Erwin Grill

List of Publications by Year
in descending order

48 papers	8,007 citations	147801 31 h-index	197818 49 g-index
52 all docs	52 docs citations	52 times ranked	8370 citing authors

#	ARTICLE	IF	CITATIONS
1	Regulators of PP2C Phosphatase Activity Function as Abscisic Acid Sensors. Science, 2009, 324, 1064-1068.	12.6	2,017
2	ABA perception and signalling. Trends in Plant Science, 2010, 15, 395-401.	8.8	1,106
3	A hydraulic signal in rootâ€toâ€shoot signalling of water shortage. Plant Journal, 2007, 52, 167-174.	5.7	464
4	Advances and current challenges in calcium signaling. New Phytologist, 2018, 218, 414-431.	7.3	423
5	Stomatal Closure by Fast Abscisic Acid Signaling Is Mediated by the Guard Cell Anion Channel SLAH3 and the Receptor RCAR1. Science Signaling, 2011, 4, ra32.	3.6	338
6	Mass-spectrometry-based draft of the Arabidopsis proteome. Nature, 2020, 579, 409-414.	27.8	328
7	Homeodomain protein ATHB6 is a target of the protein phosphatase ABI1 and regulates hormone responses in Arabidopsis. EMBO Journal, 2002, 21, 3029-3038.	7.8	309
8	Generation of Active Pools of Abscisic Acid Revealed by In Vivo Imaging of Water-Stressed Arabidopsis. Plant Physiology, 2005, 137, 209-219.	4.8	230
9	Type 2C protein phosphatases in plants. FEBS Journal, 2013, 280, 681-693.	4.7	200
10	Revisiting the Basal Role of ABA â€" Roles Outside of Stress. Trends in Plant Science, 2019, 24, 625-635.	8.8	189
11	Hydrogen peroxide is a regulator of ABI1, a protein phosphatase 2C fromArabidopsis. FEBS Letters, 2001, 508, 443-446.	2.8	181
12	CO2 signaling in guard cells: Calcium sensitivity response modulation, a Ca2+-independent phase, and CO2 insensitivity of the gca2 mutant. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7506-7511.	7.1	174
13	Closely related receptor complexes differ in their ABA selectivity and sensitivity. Plant Journal, 2010, 61, 25-35.	5.7	170
14	Hydraulic signals in long-distance signaling. Current Opinion in Plant Biology, 2013, 16, 293-300.	7.1	158
15	Combinatorial interaction network of abscisic acid receptors and coreceptors from <i>Arabidopsis thaliana</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10280-10285.	7.1	142
16	Function of phytochelatin synthase in catabolism of glutathione-conjugates. Plant Journal, 2007, 49, 740-749.	5.7	120
17	Fibrillin expression is regulated by abscisic acid response regulators and is involved in abscisic acid-mediated photoprotection. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6061-6066.	7.1	115
18	Leveraging abscisic acid receptors for efficient water use in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6791-6796.	7.1	106

