

# Ronald Pierik

## List of Publications by Year in descending order

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104  
papers

8,472  
citations

44069

48  
h-index

48315

88  
g-index

115  
all docs

115  
docs citations

115  
times ranked

7389  
citing authors

#	ARTICLE	IF	CITATIONS
1	How plants cope with complete submergence. <i>New Phytologist</i> , 2006, 170, 213-226.	7.3	465
2	The Janus face of ethylene: growth inhibition and stimulation. <i>Trends in Plant Science</i> , 2006, 11, 176-183.	8.8	398
3	The shade avoidance syndrome: multiple signals and ecological consequences. <i>Plant, Cell and Environment</i> , 2017, 40, 2530-2543.	5.7	342
4	Shade tolerance: when growing tall is not an option. <i>Trends in Plant Science</i> , 2013, 18, 65-71.	8.8	322
5	Auxin transport through PIN-FORMED 3 (PIN3) controls shade avoidance and fitness during competition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 22740-22744.	7.1	246
6	Reaching out of the shade. <i>Current Opinion in Plant Biology</i> , 2005, 8, 462-468.	7.1	222
7	DELLA protein function in growth responses to canopy signals. <i>Plant Journal</i> , 2007, 51, 117-126.	5.7	209
8	Shade avoidance: phytochrome signalling and other aboveground neighbour detection cues. <i>Journal of Experimental Botany</i> , 2014, 65, 2815-2824.	4.8	206
9	Perception of low red:far-red ratio compromises both salicylic acid- and jasmonic acid-dependent pathogen defences in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2013, 75, 90-103.	5.7	181
10	Light Signaling, Root Development, and Plasticity. <i>Plant Physiology</i> , 2018, 176, 1049-1060.	4.8	181
11	Low Red/Far-Red Ratios Reduce <i>Arabidopsis</i> Resistance to <i>Botrytis cinerea</i> and Jasmonate Responses via a COI1-JAZ10-Dependent, Salicylic Acid-Independent Mechanism. <i>Plant Physiology</i> , 2012, 158, 2042-2052.	4.8	180
12	Interactions between Ethylene and Gibberellins in Phytochrome-Mediated Shade Avoidance Responses in Tobacco. <i>Plant Physiology</i> , 2004, 136, 2928-2936.	4.8	174
13	Auxin and Ethylene Regulate Elongation Responses to Neighbor Proximity Signals Independent of Gibberellin and DELLA Proteins in <i>Arabidopsis thaliana</i> . <i>Plant Physiology</i> , 2009, 149, 1701-1712.	4.8	170
14	Far-Red Light Detection in the Shoot Regulates Lateral Root Development through the HY5 Transcription Factor. <i>Plant Cell</i> , 2018, 30, 101-116.	6.6	164
15	Molecular mechanisms of plant competition: neighbour detection and response strategies. <i>Functional Ecology</i> , 2013, 27, 841-853.	3.6	162
16	Biogenic volatile organic compounds and plant competition. <i>Trends in Plant Science</i> , 2010, 15, 126-132.	8.8	159
17	Light Quality-Mediated Petiole Elongation in <i>Arabidopsis</i> during Shade Avoidance Involves Cell Wall Modification by Xyloglucan Endotransglucosylase/Hydrolases. <i>Plant Physiology</i> , 2010, 154, 978-990.	4.8	158
18	Canopy studies on ethylene-insensitive tobacco identify ethylene as a novel element in blue light and plant-plant signalling. <i>Plant Journal</i> , 2004, 38, 310-319.	5.7	156

