# Ansgar Kahmen

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6139392/publications.pdf

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| 95 | 6,956 | 76326 | 62596 |
|---|---|---|---|
| papers | citations | 40 h-index | 80 g-index |

| 96 | 96 | 96 | 7863 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Effects of phenotypic variability on the oxygen and hydrogen isotope compositions of grains in different winter wheat varieties. Isotopes in Environmental and Health Studies, 2022, 58, 60-80. | 1.0 | 1 |
| 2 | Number of growth days and not length of the growth period determines radial stem growth of temperate trees. Ecology Letters, 2022, 25, 427-439. | 6.4 | 58 |
| 3 | Mechanisms of woody-plant mortality under rising drought, CO2 and vapour pressure deficit. Nature Reviews Earth & Environment, 2022, 3, 294-308. | 29.7 | 163 |
| 4 | Do <sup>2</sup>H and <sup>18</sup>O in leaf water reflect environmental drivers differently?. New Phytologist, 2022, 235, 41-51. | 7.3 | 29 |
| 5 | Lack of hydraulic recovery as a cause of postâ€drought foliage reduction and canopy decline in European beech. New Phytologist, 2022, 234, 1195-1205. | 7.3 | 40 |
| 6 | Reduced plant water use can explain higher soil moisture in organic compared to conventional farming systems. Agriculture, Ecosystems and Environment, 2022, 332, 107915. | 5.3 | 7 |
| 7 | Constraining parameter uncertainty for predicting oxygen and hydrogen isotope values in fruit. Journal of Experimental Botany, 2022, 73, 5016-5032. | 4.8 | 5 |
| 8 | Explicitly accounting for needle sugar pool size crucial for predicting intraâ€seasonal dynamics of needle carbohydrates Î´<sup>18</sup>O and Î´<sup>13</sup>C. New Phytologist, 2022, 236, 2044-2060. | 7.3 | 8 |
| 9 | Species variation in the hydrogen isotope composition of leaf cellulose is mostly driven by isotopic variation in leaf sucrose. Plant, Cell and Environment, 2022, 45, 2636-2651. | 5.7 | 11 |
| 10 | Soil nutrient availability alters tree carbon allocation dynamics during drought. Tree Physiology, 2021, 41, 697-707. | 3.1 | 28 |
| 11 | Drivers and dynamics of a massive adaptive radiation in cichlid fishes. Nature, 2021, 589, 76-81. | 27.8 | 151 |
| 12 | Timing of drought in the growing season and strong legacy effects determine the annual productivity of temperate grasses in a changing climate. Biogeosciences, 2021, 18, 585-604. | 3.3 | 21 |
| 13 | On the use of leaf water to determine plant water source: A proof of concept. Hydrological Processes, 2021, 35, e14073. | 2.6 | 20 |
| 14 | Rapid hydraulic collapse as cause of drought-induced mortality in conifers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 80 |
| 15 | Flowering phenology in alpine grassland strongly responds to shifts in snowmelt but weakly to summer drought. Alpine Botany, 2021, 131, 73-88. | 2.4 | 19 |
| 16 | Past and future snowmelt trends in the Swiss Alps: the role of temperature and snowpack. Climatic Change, 2021, 165, 1. | 3.6 | 20 |
| 17 | Precipitation isotope time series predictions from machine learning applied in Europe. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 31 |
| 18 | Metabolic exchange between pathways for isoprenoid synthesis and implications for biosynthetic hydrogen isotope fractionation. New Phytologist, 2021, 231, 1708-1719. | 7.3 | 10 |

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|---|---|---|---|
| 19 | Dynamic <sup>2</sup>H irrigation pulse labelling reveals rapid infiltration and mixing of precipitation in the soil and speciesâ€specific water uptake depths of trees in a temperate forest. Ecohydrology, 2021, 14, e2322. | 2.4 | 12 |
