Erik J Veneklaas

List of Publications by Year
in descending order

121 papers	15,901 citations	53751 45 h-index	17580 121 g-index
123 all docs	123 docs citations	123 times ranked	15971 citing authors

#	Article	IF	Citations
1	The worldwide leaf economics spectrum. Nature, 2004, 428, 821-827.	13.7	6,489
2	TRY plant trait database â€“ enhanced coverage and open access. Global Change Biology, 2020, 26, 119-188.	4.2	1,038
3	Root Structure and Functioning for Efficient Acquisition of Phosphorus: Matching Morphological and Physiological Traits. Annals of Botany, 2006, 98, 693-713.	1.4	1,012
4	Opportunities for improving phosphorusâ€use efficiency in crop plants. New Phytologist, 2012, 195, 306-320.	3.5	702
5	Plant and microbial strategies to improve the phosphorus efficiency of agriculture. Plant and Soil, 2011, 349, 121-156.	1.8	678
6	Global variability in leaf respiration in relation to climate, plant functional types and leaf traits. New Phytologist, 2015, 206, 614-636.	3.5	350
7	Strategies and agronomic interventions to improve the phosphorus-use efficiency of farming systems. Plant and Soil, 2011, 349, 89-120.	1.8	343
8	Chickpea and white lupin rhizosphere carboxylates vary with soil properties and enhance phosphorus uptake. Plant and Soil, 2003, 248, 187-197.	1.8	260
9	Phosphorus Nutrition of Proteaceae in Severely Phosphorus-Impoverished Soils: Are There Lessons To Be Learned for Future Crops?. Plant Physiology, 2011, 156, 1058-1066.	2.3	176
10	Carboxylate composition of root exudates does not relate consistently to a crop speciesâ€™ ability to use phosphorus from aluminium, iron or calcium phosphate sources. New Phytologist, 2007, 173, 181-190.	3.5	175
11	Distribution of Carboxylates and Acid Phosphatase and Depletion of Different Phosphorus Fractions in the Rhizosphere of a Cereal and Three Grain Legumes. Plant and Soil, 2006, 281, 109-120.	1.8	172
12	Carboxylate release of wheat, canola and 11 grain legume species as affected by phosphorus status. Plant and Soil, 2006, 288, 127-139.	1.8	169
13	Nature and nurture: the importance of seed phosphorus content. Plant and Soil, 2012, 357, 1-8.	1.8	167
14	Phosphorus benefits of different legume crops to subsequent wheat grown in different soils of Western Australia. Plant and Soil, 2005, 271, 175-187.	1.8	164
15	Physiological and ecological significance of biomineralization in plants. Trends in Plant Science, 2014, 19, 166-174.	4.3	156
16	Influence of leaf dry mass per area, CO2, and irradiance on mesophyll conductance in sclerophylls. Journal of Experimental Botany, 2009, 60, 2303-2314.	2.4	145
17	Banksia species (Proteaceae) from severely phosphorusâ€impoverished soils exhibit extreme efficiency in the use and reâ€mobilization of phosphorus. Plant, Cell and Environment, 2007, 30, 1557-1565.	2.8	144
18	Optimal allocation of leaf epidermal area for gas exchange. New Phytologist, 2016, 210, 1219-1228.	3.5	139