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19	The Art of Being Flexible: How to Escape from Shade, Salt, and Drought. <i>Plant Physiology</i> , 2014, 166, 5-22.	4.8	155
20	Blueâ€lightâ€mediated shade avoidance requires combined auxin and brassinosteroid action in <i>Arabidopsis</i> seedlings. <i>Plant Journal</i> , 2011, 67, 208-217.	5.7	148
21	Integration of Phytochrome and Cryptochrome Signals Determines Plant Growth during Competition for Light. <i>Current Biology</i> , 2016, 26, 3320-3326.	3.9	148
22	Cell Wall Modifying Proteins Mediate Plant Acclimatization to Biotic and Abiotic Stresses. <i>Critical Reviews in Plant Sciences</i> , 2011, 30, 548-562.	5.7	133
23	Two <i>Rumex</i> Species from Contrasting Hydrological Niches Regulate Flooding Tolerance through Distinct Mechanisms. <i>Plant Cell</i> , 2013, 25, 4691-4707.	6.6	133
24	Ethylene is required in tobacco to successfully compete with proximate neighbours. <i>Plant, Cell and Environment</i> , 2003, 26, 1229-1234.	5.7	130
25	Canopy Light and Plant Health. <i>Plant Physiology</i> , 2012, 160, 145-155.	4.8	128
26	Flooding tolerance of <i>Carex</i> species in relation to field distribution and aerenchyma formation. <i>New Phytologist</i> , 2000, 148, 93-103.	7.3	122
27	Neighbor detection at the leaf tip adaptively regulates upward leaf movement through spatial auxin dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7450-7455.	7.1	118
28	Ethylene-Induced Differential Growth of Petioles in <i>Arabidopsis</i> . <i>Analyzing Natural Variation, Response Kinetics, and Regulation. Plant Physiology</i> , 2005, 137, 998-1008.	4.8	116
29	Natural variation of submergence tolerance among <i>Arabidopsis thaliana</i> accessions. <i>New Phytologist</i> , 2011, 190, 299-310.	7.3	114
30	Growth Control by Ethylene: Adjusting Phenotypes to the Environment. <i>Journal of Plant Growth Regulation</i> , 2007, 26, 188-200.	5.1	108
31	Contrasting root behaviour in two grass species: a test of functionality in dynamic heterogeneous conditions. <i>Plant and Soil</i> , 2011, 344, 347-360.	3.7	107
32	Ecology of plant volatiles: taking a plant community perspective. <i>Plant, Cell and Environment</i> , 2014, 37, 1845-1853.	5.7	103
33	Competing neighbors: light perception and root function. <i>Oecologia</i> , 2014, 176, 1-10.	2.0	91
34	The Regulation of Cell Wall Extensibility during Shade Avoidance: A Study Using Two Contrasting Ecotypes of <i>Stellaria longipes</i> . <i>Plant Physiology</i> , 2008, 148, 1557-1569.	4.8	89
35	Plant neighbor detection through touching leaf tips precedes phytochrome signals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14705-14710.	7.1	89
36	Three Auxin Response Factors Promote Hypocotyl Elongation. <i>Plant Physiology</i> , 2018, 178, 864-875.	4.8	79

