Pedro L Rodriguez

List of Publications by Year
in descending order

111 papers	18,068 citations	20817 60 h-index	30922 102 g-index
116 all docs	116 docs citations	116 times ranked	12848 citing authors

#	Article	IF	Citations
1	Abscisic Acid: Emergence of a Core Signaling Network. Annual Review of Plant Biology, 2010, 61, 651-679.	18.7	2,506
2	Abscisic Acid Inhibits Type 2C Protein Phosphatases via the PYR/PYL Family of START Proteins. Science, 2009, 324, 1068-1071.	12.6	2,385
3	In vitro reconstitution of an abscisic acid signalling pathway. Nature, 2009, 462, 660-664.	27.8	1,113
4	Protein Phosphatases 2C Regulate the Activation of the Snf1-Related Kinase OST1 by Abscisic Acid in<i>Arabidopsis</i>Â. Plant Cell, 2009, 21, 3170-3184.	6.6	500
5	<i>Arabidopsis</i> PYR/PYL/RCAR Receptors Play a Major Role in Quantitative Regulation of Stomatal Aperture and Transcriptional Response to Abscisic Acid. Plant Cell, 2012, 24, 2483-2496.	6.6	493
6	Pseudomonas syringae pv. tomato hijacks the Arabidopsis abscisic acid signalling pathway to cause disease. EMBO Journal, 2007, 26, 1434-1443.	7.8	484
7	Modulation of drought resistance by the abscisic acid receptor PYL5 through inhibition of cladeâ€ƒA PP2Cs. Plant Journal, 2009, 60, 575-588.	5.7	476
8	The abscisic acid receptor PYR1 in complex with abscisic acid. Nature, 2009, 462, 665-668.	27.8	457
9	The Short-Chain Alcohol Dehydrogenase ABA2 Catalyzes the Conversion of Xanthoxin to Abscisic Aldehyde[W]. Plant Cell, 2002, 14, 1833-1846.	6.6	435
10	Gainâ€ofâ€function and lossâ€ofâ€function phenotypes of the protein phosphatase 2C HAB1 reveal its role as a negative regulator of abscisic acid signalling. Plant Journal, 2004, 37, 354-369.	5.7	368
11	Plant roots use a patterning mechanism to position lateral root branches toward available water. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9319-9324.	7.1	317
12	Diffusional conductances to CO2 as a target for increasing photosynthesis and photosynthetic water-use efficiency. Photosynthesis Research, 2013, 117, 45-59.	2.9	305
13	ABI1 and PP2CA Phosphatases Are Negative Regulators of Snf1-Related Protein Kinase1 Signaling in <i>Arabidopsis</i>. Plant Cell, 2013, 25, 3871-3884.	6.6	266
14	Triple Loss of Function of Protein Phosphatases Type 2C Leads to Partial Constitutive Response to Endogenous Abscisic Acid Â Â Â. Plant Physiology, 2009, 150, 1345-1355.	4.8	252
15	PYRABACTIN RESISTANCE1-LIKE8 Plays an Important Role for the Regulation of Abscisic Acid Signaling in Root Â Â Â. Plant Physiology, 2013, 161, 931-941.	4.8	244
16	Enhancement of Abscisic Acid Sensitivity and Reduction of Water Consumption in Arabidopsis by Combined Inactivation of the Protein Phosphatases Type 2C ABI1 and HAB1 Â. Plant Physiology, 2006, 141, 1389-1399.	4.8	235
17	Jasmonate signaling involves the abscisic acid receptor PYL4 to regulate metabolic reprogramming in <i>Arabidopsis</i> and tobacco. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5891-5896.	7.1	228
18	ABI2, a second protein phosphatase 2C involved in abscisic acid signal transduction in Arabidopsis. FEBS Letters, 1998, 421, 185-190.	2.8	220