| 20 | Climate Change Modulates Multitrophic Interactions Between Maize, A Root Herbivore, and Its Enemies. Journal of Chemical Ecology, 2021, 47, 889-906. | 1.8 | 6 |
| 21 | Carbon isotope composition of plant photosynthetic tissues reflects a Crassulacean Acid Metabolism (CAM) continuum in the majority of CAM lineages. Perspectives in Plant Ecology, Evolution and Systematics, 2021, 51, 125619. | 2.7 | 31 |
| 22 | Using plant physiological stable oxygen isotope models to counter food fraud. Scientific Reports, 2021, 11, 17314. | 3.3 | 12 |
| 23 | TreeNetâ€"The Biological Drought and Growth Indicator Network. Frontiers in Forests and Global Change, 2021, 4, . | 2.3 | 13 |
| 24 | Spatial Arrangement and Biofertilizers Enhance the Performance of Legumeâ€"Millet Intercropping System in Rainfed Areas of Southern India. Frontiers in Sustainable Food Systems, 2021, 5, . | 3.9 | 2 |
| 25 | Soil nutrients and lowered source:sink ratio mitigate effects of mild but not of extreme drought in trees. Environmental and Experimental Botany, 2020, 169, 103905. | 4.2 | 28 |
| 26 | The <sup>18</sup>Oâ€signal transfer from water vapour to leaf water and assimilates varies among plant species and growth forms. Plant, Cell and Environment, 2020, 43, 510-523. | 5.7 | 27 |
| 27 | Validation and calibration of soil Î´2H and brGDGTs along (E-W) and strike (N-S) of the Himalayan climatic gradient. Geochimica Et Cosmochimica Acta, 2020, 290, 408-423. | 3.9 | 6 |
| 28 | Rhizosphere activity in an old-growth forest reacts rapidly to changes in soil moisture and shapes whole-tree carbon allocation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24885-24892. | 7.1 | 50 |
| 29 | Improving the extraction and purification of leaf and phloem sugars for oxygen isotope analyses. Rapid Communications in Mass Spectrometry, 2020, 34, e8854. | 1.5 | 10 |
| 30 | Deep-rooted pigeon pea promotes the water relations and survival of shallow-rooted finger millet during droughtâ€"Despite strong competitive interactions at ambient water availability. PLoS ONE, 2020, 15, e0228993. | 2.5 | 20 |
| 31 | A first assessment of the impact of the extreme 2018 summer drought on Central European forests. Basic and Applied Ecology, 2020, 45, 86-103. | 2.7 | 482 |
| 32 | A bottom-up quantification of foliar mercury uptake fluxes across Europe. Biogeosciences, 2020, 17, 6441-6456. | 3.3 | 24 |
| 33 | No role for xylem embolism or carbohydrate shortage in temperate trees during the severe 2015 drought. Journal of Ecology, 2019, 107, 334-349. | 4.0 | 46 |
| 34 | Data do not support large-scale oligotrophication of terrestrial ecosystems. Nature Ecology and Evolution, 2019, 3, 1285-1286. | 7.8 | 9 |
| 35 | Invasive knotweed has greater nitrogen-use efficiency than native plants: evidence from a 15N pulse-chasing experiment. Oecologia, 2019, 191, 389-396. | 2.0 | 18 |
| 36 | Temperature and moisture variability in the eastern Mediterranean region during Marine Isotope Stages 11â€"10 based on biomarker analysis of the Tenaghi Philippon peat deposit. Quaternary Science Reviews, 2019, 225, 105977. | 3.0 | 8 |

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|---|---|---|---|
| 37 | Innate and learned olfactory attraction to flowering plants by the parasitoid Cotesia rubecula (Marshall, 1885) (Hymenoptera: Braconidae): Potential impacts on conservation biological control. Biological Control, 2019, 132, 16-22. | 3.0 | 6 |
| 38 | Bioirrigation: a common mycorrhizal network facilitates the water transfer from deep-rooted pigeon pea to shallow-rooted finger millet under drought. Plant and Soil, 2019, 440, 277-292. | 3.7 | 20 |