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37	Is elongation-induced leaf emergence beneficial for submerged <i>Rumex</i> species?. <i>Annals of Botany</i> , 2009, 103, 353-357.	2.9	78
38	Physiological regulation and functional significance of shade avoidance responses to neighbors. <i>Plant Signaling and Behavior</i> , 2010, 5, 655-662.	2.4	78
39	Canopy light cues affect emission of constitutive and methyl jasmonate-induced volatile organic compounds in <i>Arabidopsis thaliana</i> . <i>New Phytologist</i> , 2013, 200, 861-874.	7.3	78
40	Plant Phenotypic and Transcriptional Changes Induced by Volatiles from the Fungal Root Pathogen <i>Rhizoctonia solani</i> . <i>Frontiers in Plant Science</i> , 2017, 8, 1262.	3.6	78
41	Differential petiole growth in <i>Arabidopsis thaliana</i> : photocontrol and hormonal regulation. <i>New Phytologist</i> , 2009, 184, 141-152.	7.3	77
42	Ethylene-induced differential petiole growth in <i>Arabidopsis thaliana</i> involves local microtubule reorientation and cell expansion. <i>New Phytologist</i> , 2012, 193, 339-348.	7.3	74
43	Light signalling shapes plant-plant interactions in dense canopies. <i>Plant, Cell and Environment</i> , 2021, 44, 1014-1029.	5.7	71
44	A functional comparison of acclimation to shade and submergence in two terrestrial plant species. <i>New Phytologist</i> , 2005, 167, 197-206.	7.3	64
45	Molecular Profiles of Contrasting Shade Response Strategies in Wild Plants: Differential Control of Immunity and Shoot Elongation. <i>Plant Cell</i> , 2017, 29, 331-344.	6.6	63
46	Control of Plant Growth and Defense by Photoreceptors: From Mechanisms to Opportunities in Agriculture. <i>Molecular Plant</i> , 2021, 14, 61-76.	8.3	61
47	Inhibition of root elongation by ethylene in wetland and non-wetland plant species and the impact of longitudinal ventilation. <i>Plant, Cell and Environment</i> , 2007, 30, 31-38.	5.7	56
48	Ethylene- and shade-induced hypocotyl elongation share transcriptome patterns and functional regulators. <i>Plant Physiology</i> , 2016, 172, pp.00725.2016.	4.8	54
49	New Perspectives in Flooding Research: the Use of Shade Avoidance and <i>Arabidopsis thaliana</i> . <i>Annals of Botany</i> , 2005, 96, 533-540.	2.9	53
50	Different shades of JAZ during plant growth and defense. <i>New Phytologist</i> , 2014, 204, 261-264.	7.3	53
51	Soil Salinity Limits Plant Shade Avoidance. <i>Current Biology</i> , 2019, 29, 1669-1676.e4.	3.9	52
52	Far-red radiation increases dry mass partitioning to fruits but reduces <i>Botrytis cinerea</i> resistance in tomato. <i>Environmental and Experimental Botany</i> , 2019, 168, 103889.	4.2	51
53	Endogenous Abscisic Acid as a Key Switch for Natural Variation in Flooding-Induced Shoot Elongation. <i>Plant Physiology</i> , 2010, 154, 969-977.	4.8	50
54	Plasticity as a plastic response: how submergence-induced leaf elongation in <i>Rumex palustris</i> depends on light and nutrient availability in its early life stage. <i>New Phytologist</i> , 2012, 194, 572-582.	7.3	50

