Andreas Richter

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8752004/publications.pdf

Version: 2024-02-01

484 papers

46,707 citations

103 h-index 184

622 all docs 622 docs citations

times ranked

622

34125 citing authors

g-index

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Effect of emission changes in Southeast Asia on global hydroxyl and methane lifetime. Tellus, Series B: Chemical and Physical Meteorology, 2022, 61, 588. | 0.8 | 9 |
| 2 | Decay of similarity across tropical forest communities: integrating spatial distance with soil nutrients. Ecology, 2022, 103, e03599. | 1.5 | 9 |
| 3 | Lignin Preservation and Microbial Carbohydrate Metabolism in Permafrost Soils. Journal of Geophysical Research G: Biogeosciences, 2022, 127, e2020JG006181. | 1.3 | 5 |
| 4 | Plant-microbial linkages underpin carbon sequestration in contrasting mountain tundra vegetation types. Soil Biology and Biochemistry, 2022, 165, 108530. | 4.2 | 15 |
| 5 | Negative priming of soil organic matter following long-term in situ warming of sub-arctic soils. Geoderma, 2022, 410, 115652. | 2.3 | 10 |
| 6 | Contrasting drivers of belowground nitrogen cycling in a montane grassland exposed to a multifactorial global change experiment with elevated CO ₂ , warming, and drought. Global Change Biology, 2022, 28, 2425-2441. | 4.2 | 25 |
| 7 | Down-regulation of the bacterial protein biosynthesis machinery in response to weeks, years, and decades of soil warming. Science Advances, 2022, 8, eabm3230. | 4.7 | 18 |
| 8 | Variability of nitrogen oxide emission fluxes and lifetimes estimated from Sentinel-5P TROPOMI observations. Atmospheric Chemistry and Physics, 2022, 22, 2745-2767. | 1.9 | 24 |
| 9 | Long-term warming reduced microbial biomass but increased recent plant-derived C in microbes of a subarctic grassland. Soil Biology and Biochemistry, 2022, 167, 108590. | 4.2 | 12 |
| 10 | Growth of soil microbes is not limited by the availability of nitrogen and phosphorus in a Mediterranean oak-savanna. Soil Biology and Biochemistry, 2022, 169, 108680. | 4.2 | 4 |
| 11 | Stoichiometric regulation of priming effects and soil carbon balance by microbial life strategies. Soil Biology and Biochemistry, 2022, 169, 108669. | 4.2 | 45 |
| 12 | Lowland plant arrival in alpine ecosystems facilitates a decrease in soil carbon content under experimental climate warming. ELife, 2022, 11, . | 2.8 | 4 |
| 13 | Ground-based validation of the MetOp-A and MetOp-B GOME-2 OCIO measurements. Atmospheric Measurement Techniques, 2022, 15, 3439-3463. | 1.2 | O |
| 14 | Nitrogen fixation by diverse diazotrophic communities can support population growth of arboreal ants. BMC Biology, 2022, 20, . | 1.7 | 2 |
| 15 | Microbiome assembly in thawing permafrost and its feedbacks to climate. Global Change Biology, 2022, 28, 5007-5026. | 4.2 | 34 |
| 16 | Dissolved organic matter characterization in soils and streams in a small coastal low-Arctic catchment. Biogeosciences, 2022, 19, 3073-3097. | 1.3 | 9 |
| 17 | Acidobacteria are active and abundant members of diverse atmospheric H2-oxidizing communities detected in temperate soils. ISME Journal, 2021, 15, 363-376. | 4.4 | 23 |
| 18 | Empirical support for the biogeochemical niche hypothesis in forest trees. Nature Ecology and Evolution, 2021, 5, 184-194. | 3.4 | 50 |

| # | Article | IF | Citations |
|----|--|-----|-----------|
| 19 | Retrieval and evaluation of tropospheric-aerosol extinction profiles using multi-axis differential optical absorption spectroscopy (MAX-DOAS) measurements over Athens, Greece. Atmospheric Measurement Techniques, 2021, 14, 749-767. | 1.2 | 4 |
| 20 | Permafrost Causes Unique Fineâ€Scale Spatial Variability Across Tundra Soils. Global Biogeochemical Cycles, 2021, 35, e2020GB006659. | 1.9 | 16 |
| 21 | Microbial responses to herbivory-induced vegetation changes in a high-Arctic peatland. Polar Biology, 2021, 44, 899-911. | 0.5 | 3 |
| 22 | The Unusual Stratospheric Arctic Winter 2019/20: Chemical Ozone Loss From Satellite Observations and TOMCAT Chemical Transport Model. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034386. | 1.2 | 19 |
| 23 | Warming and elevated CO ₂ intensify drought and recovery responses of grassland carbon allocation to soil respiration. Global Change Biology, 2021, 27, 3230-3243. | 4.2 | 33 |
| 24 | Genomic insights into diverse bacterial taxa that degrade extracellular DNA in marine sediments. Nature Microbiology, 2021, 6, 885-898. | 5.9 | 29 |
| 25 | Shifts in the Abundances of Saprotrophic and Ectomycorrhizal Fungi With Altered Leaf Litter Inputs. Frontiers in Plant Science, 2021, 12, 682142. | 1.7 | 16 |
| 26 | Impact of Nutrient Additions on Freeâ€Living Nitrogen Fixation in Litter and Soil of Two Frenchâ€Guianese Lowland Tropical Forests. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006023. | 1.3 | 4 |
| 27 | Cyanate is a low abundance but actively cycled nitrogen compound in soil. Communications Earth & Environment, 2021, 2, . | 2.6 | 11 |
| 28 | Evaluation of UV–visible MAX-DOAS aerosol profiling products by comparison with ceilometer, sun photometer, and in situ observations in Vienna, Austria. Atmospheric Measurement Techniques, 2021, 14, 5299-5318. | 1.2 | 5 |
| 29 | Estimation of ship emission rates at a major shipping lane by long-path DOAS measurements. Atmospheric Measurement Techniques, 2021, 14, 5791-5807. | 1.2 | 9 |
| 30 | The effect of global change on soil phosphatase activity. Global Change Biology, 2021, 27, 5989-6003. | 4.2 | 59 |
| 31 | Recently photoassimilated carbon and fungusâ€delivered nitrogen are spatially correlated in the ectomycorrhizal tissue of <i>Fagus sylvatica</i> . New Phytologist, 2021, 232, 2457-2474. | 3.5 | 19 |
| 32 | Ecological memory of recurrent drought modifies soil processes via changes in soil microbial community. Nature Communications, 2021, 12, 5308. | 5.8 | 108 |
| 33 | Responses of grassland soil CO2 production and fluxes to drought are shifted in a warmer climate under elevated CO2. Soil Biology and Biochemistry, 2021, 163, 108436. | 4.2 | 10 |
| 34 | A critical perspective on interpreting amplicon sequencing data in soil ecological research. Soil Biology and Biochemistry, 2021, 160, 108357. | 4.2 | 36 |
| 35 | How can fertilization regimes and durations shape earthworm gut microbiota in a long-term field experiment?. Ecotoxicology and Environmental Safety, 2021, 224, 112643. | 2.9 | 9 |
| 36 | Increased microbial expression of organic nitrogen cycling genes in long-term warmed grassland soils. ISME Communications, 2021, 1 , . | 1.7 | 14 |

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| # | Article | IF | Citations |
|----|---|-----|-----------|
| 37 | Retrieval algorithm for OClO from TROPOMI (TROPOspheric Monitoring Instrument) by differential optical absorption spectroscopy. Atmospheric Measurement Techniques, 2021, 14, 7595-7625. | 1.2 | 2 |
| 38 | Glyoxal tropospheric column retrievals from TROPOMI – multi-satellite intercomparison and ground-based validation. Atmospheric Measurement Techniques, 2021, 14, 7775-7807. | 1.2 | 7 |
| 39 | Regulation of nitrogen fixation from free-living organisms in soil and leaf litter of two tropical forests of the Guiana shield. Plant and Soil, 2020, 450, 93-110. | 1.8 | 23 |
| 40 | Increased microbial growth, biomass, and turnover drive soil organic carbon accumulation at higher plant diversity. Global Change Biology, 2020, 26, 669-681. | 4.2 | 217 |
| 41 | Microbial carbon limitation: The need for integrating microorganisms into our understanding of ecosystem carbon cycling. Global Change Biology, 2020, 26, 1953-1961. | 4.2 | 239 |
| 42 | A systemic overreaction to years versus decades of warming in a subarctic grassland ecosystem. Nature Ecology and Evolution, 2020, 4, 101-108. | 3.4 | 33 |
| 43 | Microbial growth and carbon use efficiency show seasonal responses in a multifactorial climate change experiment. Communications Biology, 2020, 3, 584. | 2.0 | 30 |
| 44 | Carbon loss from northern circumpolar permafrost soils amplified by rhizosphere priming. Nature Geoscience, 2020, 13, 560-565. | 5.4 | 72 |
| 45 | Assessing microbial residues in soil as a potential carbon sink and moderator of carbon use efficiency. Biogeochemistry, 2020, 151, 237-249. | 1.7 | 33 |
| 46 | Composition and activity of nitrifier communities in soil are unresponsive to elevated temperature and CO2, but strongly affected by drought. ISME Journal, 2020, 14, 3038-3053. | 4.4 | 43 |
| 47 | C:N:P stoichiometry regulates soil organic carbon mineralization and concomitant shifts in microbial community composition in paddy soil. Biology and Fertility of Soils, 2020, 56, 1093-1107. | 2.3 | 112 |
| 48 | Unexpected long-range transport of glyoxal and formaldehyde observed from the Copernicus Sentinel-5 Precursor satellite during the 2018 Canadian wildfires. Atmospheric Chemistry and Physics, 2020, 20, 2057-2072. | 1.9 | 47 |
| 49 | Lability classification of soil organic matter in the northern permafrost region. Biogeosciences, 2020, 17, 361-379. | 1.3 | 23 |
| 50 | Long-term time series of Arctic tropospheric BrO derived from UV–VIS satellite remote sensing and its relation to first-year sea ice. Atmospheric Chemistry and Physics, 2020, 20, 11869-11892. | 1.9 | 23 |
| 51 | Pan-Arctic surface ozone: modelling vs. measurements. Atmospheric Chemistry and Physics, 2020, 20, 15937-15967. | 1.9 | 14 |
| 52 | Intercomparison of NO ₂ , O ₄ , O ₃ and HCHO slant column measurements by MAX-DOAS and zenith-sky UV–visible spectrometers during CINDI-2. Atmospheric Measurement Techniques, 2020, 13, 2169-2208. | 1,2 | 52 |
| 53 | Spatial distribution of enhanced BrO and its relation to meteorological parameters in Arctic and Antarctic sea ice regions. Atmospheric Chemistry and Physics, 2020, 20, 12285-12312. | 1.9 | 6 |
| 54 | Characterization of a thaumarchaeal symbiont that drives incomplete nitrification in the tropical sponge <i>lanthella basta</i> . Environmental Microbiology, 2019, 21, 3831-3854. | 1.8 | 50 |