#	Article	IF	Citations
19	Extensive signal integration by the phytohormone protein network. Nature, 2020, 583, 271-276.	27.8	104
20	Abscisic acid sensor RCAR7/PYL13, specific regulator of protein phosphatase coreceptors. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5741-5746.	7.1	100
21	Nuclear localization of the mutant protein phosphatase abi1 is required for insensitivity towards ABA responses in Arabidopsis. Plant Journal, 2008, 54, 806-819.	5.7	91
22	Expression of the Arabidopsis Mutant <i>abi1</i> Gene Alters Abscisic Acid Sensitivity, Stomatal Development, and Growth Morphology in Gray Poplars. Plant Physiology, 2009, 151, 2110-2119.	4.8	72
23	The abi1-1 mutation blocks ABA signaling downstream of cADPR action. Plant Journal, 2003, 34, 307-315.	5.7	69
24	Cytosolic Action of Phytochelatin Synthase Â Â. Plant Physiology, 2010, 153, 159-169.	4.8	65
25	Phytochelatin synthase catalyzes key step in turnover of glutathione conjugates. Phytochemistry, 2003, 62, 423-431.	2.9	62
26	Exploring the <scp>A</scp>rabidopsis sulfur metabolome. Plant Journal, 2014, 77, 31-45.	5.7	60
27	[39] Phytochelatins. Methods in Enzymology, 1991, 205, 333-341.	1.0	59
28	Generating Plants with Improved Water Use Efficiency. Agronomy, 2018, 8, 194.	3.0	51
29	Action of Natural Abscisic Acid Precursors and Catabolites on Abscisic Acid Receptor Complexes Â. Plant Physiology, 2011, 157, 2108-2119.	4.8	49
30	Abscisic Acid Receptors and Coreceptors Modulate Plant Water Use Efficiency and Water Productivity. Plant Physiology, 2019, 180, 1066-1080.	4.8	48
31	The formation of a camalexin-biosynthetic metabolon. Plant Cell, 2019, 31, tpc.00403.2019.	6.6	38
32	Phytochelatins are synthesized by two vacuolar serine carboxypeptidases inSaccharomyces cerevisiae. FEBS Letters, 2007, 581, 1681-1687.	2.8	35
33	A LIM Domain Protein from Tobacco Involved in Actin-Bundling and Histone Gene Transcription. Molecular Plant, 2013, 6, 483-502.	8.3	33
34	Abscisic acid analogs as chemical probes for dissection of abscisic acid responses in Arabidopsis thaliana. Phytochemistry, 2015, 113, 96-107.	2.9	31
35	Dissection of glutathione conjugate turnover in yeast. Phytochemistry, 2010, 71, 54-61.	2.9	30
36	Carbon isotope composition, water use efficiency, and drought sensitivity are controlled by a common genomic segment in maize. Theoretical and Applied Genetics, 2019, 132, 53-63.	3.6	26

#	Article	IF	Citations
37	Moonlighting Function of Phytochelatin Synthase1 in Extracellular Defense against Fungal Pathogens. Plant Physiology, 2020, 182, 1920-1932.	4.8	26
38	Rebuilding core abscisic acid signaling pathways of <i>Arabidopsis</i> in yeast. EMBO Journal, 2019, 38, e101859.	7.8	25
39	Interaction network of <scp>ABA</scp> receptors in grey poplar. Plant Journal, 2017, 92, 199-210.	5.7	23
40	Analysis of Arabidopsis glutathione-transferases in yeast. Phytochemistry, 2013, 91, 198-207.	2.9	21
41	Electric defence. Nature, 2013, 500, 404-405.	27.8	20
42	Potent Analogues of Abscisic Acid â€" Identifying Cyanoâ€Cyclopropyl Moieties as Promising Replacements for the Cyclohexenone Headgroup. European Journal of Organic Chemistry, 2018, 2018, 1416-1425.	2.4	19
43	BOTANY: A Plant Receptor with a Big Family. Science, 2007, 315, 1676-1677.	12.6	18
44	Insights into the in Vitro and in Vivo SAR of Abscisic Acid â€" Exploring Unprecedented Variations of the Side Chain via Crossâ€Couplingâ€Mediated Syntheses. European Journal of Organic Chemistry, 2018, 2018, 1403-1415.	2.4	16
45	Increased water use efficiency and water productivity of arabidopsis by abscisic acid receptors from Populus canescens. Annals of Botany, 2019, 124, 581-589.	2.9	15
46	Modulation of ABA responses by the protein kinase WNK8. FEBS Letters, 2019, 593, 339-351.	2.8	10
47	Synthesis and Exploration of Abscisic Acid Receptor Agonists Against Dought Stress by Adding Constraint to a Tetrahydroquinolineâ€Based Lead Structure. European Journal of Organic Chemistry, 2021, 2021, 3442-3457.	2.4	8
48	Natural alleles of the abscisic acid catabolism gene<i>ZmAbh4</i>modulate water use efficiency and carbon isotope discrimination in maize. Plant Cell, 2022, 34, 3860-3872.	6.6	5