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55	Growth-mediated stress escape: convergence of signal transduction pathways activated upon exposure to two different environmental stresses. <i>New Phytologist</i> , 2011, 189, 122-134.	7.3	49
56	Fitness consequences of natural variation in flooding-induced shoot elongation in <i>Rumex palustris</i> . <i>New Phytologist</i> , 2011, 190, 409-420.	7.3	49
57	Studies of <i>Physcomitrella patens</i> reveal that ethylene-mediated submergence responses arose relatively early in land-plant evolution. <i>Plant Journal</i> , 2012, 72, 947-959.	5.7	49
58	Canopy Light Quality Modulates Stress Responses in Plants. <i>IScience</i> , 2019, 22, 441-452.	4.1	45
59	Far-red light promotes <i>Botrytis cinerea</i> disease development in tomato leaves via jasmonate-dependent modulation of soluble sugars. <i>Plant, Cell and Environment</i> , 2020, 43, 2769-2781.	5.7	43
60	Red:far-red light conditions affect the emission of volatile organic compounds from barley ( <i>Hordeum vulgare</i> ), leading to altered biomass allocation in neighbouring plants. <i>Annals of Botany</i> , 2015, 115, 961-970.	2.9	41
61	An Ancestral Role for CONSTITUTIVE TRIPLE RESPONSE1 Proteins in Both Ethylene and Abscisic Acid Signaling. <i>Plant Physiology</i> , 2015, 169, 283-298.	4.8	41
62	Ethylene promotes hyponastic growth through interaction with ROTUNDIFOLIA3/CYP90C1 in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2013, 64, 613-624.	4.8	40
63	scRNA-seq reveals weed-induced PIF3-like as a candidate target to manipulate weed stress response in soybean. <i>New Phytologist</i> , 2015, 207, 196-210.	7.3	40
64	The bHLH network underlying plant shade avoidance. <i>Physiologia Plantarum</i> , 2020, 169, 312-324.	5.2	40
65	Subtle variation in shade avoidance responses may have profound consequences for plant competitiveness. <i>Annals of Botany</i> , 2018, 121, 863-873.	2.9	39
66	Blue light regulated shade avoidance. <i>Plant Signaling and Behavior</i> , 2012, 7, 514-517.	2.4	36
67	Photoreceptors Regulate Plant Developmental Plasticity through Auxin. <i>Plants</i> , 2020, 9, 940.	3.5	36
68	Plant Stress Profiles. <i>Science</i> , 2008, 320, 880-881.	12.6	35
69	Interactions between Auxin, Microtubules and XTHs Mediate Green Shade- Induced Petiole Elongation in <i>Arabidopsis</i> . <i>PLoS ONE</i> , 2014, 9, e90587.	2.5	35
70	From shade avoidance responses to plant performance at vegetation level: using virtual plant modelling as a tool. <i>New Phytologist</i> , 2014, 204, 268-272.	7.3	31
71	Antiphase Light and Temperature Cycles Affect PHYTOCHROME B-Controlled Ethylene Sensitivity and Biosynthesis, Limiting Leaf Movement and Growth of <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2013, 163, 882-895.	4.8	28
72	Ethylene sensitivity affects changes in growth patterns, but not stem properties, in response to mechanical stress in tobacco. <i>Physiologia Plantarum</i> , 2006, 128, 274-282.	5.2	27

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73	Petiole hyponasty: an ethylene-driven, adaptive response to changes in the environment. <i>AoB PLANTS</i> , 2011, 2011, plr031.	2.3	27
74	Thick Root Syndrome in Cucumber ( <i>Cucumis sativus</i> L.): A Description of the Phenomenon and an Investigation of the Role of Ethylene. <i>Annals of Botany</i> , 1999, 84, 755-762.	2.9	26
75	Density-induced Plant Size Reduction and Size Inequalities in Ethylene-sensing and Ethylene-insensitive Tobacco. <i>Plant Biology</i> , 2004, 6, 201-205.	3.8	23
76	Reducing shade avoidance can improve <i>Arabidopsis</i> canopy performance against competitors. <i>Plant, Cell and Environment</i> , 2021, 44, 1130-1141.	5.7	23
77	Illumina Sequencing Technology as a Method of Identifying T-DNA Insertion Loci in Activation-Tagged <i>Arabidopsis thaliana</i> Plants. <i>Molecular Plant</i> , 2012, 5, 948-950.	8.3	22
78	Ethylene-Mediated Regulation of A2-Type CYCLINs Modulates Hyponastic Growth in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2015, 169, 194-208.	4.8	22
79	Regulation of Lateral Root Development by Shoot-Sensed Far-Red Light via HY5 Is Nitrate-Dependent and Involves the NRT2.1 Nitrate Transporter. <i>Frontiers in Plant Science</i> , 2021, 12, 660870.	3.6	21
80	Plant Life without Ethylene. <i>Trends in Plant Science</i> , 2015, 20, 783-786.	8.8	18
81	Location Matters: Canopy Light Responses over Spatial Scales. <i>Trends in Plant Science</i> , 2018, 23, 865-873.	8.8	18
82	The Dynamic Plant: Capture, Transformation, and Management of Energy. <i>Plant Physiology</i> , 2018, 176, 961-966.	4.8	16
83	How light and biomass density influence the reproduction of delayed <i>Saccharina latissima</i> gametophytes (Phaeophyceae). <i>Journal of Phycology</i> , 2020, 56, 709-718.	2.3	16
84	Cell wall modification involving XTHs controls phytochrome-mediated petiole elongation in <i>Arabidopsis thaliana</i> . <i>Plant Signaling and Behavior</i> , 2010, 5, 1491-1492.	2.4	15
85	Light quality controls shoot elongation through regulation of multiple hormones. <i>Plant Signaling and Behavior</i> , 2009, 4, 755-756.	2.4	14
86	Photomorphogenesis and Photoreceptors. <i>Advances in Photosynthesis and Respiration</i> , 2016, , 171-186.	1.0	14
87	Variation in plastic responses to light results from selection in different competitive environments—A game theoretical approach using virtual plants. <i>PLoS Computational Biology</i> , 2019, 15, e1007253.	3.2	14
88	Mechanisms of far-red light-mediated dampening of defense against <i>Botrytis cinerea</i> in tomato leaves. <i>Plant Physiology</i> , 2021, 187, 1250-1266.	4.8	14
89	Moving resources away from the herbivore: regulation and adaptive significance. <i>New Phytologist</i> , 2010, 188, 643-645.	7.3	13
90	A kinetic analysis of hyponastic growth and petiole elongation upon ethylene exposure in <i>Rumex palustris</i> . <i>Annals of Botany</i> , 2010, 106, 429-435.	2.9	13