| 39 | Complementary water uptake depth of Quercus petraea and Pinus sylvestris in mixed stands during an extreme drought. Plant and Soil, 2019, 437, 93-115. | 3.7 | 37 |
| 40 | Speciesâ€specific differences in water uptake depth of mature temperate trees vary with water availability in the soil. Plant Biology, 2019, 21, 71-81. | 3.8 | 95 |
| 41 | Water relations of drought-stressed temperate trees benefit from short drought-intermitting rainfall events. Agricultural and Forest Meteorology, 2019, 265, 70-77. | 4.8 | 16 |
| 42 | Contrasting stomatal sensitivity to temperature and soil drought in mature alpine conifers. Plant, Cell and Environment, 2019, 42, 1674-1689. | 5.7 | 37 |
| 43 | <sup>2</sup>Hâ€fractionations during the biosynthesis of carbohydrates and lipids imprint a metabolic signal on the Î´<sup>2</sup>H values of plant organic compounds. New Phytologist, 2018, 218, 479-491. | 7.3 | 78 |
| 44 | Daily stem diameter variations can predict the canopy water status of mature temperate trees. Tree Physiology, 2018, 38, 941-952. | 3.1 | 56 |
| 45 | Rapid atmospheric transport and large-scale deposition of recently synthesized plant waxes. Geochimica Et Cosmochimica Acta, 2018, 222, 599-617. | 3.9 | 36 |
| 46 | Losing half the conductive area hardly impacts the water status of mature trees. Scientific Reports, 2018, 8, 15006. | 3.3 | 39 |
| 47 | Effects of plant productivity and species richness on the drought response of soil respiration in temperate grasslands. PLoS ONE, 2018, 13, e0209031. | 2.5 | 14 |
| 48 | Finger Millet Growth and Nutrient Uptake Is Improved in Intercropping With Pigeon Pea Through â€œBiofertilizationâ€•and â€œBioirrigationâ€•Mediated by Arbuscular Mycorrhizal Fungi and Plant Growth Promoting Rhizobacteria. Frontiers in Environmental Science, 2018, 6, . | 3.3 | 44 |
| 49 | Quantification of uncertainties in conifer sap flow measured with the thermal dissipation method. New Phytologist, 2018, 219, 1283-1299. | 7.3 | 81 |
| 50 | Employing stable isotopes to determine the residence times of soil water and the temporal origin of water taken up by Fagus sylvatica and Picea abies in a temperate forest. New Phytologist, 2018, 219, 1300-1313. | 7.3 | 115 |
| 51 | Leaf water <sup>18</sup>O and <sup>2</sup>H enrichment along vertical canopy profiles in a broadleaved and a conifer forest tree. Plant, Cell and Environment, 2017, 40, 1086-1103. | 5.7 | 21 |
| 52 | Oxygen isotope fractionations across individual leaf carbohydrates in grass and tree species. Plant, Cell and Environment, 2017, 40, 1658-1670. | 5.7 | 54 |
| 53 | Tightly bound soil water introduces isotopic memory effects on mobile and extractable soil water pools. Isotopes in Environmental and Health Studies, 2017, 53, 368-381. | 1.0 | 35 |
| 54 | Sources and abundances of leaf waxes in aerosols in central Europe. Geochimica Et Cosmochimica Acta, 2017, 198, 299-314. | 3.9 | 24 |

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|---|---|---|---|
| 55 | Low secondary leaf waxn-alkane synthesis on fully mature leaves of C3 grasses grown at controlled environmental conditions and variable humidity. Rapid Communications in Mass Spectrometry, 2017, 31, 218-226. | 1.5 | 12 |
| 56 | Application of Mycorrhiza and Soil from a Permaculture System Improved Phosphorus Acquisition in Naranjilla. Frontiers in Plant Science, 2017, 8, 1263. | 3.6 | 13 |
| 57 | A dual-biomarker approach for quantification of changes in relative humidity from sedimentary lipid <i>D</i>âˆ•<i>H</i> ratios. Climate of the Past, 2017, 13, 741-757. | 3.4 | 49 |
| 58 | Stable isotopes in leaf water of terrestrial plants. Plant, Cell and Environment, 2016, 39, 1087-1102. | 5.7 | 256 |