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|----|--|-----|-----------|
| 55 | Life at O°C: the biology of the alpine snowbed plant Soldanella pusilla. Alpine Botany, 2019, 129, 63-80. | 1.1 | 38 |
| 56 | Carbon isotopic tracing of sugars throughout wholeâ€trees exposed to climate warming. Plant, Cell and Environment, 2019, 42, 3253-3263. | 2.8 | 6 |
| 57 | Detection of outflow of formaldehyde and glyoxal from the African continent to the Atlantic Ocean with a MAX-DOAS instrument. Atmospheric Chemistry and Physics, 2019, 19, 10257-10278. | 1.9 | 13 |
| 58 | Plant roots increase both decomposition and stable organic matter formation in boreal forest soil. Nature Communications, 2019, 10, 3982. | 5.8 | 115 |
| 59 | Nutrient scarcity strengthens soil fauna control over leaf litter decomposition in tropical rainforests. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191300. | 1.2 | 18 |
| 60 | Towards monitoring localized CO ₂ emissions from space: co-located regional CO ₂ and NO ₂ enhancements observed by the OCO-2 and S5P satellites. Atmospheric Chemistry and Physics, 2019, 19, 9371-9383. | 1.9 | 107 |
| 61 | Full-azimuthal imaging-DOAS observations of NO ₂ and O ₄ during CINDI-2. Atmospheric Measurement Techniques, 2019, 12, 4171-4190. | 1.2 | 5 |
| 62 | Rapid Transfer of Plant Photosynthates to Soil Bacteria via Ectomycorrhizal Hyphae and Its Interaction With Nitrogen Availability. Frontiers in Microbiology, 2019, 10, 168. | 1.5 | 106 |
| 63 | Soil multifunctionality is affected by the soil environment and by microbial community composition and diversity. Soil Biology and Biochemistry, 2019, 136, 107521. | 4.2 | 217 |
| 64 | Near-surface and path-averaged mixing ratios of NO ₂ derived from car DOAS zenith-sky and tower DOAS off-axis measurements in Vienna: a case study. Atmospheric Chemistry and Physics, 2019, 19, 5853-5879. | 1.9 | 9 |
| 65 | Intercomparison of MAX-DOAS vertical profile retrieval algorithms: studies using synthetic data. Atmospheric Measurement Techniques, 2019, 12, 2155-2181. | 1.2 | 34 |
| 66 | Is a scaling factor required to obtain closure between measured and modelled atmospheric O ₄ absorptions? An assessment of uncertainties of measurements and radiative transfer simulations for 2 selected days during the MAD-CAT campaign. Atmospheric Measurement Techniques, 2019, 12, 2745-2817. | 1,2 | 22 |
| 67 | First high-resolution BrO column retrievals from TROPOMI. Atmospheric Measurement Techniques, 2019, 12, 2913-2932. | 1.2 | 25 |
| 68 | Concept of small satellite UV/visible imaging spectrometer optimized for tropospheric NO2 measurements in air quality monitoring. Acta Astronautica, 2019, 160, 421-432. | 1.7 | 2 |
| 69 | An improved total and tropospheric NO ₂ column retrieval for GOME-2. Atmospheric Measurement Techniques, 2019, 12, 1029-1057. | 1.2 | 18 |
| 70 | Microbial carbon and nitrogen cycling responses to drought and temperature in differently managed mountain grasslands. Soil Biology and Biochemistry, 2019, 135, 144-153. | 4.2 | 51 |
| 71 | Low yield and abiotic origin of N2O formed by the complete nitrifier Nitrospira inopinata. Nature Communications, 2019, 10, 1836. | 5.8 | 123 |
| 72 | Adverse results of the economic crisis: A study on the emergence of enhanced formaldehyde (HCHO) levels seen from satellites over Greek urban sites. Atmospheric Research, 2019, 224, 42-51. | 1.8 | 13 |

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|----|---|-----|-----------|
| 73 | Variation in rhizosphere priming and microbial growth and carbon use efficiency caused by wheat genotypes and temperatures. Soil Biology and Biochemistry, 2019, 134, 54-61. | 4.2 | 20 |
| 74 | Widespread soil bacterium that oxidizes atmospheric methane. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8515-8524. | 3.3 | 149 |
| 75 | Intercomparison of four airborne imaging DOAS systems for tropospheric NO ₂ mapping – the AROMAPEX campaign. Atmospheric Measurement Techniques, 2019, 12, 211-236. | 1.2 | 21 |
| 76 | Coupled carbon and nitrogen losses in response to seven years of chronic warming in subarctic soils. Soil Biology and Biochemistry, 2019, 134, 152-161. | 4.2 | 25 |
| 77 | Root Exudation of Primary Metabolites: Mechanisms and Their Roles in Plant Responses to Environmental Stimuli. Frontiers in Plant Science, 2019, 10, 157. | 1.7 | 540 |
| 78 | Growth explains microbial carbon use efficiency across soils differing in land use and geology. Soil Biology and Biochemistry, 2019, 128, 45-55. | 4.2 | 127 |
| 79 | Cyanate and urea are substrates for nitrification by Thaumarchaeota in the marine environment. Nature Microbiology, 2019, 4, 234-243. | 5.9 | 103 |
| 80 | Studies of the horizontal inhomogeneities in NO ₂ concentrations above a shipping lane using ground-based multi-axis differential optical absorption spectroscopy (MAX-DOAS) measurements and validation with airborne imaging DOAS measurements. Atmospheric Measurement Techniques, 2019, 12, 5959-5977. | 1,2 | 9 |
| 81 | Global diffuse attenuation derived from vibrational Raman scattering detected in hyperspectral backscattered satellite spectra. Optics Express, 2019, 27, A829. | 1.7 | 5 |
| 82 | Spatial Variation of Soil CO2, CH4 and N2O Fluxes Across Topographical Positions in Tropical Forests of the Guiana Shield. Ecosystems, 2018, 21, 1445-1458. | 1.6 | 29 |
| 83 | Geothermally warmed soils reveal persistent increases in the respiratory costs of soil microbes contributing to substantial C losses. Biogeochemistry, 2018, 138, 245-260. | 1.7 | 17 |
| 84 | Significance of dark CO2 fixation in arctic soils. Soil Biology and Biochemistry, 2018, 119, 11-21. | 4.2 | 58 |
| 85 | Regional environmental conditions shape microbial community structure stronger than local forest management intensity. Forest Ecology and Management, 2018, 409, 250-259. | 1.4 | 47 |
| 86 | XBAER-derived aerosol optical thickness from OLCI/Sentinel-3 observation. Atmospheric Chemistry and Physics, 2018, 18, 2511-2523. | 1.9 | 21 |
| 87 | Investigating missing sources of glyoxal over China using a regional air quality model (RAMS-CMAQ). Journal of Environmental Sciences, 2018, 71, 108-118. | 3.2 | 9 |
| 88 | pH-Dependent Bioavailability, Speciation, and Phytotoxicity of Tungsten (W) in Soil Affect Growth and Molybdoenzyme Activity of Nodulated Soybeans. Environmental Science & Environmental Science, 2018, 52, 6146-6156. | 4.6 | 36 |
| 89 | Soil organic matter quality exerts a stronger control than stoichiometry on microbial substrate use efficiency along a latitudinal transect. Soil Biology and Biochemistry, 2018, 121, 212-220. | 4.2 | 104 |
| 90 | Application of stableâ€isotope labelling techniques for the detection of active diazotrophs. Environmental Microbiology, 2018, 20, 44-61. | 1.8 | 44 |

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|-----|--|-----|-----------|
| 91 | Full 15N tracer accounting to revisit major assumptions of 15N isotope pool dilution approaches for gross nitrogen mineralization. Soil Biology and Biochemistry, 2018, 117, 16-26. | 4.2 | 35 |
| 92 | Fate of carbohydrates and lignin in north-east Siberian permafrost soils. Soil Biology and Biochemistry, 2018, 116, 311-322. | 4.2 | 59 |
| 93 | Improving algorithms and uncertainty estimates for satellite NO ₂ retrievals: results from the quality assurance for the essential climate variables (QA4ECV) project. Atmospheric Measurement Techniques, 2018, 11, 6651-6678. | 1.2 | 187 |
| 94 | Aerosol profiling during the large scale field campaign CINDI-2. EPJ Web of Conferences, 2018, 176, 10005. | 0.1 | 0 |
| 95 | BOREAS \hat{a} \in a new MAX-DOAS profile retrieval algorithm for aerosols and trace gases. Atmospheric Measurement Techniques, 2018, 11, 6833-6859. | 1.2 | 27 |
| 96 | Standardized protocols and procedures can precisely and accurately quantify non-structural carbohydrates. Tree Physiology, 2018, 38, 1764-1778. | 1.4 | 171 |
| 97 | GOME-2A retrievals of tropospheric NO ₂ in different spectral ranges – influence of penetration depth. Atmospheric Measurement Techniques, 2018, 11, 2769-2795. | 1.2 | 5 |
| 98 | Algorithm theoretical baseline for formaldehyde retrievals from S5P TROPOMI and from the QA4ECV project. Atmospheric Measurement Techniques, 2018, 11, 2395-2426. | 1.2 | 127 |
| 99 | Improved slant column density retrieval of nitrogen dioxide and formaldehyde for OMI and GOME-2A from QA4ECV: intercomparison, uncertainty characterisation, and trends. Atmospheric Measurement Techniques, 2018, 11, 4033-4058. | 1.2 | 74 |
| 100 | The importance of surface reflectance anisotropy for cloud and NO ₂ retrievals from GOME-2 and OMI. Atmospheric Measurement Techniques, 2018, 11, 4509-4529. | 1.2 | 25 |
| 101 | Microbial temperature sensitivity and biomass change explain soil carbon loss with warming. Nature Climate Change, 2018, 8, 885-889. | 8.1 | 230 |
| 102 | A plant–microbe interaction framework explaining nutrient effects on primary production. Nature Ecology and Evolution, 2018, 2, 1588-1596. | 3.4 | 100 |
| 103 | Resistance of soil protein depolymerization rates to eight years of elevated CO2, warming, and summer drought in a temperate heathland. Biogeochemistry, 2018, 140, 255-267. | 1.7 | 13 |
| 104 | Temperature response of permafrost soil carbon is attenuated by mineral protection. Global Change Biology, 2018, 24, 3401-3415. | 4.2 | 107 |
| 105 | Soil microbial CNP and respiration responses to organic matter and nutrient additions: Evidence from a tropical soil incubation. Soil Biology and Biochemistry, 2018, 122, 141-149. | 4.2 | 62 |
| 106 | Amino acid production exceeds plant nitrogen demand in Siberian tundra. Environmental Research Letters, 2018, 13, 034002. | 2.2 | 49 |
| 107 | Vertical Profiles of Tropospheric Ozone From MAXâ€DOAS Measurements During the CINDIâ€2 Campaign: Part 1â€"Development of a New Retrieval Algorithm. Journal of Geophysical Research D: Atmospheres, 2018, 123, 10,637. | 1.2 | 18 |
| 108 | Standards VDI 4211 and VDI 4212 on passive FTIR and DOAS remote sensing techniques. , 2018, , . | | 1 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 109 | Rhizospheric microbial community of Caesalpinia spinosa (Mol.) Kuntze in conserved and deforested zones of the Atiquipa fog forest in Peru. Applied Soil Ecology, 2017, 114, 132-141. | 2.1 | 10 |
| 110 | Global patterns of phosphatase activity in natural soils. Scientific Reports, 2017, 7, 1337. | 1.6 | 296 |
| 111 | Decoupling of microbial carbon, nitrogen, and phosphorus cycling in response to extreme temperature events. Science Advances, 2017, 3, e1602781. | 4.7 | 143 |
| 112 | Optimal metabolic regulation along resource stoichiometry gradients. Ecology Letters, 2017, 20, 1182-1191. | 3.0 | 118 |
| 113 | Microbial utilization of mineral-associated nitrogen in soils. Soil Biology and Biochemistry, 2017, 104, 185-196. | 4.2 | 30 |
| 114 | Monitoring shipping emissions in the German Bight using MAX-DOAS measurements. Atmospheric Chemistry and Physics, 2017, 17, 10997-11023. | 1.9 | 31 |
| 115 | Enhanced trans-Himalaya pollution transport to the Tibetan Plateau by cut-off low systems. Atmospheric Chemistry and Physics, 2017, 17, 3083-3095. | 1.9 | 38 |
| 116 | Space-based observation of volcanic iodine monoxide. Atmospheric Chemistry and Physics, 2017, 17, 4857-4870. | 1.9 | 21 |
| 117 | Investigating differences in DOAS retrieval codes using MAD-CAT campaign data. Atmospheric Measurement Techniques, 2017, 10, 955-978. | 1,2 | 20 |
| 118 | High-resolution airborne imaging DOAS measurements of NO ₂ above Bucharest during AROMAT. Atmospheric Measurement Techniques, 2017, 10, 1831-1857. | 1.2 | 20 |
| 119 | Structural uncertainty in air mass factor calculation for NO ₂ and HCHO satellite retrievals. Atmospheric Measurement Techniques, 2017, 10, 759-782. | 1.2 | 133 |
| 120 | MAX-DOAS measurements of HONO slant column densities during the MAD-CAT campaign: inter-comparison, sensitivity studies on spectral analysis settings, and error budget. Atmospheric Measurement Techniques, 2017, 10, 3719-3742. | 1.2 | 31 |
| 121 | Post photosynthetic carbon partitioning to sugar alcohols and consequences for plant growth. Phytochemistry, 2017, 144, 243-252. | 1.4 | 33 |
| 122 | C-IFS-CB05-BASCOE: stratospheric chemistry in the Integrated Forecasting System of ECMWF. Geoscientific Model Development, 2016, 9, 3071-3091. | 1.3 | 24 |
| 123 | Microbes as Engines of Ecosystem Function: When Does Community Structure Enhance Predictions of Ecosystem Processes?. Frontiers in Microbiology, 2016, 7, 214. | 1.5 | 479 |
| 124 | Exploring the metabolic potential of microbial communities in ultraâ€basic, reducing springs at The Cedars, CA, USA: Experimental evidence of microbial methanogenesis and heterotrophic acetogenesis. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 1203-1220. | 1.3 | 35 |
| 125 | Plant-derived compounds stimulate the decomposition of organic matter in arctic permafrost soils. Scientific Reports, 2016, 6, 25607. | 1.6 | 87 |
| 126 | A case study of a transported bromine explosion event in the Canadian high arctic. Journal of Geophysical Research D: Atmospheres, 2016, 121, 457-477. | 1.2 | 38 |