#	Article	IF	Citations
19	Title is missing!. Plant and Soil, 2002, 238, 111-122.	1.8	131
20	Leaf water relations during summer water deficit: differential responses in turgor maintenance and variation in leaf structure among different plant communities in southâ€western Australia. Plant, Cell and Environment, 2008, 31, 1791-1802.	2.8	128
21	Short Communication: Leaf trait relationships in Australian plant species. Functional Plant Biology, 2004, 31, 551.	1.1	123
22	Low levels of ribosomal <scp>RNA</scp> partly account for the very high photosynthetic phosphorusâ€use efficiency of <scp>P</scp>roteaceae species. Plant, Cell and Environment, 2014, 37, 1276-1298.	2.8	121
23	Litterfall and nutrient fluxes in two montane tropical rain forests, Colombia. Journal of Tropical Ecology, 1991, 7, 319-336.	0.5	97
24	Phosphorus uptake by grain legumes and subsequently grown wheat at different levels of residual phosphorus fertiliser. Australian Journal of Agricultural Research, 2005, 56, 1041.	1.5	87
25	Variable tolerance of wetland tree species to combined salinity and waterlogging is related to regulation of ion uptake and production of organic solutes. New Phytologist, 2006, 169, 123-134.	3.5	83
26	Altered vegetation structure and composition linked to fire frequency and plant invasion in a biodiverse woodland. Biological Conservation, 2009, 142, 2270-2281.	1.9	80
27	Does cluster-root activity benefit nutrient uptake and growth of co-existing species?. Oecologia, 2014, 174, 23-31.	0.9	80
28	Two sides to every leaf: water and <scp>CO</scp>₂ transport in hypostomatous and amphistomatous leaves. New Phytologist, 2019, 222, 1179-1187.	3.5	76
29	Carboxylate concentrations in the rhizosphere of lateral roots of chickpea (Cicer arietinum) increase during plant development, but are not correlated with phosphorus status of soil or plants. New Phytologist, 2004, 162, 745-753.	3.5	74
30	AusTraits, a curated plant trait database for the Australian flora. Scientific Data, 2021, 8, 254.	2.4	73
31	Stomatal crypts may facilitate diffusion of CO₂ to adaxial mesophyll cells in thick sclerophylls. Plant, Cell and Environment, 2009, 32, 1596-1611.	2.8	69
32	Using multiple trait associations to define hydraulic functional types in plant communities of south-western Australia. Oecologia, 2008, 158, 385-397.	0.9	68
33	Triticum aestivum shows a greater biomass response to a supply of aluminium phosphate than Lupinus albus , despite releasing fewer carboxylates into the rhizosphere. New Phytologist, 2006, 169, 515-524.	3.5	67
34	Photosynthesis at an extreme end of the leaf trait spectrum: how does it relate to high leaf dry mass per area and associated structural parameters?. Journal of Experimental Botany, 2010, 61, 3015-3028.	2.4	67
35	Morphologies and elemental compositions of calcium crystals in phyllodes and branchlets of Acacia robeorum (Leguminosae: Mimosoideae). Annals of Botany, 2012, 109, 887-896.	1.4	63
36	Gallery forest types and their environmental correlates in a Colombian savanna landscape. Ecography, 2005, 28, 236-252.	2.1	62

#	Article	IF	Citations
37	Soil seed bank compositional change constrains biodiversity in an invaded species-rich woodland. Biological Conservation, 2009, 142, 256-269.	1.9	59
38	Apparent Overinvestment in Leaf Venation Relaxes Leaf Morphological Constraints on Photosynthesis in Arid Habitats. Plant Physiology, 2016, 172, 2286-2299.	2.3	59
39	Stomatal Crypts Have Small Effects on Transpiration: A Numerical Model Analysis. Plant Physiology, 2009, 151, 2018-2027.	2.3	58
40	Complementary plant nutrientâ€acquisition strategies promote growth of neighbour species. Functional Ecology, 2014, 28, 819-828.	1.7	56
41	Enhanced soil and leaf nutrient status of a Western Australian Banksia woodland community invaded by Ehrharta calycina and Pelargonium capitatum. Plant and Soil, 2006, 284, 253-264.	1.8	55
42	Tropical cyclones and the ecohydrology of Australia's recent continentalâ€scale drought. Geophysical Research Letters, 2012, 39, .	1.5	55
43	Leaf manganese concentrations as a tool to assess belowground plant functioning in phosphorus-impoverished environments. Plant and Soil, 2021, 461, 43-61.	1.8	52
44	Effects of phosphorus supply on growth, phosphate concentration and cluster-root formation in three Lupinus species. Annals of Botany, 2010, 105, 365-374.	1.4	51
45	Inbreeding and outbreeding depression in <scp>S</scp>tylidium hispidum: implications for mixing seed sources for ecological restoration. Ecology and Evolution, 2012, 2, 2262-2273.	0.8	51
46	Water relations and mineral nutrition of closely related woody plant species on desert dunes and interdunes. Australian Journal of Botany, 2008, 56, 27.	0.3	48
47	Seasonal patterns in water use and leaf turnover of different plant functional types in a species-rich woodland, south-western Australia. Plant and Soil, 2003, 257, 295-304.	1.8	47
48	Spatial analysis of fine root distribution on a recently constructed ecosystem in a water-limited environment. Plant and Soil, 2011, 344, 255-272.	1.8	46
49	Are leaf functional traits â€˜invariantâ€™ with plant size and what is â€˜invarianceâ€™ anyway?. Functional Ecology, 2014, 28, 1330-1343.	1.7	46
50	Tree hostâ€“pathogen interactions as influenced by drought timing: linking physiological performance, biochemical defence and disease severity. Tree Physiology, 2019, 39, 6-18.	1.4	46
51	Relative growth rate and biomass allocation in 20 Aegilops (Poaceae) species. New Phytologist, 1998, 140, 425-437.	3.5	45
52	Rhizosphere carboxylate concentrations of chickpea are affected by genotype and soil type. Plant and Soil, 2004, 261, 1-10.	1.8	45
53	Plant phosphorus status has a limited influence on the concentration of phosphorus-mobilising carboxylates in the rhizosphere of chickpea. Functional Plant Biology, 2005, 32, 153.	1.1	45
54	Relative growth rate and biomass allocation in 20 Aegilops (Poaceae) species. New Phytologist, 1998, 140, 425-437.	3.5	39