| 59 | Temperate tree species show identical response in tree water deficit but different sensitivities in sap flow to summer soil drying. Tree Physiology, 2016, 36, 1508-1519. | 3.1 | 62 |
| 60 | The enigma of effective path length for <scp><sup>18</sup>O</scp> enrichment in leaf water of conifers. Plant, Cell and Environment, 2015, 38, 2551-2565. | 5.7 | 45 |
| 61 | n-Alkane biosynthetic hydrogen isotope fractionation is not constant throughout the growing season in the riparian tree Salix viminalis. Geochimica Et Cosmochimica Acta, 2015, 165, 75-85. | 3.9 | 68 |
| 62 | Concentrations and Î´2H values of cuticular n-alkanes vary significantly among plant organs, species and habitats in grasses from an alpine and a temperate European grassland. Oecologia, 2015, 178, 981-998. | 2.0 | 40 |
| 63 | Seasonal variation of leaf waxn-alkane production and Î´<sup>2</sup>H values from the evergreen oak tree,Quercus agrifolia. Isotopes in Environmental and Health Studies, 2015, 51, 124-142. | 1.0 | 37 |
| 64 | No shift to a deeper water uptake depth in response to summer drought of two lowland and sub-alpine C3-grasslands in Switzerland. Oecologia, 2015, 177, 97-111. | 2.0 | 71 |
| 65 | Vegetation Dynamics at the Upper Reaches of a Tropical Montane Forest are Driven by Disturbance Over the Past 7300 Years. Arctic, Antarctic, and Alpine Research, 2014, 46, 787-799. | 1.1 | 20 |
| 66 | Oxygen isotope ratios (18O/16O) of hemicellulose-derived sugar biomarkers in plants, soils and sediments as paleoclimate proxy II: Insight from a climate transect study. Geochimica Et Cosmochimica Acta, 2014, 126, 624-634. | 3.9 | 33 |
| 67 | Reliability and quality of water isotope data collected with a lowâ€budget rain collector. Rapid Communications in Mass Spectrometry, 2014, 28, 879-885. | 1.5 | 31 |
| 68 | Abundance and distribution of leaf wax n-alkanes in leaves of Acacia and Eucalyptus trees along a strong humidity gradient in northern Australia. Organic Geochemistry, 2013, 62, 62-67. | 1.8 | 106 |
| 69 | Leaf water deuterium enrichment shapes leaf wax n-alkane Î´D values of angiosperm plants I: Experimental evidence and mechanistic insights. Geochimica Et Cosmochimica Acta, 2013, 111, 39-49. | 3.9 | 194 |
| 70 | Leaf water deuterium enrichment shapes leaf wax n-alkane Î´D values of angiosperm plants II: Observational evidence and global implications. Geochimica Et Cosmochimica Acta, 2013, 111, 50-63. | 3.9 | 188 |
| 71 | The multifaceted relationship between leaf water <sup>18</sup><scp>O</scp> enrichment and transpiration rate. Plant, Cell and Environment, 2013, 36, 1239-1241. | 5.7 | 37 |
| 72 | Molecular Paleohydrology: Interpreting the Hydrogen-Isotopic Composition of Lipid Biomarkers from Photosynthesizing Organisms. Annual Review of Earth and Planetary Sciences, 2012, 40, 221-249. | 11.0 | 748 |

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|---|---|---|---|
| 73 | Hydrogen isotope ratios of lacustrine sedimentary n-alkanes as proxies of tropical African hydrology: Insights from a calibration transect across Cameroon. Geochimica Et Cosmochimica Acta, 2012, 79, 106-126. | 3.9 | 137 |
| 74 | Leaf wax nâ€alkane Î´D values are determined early in the ontogeny of Populus trichocarpa leaves when grown under controlled environmental conditions. Plant, Cell and Environment, 2011, 34, 1639-1651. | 5.7 | 93 |
| 75 | Cellulose Î´ <sup>18</sup>O is an index of leaf-to-air vapor pressure difference (VPD) in tropical plants. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 1981-1986. | 7.1 | 148 |
| 76 | Impact of invertebrate herbivory in grasslands depends on plant species diversity. Ecology, 2010, 91, 1639-1650. | 3.2 | 67 |