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|-----|--|-----|-----------|
| 127 | Soil microbial carbon use efficiency and biomass turnover in a long-term fertilization experiment in a temperate grassland. Soil Biology and Biochemistry, 2016, 97, 168-175. | 4.2 | 205 |
| 128 | Carbon Isotope Composition of Carbohydrates and Polyols in Leaf and Phloem Sap ofPhaseolus vulgarisL. Influences Predictions of Plant Water Use Efficiency. Plant and Cell Physiology, 2016, 57, 1756-1766. | 1.5 | 14 |
| 129 | Slant column MAX-DOAS measurements of nitrogen dioxide, formaldehyde, glyoxal and oxygen dimer in the urban environment of Athens. Atmospheric Environment, 2016, 135, 118-131. | 1.9 | 32 |
| 130 | Stress-induced changes in carbon allocation among metabolite pools influence isotope-based predictions of water use efficiency in Phaseolus vulgaris. Functional Plant Biology, 2016, 43, 1149. | 1.1 | 7 |
| 131 | Anthropogenic sulphur dioxide load over China as observed from different satellite sensors. Atmospheric Environment, 2016, 145, 45-59. | 1.9 | 33 |
| 132 | Controls on the storage of organic carbon in permafrost soil in northern Siberia. European Journal of Soil Science, 2016, 67, 478-491. | 1.8 | 24 |
| 133 | Estimates of free-tropospheric NO ₂ and HCHO mixing ratios derived from high-altitude mountain MAX-DOAS observations at midlatitudes and in the tropics. Atmospheric Chemistry and Physics, 2016, 16, 2803-2817. | 1.9 | 21 |
| 134 | Impacts of the 2014–2015 Holuhraun eruption on the UK atmosphere. Atmospheric Chemistry and Physics, 2016, 16, 11415-11431. | 1.9 | 16 |
| 135 | An exemplary case of a bromine explosion event linked to cyclone development in the Arctic. Atmospheric Chemistry and Physics, 2016, 16, 1773-1788. | 1.9 | 29 |
| 136 | Drought history affects grassland plant and microbial carbon turnover during and after a subsequent drought event. Journal of Ecology, 2016, 104, 1453-1465. | 1.9 | 94 |
| 137 | Microbial carbon use efficiency and biomass turnover times depending on soil depth – Implications for carbon cycling. Soil Biology and Biochemistry, 2016, 96, 74-81. | 4.2 | 289 |
| 138 | Microbial nitrogen dynamics in organic and mineral soil horizons along a latitudinal transect in western Siberia. Global Biogeochemical Cycles, 2015, 29, 567-582. | 1.9 | 108 |
| 139 | Summer drought alters carbon allocation to roots and root respiration in mountain grassland. New Phytologist, 2015, 205, 1117-1127. | 3.5 | 199 |
| 140 | A panâ€Arctic synthesis of CH ₄ and CO ₂ production from anoxic soil incubations. Global Change Biology, 2015, 21, 2787-2803. | 4.2 | 138 |
| 141 | Data assimilation of satellite-retrieved ozone, carbon monoxide and nitrogen dioxide with ECMWF's Composition-IFS. Atmospheric Chemistry and Physics, 2015, 15, 5275-5303. | 1.9 | 109 |
| 142 | Evaluation of the MACC operational forecast system – potential and challenges of global near-real-time modelling with respect to reactive gases in the troposphere. Atmospheric Chemistry and Physics, 2015, 15, 14005-14030. | 1.9 | 21 |
| 143 | Monitoring compliance with sulfur content regulations of shipping fuel by in situ measurements of ship emissions. Atmospheric Chemistry and Physics, 2015, 15, 10087-10092. | 1.9 | 59 |
| 144 | Properties and bioavailability of particulate and mineralâ€associated organic matter in <scp>A</scp> rctic permafrost soils, <scp>L</scp> ower <scp>K</scp> olyma <scp>R</scp> egion, <scp>R</scp> ussia. European Journal of Soil Science, 2015, 66, 722-734. | 1.8 | 59 |