#	Article	IF	Citations
55	Yield and water use of wheat (Triticum aestivum) in a Mediterranean environment: Cultivar differences and sowing density effects. Plant and Soil, 1996, 181, 251-262.	1.8	35
56	Species distribution and crown decline are associated with contrasting water relations in four common sympatric eucalypt species in southwestern Australia. Plant and Soil, 2013, 364, 409-423.	1.8	35
57	Is nitrogen transfer among plants enhanced by contrasting nutrientâ€acquisition strategies?. Plant, Cell and Environment, 2015, 38, 50-60.	2.8	30
58	Does phenotypic plasticity in carboxylate exudation differ among rare and widespread Banksia species (Proteaceae)?. New Phytologist, 2007, 173, 592-599.	3.5	29
59	Precipitation of Calcium, Magnesium, Strontium and Barium in Tissues of Four Acacia Species (Leguminosae: Mimosoideae). PLoS ONE, 2012, 7, e41563.	1.1	29
60	Root Architecture of Jarrah (Eucalyptus marginata) Trees in Relation to Postâ€Mining Deep Ripping in Western Australia. Restoration Ecology, 2007, 15, S65.	1.4	28
61	Dinitrogenâ€fixing Acacia species from phosphorusâ€impoverished soils resorb leaf phosphorus efficiently. Plant, Cell and Environment, 2011, 34, 2060-2070.	2.8	28
62	Effects of global environmental change on carbon partitioning in vegetative plants of Triticum aestivum and closely related Aegilops species. Global Change Biology, 1995, 1, 397-406.	4.2	26
63	Relative growth rate, biomass allocation pattern and water use efficiency of three wheat cultivars during early ontogeny as dependent on water availability. Physiologia Plantarum, 1996, 98, 493-504.	2.6	24
64	Water relations and mineral nutrition of Triodia grasses on desert dunes and interdunes. Australian Journal of Botany, 2008, 56, 408.	0.3	24
65	Osmotic potential at full turgor: an easily measurable trait to help breeders select for drought tolerance in wheat. Plant Breeding, 2016, 135, 279-285.	1.0	24
66	A climate change context for the decline of a foundation tree species in south-western Australia: insights from phylogeography and species distribution modelling. Annals of Botany, 2015, 116, 941-952.	1.4	22
67	Contrasting water relations of three coastal tree species with different exposure to salinity. Physiologia Plantarum, 2006, 127, 360-373.	2.6	21
68	The fate of hydraulically redistributed water in a semi-arid zone eucalyptus species. Tree Physiology, 2011, 31, 649-658.	1.4	21
69	Contrasting physiological responses of two co-occurring eucalypts to seasonal drought at restored bauxite mine sites. Tree Physiology, 2011, 31, 1052-1066.	1.4	21
70	Dynamics of non-structural carbohydrates in two Ficus species after transfer to deep shade. Environmental and Experimental Botany, 2005, 54, 148-154.	2.0	20
71	Spatioâ€temporal water dynamics in mature Banksia menziesii trees during drought. Physiologia Plantarum, 2014, 152, 301-315.	2.6	20
72	Root-zone hypoxia reduces growth of the tropical forage grass Urochloa humidicola in high-nutrient but not low-nutrient conditions. Annals of Botany, 2019, 124, 1019-1032.	1.4	19

