Gabriel Krouk

List of Publications by Year
in descending order

53 papers	6,507 citations	87888 — 38 h-index	161849 — 54 g-index
65 all docs	65 docs citations	65 times ranked	6040 citing authors

#	Article	IF	Citations
1	Nitrate-Regulated Auxin Transport by NRT1.1 Defines a Mechanism for Nutrient Sensing in Plants. Developmental Cell, 2010, 18, 927-937.	7.0	870
2	Nitrate Transport, Sensing, and Responses in Plants. Molecular Plant, 2016, 9, 837-856.	8.3	427
3	Nitrogen economics of root foraging: Transitive closure of the nitrateâ€“cytokinin relay and distinct systemic signaling for N supply vs. demand. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18524-18529.	7.1	333
4	Nitrate signaling: adaptation to fluctuating environments. Current Opinion in Plant Biology, 2010, 13, 265-272.	7.1	319
5	ABA transport and transporters. Trends in Plant Science, 2013, 18, 325-333.	8.8	281
6	Multiple mechanisms of nitrate sensing by Arabidopsis nitrate transceptor NRT1.1. Nature Plants, 2015, 1, 15015.	9.3	265
7	A framework integrating plant growth with hormones and nutrients. Trends in Plant Science, 2011, 16, 178-182.	8.8	255
8	Nitrate transceptor(s) in plants. Journal of Experimental Botany, 2011, 62, 2299-2308.	4.8	246
9	Predictive network modeling of the high-resolution dynamic plant transcriptome in response to nitrate. Genome Biology, 2010, 11, R123.	9.6	241
10	Nitrate in 2020: Thirty Years from Transport to Signaling Networks. Plant Cell, 2020, 32, 2094-2119.	6.6	203
11	AtNIGT1/HRS1 integrates nitrate and phosphate signals at the Arabidopsis root tip. Nature Communications, 2015, 6, 6274.	12.8	195
12	Hit-and-run transcriptional control by bZIP1 mediates rapid nutrient signaling in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10371-10376.	7.1	154
13	A map of cell typeâ€specific auxin responses. Molecular Systems Biology, 2013, 9, 688.	7.2	150
14	Regulation of the High-Affinity NO3â" Uptake System by NRT1.1-Mediated NO3â" Demand Signaling in Arabidopsis. Plant Physiology, 2006, 142, 1075-1086.	4.8	149
15	The Primary Nitrate Response: a multifaceted signalling pathway. Journal of Experimental Botany, 2014, 65, 5567-5576.	4.8	146
16	Identification of Molecular Integrators Shows that Nitrogen Actively Controls the Phosphate Starvation Response in Plants. Plant Cell, 2019, 31, 1171-1184.	6.6	135
17	Responses to Systemic Nitrogen Signaling in Arabidopsis Roots Involve <i>trans</i>-Zeatin in Shoots. Plant Cell, 2018, 30, 1243-1257.	6.6	134
18	Gene regulatory networks in plants: learning causality from time and perturbation. Genome Biology, 2013, 14, 123.	8.8	115