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|-----|--|-----|-----------|
| 145 | <i>Editorial Note</i> "A novel Whole Air Sample Profiler (WASP) for the quantification of volatile organic compounds in the boundary layer" published in Atmos. Meas. Tech., 6, 2703–2712, 2013. Atmospheric Measurement Techniques, 2015, 8, 3405-3406. | 1.2 | 0 |
| 146 | Storage and transformation of organic matter fractions in cryoturbated permafrost soils across the Siberian Arctic. Biogeosciences, 2015, 12, 4525-4542. | 1.3 | 85 |
| 147 | A wide field-of-view imaging DOAS instrument for two-dimensional trace gas mapping from aircraft. Atmospheric Measurement Techniques, 2015, 8, 5113-5131. | 1.2 | 30 |
| 148 | Validation of reactive gases and aerosols in the MACC global analysis and forecast system. Geoscientific Model Development, 2015, 8, 3523-3543. | 1.3 | 49 |
| 149 | Tropospheric chemistry in the Integrated Forecasting System of ECMWF. Geoscientific Model Development, 2015, 8, 975-1003. | 1.3 | 204 |
| 150 | Social dynamics within decomposer communities lead to nitrogen retention and organic matter build-up in soils. Nature Communications, 2015, 6, 8960. | 5.8 | 80 |
| 151 | Differences in satellite-derived NO x emission factors between Eurasian and North American boreal forest fires. Atmospheric Environment, 2015, 121, 55-65. | 1.9 | 22 |
| 152 | Convergence of soil nitrogen isotopes across global climate gradients. Scientific Reports, 2015, 5, 8280. | 1.6 | 127 |
| 153 | Microbial community composition shapes enzyme patterns in topsoil and subsoil horizons along a latitudinal transect in Western Siberia. Soil Biology and Biochemistry, 2015, 83, 106-115. | 4.2 | 104 |
| 154 | Ship-based MAX-DOAS measurements of tropospheric NO 2 and SO 2 in the South China and Sulu Sea. Atmospheric Environment, 2015, 102, 331-343. | 1.9 | 36 |
| 155 | The application of ecological stoichiometry to plant–microbial–soil organic matter transformations. Ecological Monographs, 2015, 85, 133-155. | 2.4 | 735 |
| 156 | Metatranscriptomic census of active protists in soils. ISME Journal, 2015, 9, 2178-2190. | 4.4 | 274 |
| 157 | Storage, Landscape Distribution, and Burial History of Soil Organic Matter in Contrasting Areas of Continuous Permafrost. Arctic, Antarctic, and Alpine Research, 2015, 47, 71-88. | 0.4 | 71 |
| 158 | Non-structural carbohydrates in woody plants compared among laboratories. Tree Physiology, 2015, 35, tpv073. | 1.4 | 163 |
| 159 | The effect of warming on the vulnerability of subducted organic carbon in arctic soils. Soil Biology and Biochemistry, 2015, 90, 19-29. | 4.2 | 68 |
| 160 | Investigating the Link Between Glyoxal and Biogenic Activities. Springer Earth System Sciences, 2015, , 59-65. | 0.1 | 1 |
| 161 | Estimates of NOx Emission Factors from GOME-2 Measurements for the Major Types of Open Biomass Burning. Springer Earth System Sciences, 2015, , 67-75. | 0.1 | 0 |
| 162 | Effects of drought on nitrogen turnover and abundances of ammonia-oxidizers in mountain grassland. Biogeosciences, 2014, 11, 6003-6015. | 1.3 | 51 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 163 | Liquid water absorption and scattering effects in DOAS retrievals over oceans. Atmospheric Measurement Techniques, 2014, 7, 4203-4221. | 1.2 | 23 |
| 164 | Effects of Soil Organic Matter Properties and Microbial Community Composition on Enzyme Activities in Cryoturbated Arctic Soils. PLoS ONE, 2014, 9, e94076. | 1.1 | 90 |
| 165 | Overview: Tropospheric profiling: state of the art and future challenges – introduction to the AMT special issue. Atmospheric Measurement Techniques, 2014, 7, 2981-2986. | 1.2 | 6 |
| 166 | Construction of merged satellite total O ₃ and NO ₂ time series in the tropics for trend studies and evaluation by comparison to NDACC SAOZ measurements. Atmospheric Measurement Techniques, 2014, 7, 3337-3354. | 1.2 | 13 |
| 167 | An improved glyoxal retrieval from OMI measurements. Atmospheric Measurement Techniques, 2014, 7, 4133-4150. | 1.2 | 42 |
| 168 | Decreasing emissions of NOx relative to CO2 in East Asia inferred from satellite observations. Nature Geoscience, 2014, 7, 792-795. | 5.4 | 99 |
| 169 | Effect of surface BRDF of various land cover types on geostationary observations of tropospheric NO ₂ . Atmospheric Measurement Techniques, 2014, 7, 3497-3508. | 1.2 | 20 |
| 170 | Site- and horizon-specific patterns of microbial community structure and enzyme activities in permafrost-affected soils of Greenland. Frontiers in Microbiology, 2014, 5, 541. | 1.5 | 73 |
| 171 | Experimental drought reduces the transfer of recently fixed plant carbon to soil microbes and alters the bacterial community composition in a mountain meadow. New Phytologist, 2014, 201, 916-927. | 3.5 | 261 |
| 172 | Microbial community dynamics alleviate stoichiometric constraints during litter decay. Ecology Letters, 2014, 17, 680-690. | 3.0 | 302 |
| 173 | <scp><i>NxrB</i></scp> encoding the beta subunit of nitrite oxidoreductase as functional and phylogenetic marker for nitriteâ€oxidizing <scp><i>N</i></scp> <i>itrospiraEnvironmental Microbiology, 2014, 16, 3055-3071.</i> | 1.8 | 280 |
| 174 | Nutrient limitation of alpine plants: Implications from leaf NÂ:ÂP stoichiometry and leaf \hat{l} (sup>15 (sup>N). Journal of Plant Nutrition and Soil Science, 2014, 177, 378-387. | 1.1 | 44 |
| 175 | Stoichiometric imbalances between terrestrial decomposer communities and their resources: mechanisms and implications of microbial adaptations to their resources. Frontiers in Microbiology, 2014, 5, 22. | 1.5 | 501 |
| 176 | Characterisation of vertical BrO distribution during events of enhanced tropospheric BrO in Antarctica, from combined remote and in-situ measurements. Journal of Quantitative Spectroscopy and Radiative Transfer, 2014, 138, 70-81. | 1.1 | 15 |
| 177 | Convective forcing of mercury and ozone in the Arctic boundary layer induced by leads in sea ice. Nature, 2014, 506, 81-84. | 13.7 | 79 |
| 178 | Adjustment of microbial nitrogen use efficiency to carbon:nitrogen imbalances regulates soil nitrogen cycling. Nature Communications, 2014, 5, 3694. | 5.8 | 594 |
| 179 | Distinct microbial communities associated with buried soils in the Siberian tundra. ISME Journal, 2014, 8, 841-853. | 4.4 | 137 |
| 180 | Aerobic nitrous oxide production through N-nitrosating hybrid formation in ammonia-oxidizing archaea. ISME Journal, 2014, 8, 1135-1146. | 4.4 | 270 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 181 | Soil warming alters microbial substrate use in alpine soils. Global Change Biology, 2014, 20, 1327-1338. | 4.2 | 97 |
| 182 | Growth of nitrite-oxidizing bacteria by aerobic hydrogen oxidation. Science, 2014, 345, 1052-1054. | 6.0 | 166 |
| 183 | Fungal and bacterial utilization of organic substrates depends on substrate complexity and N availability. FEMS Microbiology Ecology, 2014, 87, 142-152. | 1.3 | 108 |
| 184 | Simulated air quality and pollutant budgets over Europe in 2008. Science of the Total Environment, 2014, 470-471, 270-281. | 3.9 | 4 |
| 185 | Input of easily available organic C and N stimulates microbial decomposition of soil organic matter in arctic permafrost soil. Soil Biology and Biochemistry, 2014, 75, 143-151. | 4.2 | 213 |
| 186 | Temporal and spatial characteristics of ozone depletion events from measurements in the Arctic. Atmospheric Chemistry and Physics, 2014, 14, 4875-4894. | 1.9 | 40 |
| 187 | The empirical relationship between satellite-derived tropospheric NO ₂ and fire radiative power and possible implications for fire emission rates of NO _x . Atmospheric Chemistry and Physics, 2014. 14. 2447-2466. | 1.9 | 37 |
| 188 | Chemical ozone loss and ozone mini-hole event during the Arctic winter 2010/2011 as observed by SCIAMACHY and GOME-2. Atmospheric Chemistry and Physics, 2014, 14, 3247-3276. | 1.9 | 29 |
| 189 | Changes in atmospheric aerosol loading retrieved from space-based measurements during the past decade. Atmospheric Chemistry and Physics, 2014, 14, 6881-6902. | 1.9 | 72 |
| 190 | Systematic analysis of tropospheric NO ₂ long-range transport events detected in GOME-2 satellite data. Atmospheric Chemistry and Physics, 2014, 14, 7367-7396. | 1.9 | 26 |
| 191 | Evolution of NO2 levels in Spain from 1996 to 2012. Scientific Reports, 2014, 4, 5887. | 1.6 | 29 |
| 192 | Validation strategy for satellite observations of tropospheric reactive gases. Annals of Geophysics, 2014, , . | 0.5 | 10 |
| 193 | Carbon use efficiency of microbial communities: stoichiometry, methodology and modelling. Ecology Letters, 2013, 16, 930-939. | 3.0 | 627 |
| 194 | Microbial N immobilization is of great importance in acidified mountain spruce forest soils. Soil Biology and Biochemistry, 2013, 59, 58-71. | 4.2 | 73 |
| 195 | Nitrogen dynamics in Turbic Cryosols from Siberia and Greenland. Soil Biology and Biochemistry, 2013, 67, 85-93. | 4.2 | 78 |
| 196 | Host-compound foraging by intestinal microbiota revealed by single-cell stable isotope probing. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4720-4725. | 3.3 | 210 |
| 197 | Seasonal variation in functional properties of microbial communities in beech forest soil. Soil Biology and Biochemistry, 2013, 60, 95-104. | 4.2 | 131 |
| 198 | Linking microbial community structure and allocation of plant-derived carbon in an organic agricultural soil using 13CO2 pulse-chase labelling combined with 13C-PLFA profiling. Soil Biology and Biochemistry, 2013, 58, 207-215. | 4.2 | 71 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 199 | Nitrification rates in Arctic soils are associated with functionally distinct populations of ammonia-oxidizing archaea. ISME Journal, 2013, 7, 1620-1631. | 4.4 | 163 |
| 200 | The effects of rapid urbanization on the levels in tropospheric nitrogen dioxide and ozone over East China. Atmospheric Environment, 2013, 77, 558-567. | 1.9 | 67 |
| 201 | Metabolic Features of Protochlamydia amoebophila Elementary Bodies – A Link between Activity and Infectivity in Chlamydiae. PLoS Pathogens, 2013, 9, e1003553. | 2.1 | 44 |
| 202 | Corrigendum to "MAX-DOAS formaldehyde slant column measurements during CINDI: intercomparison and analysis improvement" published in Atmos. Meas. Tech., 6, 167–185, 2013. Atmospheric Measurement Techniques, 2013, 6, 219-219. | 1.2 | 1 |
| 203 | MAX-DOAS formaldehyde slant column measurements during CINDI: intercomparison and analysis improvement. Atmospheric Measurement Techniques, 2013, 6, 167-185. | 1.2 | 78 |
| 204 | Improvements to the retrieval of tropospheric NO<sub>2</sub> from satellite $\hat{a} \in ``stratospheric correction using SCIAMACHY limb/nadir matching and comparison to Oslo CTM2 simulations. Atmospheric Measurement Techniques, 2013, 6, 565-584.$ | 1.2 | 34 |
| 205 | Responses of belowground carbon allocation dynamics to extended shading in mountain grassland. New Phytologist, 2013, 198, 116-126. | 3.5 | 84 |
| 206 | The MACC reanalysis: an 8 yr data set of atmospheric composition. Atmospheric Chemistry and Physics, 2013, 13, 4073-4109. | 1.9 | 424 |
| 207 | Long-term changes of tropospheric NO ₂ over megacities derived from multiple satellite instruments. Atmospheric Chemistry and Physics, 2013, 13, 4145-4169. | 1.9 | 237 |
| 208 | Multiannual changes of CO ₂ emissions in China: indirect estimates derived from satellite measurements of tropospheric NO ₂ columns. Atmospheric Chemistry and Physics, 2013, 13, 9415-9438. | 1.9 | 45 |
| 209 | Economic crisis detected from space: Air quality observations over Athens/Greece. Geophysical Research Letters, 2013, 40, 458-463. | 1.5 | 88 |
| 210 | Uncertainties in the inverse modelling of sulphur dioxide eruption profiles. Geomatics, Natural Hazards and Risk, 2012, 3, 97-97. | 2.0 | 0 |
| 211 | The Cabauw Intercomparison campaign for Nitrogen Dioxide measuring Instruments (CINDI): design, execution, and early results. Atmospheric Measurement Techniques, 2012, 5, 457-485. | 1.2 | 83 |
| 212 | Rate of Belowground Carbon Allocation Differs with Successional Habit of Two Afromontane Trees. PLoS ONE, 2012, 7, e45540. | 1.1 | 11 |
| 213 | Who is who in litter decomposition? Metaproteomics reveals major microbial players and their biogeochemical functions. ISME Journal, 2012, 6, 1749-1762. | 4.4 | 537 |
| 214 | Stoichiometric controls of nitrogen and phosphorus cycling in decomposing beech leaf litter. Ecology, 2012, 93, 770-782. | 1.5 | 228 |
| 215 | Exploring the missing source of glyoxal (CHOCHO) over China. Geophysical Research Letters, 2012, 39, . | 1.5 | 82 |
| 216 | A study of BRDF over Tokyo for the spaceborne measurements of atmospheric trace gases. , 2012, , . | | 1 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 217 | Characteristics of tropospheric ozone depletion events in the Arctic spring: analysis of the ARCTAS, ARCPAC, and ARCIONS measurements and satellite BrO observations. Atmospheric Chemistry and Physics, 2012, 12, 9909-9922. | 1.9 | 42 |
| 218 | Analysis of satellite-derived Arctic tropospheric BrO columns in conjunction with aircraft measurements during ARCTAS and ARCPAC. Atmospheric Chemistry and Physics, 2012, 12, 1255-1285. | 1.9 | 63 |
| 219 | Simultaneous satellite observations of IO and BrO over Antarctica. Atmospheric Chemistry and Physics, 2012, 12, 6565-6580. | 1.9 | 51 |
| 220 | Impact of forest fires, biogenic emissions and high temperatures on the elevated Eastern Mediterranean ozone levels during the hot summer of 2007. Atmospheric Chemistry and Physics, 2012, 12, 8727-8750. | 1.9 | 52 |
| 221 | Corrigendum to "Simultaneous satellite observations of IO and BrO over Antarctica" published in Atmos. Chem. Phys., 12, 6565–6580, 2012. Atmospheric Chemistry and Physics, 2012, 12, 9383-9385. | 1.9 | 0 |
| 222 | Formaldehyde and nitrogen dioxide over the remote western Pacific Ocean: SCIAMACHY and GOME-2 validation using ship-based MAX-DOAS observations. Atmospheric Chemistry and Physics, 2012, 12, 11179-11197. | 1.9 | 76 |
| 223 | Field and satellite observations of the formation and distribution of Arctic atmospheric bromine above a rejuvenated sea ice cover. Journal of Geophysical Research, 2012, 117, . | 3.3 | 43 |
| 224 | Effects of stoichiometry and temperature perturbations on beech leaf litter decomposition, enzyme activities and protein expression. Biogeosciences, 2012, 9, 4537-4551. | 1.3 | 55 |
| 225 | Atmospheric Composition Change. , 2012, , 309-365. | | 2 |
| 226 | Uptake of ant-derived nitrogen in the myrmecophytic orchid Caularthron bilamellatum. Annals of Botany, 2012, 110, 757-766. | 1.4 | 33 |
| 227 | Allocation of carbon to fine root compounds and their residence times in a boreal forest depend on root size class and season. New Phytologist, 2012, 194, 972-981. | 3.5 | 56 |
| 228 | Environmental and stoichiometric controls on microbial carbonâ€use efficiency in soils. New Phytologist, 2012, 196, 79-91. | 3.5 | 1,046 |
| 229 | Satellite remote sensing of changes in NO x emissions over China during 1996–2010. Science Bulletin, 2012, 57, 2857-2864. | 1.7 | 113 |
| 230 | ACE2 links amino acid malnutrition to microbial ecology and intestinal inflammation. Nature, 2012, 487, 477-481. | 13.7 | 1,035 |
| 231 | Impact of the 2009 Attica wild fires on the air quality in urban Athens. Atmospheric Environment, 2012, 46, 536-544. | 1.9 | 50 |
| 232 | Influence of litter chemistry and stoichiometry on glucan depolymerization during decomposition of beech (Fagus sylvatica L.) litter. Soil Biology and Biochemistry, 2012, 50, 174-187. | 4.2 | 31 |
| 233 | A field method to store samples from temperate mountain grassland soils for analysis of phospholipid fatty acids. Soil Biology and Biochemistry, 2012, 51, 81-83. | 4.2 | 31 |
| 234 | Drought-induced reduction in uptake of recently photosynthesized carbon by springtails and mites in alpine grassland. Soil Biology and Biochemistry, 2012, 55, 37-39. | 4.2 | 9 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 235 | Controls of hydrochemical fluxes via stemflow in tropical lowland rainforests: Effects of meteorology and vegetation characteristics. Journal of Hydrology, 2012, 452-453, 247-258. | 2.3 | 47 |
| 236 | <i>amoA</i> â€based consensus phylogeny of ammoniaâ€oxidizing archaea and deep sequencing of <i>amoA</i> genes from soils of four different geographic regions. Environmental Microbiology, 2012, 14, 525-539. | 1.8 | 485 |
| 237 | Long-Term Change in the Nitrogen Cycle of Tropical Forests. Science, 2011, 334, 664-666. | 6.0 | 250 |
| 238 | Optimization of Biomass Composition Explains Microbial Growth-Stoichiometry Relationships. American Naturalist, 2011, 177, E29-E42. | 1.0 | 53 |
| 239 | The impact of North American anthropogenic emissions and lightning on long-range transport of trace gases and their export from the continent during summers 2002 and 2004. Journal of Geophysical Research, 2011, 116, . | 3.3 | 18 |
| 240 | SO ₂ emissions and lifetimes: Estimates from inverse modeling using in situ and global, space-based (SCIAMACHY and OMI) observations. Journal of Geophysical Research, 2011, 116, . | 3.3 | 230 |
| 241 | From Radiation Fields to Atmospheric Concentrations – Retrieval of Geophysical Parameters. , 2011, , 99-127. | | 3 |
| 242 | Evaluations of NO _x and highly reactive VOC emission inventories in Texas and their implications for ozone plume simulations during the Texas Air Quality Study 2006. Atmospheric Chemistry and Physics, 2011, 11, 11361-11386. | 1.9 | 85 |
| 243 | Emission sources contributing to tropospheric ozone over Equatorial Africa during the summer monsoon. Atmospheric Chemistry and Physics, 2011, 11, 13395-13419. | 1.9 | 13 |
| 244 | Analysis of reactive bromine production and ozone depletion in the Arctic boundary layer using 3-D simulations with GEM-AQ: inference from synoptic-scale patterns. Atmospheric Chemistry and Physics, 2011, 11, 3949-3979. | 1.9 | 75 |
| 245 | Evaluation of stratospheric chlorine chemistry for the Arctic spring 2005 using modelled and measured OClO column densities. Atmospheric Chemistry and Physics, 2011, 11, 689-703. | 1.9 | 18 |
| 246 | Global observations of tropospheric BrO columns using GOME-2 satellite data. Atmospheric Chemistry and Physics, 2011, 11, 1791-1811. | 1.9 | 156 |
| 247 | Compoundâ€specific differences in ¹³ C of soluble carbohydrates in leaves and phloem of 6â€monthâ€old <i>Eucalyptus globulus</i> (Labill). Plant, Cell and Environment, 2011, 34, 1599-1608. | 2.8 | 18 |
| 248 | Spatioâ€temporal variations determine plant–microbe competition for inorganic nitrogen in an alpine meadow. Journal of Ecology, 2011, 99, 563-571. | 1.9 | 68 |
| 249 | Seasonality and resource availability control bacterial and archaeal communities in soils of a temperate beech forest. ISME Journal, 2011, 5, 389-402. | 4.4 | 273 |
| 250 | Microbial processes and community composition in the rhizosphere of European beech–ÂThe influence of plant C exudates. Soil Biology and Biochemistry, 2011, 43, 551-558. | 4.2 | 170 |
| 251 | Natural abundance radiocarbon in soil microbial biomass: Results from a glacial foreland. Soil Biology and Biochemistry, 2011, 43, 1356-1361. | 4.2 | 6 |
| 252 | A feasibility study for the detection of the diurnal variation of tropospheric NO2 over Tokyo from a geostationary orbit. Advances in Space Research, 2011, 48, 1551-1564. | 1.2 | 5 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 253 | Megacities as hot spots of air pollution in the East Mediterranean. Atmospheric Environment, 2011, 45, 1223-1235. | 1.9 | 239 |
| 254 | <i>Nitrososphaera viennensis $$ </i> $$, an ammonia oxidizing archaeon from soil. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8420-8425. | 3.3 | 810 |
| 255 | Topography strongly affects atmospheric deposition and canopy exchange processes in different types of wet lowland rainforest, Southwest Costa Rica. Biogeochemistry, 2011, 106, 371-396. | 1.7 | 36 |
| 256 | Dominant plant species shift their nitrogen uptake patterns in response to nutrient enrichment caused by a fungal fairy in an alpine meadow. Plant and Soil, 2011, 341, 495-504. | 1.8 | 72 |
| 257 | Linking Microbial and Ecosystem Ecology Using Ecological Stoichiometry: A Synthesis of Conceptual and Empirical Approaches. Ecosystems, 2011, 14, 261-273. | 1.6 | 89 |
| 258 | Nine years of atmospheric remote sensing with sciamachy - atmospheric parameters and data products. , 2011, , . | | 1 |
| 259 | Polyols as biomarkers and bioindicators for 21st century plant breeding. Functional Plant Biology, 2011, 38, 934. | 1.1 | 38 |
| 260 | Microorganisms with Novel Dissimilatory (Bi)Sulfite Reductase Genes Are Widespread and Part of the Core Microbiota in Low-Sulfate Peatlands. Applied and Environmental Microbiology, 2011, 77, 1231-1242. | 1.4 | 49 |
| 261 | Plants control the seasonal dynamics of microbial N cycling in a beech forest soil by belowground C allocation. Ecology, 2011, 92, 1036-1051. | 1.5 | 118 |
| 262 | Thaumarchaeotes abundant in refinery nitrifying sludges express <i>amoA</i> but are not obligate autotrophic ammonia oxidizers. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16771-16776. | 3.3 | 272 |
| 263 | Uncertainties in the inverse modelling of sulphur dioxide eruption profiles. Geomatics, Natural Hazards and Risk, 2011, 2, 201-216. | 2.0 | 28 |
| 264 | Operational total and tropospheric NO ₂ column retrieval for GOME-2. Atmospheric Measurement Techniques, 2011, 4, 1491-1514. | 1.2 | 114 |
| 265 | An improved tropospheric NO ₂ column retrieval algorithm for the Ozone Monitoring Instrument. Atmospheric Measurement Techniques, 2011, 4, 1905-1928. | 1.2 | 550 |
| 266 | Influence of low spatial resolution a priori data on tropospheric NO ₂ satellite retrievals. Atmospheric Measurement Techniques, 2011, 4, 1805-1820. | 1.2 | 57 |
| 267 | An improved NO ₂ retrieval for the GOME-2 satellite instrument. Atmospheric Measurement Techniques, 2011, 4, 1147-1159. | 1.2 | 134 |
| 268 | SCIAMACHY's View of the Changing Earth's Environment. , 2011, , 175-216. | | 11 |
| 269 | Plants control the seasonal dynamics of microbial N cycling in a beech forest soil by belowground C allocation. Ecology, 2011, 92, 1036-1051. | 1.5 | 19 |
| 270 | High-mobility group protein HMGA2-derived fragments stimulate the proliferation of chondrocytes and adipose tissue-derived stem cells., 2011, 21, 355-363. | | 11 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 271 | Satellite Monitoring of Nitrogen Oxide Emissions. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 219-234. | 0.1 | 0 |
| 272 | GOME-2 observations of oxygenated VOCs: what can we learn from the ratio glyoxal to formaldehyde on a global scale?. Atmospheric Chemistry and Physics, 2010, 10, 10145-10160. | 1.9 | 114 |
| 273 | Are there urban signatures in the tropospheric ozone column products derived from satellite measurements?. Atmospheric Chemistry and Physics, 2010, 10, 5213-5222. | 1.9 | 41 |
| 274 | Satellite observations of long range transport of a large BrO plume in the Arctic. Atmospheric Chemistry and Physics, 2010, 10, 6515-6526. | 1.9 | 70 |
| 275 | Vertical structure of Antarctic tropospheric ozone depletion events: characteristics and broader implications. Atmospheric Chemistry and Physics, 2010, 10, 7775-7794. | 1.9 | 61 |
| 276 | Multi-annual changes of NO _x emissions in megacity regions: nonlinear trend analysis of satellite measurement based estimates. Atmospheric Chemistry and Physics, 2010, 10, 8481-8498. | 1.9 | 68 |
| 277 | Chemical and aerosol characterisation of the troposphere over West Africa during the monsoon period as part of AMMA. Atmospheric Chemistry and Physics, 2010, 10, 7575-7601. | 1.9 | 93 |
| 278 | Enhanced salt tolerance of transgenic tobacco plants by co-expression of PcINO1 and McIMT1 is accompanied by increased level of myo-inositol and methylated inositol. Protoplasma, 2010, 245, 143-152. | 1.0 | 54 |
| 279 | Determination of gross rates of amino acid production and immobilization inÂdecomposing leaf litter by a novel 15N isotope pool dilution technique. Soil Biology and Biochemistry, 2010, 42, 1293-1302. | 4.2 | 118 |
| 280 | Negligible contribution from roots to soil-borne phospholipid fatty acid fungal biomarkers 18:2ω6,9 and 18:1ω9. Soil Biology and Biochemistry, 2010, 42, 1650-1652. | 4.2 | 150 |
| 281 | Quantification and monosaccharide composition of hemicelluloses from different plant functional types. Plant Physiology and Biochemistry, 2010, 48, 1-8. | 2.8 | 132 |
| 282 | Proteome analysis of fungal and bacterial involvement in leaf litter decomposition. Proteomics, 2010, 10, 1819-1830. | 1.3 | 83 |
| 283 | Belowground carbon allocation by trees drives seasonal patterns of extracellular enzyme activities by altering microbial community composition in a beech forest soil. New Phytologist, 2010, 187, 843-858. | 3.5 | 337 |
| 284 | The effect of resource quantity and resource stoichiometry on microbial carbon-use-efficiency. FEMS Microbiology Ecology, 2010, 73, no-no. | 1.3 | 227 |
| 285 | Hemicellulose concentration and composition in plant cell walls under extreme carbon source-sink imbalances. Physiologia Plantarum, 2010, 139, 241-55. | 2.6 | 31 |
| 286 | On the improvement of NO ₂ satellite retrievals – aerosol impact on the airmass factors. Atmospheric Measurement Techniques, 2010, 3, 475-493. | 1.2 | 103 |
| 287 | Satellite remote sensing of tropospheric composition – principles, results, and challenges. EPJ Web of Conferences, 2010, 9, 181-189. | 0.1 | 2 |
| 288 | Contribution of carbon fixed by Rubisco and PEPC to phloem export in the Crassulacean acid metabolism plant Kalanchoë daigremontiana. Journal of Experimental Botany, 2010, 61, 1375-1383. | 2.4 | 47 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 289 | Intercomparison of slant column measurements of NO ₂ and O ₄ by MAX-DOAS and zenith-sky UV and visible spectrometers. Atmospheric Measurement Techniques, 2010, 3, 1629-1646. | 1.2 | 106 |
| 290 | Testing and improving OMI DOMINO tropospheric NO ₂ using observations from the DANDELIONS and INTEXâ€B validation campaigns. Journal of Geophysical Research, 2010, 115, . | 3.3 | 103 |
| 291 | Remote sensing and inverse transport modeling of the Kasatochi eruption sulfur dioxide cloud. Journal of Geophysical Research, 2010, 115, . | 3.3 | 93 |
| 292 | Comparison of satellite observed tropospheric NO2 over India with model simulations. Atmospheric Environment, 2010, 44, 3314-3321. | 1.9 | 61 |
| 293 | Nitrogen oxides in the troposphere $\hat{a}\in$ " What have we learned from satellite measurements?. EPJ Web of Conferences, 2009, 1, 149-156. | 0.1 | 10 |
| 294 | Application of High-Mobility-Group-A Proteins Increases the Proliferative Activity of Chondrocytes <i>In Vitro</i> . Tissue Engineering - Part A, 2009, 15, 473-477. | 1.6 | 15 |
| 295 | Short-term dynamics of nonstructural carbohydrates and hemicelluloses in young branches of temperate forest trees during bud break. Tree Physiology, 2009, 29, 901-911. | 1.4 | 84 |
| 296 | Sensitivity Study of the Airmass Factors used for Satellite Retrievals of tropospheric NO2., 2009,,. | | 0 |
| 297 | Comparison of Groundâ€Based and Satellite Estimates of NO2 Columns under Anthropogenic Pollution. , 2009, , . | | 0 |
| 298 | Regional NOx emission inversion through a four-dimensional variational approach using SCIAMACHY tropospheric NO2 column observations. Atmospheric Environment, 2009, 43, 5046-5055. | 1.9 | 54 |
| 299 | Atmospheric composition change: Climate–Chemistry interactions. Atmospheric Environment, 2009, 43, 5138-5192. | 1.9 | 243 |
| 300 | Measuring atmospheric composition change. Atmospheric Environment, 2009, 43, 5351-5414. | 1.9 | 160 |
| 301 | Combining agent-based and stock-flow modelling approaches in a participative analysis of the integrated land system in Reichraming, Austria. Landscape Ecology, 2009, 24, 1149-1165. | 1.9 | 62 |
| 302 | Preparation of starch and soluble sugars of plant material for the analysis of carbon isotope composition: a comparison of methods. Rapid Communications in Mass Spectrometry, 2009, 23, 2476-2488. | 0.7 | 76 |
| 303 | Co-transfection of plasmid DNA and laser-generated gold nanoparticles does not disturb the bioactivity of GFP-HMGB1 fusion protein. Journal of Nanobiotechnology, 2009, 7, 6. | 4.2 | 12 |
| 304 | The boundless carbon cycle. Nature Geoscience, 2009, 2, 598-600. | 5.4 | 1,223 |
| 305 | Does photosynthesis affect grassland soilâ€respired CO ₂ and its carbon isotope composition on a diurnal timescale?. New Phytologist, 2009, 182, 451-460. | 3.5 | 260 |
| 306 | A Graduate-Level Online Module for Teaching Remote Sensing of Tropospheric NO2 from Space. Journal of Chemical Education, 2009, 86, 750. | 1.1 | 2 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 307 | Retrieval of vertical columns of sulfur dioxide from SCIAMACHY and OMI: Air mass factor algorithm development, validation, and error analysis. Journal of Geophysical Research, 2009, 114, . | 3.3 | 105 |
| 308 | Cartilage replacement in dogs. Veterinary and Comparative Orthopaedics and Traumatology, 2009, 22, 216-221. | 0.2 | 1 |
| 309 | NO ₂ columns in the western United States observed from space and simulated by a regional chemistry model and their implications for NO _x emissions. Journal of Geophysical Research, 2009, 114, . | 3.3 | 146 |
| 310 | Investigation of NO _x emissions and NO _x -related chemistry in East Asia using CMAQ-predicted and GOME-derived NO ₂ columns. Atmospheric Chemistry and Physics, 2009, 9, 1017-1036. | 1.9 | 67 |
| 311 | Temporal and spatial variability of glyoxal as observed from space. Atmospheric Chemistry and Physics, 2009, 9, 4485-4504. | 1.9 | 108 |
| 312 | BrO, blizzards, and drivers of polar tropospheric ozone depletion events. Atmospheric Chemistry and Physics, 2009, 9, 4639-4652. | 1.9 | 98 |
| 313 | Satellite observations and model simulations of tropospheric NO ₂ columns over south-eastern Europe. Atmospheric Chemistry and Physics, 2009, 9, 6119-6134. | 1.9 | 32 |
| 314 | Satellite measurements of formaldehyde linked to shipping emissions. Atmospheric Chemistry and Physics, 2009, 9, 8223-8234. | 1.9 | 36 |
| 315 | Corrigendum to "Satellite observations and model simulations of tropospheric NO ₂ columns over south-eastern Europe" published in Atmos. Chem. Phys., 9, 6119–6134, 2009. Atmospheric Chemistry and Physics, 2009, 9, 6495-6496. | 1.9 | 0 |
| 316 | Ship emitted NO ₂ in the Indian Ocean: comparison of model results with satellite data. Atmospheric Chemistry and Physics, 2009, 9, 7289-7301. | 1.9 | 47 |
| 317 | Remote Sensing of Tropospheric Trace Gases (NO2 and SO2) from SCIAMACHY., 2009, , 63-72. | | 1 |
| 318 | Light affects competition for inorganic and organic nitrogen between maize and rhizosphere microorganisms. Plant and Soil, 2008, 304, 59-72. | 1.8 | 44 |
| 319 | Initial effects of experimental warming on carbon exchange rates, plant growth and microbial dynamics of a lichen-rich dwarf shrub tundra in Siberia. Plant and Soil, 2008, 307, 191-205. | 1.8 | 126 |
| 320 | Enzymatic breakdown of raffinose oligosaccharides in pea seeds. Planta, 2008, 228, 99-110. | 1.6 | 65 |
| 321 | Chemical differences between seeds and elaiosomes indicate an adaptation to nutritional needs of ants. Oecologia, 2008, 155, 539-547. | 0.9 | 88 |
| 322 | Genomic characterisation, chromosomal assignment and in vivo localisation of the canine High Mobility Group A1 (HMGA1) gene. BMC Genetics, 2008, 9, 49. | 2.7 | 3 |
| 323 | The sensitivity of Western European NO ₂ columns to interannual variability of meteorology and emissions: a model—GOME study. Atmospheric Science Letters, 2008, 9, 182-188. | 0.8 | 8 |
| 324 | A moderately thermophilic ammonia-oxidizing crenarchaeote from a hot spring. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 2134-2139. | 3.3 | 626 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 325 | Nitrogen fixation by phyllosphere bacteria associated with higher plants and their colonizing epiphytes of a tropical lowland rainforest of Costa Rica. ISME Journal, 2008, 2, 561-570. | 4.4 | 218 |
| 326 | Impact of transport of sulfur dioxide from the Asian continent on the air quality over Korea during May 2005. Atmospheric Environment, 2008, 42, 1461-1475. | 1.9 | 38 |
| 327 | Atmospheric mercury depletion event study in Ny-Alesund (Svalbard) in spring 2005. Deposition and transformation of Hg in surface snow during springtime. Science of the Total Environment, 2008, 397, 167-177. | 3.9 | 49 |
| 328 | Tree girdling increases soil N mineralisation in two spruce stands. Soil Biology and Biochemistry, 2008, 40, 1155-1166. | 4.2 | 49 |
| 329 | The 2005 and 2006 DANDELIONS NO ₂ and aerosol intercomparison campaigns. Journal of Geophysical Research, 2008, 113, . | 3.3 | 116 |
| 330 | Validation of Ozone Monitoring Instrument nitrogen dioxide columns. Journal of Geophysical Research, 2008, 113 , . | 3.3 | 194 |
| 331 | Measurement of lowâ€altitude CO over the Indian subcontinent by MOPITT. Journal of Geophysical Research, 2008, 113, . | 3.3 | 47 |
| 332 | Root-derived respiration and non-structural carbon of rice seedlings. European Journal of Soil Biology, 2008, 44, 22-29. | 1.4 | 36 |
| 333 | Nitrification in terrestrial hot springs of Iceland and Kamchatka. FEMS Microbiology Ecology, 2008, 64, 167-174. | 1.3 | 173 |
| 334 | A threeâ€dimensional model study on the production of BrO and Arctic boundary layer ozone depletion. Journal of Geophysical Research, 2008, 113, . | 3.3 | 24 |
| 335 | Support to Aviation for Volcanic Ash Avoidance (SAVAA). , 2008, , . | | 3 |
| 336 | Total Nitrogen Content and \hat{I} 15N Signatures in Moss Tissue: Indicative Value for Nitrogen Deposition Patterns and Source Allocation on a Nationwide Scale. Environmental Science & Environmental | 4.6 | 65 |
| 337 | Remote Sensing of Tropospheric Pollution from Space. Bulletin of the American Meteorological Society, 2008, 89, 805-822. | 1.7 | 108 |
| 338 | GEM-AQ, an on-line global multiscale chemical weather modelling system: model description and evaluation of gas phase chemistry processes. Atmospheric Chemistry and Physics, 2008, 8, 3255-3281. | 1.9 | 84 |
| 339 | Validation of NO ₂ and NO from the Atmospheric Chemistry Experiment (ACE). Atmospheric Chemistry and Physics, 2008, 8, 5801-5841. | 1.9 | 64 |
| 340 | NO ₂ climatology in the northern subtropical region: diurnal, seasonal and interannual variability. Atmospheric Chemistry and Physics, 2008, 8, 1635-1648. | 1.9 | 35 |
| 341 | Satellite measurement based estimates of decadal changes in European nitrogen oxides emissions. Atmospheric Chemistry and Physics, 2008, 8, 2623-2641. | 1.9 | 84 |
| 342 | The influence of natural and anthropogenic secondary sources on the glyoxal global distribution. Atmospheric Chemistry and Physics, 2008, 8, 4965-4981. | 1.9 | 174 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 343 | SO ₂ Retrieval from SCIAMACHY using the Weighting Function DOAS (WFDOAS) technique: comparison with Standard DOAS retrieval. Atmospheric Chemistry and Physics, 2008, 8, 6137-6145. | 1.9 | 66 |
| 344 | No diurnal variation in rate or carbon isotope composition of soil respiration in a boreal forest. Tree Physiology, 2007, 27, 749-756. | 1.4 | 44 |
| 345 | Physiological Responses of Bryophytes Thuidium tamariscinum and Hylocomium splendens to Increased Nitrogen Deposition. Annals of Botany, 2007, 99, 161-169. | 1.4 | 64 |
| 346 | Measurements of O& t;sub>3& t;/sub>, NO& t;sub>2& t;/sub> and BrO during the INDOEX campaign using ground based DOAS and GOME satellite data. Atmospheric Chemistry and Physics, 2007, 7, 283-291. | 1.9 | 8 |
| 347 | Circumpolar transport and air-surface exchange of atmospheric mercury at Ny-Ãlesund (79° N), Svalbard, spring 2002. Atmospheric Chemistry and Physics, 2007, 7, 151-166. | 1.9 | 58 |
| 348 | Systematic analysis of interannual and seasonal variations of model-simulated tropospheric NO ₂ in Asia and comparison with GOME-satellite data. Atmospheric Chemistry and Physics, 2007, 7, 1671-1681. | 1.9 | 122 |
| 349 | Comparison of box-air-mass-factors and radiances for Multiple-Axis Differential Optical Absorption Spectroscopy (MAX-DOAS) geometries calculated from different UV/visible radiative transfer models. Atmospheric Chemistry and Physics, 2007, 7, 1809-1833. | 1.9 | 168 |
| 350 | Lightning-produced NO _x over Brazil during TROCCINOX: airborne measurements in tropical and subtropical thunderstorms and the importance of mesoscale convective systems. Atmospheric Chemistry and Physics, 2007, 7, 2987-3013. | 1.9 | 67 |
| 351 | Halogens and their role in polar boundary-layer ozone depletion. Atmospheric Chemistry and Physics, 2007, 7, 4375-4418. | 1.9 | 593 |
| 352 | Multi-model simulations of the impact of international shipping on Atmospheric Chemistry and Climate in 2000 and 2030. Atmospheric Chemistry and Physics, 2007, 7, 757-780. | 1.9 | 133 |
| 353 | Inhibition of raffinose oligosaccharide breakdown delays germination of pea seeds. Journal of Plant Physiology, 2007, 164, 1093-1096. | 1.6 | 97 |
| 354 | Forest fire plumes over the North Atlantic: p-TOMCAT model simulations with aircraft and satellite measurements from the ITOP/ICARTT campaign. Journal of Geophysical Research, 2007, 112 , . | 3.3 | 55 |
| 355 | Evaluation of the MOCAGE chemistry transport model during the ICARTT/ITOP experiment. Journal of Geophysical Research, 2007, 112, . | 3.3 | 76 |
| 356 | Conservation of soil organic matter through cryoturbation in arctic soils in Siberia. Journal of Geophysical Research, 2007, 112 , . | 3.3 | 118 |
| 357 | NO _x emission trends for China, 1995–2004: The view from the ground and the view from space. Journal of Geophysical Research, 2007, 112, . | 3.3 | 422 |
| 358 | Heterotrophic microbial communities use ancient carbon following glacial retreat. Biology Letters, 2007, 3, 487-490. | 1.0 | 201 |
| 359 | Biodeterioration of brazilwood Caesalpinia echinata Lam. (Leguminosae—Caesalpinioideae) by rot fungi and termites. International Biodeterioration and Biodegradation, 2007, 60, 285-292. | 1.9 | 29 |
| 360 | Ectopic expression of phosphoenolpyruvate carboxylase in <i>Vicia narbonensis</i> seeds: effects of improved nutrient status on seed maturation and transcriptional regulatory networks. Plant Journal, 2007, 51, 819-839. | 2.8 | 36 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 361 | Microbial activities and foliar uptake of nitrogen in the epiphytic bromeliad Vriesea gigantea. New Phytologist, 2007, 175, 311-320. | 3.5 | 88 |
| 362 | Variations of the increasing trend of tropospheric NO2 over central east China during the past decade. Atmospheric Environment, 2007, 41, 4865-4876. | 1.9 | 89 |
| 363 | Pollution events over the East Mediterranean: Synergistic use of GOME, ground-based and sonde observations and models. Atmospheric Environment, 2007, 41, 7262-7273. | 1.9 | 28 |
| 364 | Shift in soil–plant nitrogen dynamics of an alpine–nival ecotone. Plant and Soil, 2007, 301, 65-76. | 1.8 | 65 |
| 365 | An ozone depletion event in the sub-arctic surface layer over Hudson Bay, Canada. Journal of Atmospheric Chemistry, 2007, 57, 255-280. | 1.4 | 13 |
| 366 | Production of dissolved organic carbon and low-molecular weight organic acids in soil solution driven by recent tree photosynthate. Biogeochemistry, 2007, 84, 1-12. | 1.7 | 71 |
| 367 | Two tobacco proline dehydrogenases are differentially regulated and play a role in early plant development. Planta, 2007, 225, 1313-1324. | 1.6 | 65 |
| 368 | Regional NOxemission strength for the Indian subcontinent and the impact of emissions from India and neighboring countries on regional O3chemistry. Journal of Geophysical Research, 2006, 111 , . | 3.3 | 34 |
| 369 | Global distribution pattern of anthropogenic nitrogen oxide emissions: Correlation analysis of satellite measurements and model calculations. Journal of Geophysical Research, 2006, 111, . | 3.3 | 44 |
| 370 | Comparison of 7 years of satellite-borne and ground-based tropospheric NO2measurements around Milan, Italy. Journal of Geophysical Research, 2006, 111 , . | 3.3 | 62 |
| 371 | Measurements of nitrogen dioxide total column amounts using a Brewer double spectrophotometer in direct Sun mode. Journal of Geophysical Research, 2006, 111 , . | 3.3 | 66 |
| 372 | Observation of a fast ozone loss in the marginal ice zone of the Arctic Ocean. Journal of Geophysical Research, 2006, 111 , . | 3.3 | 56 |
| 373 | Tropospheric and stratospheric BrO columns over Arrival Heights, Antarctica, 2002. Journal of Geophysical Research, 2006, 111 , . | 3.3 | 36 |
| 374 | Simultaneous global observations of glyoxal and formaldehyde from space. Geophysical Research Letters, 2006, 33, . | 1.5 | 265 |
| 375 | NO ₂ Profile retrieval using airborne multi axis UV-visible skylight absorption measurements over central Europe. Atmospheric Chemistry and Physics, 2006, 6, 3049-3058. | 1.9 | 35 |
| 376 | Inverse modelling of the spatial distribution of NO _x emissions on a continental scale using satellite data. Atmospheric Chemistry and Physics, 2006, 6, 1747-1770. | 1.9 | 127 |
| 377 | Multi-model ensemble simulations of tropospheric NO ₂ compared with GOME retrievals for the year 2000. Atmospheric Chemistry and Physics, 2006, 6, 2943-2979. | 1.9 | 127 |
| 378 | Airborne multi-axis DOAS measurements of tropospheric SO ₂ plumes in the Po-valley, Italy. Atmospheric Chemistry and Physics, 2006, 6, 329-338. | 1.9 | 40 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 379 | Satellite-observed U.S. power plant NOxemission reductions and their impact on air quality. Geophysical Research Letters, 2006, 33, . | 1.5 | 219 |
| 380 | Short-term changes in carbon isotope composition of soluble carbohydrates and starch: from canopy leaves to the root system. Rapid Communications in Mass Spectrometry, 2006, 20, 653-660. | 0.7 | 94 |
| 381 | Essential role for collectrin in renal amino acid transport. Nature, 2006, 444, 1088-1091. | 13.7 | 208 |
| 382 | Dynamics of carbohydrates in the embryo axes of horse chestnut seeds during their transition from dormancy to germination. Russian Journal of Plant Physiology, 2006, 53, 768-778. | 0.5 | 6 |
| 383 | Significance of organic nitrogen acquisition for dominant plant species in an alpine meadow on the Tibet plateau, China. Plant and Soil, 2006, 285, 221-231. | 1.8 | 74 |
| 384 | Retrieval And Monitoring of Atmospheric Trace Gas Concentrations in Nadir and Limb Geometry Using the Space-Borne Sciamachy Instrument. Environmental Monitoring and Assessment, 2006, 120, 65-77. | 1.3 | 23 |
| 385 | Soil carbon and nitrogen dynamics along a latitudinal transect in Western Siberia, Russia. Biogeochemistry, 2006, 81, 239-252. | 1.7 | 27 |
| 386 | Targeted metabolite profiling provides a functional link among eucalypt taxonomy, physiology and evolution. Phytochemistry, 2006, 67, 402-408. | 1.4 | 63 |
| 387 | Comparison of model-simulated tropospheric NO2 over China with GOME-satellite data. Atmospheric Environment, 2006, 40, 593-604. | 1.9 | 65 |
| 388 | Chemical characterization of air pollution in Eastern China and the Eastern United States. Atmospheric Environment, 2006, 40, 2607-2625. | 1.9 | 134 |
| 389 | Changes in Carbohydrate and Nutrient Contents Throughout a Reproductive Cycle Indicate that Phosphorus is a Limiting Nutrient in the Epiphytic Bromeliad, Werauhia sanguinolenta. Annals of Botany, 2006, 97, 745-754. | 1.4 | 34 |
| 390 | GOME Observations of Stratospheric Trace Gas Distributions during the Splitting Vortex Event in the Antarctic Winter of 2002. Part I: Measurements. Journals of the Atmospheric Sciences, 2005, 62, 778-785. | 0.6 | 38 |
| 391 | Stratospheric and tropospheric NO ₂ variability on the diurnal and annual scale: a combined retrieval from ENVISAT/SCIAMACHY and solar FTIR at the Permanent Ground-Truthing Facility Zugspitze/Garmisch. Atmospheric Chemistry and Physics, 2005, 5, 2657-2677. | 1.9 | 36 |
| 392 | Satellite observations of atmospheric SO2 from volcanic eruptions during the time-period of 1996–2002. Advances in Space Research, 2005, 36, 879-887. | 1.2 | 115 |
| 393 | Salt tolerance in Eucalyptus spp.: identity and response of putative osmolytes. Plant, Cell and Environment, 2005, 28, 772-787. | 2.8 | 47 |
| 394 | Increase in tropospheric nitrogen dioxide over China observed from space. Nature, 2005, 437, 129-132. | 13.7 | 1,300 |
| 395 | Temperature-dependent shift from labile to recalcitrant carbon sources of arctic heterotrophs. Rapid Communications in Mass Spectrometry, 2005, 19, 1401-1408. | 0.7 | 145 |
| 396 | RAS Gene Hot-Spot Mutations in Canine Neoplasias. Journal of Heredity, 2005, 96, 764-765. | 1.0 | 14 |

