. Plant Physiology, 2007, 145, 1192-1200.	4.8	205
96	Transgenic barley in applied research and biotechnology. Journal Fur Verbraucherschutz Und Lebensmittelsicherheit, 2007, 2, 104-104.	1.4	3
97	Expression of influenza A (H5N1) vaccine in barley grains for oral bird immunization. Journal Fur Verbraucherschutz Und Lebensmittelsicherheit, 2007, 2, 118-118.	1.4	2
98	Efficient Agrobacterium-Mediated Transformation of Various Barley (Hordeum vulgare L.) Genotypes. , 2007, , 143-145.		2
99	Genetic transformation of barley (Hordeum vulgare L.) via infection of androgenetic pollen cultures with Agrobacterium tumefaciens. Plant Biotechnology Journal, 2006, 4, 251-261.	8.3	191
100	Immature pollen-derived doubled haploid formation in barley cv. Golden Promise as a tool for transgene recombination. Acta Physiologiae Plantarum, 2005, 27, 591-599.	2.1	40
101	Ectopic Expression of Constitutively Activated RACB in Barley Enhances Susceptibility to Powdery Mildew and Abiotic Stress. Plant Physiology, 2005, 139, 353-362.	4.8	80
102	Genetic Transformation of Barley (Hordeum Vulgare L.) by Co-Culture of Immature Embryos with Agrobacterium. , 2004, , 35-44.		14
103	The influence of 2,4-dichlorophenoxyacetic acid on localisation of the PR-proteins CBP20 and class I chitinase in tobacco suspension cell cultures. Plant Science, 2002, 163, 1099-1106.	3.6	5
104	Expression of the tobacco gene CBP20 in response to developmental stage, wounding, salicylic acid and heavy metals. Plant Science, 1999, 148, 165-174.	3.6	16
105	The green fluorescent protein targets secretory proteins to the yeast vacuole. Biochimica Et Biophysica Acta - Bioenergetics, 1999, 1410, 287-298.	1.0	49
106	Cloning of the wound-inducible protein CBP20 and expression in suspension cultures of tobacco. Plant Science, 1997, 128, 199-206.	3.6	2
107	Genetic Transformation of Triticeae Cereals for Molecular Farming. , 0, , .		1
108	The meiotic topoisomerase VI B subunit (MTOPVIB) is essential for meiotic DNA double-strand break formation in barley (Hordeum vulgare L.). Plant Reproduction, 0, , .	2.2	7