#	Article	IF	Citations
19	Hormones and nitrate: a two-way connection. Plant Molecular Biology, 2016, 91, 599-606.	3.9	111
20	HIGH NITROGEN INSENSITIVE 9 (HNI9)-mediated systemic repression of root NO ₃ ^{âˆ’} uptake is associated with changes in histone methylation. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13329-13334.	7.1	108
21	Transient genome-wide interactions of the master transcription factor NLP7 initiate a rapid nitrogen-response cascade. Nature Communications, 2020, 11, 1157.	12.8	99
22	Nitrate Controls Root Development through Post-Transcriptional Regulation of the NRT1.1/NPF6.3 transporter/sensor. Plant Physiology, 2016, 172, pp.01047.2016.	4.8	94
23	Integration of responses within and across <i>Arabidopsis</i> natural accessions uncovers loci controlling root systems architecture. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15133-15138.	7.1	93
24	Network Walking charts transcriptional dynamics of nitrogen signaling by integrating validated and predicted genome-wide interactions. Nature Communications, 2019, 10, 1569.	12.8	92
25	Getting to the Root of Plant Mineral Nutrition: Combinatorial Nutrient Stresses Reveal Emergent Properties. Trends in Plant Science, 2019, 24, 542-552.	8.8	88
26	Combinatorial interaction network of transcriptomic and phenotypic responses to nitrogen and hormones in the <i>Arabidopsis thaliana</i> root. Science Signaling, 2016, 9, rs13.	3.6	81
27	Novel Aquaporin Regulatory Mechanisms Revealed by Interactomics. Molecular and Cellular Proteomics, 2016, 15, 3473-3487.	3.8	80
28	Integrated RNA-seq and sRNA-seq analysis identifies novel nitrate-responsive genes in Arabidopsis thaliana roots. BMC Genomics, 2013, 14, 701.	2.8	76
29	TARGET: A Transient Transformation System for Genome-Wide Transcription Factor Target Discovery. Molecular Plant, 2013, 6, 978-980.	8.3	73
30	The world according to GARP transcription factors. Current Opinion in Plant Biology, 2017, 39, 159-167.	7.1	72
31	Modeling the global effect of the basic-leucine zipper transcription factor 1 (bZIP1) on nitrogen and light regulation in Arabidopsis. BMC Systems Biology, 2010, 4, 111.	3.0	69
32	A Systems Approach Uncovers Restrictions for Signal Interactions Regulating Genome-wide Responses to Nutritional Cues in Arabidopsis. PLoS Computational Biology, 2009, 5, e1000326.	3.2	64
33	The Arabidopsis NRT1.1 transceptor coordinately controls auxin biosynthesis and transport to regulate root branching in response to nitrate. Journal of Experimental Botany, 2020, 71, 4480-4494.	4.8	64
34	LPCAT1 controls phosphate homeostasis in a zinc-dependent manner. ELife, 2018, 7, .	6.0	63
35	RootScape: A Landmark-Based System for Rapid Screening of Root Architecture in Arabidopsis Â Â. Plant Physiology, 2013, 161, 1086-1096.	4.8	59
36	Longâ€distance nitrate signaling displays cytokinin dependent and independent branches. Journal of Integrative Plant Biology, 2016, 58, 226-229.	8.5	57

#	Article	IF	Citations
37	Nitrogen and Phosphorus interactions in plants: from agronomic to physiological and molecular insights. Current Opinion in Plant Biology, 2020, 57, 104-109.	7.1	49
38	A system biology approach highlights a hormonal enhancer effect on regulation of genes in a nitrate responsive "biomodule". BMC Systems Biology, 2009, 3, 59.	3.0	48
39	Iron and ROS control of the DownSTream mRNA decay pathway is essential for plant fitness. EMBO Journal, 2012, 31, 175-186.	7.8	37
40	Finding a nitrogen niche: a systems integration of local and systemic nitrogen signalling in plants. Journal of Experimental Botany, 2014, 65, 5601-5610.	4.8	36
41	A Systems View of Responses to Nutritional Cues in Arabidopsis: Toward a Paradigm Shift for Predictive Network Modeling. Plant Physiology, 2010, 152, 445-452.	4.8	34
42	Nitrate signalling: Calcium bridges the nitrate gap. Nature Plants, 2017, 3, 17095.	9.3	34
43	The Chromatin Factor HNI9 and ELONGATED HYPOCOTYL5 Maintain ROS Homeostasis under High Nitrogen Provision. Plant Physiology, 2019, 180, 582-592.	4.8	30
44	TransDetect Identifies a New Regulatory Module Controlling Phosphate Accumulation. Plant Physiology, 2017, 175, 916-926.	4.8	28
45	PDX1.1-dependent biosynthesis of vitamin B6 protects roots from ammonium-induced oxidative stress. Molecular Plant, 2022, 15, 820-839.	8.3	28
46	GARP transcription factors repress Arabidopsis nitrogen starvation response via ROS-dependent and -independent pathways. Journal of Experimental Botany, 2021, 72, 3881-3901.	4.8	27
47	Nitrate signaling promotes plant growth by upregulating gibberellin biosynthesis and destabilization of DELLA proteins. Current Biology, 2021, 31, 4971-4982.e4.	3.9	25
48	GeneCloud Reveals Semantic Enrichment in Lists of Gene Descriptions. Molecular Plant, 2015, 8, 971-973.	8.3	17
49	Reverse engineering highlights potential principles of large gene regulatory network design and learning. Npj Systems Biology and Applications, 2017, 3, 17.	3.0	13
50	The Next Generation of Training for Arabidopsis Researchers: Bioinformatics and Quantitative Biology. Plant Physiology, 2017, 175, 1499-1509.	4.8	11
51	Root Membrane Ubiquitinome under Short-Term Osmotic Stress. International Journal of Molecular Sciences, 2022, 23, 1956.	4.1	7
52	iPlant Systems Biology (iPSB): An International Network Hub in the Plant Community. Molecular Plant, 2019, 12, 727-730.	8.3	5
53	Comparative study of molecular binding sites of nitrate and auxin in Arabidopsis thaliana NRT1.1 & NRT1.2 transporter.. , 0, , .		0