| # | Article | IF | CITATIONS |
|-----|---|-----|-----------|
| 397 | "Best Friends" Sharing the HMGA1 Gene: Comparison of the Human and Canine HMGA1 to Orthologous Other Species. Journal of Heredity, 2005, 96, 777-781. | 1.0 | 6 |
| 398 | Microtopography and Plant-Cover Controls on Nitrogen Dynamics in Hummock Tundra Ecosystems in Siberia. Arctic, Antarctic, and Alpine Research, 2005, 37, 435-443. | 0.4 | 33 |
| 399 | A study of the trace gas columns of O3, NO2 and HCHO over Africa in September 1997. Faraday Discussions, 2005, 130, 387. | 1.6 | 31 |
| 400 | Induction of raffinose oligosaccharide biosynthesis by abscisic acid in somatic embryos of alfalfa (Medicago sativa L.). Plant Science, 2005, 168, 1075-1082. | 1.7 | 40 |
| 401 | Storage and mineralization of carbon and nitrogen in soils of a frost-boil tundra ecosystem in Siberia. Applied Soil Ecology, 2005, 29, 173-183. | 2.1 | 40 |
| 402 | An intercomparison campaign of ground-based UV-visible measurements of NO2, BrO, and OCIO slant columns: Methods of analysis and results for NO2. Journal of Geophysical Research, 2005, 110, . | 3.3 | 73 |
| 403 | Evaluation of long-term tropospheric NO2data obtained by GOME over East Asia in 1996–2002. Geophysical Research Letters, 2005, 32, . | 1.5 | 63 |
| 404 | Global observations of stratospheric bromine monoxide from SCIAMACHY. Geophysical Research Letters, 2005, 32, . | 1.5 | 79 |
| 405 | Satellite measurements of daily variations in soil NOxemissions. Geophysical Research Letters, 2005, 32, . | 1.5 | 82 |
| 406 | Large-scale environmental controls on microbial biofilms in high-alpine streams. Biogeosciences, 2004, 1, 159-171. | 1.3 | 54 |
| 407 | myo-Inositol and sucrose concentrations affect the accumulation of raffinose family oligosaccharides in seeds. Journal of Experimental Botany, 2004, 55, 1981-1987. | 2.4 | 114 |
| 408 | SCIAMACHY on ENVISAT: in-flight optical performance and first results. , 2004, , . | | 18 |
| 409 | Disruption of AtMRP4, a guard cell plasma membrane ABCC-type ABC transporter, leads to deregulation of stomatal opening and increased drought susceptibility. Plant Journal, 2004, 39, 219-236. | 2.8 | 141 |
| 410 | The canineKRAS2gene maps to chromosome 22. Animal Genetics, 2004, 35, 350-351. | 0.6 | 4 |
| 411 | The canineNRASgene maps to CFA 17. Animal Genetics, 2004, 35, 355-356. | 0.6 | 1 |
| 412 | Analysis of tropospheric NOx over Asia using the model of atmospheric transport and chemistry (MATCH-MPIC) and GOME-satellite observations. Atmospheric Environment, 2004, 38, 581-596. | 1.9 | 82 |
| 413 | Trace gas column retrieval – an error assessment study for GOME-2. Advances in Space Research, 2004, 34, 727-733. | 1.2 | 11 |
| 414 | Semiannual NO2plumes during the monsoon transition periods over the central Indian Ocean. Geophysical Research Letters, 2004, 31, . | 1.5 | 16 |