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91	A Gas-and-Brake Mechanism of bHLH Proteins Modulates Shade Avoidance. <i>Plant Physiology</i> , 2020, 184, 2137-2153.	4.8	13
92	Architecture and plasticity: optimizing plant performance in dynamic environments. <i>Plant Physiology</i> , 2021, 187, 1029-1032.	4.8	12
93	Auxin perception and polar auxin transport are not always a prerequisite for differential growth. <i>Plant Signaling and Behavior</i> , 2009, 4, 899-901.	2.4	11
94	Organ-specific phytohormone synthesis in two <i>Geranium</i> species with antithetical responses to far-red light enrichment. <i>Plant Direct</i> , 2018, 2, e00066.	1.9	10
95	The role of seasonality in reproduction of multiannual delayed gametophytes of <i>Saccharina latissima</i> . <i>Journal of Phycology</i> , 2021, 57, 1580-1589.	2.3	8
96	A plant chamber system with downstream reaction chamber to study the effects of pollution on biogenic emissions. <i>Environmental Sciences: Processes and Impacts</i> , 2014, 16, 2301-2312.	3.5	7
97	A molecular basis for the physiological variation in shade avoidance responses. <i>Plant Signaling and Behavior</i> , 2009, 4, 528-529.	2.4	5
98	In-Culture Selection and the Potential Effects of Changing Sex Ratios on the Reproductive Success of Multiannual Delayed Gametophytes of <i>Saccharina latissima</i> and <i>Alaria esculenta</i> . <i>Journal of Marine Science and Engineering</i> , 2021, 9, 1250.	2.6	4
99	Struggling for Light. <i>Plant Signaling and Behavior</i> , 2007, 2, 512-513.	2.4	2
100	Beating the blues: engineering cryptochrome expression improves soybean yield. <i>Molecular Plant</i> , 2021, 14, 202-204.	8.3	2
101	Plant Competition: Light Signals Control Polar Auxin Transport. <i>Signaling and Communication in Plants</i> , 2013, , 281-293.	0.7	2
102	The SeaCoRe system for large scale kelp aquaculture: a plug-and-play, compatible, open-source system for the propagation and transport of clonal gametophyte cultures. <i>Journal of Applied Phycology</i> , 2022, 34, 517-527.	2.8	2
103	Photosensory Cues in Plant-Plant Interactions: Regulation and Functional Significance of Shade Avoidance Responses. <i>Signaling and Communication in Plants</i> , 2010, , 159-178.	0.7	1
104	Warm days, relaxed RNA. <i>Nature Plants</i> , 2020, 6, 438-439.	9.3	0