#	Article	IF	Citations
73	Transpiration and water relations of evergreen shrub species on an artificial landform for mine waste storage versus an adjacent natural site in semiâ€arid Western Australia. Ecohydrology, 2014, 7, 965-981.	1.1	18
74	A threatened ecological community: research advances and priorities for Banksia woodlands. Australian Journal of Botany, 2021, 69, 53.	0.3	18
75	Isometric partitioning of hydraulic conductance between leaves and stems: balancing safety and efficiency in different growth forms and habitats. Plant, Cell and Environment, 2015, 38, 1628-1636.	2.8	17
76	Community patterns and environmental drivers in hyperâ€diverse kwongan scrub vegetation of Western Australia. Applied Vegetation Science, 2018, 21, 694-722.	0.9	17
77	Individual tree growth in jarrah (Eucalyptus marginata) forest is explained by size and distance of neighbouring trees in thinned and non-thinned plots. Forest Ecology and Management, 2021, 494, 119364.	1.4	17
78	Preferential outcrossing in Banksia ilicifolia (Proteaceae). Australian Journal of Botany, 2005, 53, 163.	0.3	16
79	The barrier to radial oxygen loss impedes the apoplastic entry of iron into the roots ofUrochloa humidicola. Journal of Experimental Botany, 2021, 72, 3279-3293.	2.4	16
80	Relative growth rate, biomass allocation pattern and water use efficiency of three wheat cultivars during early ontogeny as dependent on water availability. Physiologia Plantarum, 1996, 98, 493-504.	2.6	15
81	Changes in water relations for Acacia ancistrocarpa on natural and mine-rehabilitation sites in response to an experimental wetting pulse in the Great Sandy Desert. Plant and Soil, 2010, 326, 75-96.	1.8	15
82	Microbial inoculation to improve plant performance in mineâ€waste substrates: A test using pigeon pea (Cajanus cajan). Land Degradation and Development, 2022, 33, 497-511.	1.8	15
83	Drying the surface soil reduces the nitrogen content of faba bean (Vicia faba L.) through a reduction in nitrogen fixation. Plant and Soil, 2011, 339, 351-362.	1.8	14
84	Transpiration and plant water relations of evergreen woody vegetation on a recently constructed artificial ecosystem under seasonally dry conditions in Western Australia. Hydrological Processes, 2012, 26, 3281-3292.	1.1	14
85	A Critical Evaluation of Interventions to Progress Transdisciplinary Research. Society and Natural Resources, 2015, 28, 670-681.	0.9	14
86	Links between soil texture and root architecture of Eucalyptus species may limit distribution ranges under future climates. Plant and Soil, 2016, 403, 217-229.	1.8	14
87	Hydraulic redistribution: limitations for plants in saline soils. Plant, Cell and Environment, 2017, 40, 2437-2446.	2.8	14
88	Drought tolerances of three stem-succulent halophyte species of an inland semiarid salt lake system. Functional Plant Biology, 2014, 41, 1230.	1.1	13
89	Salinity tolerances of three succulent halophytes (Tecticornia spp.) differentially distributed along a salinity gradient. Functional Plant Biology, 2016, 43, 739.	1.1	13
90	Potassium Fertilisation Is Required to Sustain Cassava Yield and Soil Fertility. Agronomy, 2020, 10, 1103.	1.3	13