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19	A mutational analysis of the ABA1 gene of Arabidopsis thaliana highlights the involvement of ABA in vegetative development. Journal of Experimental Botany, 2005, 56, 2071-2083.	4.8	208
20	Both abscisic acid (ABA)-dependent and ABA-independent pathways govern the induction of NCED3, AAO3 and ABA1 in response to salt stress. Plant, Cell and Environment, 2006, 29, 2000-2008.	5.7	203
21	The sensitivity of ABI2 to hydrogen peroxide links the abscisic acid-response regulator to redox signalling. Planta, 2002, 214, 775-782.	3.2	201
22	PYR/RCAR Receptors Contribute to Ozone-, Reduced Air Humidity-, Darkness-, and CO2-Induced Stomatal Regulation Â Â Â. Plant Physiology, 2013, 162, 1652-1668.	4.8	190
23	Targeted Degradation of Abscisic Acid Receptors Is Mediated by the Ubiquitin Ligase Substrate Adaptor DDA1 in <i>Arabidopsis</i>. Plant Cell, 2014, 26, 712-728.	6.6	186
24	The SWI2/SNF2 Chromatin Remodeling ATPase BRAHMA Represses Abscisic Acid Responses in the Absence of the Stress Stimulus in<i>Arabidopsis</i>Â. Plant Cell, 2013, 24, 4892-4906.	6.6	185
25	FERONIA interacts with ABI2-type phosphatases to facilitate signaling cross-talk between abscisic acid and RALF peptide in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5519-27.	7.1	185
26	Root hydrotropism is controlled via a cortex-specific growth mechanism. Nature Plants, 2017, 3, 17057.	9.3	183
27	Selective Inhibition of Clade A Phosphatases Type 2C by PYR/PYL/RCAR Abscisic Acid Receptors Â Â. Plant Physiology, 2012, 158, 970-980.	4.8	178
28	The singleâ€subunit <scp>RING</scp>â€type E3 ubiquitin ligase <scp>RSL</scp>1 targets <scp>PYL</scp>4 and <scp>PYR</scp>1 <scp>ABA</scp> receptors in plasma membrane to modulate abscisic acid signaling. Plant Journal, 2014, 80, 1057-1071.	5.7	177
29	Protein phosphatase 2C (PP2C) function in higher plants. , 1998, 38, 919-927.		175
30	Tomato PYR/PYL/RCAR abscisic acid receptors show high expression in root, differential sensitivity to the abscisic acid agonist quinabactin, and the capability to enhance plant drought resistance. Journal of Experimental Botany, 2014, 65, 4451-4464.	4.8	173
31	HAB1â€"SWI3B Interaction Reveals a Link between Abscisic Acid Signaling and Putative SWI/SNF Chromatin-Remodeling Complexes in <i>Arabidopsis</i>. Plant Cell, 2008, 20, 2972-2988.	6.6	172
32	A thermodynamic switch modulates abscisic acid receptor sensitivity. EMBO Journal, 2011, 30, 4171-4184.	7.8	161
33	The PYL4 A194T Mutant Uncovers a Key Role of PYR1-LIKE4/PROTEIN PHOSPHATASE 2CA Interaction for Abscisic Acid Signaling and Plant Drought Resistance Â Â Â. Plant Physiology, 2013, 163, 441-455.	4.8	150
34	Stress-induced Protein Phosphatase 2C Is a Negative Regulator of a Mitogen-activated Protein Kinase. Journal of Biological Chemistry, 2003, 278, 18945-18952.	3.4	147
35	Inactivation of PYR/PYL/RCAR ABA receptors by tyrosine nitration may enable rapid inhibition of ABA signaling by nitric oxide in plants. Science Signaling, 2015, 8, ra89.	3.6	129
36	FYVE1/FREE1 Interacts with the PYL4 ABA Receptor and Mediates Its Delivery to the Vacuolar Degradation Pathway. Plant Cell, 2016, 28, 2291-2311.	6.6	129