| # | Article | IF | Citations |
|-----|---|-----|-----------|
| 415 | Frost flowers on sea ice as a source of sea salt and their influence on tropospheric halogen chemistry. Geophysical Research Letters, 2004, 31, . | 1.5 | 202 |
| 416 | Satellite measurements of NO2from international shipping emissions. Geophysical Research Letters, 2004, 31, . | 1.5 | 144 |
| 417 | BrO emission from volcanoes: A survey using GOME and SCIAMACHY measurements. Geophysical Research Letters, 2004, 31, . | 1.5 | 68 |
| 418 | First comparison between ground-based and satellite-borne measurements of tropospheric nitrogen dioxide in the Po basin. Journal of Geophysical Research, 2004, 109, . | 3.3 | 67 |
| 419 | The canine HMGA1. Gene, 2004, 330, 93-99. | 1.0 | 3 |
| 420 | Retrieval of profile information from airborne multiaxis UV-visible skylight absorption measurements. Applied Optics, 2004, 43, 4415. | 2.1 | 33 |
| 421 | New Directions: New Developments in Satellite Capabilities for Probing the Chemistry of the Troposphere. Atmospheric Environment, 2003, 37, 2567-2570. | 1.9 | 18 |
| 422 | Identification of a digalactosyl ononitol from seeds of adzuki bean (Vigna angularis). Carbohydrate Research, 2003, 338, 2017-2019. | 1.1 | 15 |
| 423 | Non-structural carbon compounds in temperate forest trees. Plant, Cell and Environment, 2003, 26, 1067-1081. | 2.8 | 625 |
| 424 | Dissecting the response to dehydration and salt (NaCl) in the resurrection plant Craterostigma plantagineum. Plant, Cell and Environment, 2003, 26, 1307-1315. | 2.8 | 24 |
| 425 | Enzymatic control of the accumulation of verbascose in pea seeds. Plant, Cell and Environment, 2003, 26, 1385-1391. | 2.8 | 22 |
| 426 | Do ants feed plants? A 15N labelling study of nitrogen fluxes from ants to plants in the mutualism of Pheidole and Piper. Journal of Ecology, 2003, 91, 126-134. | 1.9 | 63 |
| 427 | Functional diversity of the soil microflora in primary succession across two glacier forelands in the Central Alps. European Journal of Soil Science, 2003, 54, 685-696. | 1.8 | 175 |
| 428 | The canine HMGA1 gene maps to CFA 23. Animal Genetics, 2003, 34, 68-69. | 0.6 | 4 |
| 429 | Dynamical control of NH and SH winter/spring total ozone from GOME observations in 1995–2002. Geophysical Research Letters, 2003, 30, . | 1.5 | 92 |
| 430 | Molecular characterization of the canine HMGB1. Cytogenetic and Genome Research, 2003, 101, 33-38. | 0.6 | 30 |
| 431 | Investigation into the ability of roots of the poikilohydric plant Craterostigma plantagineum to survive dehydration stress. Journal of Experimental Botany, 2003, 54, 2313-2321. | 2.4 | 43 |
| 432 | Inelastic scattering in ocean water and its impact on trace gas retrievals from satellite data. Atmospheric Chemistry and Physics, 2003, 3, 1365-1375. | 1.9 | 54 |

