

H Jochen Schenk

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/603618/publications.pdf>

Version: 2024-02-01

40
papers

4,756
citations

218677

26
h-index

289244

40
g-index

45
all docs

45
docs citations

45
times ranked

5274
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Rooting depths, lateral root spreads and below-ground/above-ground allometries of plants in water-limited ecosystems. <i>Journal of Ecology</i> , 2002, 90, 480-494. | 4.0 | 1,081 |
| 2 | THE GLOBAL BIOGEOGRAPHY OF ROOTS. <i>Ecological Monographs</i> , 2002, 72, 311-328. | 5.4 | 816 |
| 3 | Root competition: beyond resource depletion. <i>Journal of Ecology</i> , 2006, 94, 725-739. | 4.0 | 420 |
| 4 | Mapping the global distribution of deep roots in relation to climate and soil characteristics. <i>Geoderma</i> , 2005, 126, 129-140. | 5.1 | 287 |
| 5 | DEFINING A PLANT'S BELOWGROUND ZONE OF INFLUENCE. <i>Ecology</i> , 2003, 84, 2313-2321. | 3.2 | 195 |
| 6 | Wood anatomy and wood density in shrubs: Responses to varying aridity along transcontinental transects. <i>American Journal of Botany</i> , 2009, 96, 1388-1398. | 1.7 | 169 |
| 7 | INTERVESSEL PIT MEMBRANE THICKNESS AS A KEY DETERMINANT OF EMBOLISM RESISTANCE IN ANGIOSPERM XYLEM. <i>IAWA Journal</i> , 2016, 37, 152-171. | 2.7 | 169 |
| 8 | Hydraulic integration and shrub growth form linked across continental aridity gradients. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 11248-11253. | 7.1 | 146 |
| 9 | Nanobubbles: a new paradigm for air-seeding in xylem. <i>Trends in Plant Science</i> , 2015, 20, 199-205. | 8.8 | 138 |
| 10 | Xylem Surfactants Introduce a New Element to the Cohesion-Tension Theory. <i>Plant Physiology</i> , 2017, 173, 1177-1196. | 4.8 | 110 |
| 11 | The Shallowest Possible Water Extraction Profile: A Null Model for Global Root Distributions. <i>Vadose Zone Journal</i> , 2008, 7, 1119-1124. | 2.2 | 107 |
| 12 | Soil depth, plant rooting strategies and species' niches. <i>New Phytologist</i> , 2008, 178, 223-225. | 7.3 | 93 |
| 13 | Spatial ecology of a small desert shrub on adjacent geological substrates. <i>Journal of Ecology</i> , 2003, 91, 383-395. | 4.0 | 76 |
| 14 | Function and three-dimensional structure of intervessel pit membranes in angiosperms: a review. <i>IAWA Journal</i> , 2019, 40, 673-702. | 2.7 | 66 |
| 15 | Pore constrictions in intervessel pit membranes provide a mechanistic explanation for xylem embolism resistance in angiosperms. <i>New Phytologist</i> , 2021, 230, 1829-1843. | 7.3 | 63 |
| 16 | High porosity with tiny pore constrictions and unbending pathways characterize the 3D structure of intervessel pit membranes in angiosperm xylem. <i>Plant, Cell and Environment</i> , 2020, 43, 116-130. | 5.7 | 60 |
| 17 | Integration of vessel traits, wood density, and height in angiosperm shrubs and trees. <i>American Journal of Botany</i> , 2011, 98, 915-922. | 1.7 | 59 |
| 18 | Vessel-associated cells in angiosperm xylem: Highly specialized living cells at the symplast-apoplast boundary. <i>American Journal of Botany</i> , 2018, 105, 151-160. | 1.7 | 55 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Clonal splitting in desert shrubs. <i>Plant Ecology</i> , 1999, 141, 41-52. | 1.6 | 50 |
| 20 | Mind the bubbles: achieving stable measurements of maximum hydraulic conductivity through woody plant samples. <i>Journal of Experimental Botany</i> , 2011, 62, 1119-1132. | 4.8 | 50 |
| 21 | Vertical Vegetation Structure Below Ground: Scaling from Root to Globe. , 2005, , 341-373. | | 46 |
| 22 | Plant sizes and shapes above and belowground and their interactions with climate. <i>New Phytologist</i> , 2022, 235, 1032-1056. | 7.3 | 45 |
| 23 | On the ascent of sap in the presence of bubbles. <i>American Journal of Botany</i> , 2015, 102, 1561-1563. | 1.7 | 44 |
| 24 | From the sap's perspective: The nature of vessel surfaces in angiosperm xylem. <i>American Journal of Botany</i> , 2018, 105, 172-185. | 1.7 | 43 |
| 25 | Leaf anatomy and subgeneric affiliations of C3 and C4 species of Suaeda (Chenopodiaceae) in North America. <i>American Journal of Botany</i> , 1997, 84, 1198-1210. | 1.7 | 39 |
| 26 | Positive pressure in xylem and its role in hydraulic function. <i>New Phytologist</i> , 2021, 230, 27-45. | 7.3 | 39 |
| 27 | Within-tree variability and sample storage effects of bordered pit membranes in xylem of <i>Acer pseudoplatanus</i> . <i>Trees - Structure and Function</i> , 2020, 34, 61-71. | 1.9 | 31 |
| 28 | Dynamic surface tension of xylem sap lipids. <i>Tree Physiology</i> , 2020, 40, 433-444. | 3.1 | 30 |
| 29 | Dissolved atmospheric gas in xylem sap measured with membrane inlet mass spectrometry. <i>Plant, Cell and Environment</i> , 2016, 39, 944-950. | 5.7 | 29 |
| 30 | Hydraulically integrated or modular? Comparing whole-plant-level hydraulic systems between two desert shrub species with different growth forms. <i>New Phytologist</i> , 2009, 183, 142-152. | 7.3 | 28 |
| 31 | Lipids in xylem sap of woody plants across the angiosperm phylogeny. <i>Plant Journal</i> , 2021, 105, 1477-1494. | 5.7 | 27 |
| 32 | The Global Biogeography of Roots. <i>Ecological Monographs</i> , 2002, 72, 311. | 5.4 | 26 |
| 33 | The stability enigma of hydraulic vulnerability curves: addressing the link between hydraulic conductivity and drought-induced embolism. <i>Tree Physiology</i> , 2019, 39, 1646-1664. | 3.1 | 22 |
| 34 | On the sectional nomenclature of Suaeda (Chenopodiaceae). <i>Taxon</i> , 2001, 50, 857-873. | 0.7 | 16 |
| 35 | Cavitation in lipid bilayers poses strict negative pressure stability limit in biological liquids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10733-10739. | 7.1 | 16 |
| 36 | Evolutionary Ecology of Plant Signals and Toxins: A Conceptual Framework. <i>Signaling and Communication in Plants</i> , 2010, , 1-19. | 0.7 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | A crucial phase in plants – it's a gas, gas, gas!. <i>New Phytologist</i> , 2022, 233, 1556-1559. | 7.3 | 6 |
| 38 | Not all lipids in xylem conduits are artefacts. A reply to Yamagishi et al.. <i>IAWA Journal</i> , 2021, 42, 384-385. | 1.0 | 3 |
| 39 | Nanoparticles are linked to polar lipids in xylem sap of temperate angiosperm species. <i>Tree Physiology</i> , 2022, , . | 3.1 | 3 |
| 40 | Wood: Biology of a living tissue. <i>American Journal of Botany</i> , 2018, 105, 139-141. | 1.7 | 2 |