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37	C2-Domain Abscisic Acid-Related Proteins Mediate the Interaction of PYR/PYL/RCAR Abscisic Acid Receptors with the Plasma Membrane and Regulate Abscisic Acid Sensitivity in <i>Arabidopsis</i>. Plant Cell, 2014, 26, 4802-4820.	6.6	127
38	A dual function of SnRK2 kinases in the regulation of SnRK1 and plant growth. Nature Plants, 2020, 6, 1345-1353.	9.3	122
39	News on ABA transport, protein degradation, and ABFs/WRKYs in ABA signaling. Current Opinion in Plant Biology, 2011, 14, 547-553.	7.1	121
40	Poliovirus Protein 2C Contains Two Regions Involved in RNA Binding Activity. Journal of Biological Chemistry, 1995, 270, 10105-10112.	3.4	119
41	The Cys-Arg/N-End Rule Pathway Is a General Sensor of Abiotic Stress in Flowering Plants. Current Biology, 2017, 27, 3183-3190.e4.	3.9	118
42	The role of Arabidopsis ABA receptors from the PYR/PYL/RCAR family in stomatal acclimation and closure signal integration. Nature Plants, 2019, 5, 1002-1011.	9.3	115
43	Development of a citrus genome-wide EST collection and cDNA microarray as resources for genomic studies. Plant Molecular Biology, 2005, 57, 375-391.	3.9	104
44	Modulation of Abscisic Acid Signaling in Vivo by an Engineered Receptor-Insensitive Protein Phosphatase Type 2C Allele Â Â. Plant Physiology, 2011, 156, 106-116.	4.8	104
45	Structural insights into PYR/PYL/RCAR ABA receptors and PP2Cs. Plant Science, 2012, 182, 3-11.	3.6	102
46	Ubiquitin Ligases RGLG1 and RGLG5 Regulate Abscisic Acid Signaling by Controlling the Turnover of Phosphatase PP2CA. Plant Cell, 2016, 28, 2178-2196.	6.6	100
47	A Direct Link between Abscisic Acid Sensing and the Chromatin-Remodeling ATPase BRAHMA via Core ABA Signaling Pathway Components. Molecular Plant, 2016, 9, 136-147.	8.3	100
48	The Xerobranching Response Represses Lateral Root Formation When Roots Are Not in Contact with Water. Current Biology, 2018, 28, 3165-3173.e5.	3.9	94
49	The lithium tolerance of the Arabidopsis <i>cat2</i> mutant reveals a crossâ€talk between oxidative stress and ethylene. Plant Journal, 2007, 52, 1052-1065.	5.7	91
50	ESCRT-I Component VPS23A Affects ABA Signaling by Recognizing ABA Receptors for Endosomal Degradation. Molecular Plant, 2016, 9, 1570-1582.	8.3	87
51	Molecular cloning in Arabidopsis thaliana of a new protein phosphatase 2C (PP2C) with homology to ABI1 and ABI2. Plant Molecular Biology, 1998, 38, 879-883.	3.9	85
52	Negative Regulation of Abscisic Acid Signaling by the Fagus sylvatica FsPP2C1 Plays A Role in Seed Dormancy Regulation and Promotion of Seed Germination. Plant Physiology, 2003, 133, 135-144.	4.8	78
53	Low ABA concentration promotes root growth and hydrotropism through relief of ABA INSENSITIVE 1-mediated inhibition of plasma membrane H ⁺ -ATPase 2. Science Advances, 2021, 7, .	10.3	78
54	TheArabidopsis HAL2-like gene family includes a novel sodium-sensitive phosphatase. Plant Journal, 1999, 17, 373-383.	5.7	77

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55	Wounding-Induced Stomatal Closure Requires Jasmonate-Mediated Activation of GORK K+ Channels by a Ca2+ Sensor-Kinase CBL1-CIPK5 Complex. Developmental Cell, 2019, 48, 87-99.e6.	7.0	74
56	Two New Alleles of the abscisic aldehyde oxidase 3 Gene Reveal Its Role in Abscisic Acid Biosynthesis in Seeds. Plant Physiology, 2004, 135, 325-333.	4.8	72
57	Calcium-dependent oligomerization of CAR proteins at cell membrane modulates ABA signaling. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E396-405.	7.1	72
58	A mechanism of growth inhibition by abscisic acid in germinating seeds of Arabidopsis thaliana based on inhibition of plasma membrane H+-ATPase and decreased cytosolic pH, K+, and anions. Journal of Experimental Botany, 2015, 66, 813-825.	4.8	71
59	Phospho-site mapping, genetic and in planta activation studies reveal key aspects of the different phosphorylation mechanisms involved in activation of SnRK2s. Plant Journal, 2010, 63, 778-790.	5.7	69
60	Preâ€‹<scp>mRNA</scp> splicing repression triggers abiotic stress signaling in plants. Plant Journal, 2017, 89, 291-309.	5.7	68
61	The plant ESCRT component FREE1 shuttles to the nucleus to attenuate abscisic acid signalling. Nature Plants, 2019, 5, 512-524.	9.3	68
62	X-ray structure of yeast hal2p, a major target of lithium and sodium toxicity, and identification of framework interactions determining cation sensitivity. Journal of Molecular Biology, 2000, 295, 927-938.	4.2	66
63	The Short-Rooted Phenotype of the<i>brevis radix</i>Mutant Partly Reflects Root Abscisic Acid Hypersensitivity Â Â Â. Plant Physiology, 2009, 149, 1917-1928.	4.8	63
64	Gliotoxin: inhibitor of poliovirus RNA synthesis that blocks the viral RNA polymerase 3Dpol. Journal of Virology, 1992, 66, 1971-1976.	3.4	63
65	A Novel Mammalian Lithium-sensitive Enzyme with a Dual Enzymatic Activity, 3â€²-Phosphoadenosine 5â€²-Phosphate Phosphatase and Inositol-polyphosphate 1-Phosphatase. Journal of Biological Chemistry, 1999, 274, 16034-16039.	3.4	62
66	<scp>ABA</scp> inhibits myristoylation and induces shuttling of the <scp>RGLG</scp>1 E3 ligase to promote nuclear degradation of <scp>PP</scp>2<scp>CA</scp>. Plant Journal, 2019, 98, 813-825.	5.7	59
67	The MATH-BTB BPM3 and BPM5 subunits of Cullin3-RING E3 ubiquitin ligases target PP2CA and other clade A PP2Cs for degradation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15725-15734.	7.1	56
68	A combination of the F-box motif and kelch repeats defines a large Arabidopsis family of F-box proteins. Plant Molecular Biology, 2001, 46, 603-614.	3.9	52
69	Structure of Ligand-Bound Intermediates of Crop ABA Receptors HighlightsÂPP2C as Necessary ABA Co-receptor. Molecular Plant, 2017, 10, 1250-1253.	8.3	49
70	A Role for 3AB Protein in Poliovirus Genome Replication. Journal of Biological Chemistry, 1995, 270, 14430-14438.	3.4	46
71	PYL8 mediates ABA perception in the root through non-cell-autonomous and ligand-stabilizationâ€"based mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11857-E11863.	7.1	46
72	A New Protein Phosphatase 2C (FsPP2C1) Induced by Abscisic Acid Is Specifically Expressed in Dormant Beechnut Seeds. Plant Physiology, 2001, 125, 1949-1956.	4.8	44