| 77 | Leaf wax n-alkane Î´D values of field-grown barley reflect leaf water Î´D values at the time of leaf formation. Geochimica Et Cosmochimica Acta, 2010, 74, 6741-6750. | 3.9 | 107 |
| 78 | High potential, but low actual, glycine uptake of dominant plant species in three Australian land-use types with intermediate N availability. Plant and Soil, 2009, 325, 109-121. | 3.7 | 27 |
| 79 | Global patterns of foliar nitrogen isotopes and their relationships with climate, mycorrhizal fungi, foliar nutrient concentrations, and nitrogen availability. New Phytologist, 2009, 183, 980-992. | 7.3 | 744 |
| 80 | The influence of species and growing conditions on the 18â€O enrichment of leaf water and its impact on â€˜effective path lengthâ€™. New Phytologist, 2009, 184, 619-630. | 7.3 | 45 |
| 81 | Significant seasonal variation in the hydrogen isotopic composition of leaf-wax lipids for two deciduous tree ecosystems (Fagus sylvativa and Acerpseudoplatanus). Organic Geochemistry, 2009, 40, 732-742. | 1.8 | 131 |
| 82 | Foliar Î´15N values characterize soil N cycling and reflect nitrate or ammonium preference of plants along a temperate grassland gradient. Oecologia, 2008, 156, 861-870. | 2.0 | 159 |
| 83 | Effects of environmental parameters, leaf physiological properties and leaf water relations on leaf water Î´<sup>18</sup>O enrichment in different Eucalyptus species. Plant, Cell and Environment, 2008, 31, 738-751. | 5.7 | 107 |
| 84 | Resource Heterogeneity Moderates the Biodiversity-Function Relationship in Real World Ecosystems. PLoS Biology, 2008, 6, e122. | 5.6 | 210 |
| 85 | Stable Isotopes as Indicators, Tracers, and Recorders of Ecological Change: Synthesis and Outlook. Journal of Nano Education (Print), 2007, 1, 399-405. | 0.3 | 0 |
| 86 | Addressing the Functional Value of Biodiversity for Ecosystem Functioning Using Stable Isotopes. Journal of Nano Education (Print), 2007, 1, 345-359. | 0.3 | 0 |
| 87 | Prediction of herbage yield in grassland: How well do Ellenberg Nâ€values perform?. Applied Vegetation Science, 2007, 10, 15-24. | 1.9 | 38 |
| 88 | Invertebrate herbivory along a gradient of plant species diversity in extensively managed grasslands. Oecologia, 2006, 150, 233-246. | 2.0 | 71 |
| 89 | Species composition of arbuscular mycorrhizal fungi in two mountain meadows with differing management types and levels of plant biodiversity. Biology and Fertility of Soils, 2006, 42, 286-298. | 4.3 | 72 |
| 90 | NICHE COMPLEMENTARITY FOR NITROGEN: AN EXPLANATION FOR THE BIODIVERSITY AND ECOSYSTEM FUNCTIONING RELATIONSHIP?. Ecology, 2006, 87, 1244-1255. | 3.2 | 202 |

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|---|---|---|---|
| 91 | Testing the efficiency of three 15N-labeled nitrogen compounds for indirect labeling of grasshoppers via plants in the field. Entomologia Experimentalis Et Applicata, 2005, 116, 219-226. | 1.4 | 10 |
| 92 | Effects of plant diversity, plant productivity and habitat parameters on arthropod abundance in montane European grasslands. Ecography, 2005, 28, 429-442. | 4.5 | 98 |
| 93 | Effects of plant diversity, community composition and environmental parameters on productivity in montane European grasslands. Oecologia, 2005, 142, 606-615. | 2.0 | 100 |
| 94 | Assessing the recovery of a long-lived herb following logging: Trillium ovatum across a 424-year chronosequence. Forest Ecology and Management, 2005, 210, 107-116. | 3.2 | 19 |
| 95 | Nitrogen fixation and metabolism by groundwater-dependent perennial plants in a hyperarid desert. Oecologia, 2004, 141, 385-394. | 2.0 | 47 |