| # | Article | IF | Citations |
|-----|--|-----|-----------|
| 433 | Transport and build-up of tropospheric trace gases during the MINOS campaign: comparision of GOME, in situ aircraft measurements and MATCH-MPIC-data. Atmospheric Chemistry and Physics, 2003, 3, 1887-1902. | 1.9 | 28 |
| 434 | Chain Elongation of Raffinose in Pea Seeds. Journal of Biological Chemistry, 2002, 277, 194-200. | 1.6 | 91 |
| 435 | Tropospheric NO ₂ columns: a comparison between model and retrieved data from GOME measurements. Atmospheric Chemistry and Physics, 2002, 2, 67-78. | 1.9 | 42 |
| 436 | Antarctic Springtime Depletion of Atmospheric Mercury. Environmental Science & | 4.6 | 307 |
| 437 | Dynamic Oxidation of Gaseous Mercury in the Arctic Troposphere at Polar Sunrise. Environmental Science & Environmental Science | 4.6 | 526 |
| 438 | Analysis for BrO in zenith-sky spectra: An intercomparison exercise for analysis improvement. Journal of Geophysical Research, 2002, 107, ACH 10-1. | 3.3 | 152 |
| 439 | Comparison of measurements and model calculations of stratospheric bromine monoxide. Journal of Geophysical Research, 2002, 107, ACH 11-1. | 3.3 | 62 |
| 440 | Functional expression of a cDNA encoding pea (Pisum sativum L.) raffinose synthase, partial purification of the enzyme from maturing seeds, and steady-state kinetic analysis of raffinose synthesis. Planta, 2002, 215, 839-846. | 1.6 | 75 |
| 441 | Plants feed ants: food bodies of myrmecophytic Piper and their significance for the interaction with Pheidole bicornis ants. Oecologia, 2002, 133, 186-192. | 0.9 | 65 |
| 442 | Consistent interpretation of ground based and GOME BrO slant column data. Advances in Space Research, 2002, 29, 1655-1660. | 1.2 | 14 |
| 443 | Intercomparison of BrO measurements from ERS-2 GOME, ground-based and balloon platforms. Advances in Space Research, 2002, 29, 1661-1666. | 1.2 | 80 |
| 444 | Tropospheric NO2 from GOME measurements. Advances in Space Research, 2002, 29, 1673-1683. | 1.2 | 361 |
| 445 | Gome measurements of stratospheric and tropospheric BrO. Advances in Space Research, 2002, 29, 1667-1672. | 1.2 | 110 |
| 446 | Air mass factor calculations for GOME measurements of lightning-produced NO2. Advances in Space Research, 2002, 29, 1685-1690. | 1.2 | 22 |
| 447 | The cold Arctic winter 1995/96 as observed by GOME and HALOE: Tropospheric wave activity and chemical ozone loss. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 1293-1319. | 1.0 | 13 |
| 448 | Flexibility of nitrogen metabolism in the tropical C3Â-crassulacean acid metabolism tree species Clusia minor. Functional Plant Biology, 2002, 29, 741. | 1.1 | 15 |
| 449 | The ring effect in the cloudy atmosphere. Geophysical Research Letters, 2001, 28, 721-724. | 1.5 | 51 |
| 450 | Magnification of atmospheric mercury deposition to polar regions in springtime: The link to tropospheric ozone depletion chemistry. Geophysical Research Letters, 2001, 28, 3219-3222. | 1.5 | 224 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 451 | Analysis of the Raffinose Family Oligosaccharide Pathway in Pea Seeds with Contrasting Carbohydrate Composition. Plant Physiology, 2001, 127, 1764-1772. | 2.3 | 121 |
| 452 | Analysis of the Raffinose Family Oligosaccharide Pathway in Pea Seeds with Contrasting Carbohydrate Composition. Plant Physiology, 2001, 127, 1764-1772. | 2.3 | 7 |
| 453 | Preparation of starch and other carbon fractions from higher plant leaves for stable carbon isotope analysis. Rapid Communications in Mass Spectrometry, 2001, 15, 1136-1140. | 0.7 | 84 |
| 454 | Analysis of the raffinose family oligosaccharide pathway in pea seeds with contrasting carbohydrate composition. Plant Physiology, 2001, 127, 1764-72. | 2.3 | 24 |
| 455 | Photosynthetic carbohydrate metabolism in the resurrection plant Craterostigma plantagineum. Journal of Experimental Botany, 2000, 51, 159-165. | 2.4 | 73 |
| 456 | Measurements of iodine monoxide (IO) above Spitsbergen. Geophysical Research Letters, 2000, 27, 1471-1474. | 1.5 | 59 |
| 457 | ATMOSPHERIC REMOTE-SENSING REFERENCE DATA FROM GOME—2. TEMPERATURE-DEPENDENT ABSORPTION CROSS SECTIONS OF O3 IN THE 231–794NM RANGE. Journal of Quantitative Spectroscopy and Radiative Transfer, 1999, 61, 509-517. | 1.1 | 397 |
| 458 | Stachyose synthesis in seeds of adzuki bean (Vigna angularis): molecular cloning and functional expression of stachyose synthase. Plant Journal, 1999, 20, 509-518. | 2.8 | 40 |
| 459 | DOAS Zenith Sky Observations: 2. Seasonal Variation of BrO Over Bremen (53°N) 1994-1995. Journal of Atmospheric Chemistry, 1999, 32, 83-99. | 1.4 | 44 |
| 460 | Title is missing!. Journal of Atmospheric Chemistry, 1999, 32, 281-314. | 1.4 | 63 |
| 461 | Intercomparison of the influence of tropospheric clouds on UV-visible absorptions Detected during the NDSC Intercomparison Campaign at OHP in June 1996. Geophysical Research Letters, 1999, 26, 1169-1172. | 1.5 | 12 |
| 462 | Enhanced O3and NO2in thunderstorm clouds: Convection or production?. Geophysical Research Letters, 1999, 26, 1291-1294. | 1.5 | 40 |
| 463 | Purification and Characterization of Stachyose Synthase from Lentil (Lens culinaris) Seeds: Galactopinitol and Stachyose Synthesis. Archives of Biochemistry and Biophysics, 1999, 366, 75-81. | 1.4 | 53 |
| 464 | The Global Ozone Monitoring Experiment (GOME): Mission Concept and First Scientific Results. Journals of the Atmospheric Sciences, 1999, 56, 151-175. | 0.6 | 1,105 |
| 465 | Metabolic changes in leaves and roots during dehydration of the resurrection plant Craterostigma plantagineum (Hochst). South African Journal of Botany, 1999, 65, 421-427. | 1.2 | 15 |
| 466 | ATMOSPHERIC REMOTE-SENSING REFERENCE DATA FROM GOME: PART 1. TEMPERATURE-DEPENDENT ABSORPTION CROSS-SECTIONS OF NO2 IN THE 231–794 nm RANGE. Journal of Quantitative Spectroscopy and Radiative Transfer, 1998, 60, 1025-1031. | 1,1 | 215 |
| 467 | Ecophysiology of Xylem-Tapping Mistletoes. Progress in Botany Fortschritte Der Botanik, 1998, , 659-674. | 0.1 | 25 |
| 468 | Galactosylononitol and Stachyose Synthesis in Seeds of Adzuki Bean1. Plant Physiology, 1998, 117, 165-172. | 2.3 | 73 |