#	Article	IF	Citations
91	Shallow environmental gradients put inland species at risk: Insights and implications from predicting future distributions ofEucalyptusspecies in South Western Australia. Austral Ecology, 2015, 40, 923-932.	0.7	11
92	Root positioning and trait shifts in Hibbertia racemosa as dependent on its neighbour's nutrientâ€acquisition strategy. Plant, Cell and Environment, 2021, 44, 1257-1267.	2.8	11
93	Restoration ecophysiology: an ecophysiological approach to improve restoration strategies and outcomes in severely disturbed landscapes. Restoration Ecology, 2022, 30, e13571.	1.4	11
94	Water availability drives the effectiveness of inorganic amendments to increase plant growth and substrate quality. Catena, 2019, 182, 104116.	2.2	10
95	Arid-zone Acacia species can access poorly soluble iron phosphate but show limited growth response. Plant and Soil, 2012, 358, 119-130.	1.8	9
96	Trait-based formal definition of plant functional types and functional communities in the multi-species and multi-traits context. Ecological Complexity, 2019, 40, 100787.	1.4	9
97	Corrigendum to: A threatened ecological community: research advances and priorities for Banksia woodlands. Australian Journal of Botany, 2021, 69, 111.	0.3	9
98	Spatial analysis of fine root distribution on a recently constructed ecosystem in a water-limited environment. Plant and Soil, 2011, 348, 471-489.	1.8	8
99	Shallow soils negatively affect water relations and photosynthesis in two semi-arid Eucalyptus species. Environmental and Experimental Botany, 2018, 155, 239-250.	2.0	8
100	The potential for phosphorus benefits through root placement in the rhizosphere of phosphorus-mobilising neighbours. Oecologia, 2020, 193, 843-855.	0.9	8
101	Root length is proxy for high-throughput screening of waterlogging tolerance in Urochloa spp. grasses. Functional Plant Biology, 2021, 48, 411.	1.1	8
102	Rhizosphere processes do not explain variation in P acquisition from sparingly soluble forms among Lupinus albus accessions. Australian Journal of Agricultural Research, 2008, 59, 616.	1.5	8
103	Genetic delineation of local provenance defines seed collection zones along a climate gradient. AoB PLANTS, 2016, 8, .	1.2	7
104	Root dynamics and survival in a nutrient-poor and species-rich woodland under a drying climate. Plant and Soil, 2018, 424, 91-102.	1.8	7
105	Investigating the effect of neighbour competition on individual tree growth in thinned and unthinned eucalypt forests. Forest Ecology and Management, 2021, 499, 119637.	1.4	7
106	Contrasting submergence tolerance in two species of stem-succulent halophytes is not determined by differences in stem internal oxygen dynamics. Annals of Botany, 2015, 115, 409-418.	1.4	6
107	Composition and ecological drivers of the kwongan scrub and woodlands in the northern Swan Coastal Plain, Western Australia. Austral Ecology, 2019, 44, 906-916.	0.7	6
108	Patterns and drivers of structure, diversity, and composition in speciesâ€rich shrublands restored after mining. Restoration Ecology, 2021, 29, e13360.	1.4	6

#	Article	IF	Citations
109	Phosphorus resorption and tissue longevity of roots and leaves â€“ importance for phosphorus use efficiency and ecosystem phosphorus cycles. Plant and Soil, 2022, 476, 627-637.	1.8	6
110	Interactions among clusterâ€root investment, leaf phosphorus concentration, and relative growth rate in two Lupinus species. American Journal of Botany, 2015, 102, 1529-1537.	0.8	5
111	Phosphate fertiliser alters carboxylates and bacterial communities in sweet potato (Ipomoea batatas) Tj ETQq1 1 0.784314 rgBT /Ove	1.8	5
112	Native plant diversity is a stronger driver for soil quality than inorganic amendments in semi-arid post-mining rehabilitation. Geoderma, 2021, 394, 115001.	2.3	5
113	Stockpiling disrupts the biological integrity of topsoil for ecological restoration. Plant and Soil, 2022, 471, 409-426.	1.8	5
114	Informing arid region mine-site restoration through comparative ecophysiology of Acacia species under drought. Journal of Arid Environments, 2016, 133, 73-84.	1.2	4
115	No evidence of regulation in root-mediated iron reduction in two Strategy I cluster-rooted Banksia species (Proteaceae). Plant and Soil, 2021, 461, 203-218.	1.8	4
116	Spectral detection of stress-related pigments in salt-lake succulent halophytic shrubs. International Journal of Applied Earth Observation and Geoinformation, 2016, 52, 457-463.	1.4	3
117	Population Size Effects on Progeny Performance in Banksia ilicifolia R. Br. (Proteaceae). HAYATI Journal of Biosciences, 2009, 16, 43-48.	0.1	2
118	How does spatial microâ€environmental heterogeneity influence seedling recruitment in ironstone outcrops?. Journal of Vegetation Science, 2021, 32, e13010.	1.1	2
119	Positive heterospecific interactions can increase longâ€term diversity of plant communities more than negative conspecific interactions alone. Functional Ecology, 2022, 36, 159-173.	1.7	2
120	Thermal imagery of woodland tree canopies provides new insights into drought-induced tree mortality. Science of the Total Environment, 2022, 834, 155395.	3.9	2
121	Chickpea and white lupin rhizosphere carboxylates vary with soil properties and enhance phosphorus uptake. , 2003, , 187-197.		1