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73	Crystal structure of an enzyme displaying both inositol-polyphosphate-1-phosphatase and 3â€²-phosphoadenosine-5â€²-phosphate phosphatase activities: a novel target of lithium therapy 1 1Edited by R. Huber. Journal of Molecular Biology, 2002, 315, 677-685.	4.2	40
74	Arabidopsis ALIX Regulates Stomatal Aperture and Turnover of Abscisic Acid Receptors. Plant Cell, 2019, 31, 2411-2429.	6.6	40
75	The Coenzyme A Biosynthetic Enzyme Phosphopantetheine Adenylyltransferase Plays a Crucial Role in Plant Growth, Salt/Osmotic Stress Resistance, and Seed Lipid Storage. Plant Physiology, 2008, 148, 546-556.	4.8	38
76	The <i>ABA1</i> gene and carotenoid biosynthesis are required for late skotomorphogenic growth in <i>Arabidopsis thaliana</i>. Plant, Cell and Environment, 2008, 31, 227-234.	5.7	37
77	Protein phosphatase type 2C PP2CA together with ABI1 inhibits SnRK2.4 activity and regulates plant responses to salinity. Plant Signaling and Behavior, 2016, 11, e1253647.	2.4	36
78	Depletion of abscisic acid levels in roots of flooded Carrizo citrange (Poncirus trifoliata L. Raf. Ã—) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 PYR/PYL/RCAR receptors. Plant Molecular Biology, 2017, 93, 623-640.	3.9	35
79	Plant Osmotic Stress Signaling: MAPKKKs Meet SnRK2s. Trends in Plant Science, 2020, 25, 1179-1182.	8.8	35
80	The Role of ABA in Plant Immunity is Mediated through the PYR1 Receptor. International Journal of Molecular Sciences, 2020, 21, 5852.	4.1	35
81	RBR-Type E3 Ligases and the Ubiquitin-Conjugating Enzyme UBC26 Regulate Abscisic Acid Receptor Levels and Signaling. Plant Physiology, 2020, 182, 1723-1742.	4.8	33
82	An Arabidopsis Mutant Impaired in Coenzyme A Biosynthesis Is Sugar Dependent for Seedling Establishment. Plant Physiology, 2006, 140, 830-843.	4.8	32
83	The <i><scp>IBO</scp></i> germination quantitative trait locus encodes a phosphatase 2<scp>C</scp>â€related variant with a nonsynonymous amino acid change that interferes with abscisic acid signaling. New Phytologist, 2015, 205, 1076-1082.	7.3	32
84	Phosphatase ABI1 and okadaic acid-sensitive phosphoprotein phosphatases inhibit salt stress-activated SnRK2.4 kinase. BMC Plant Biology, 2016, 16, 136.	3.6	32
85	A novel target of lithium therapy. FEBS Letters, 2000, 467, 321-325.	2.8	30
86	HRS1 Acts as a Negative Regulator of Abscisic Acid Signaling to Promote Timely Germination of Arabidopsis Seeds. PLoS ONE, 2012, 7, e35764.	2.5	30
87	An Arabidopsis quiescin-sulfhydryl oxidase regulates cation homeostasis at the root symplastâ€“xylem interface. EMBO Journal, 2007, 26, 3203-3215.	7.8	29
88	PYR/PYL/RCAR ABA receptors. Advances in Botanical Research, 2019, , 51-82.	1.1	23
89	Abscisic Acid Catabolism Generates Phaseic Acid, a Molecule Able to Activate a Subset of ABA Receptors. Molecular Plant, 2016, 9, 1448-1450.	8.3	22
90	A forward genetic approach in Arabidopsis thaliana identifies a RING-type ubiquitin ligase as a novel determinant of seed longevity. Plant Science, 2014, 215-216, 110-116.	3.6	20