| # | Article | IF | CITATIONS |
|-----|--|-----|-----------|
| 469 | Metabolism of Galactosylononitol in Seeds of Vigna umbellata. Plant and Cell Physiology, 1998, 39, 334-341. | 1.5 | 42 |
| 470 | Structure of Galactosylononitol. Journal of Natural Products, 1997, 60, 749-751. | 1.5 | 22 |
| 471 | Biosynthesis and accumulation of D-ononitol in Vigna umbellata in response to drought stress. Physiologia Plantarum, 1997, 101, 416-424. | 2.6 | 45 |
| 472 | DOAS Zenith Sky Observations: 1. BrO Measurements over Bremen (53°N) 1993–1994. Journal of Atmospheric Chemistry, 1997, 26, 93-108. | 1.4 | 27 |
| 473 | Effect of elevated CO 2 on growth and crassulacean-acid-metabolism activity of Kalanchoë pinnata under tropical conditions. Planta, 1997, 201, 389-396. | 1.6 | 14 |
| 474 | Biosynthesis and accumulation of D-ononitol in Vigna umbellata in response to drought stress. Physiologia Plantarum, 1997, 101, 416-424. | 2.6 | 3 |
| 475 | Sample preservation for determination of organic compounds: microwave versus freeze-drying. Journal of Experimental Botany, 1996, 47, 1469-1473. | 2.4 | 125 |
| 476 | First observation of the OIO molecule by time-resolved flash photolysis absorption spectroscopy. Chemical Physics Letters, 1996, 251, 330-334. | 1.2 | 59 |
| 477 | Purification and characterization of myo-inositol 6-O-methyltransferase from Vigna umbellata Ohwi et Ohashi. Planta, 1995, 197, 427. | 1.6 | 21 |
| 478 | Solutes and succulence in southern African mistletoes. Trees - Structure and Function, 1995, 9, 303-310. | 0.9 | 15 |
| 479 | Heterotrophic Carbon Gain of the Parasitic Angiosperm Tapinanthus oleifolius. Functional Plant Biology, 1995, 22, 537. | 1.1 | 26 |
| 480 | Viscumitol, a dimethyl-ether of muco-inositol from Viscum album. Phytochemistry, 1992, 31, 3925-3927. | 1.4 | 16 |
| 481 | The physiological importance of accumulation of cyclitols in Viscum album L.*. New Phytologist, 1992, 121, 431-438. | 3.5 | 71 |
| 482 | 1d-1-O-methyl-muco-inositol in Viscum album and members of the rhizophoraceae. Phytochemistry, 1990, 29, 1785-1786. | 1.4 | 35 |
| 483 | Geothermal ecosystems as natural climate change experiments: The ForHot research site in Iceland as a case study. Icelandic Agricultural Sciences, 0, 29, 53-71. | 0.0 | 55 |
| 484 | The role of stachyose synthase in the oligosaccharide metabolism of legume seeds , 0, , 75-84. | | 1 |