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91	Hydrotropism: Analysis of the Root Response to a Moisture Gradient. Methods in Molecular Biology, 2016, 1398, 3-9.	0.9	20
92	Tripartite hormonal regulation of plasma membrane H+-ATPase activity. Trends in Plant Science, 2022, 27, 588-600.	8.8	16
93	CtCdc55p and CtHal3p: Two putative regulatory proteins from Candida tropicalis with long acidic domains. , 1996, 12, 1321-1329.		14
94	Ubiquitylation of ABA Receptors and Protein Phosphatase 2C Coreceptors to Modulate ABA Signaling and Stress Response. International Journal of Molecular Sciences, 2021, 22, 7103.	4.1	14
95	Arabidopsis Hypocotyl Adventitious Root Formation Is Suppressed by ABA Signaling. Genes, 2021, 12, 1141.	2.4	13
96	Unnatural agrochemical ligands for engineered abscisic acid receptors. Trends in Plant Science, 2015, 20, 330-332.	8.8	10
97	PYL8 ABA receptors of<i>Phoenix dactylifera</i>play a crucial role in response to abiotic stress and are stabilized by ABA. Journal of Experimental Botany, 2021, 72, 757-774.	4.8	10
98	Drug Discovery for Thirsty Crops. Trends in Plant Science, 2020, 25, 844-846.	8.8	9
99	The fungal sesquiterpenoid pyrenophoric acid B uses the plant ABA biosynthetic pathway to inhibit seed germination. Journal of Experimental Botany, 2019, 70, 5487-5494.	4.8	7
100	PYL1- and PYL8-like ABA Receptors of Nicotiana benthamiana Play a Key Role in ABA Response in Seed and Vegetative Tissue. Cells, 2022, 11, 795.	4.1	5
101	Dual regulation of SnRK2 signaling by Raf-like MAPKKKs. Molecular Plant, 2022, , .	8.3	3
102	A Luciferase Reporter Assay to Identify Chemical Activators of ABA Signaling. Methods in Molecular Biology, 2021, 2213, 113-121.	0.9	2
103	Degradation of Abscisic Acid Receptors Through the Endosomal Pathway. Methods in Molecular Biology, 2020, 2177, 35-48.	0.9	2
104	Structure-Based Modulation of the Ligand Sensitivity of a Tomato Dimeric Abscisic Acid Receptor Through a Glu to Asp Mutation in the Latch Loop. Frontiers in Plant Science, 0, 13, .	3.6	2
105	Identification of ABA Receptor Using aÂMultiplexed Chemical Screening. Methods in Molecular Biology, 2021, 2213, 99-111.	0.9	1
106	The Xerobranching Response Represses Lateral Root Formation When Roots Are Not in Contact With Water. SSRN Electronic Journal, 0, , .	0.4	1
107	In Gel Kinase Assay. Bio-protocol, 2017, 7, e2170.	0.4	0
108	Microscopic Imaging of of. Methods in Molecular Biology, 2022, 2462, 59-69.	0.9	0

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109	Affinity Purification of Ubiquitinated Proteins Using p62-Agarose to Assess Ubiquitination of Clade A PP2Cs. Methods in Molecular Biology, 2022, 2462, 45-57.	0.9	0
110	Evaluation of the Anti-transpirant Activity of ABA Receptor Agonists in Monocot and Eudicot Plants. Methods in Molecular Biology, 2022, 2494, 229-238.	0.9	0
111	Hydrotropism: Analysis of the Root Response to a Moisture Gradient. Methods in Molecular Biology, 2022, 2494, 17-24.	0.9	0