# Hartmut Herrmann

## List of Publications by Year in Descending Order



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| 438 papers | 19,644 citations | 71 h-index | 125 g-index |
| 627 ext. papers | 22,762 ext. citations | 6.3 avg, IF | 6.69 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 438 | A statistic comparison of multi-element analysis of low atmospheric fine particles (PM) using different spectroscopy techniques.. *Journal of Environmental Sciences*, **2022**, 114, 194-203 | 6.4 | 2 |
| 437 | Photodissociation of particulate nitrate as a source of daytime tropospheric Cl.. *Nature Communications*, **2022**, 13, 939 | 17.4 | 2 |
| 436 | Synthesis and Characterization of Atmospherically Relevant Hydroxy Hydroperoxides. *Atmosphere*, **2022**, 13, 507 | 2.7 | 0 |
| 435 | Molecular distributions of dicarboxylic acids, oxocarboxylic acids, and □-dicarbonyls in aerosols over Tuoji Island in the Bohai Sea: Effects of East Asian continental outflow. *Atmospheric Research*, **2022**, 106154 | 5.4 | |
| 434 | Leaching material from Antarctic seaweeds and penguin guano affects cloud-relevant aerosol production.. *Science of the Total Environment*, **2022**, 154772 | 10.2 | |
| 433 | Evaluation of modelled LOTOS-EUROS with observational based PM10 source attribution. *Atmospheric Environment: X*, **2022**, 100173 | 2.8 | 1 |
| 432 | The impact of temperature inversions on black carbon and particle mass concentrations in a mountainous area. *Atmospheric Chemistry and Physics*, **2022**, 22, 5577-5601 | 6.8 | 1 |
| 431 | High number concentrations of transparent exopolymer particles in ambient aerosol particles and cloud water □a case study at the tropical Atlantic Ocean. *Atmospheric Chemistry and Physics*, **2022**, 22, 5725-5742 | 6.8 | 0 |
| 430 | Hydrotrioxide (ROOOH) formation in the atmosphere. *Science*, **2022**, 376, 979-982 | 33.3 | 4 |
| 429 | European Aerosol Phenomenology - 8: Harmonised Source Apportionment of Organic Aerosol using 22 Year-long ACSM/AMS Datasets. *Environment International*, **2022**, 107325 | 12.9 | 1 |
| 428 | Biogenic Emissions and Urban Air Quality. *Springer Proceedings in Complexity*, **2021**, 11-17 | 0.3 | |
| 427 | Box Model Intercomparison of Cloud Chemistry. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, | 4.4 | 3 |
| 426 | Particle hygroscopicity inhomogeneity and its impact on reactive uptake. *Science of the Total Environment*, **2021**, 151364 | 10.2 | 0 |
| 425 | Photochemical Aging of Atmospheric Fine Particles as a Potential Source for Gas-Phase Hydrogen Peroxide. *Environmental Science & Technology*, **2021**, 55, 15063-15071 | 10.3 | 2 |
| 424 | Overestimation of Monoterpene Organosulfate Abundance in Aerosol Particles by Sampling in the Presence of SO2. *Environmental Science and Technology Letters*, **2021**, 8, 206-211 | 11 | 6 |
| 423 | Strong Deviations from Thermodynamically Expected Phase Partitioning of Low-Molecular-Weight Organic Acids during One Year of Rural Measurements. *ACS Earth and Space Chemistry*, **2021**, 5, 500-515 | 3.2 | 4 |
| 422 | Concerted measurements of lipids in seawater and on submicrometer aerosol particles at the Cabo Verde islands: biogenic sources, selective transfer and high enrichments. *Atmospheric Chemistry and Physics*, **2021**, 21, 4267-4283 | 6.8 | 2 |

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| 421 | Evaluated kinetic and photochemical data for atmospheric chemistry: volume VIII □gas-phase reactions of organic species with four, or more, carbon atoms ( □C<sub>4</sub>). *Atmospheric Chemistry and Physics*, **2021**, 21, 4797-4808 | 6.8 | 15 |
| 420 | Photolytic radical persistence due to anoxia in viscous aerosol particles. *Nature Communications*, **2021**, 12, 1769 | 17.4 | 15 |
| 419 | Source apportionment and impact of long-range transport on carbonaceous aerosol particles in central Germany during HCCT-2010. *Atmospheric Chemistry and Physics*, **2021**, 21, 3667-3684 | 6.8 | 2 |
| 418 | Aerosol Marine Primary Carbohydrates and Atmospheric Transformation in the Western Antarctic Peninsula. *ACS Earth and Space Chemistry*, **2021**, 5, 1032-1047 | 3.2 | 4 |
| 417 | Guaiacol Nitration in a Simulated Atmospheric Aerosol with an Emphasis on Atmospheric Nitrophenol Formation Mechanisms. *ACS Earth and Space Chemistry*, **2021**, 5, 1083-1093 | 3.2 | 5 |
| 416 | Trimethylamine Outruns Terpenes and Aromatics in Atmospheric Autoxidation. *Journal of Physical Chemistry A*, **2021**, 125, 4454-4466 | 2.8 | 4 |
| 415 | Particle-Phase Photoreactions of HULIS and TMIs Establish a Strong Source of HO and Particulate Sulfate in the Winter North China Plain. *Environmental Science & Technology*, **2021**, 55, 7818-7830 | 10.3 | 4 |
| 414 | Determination of highly polar compounds in atmospheric aerosol particles at ultra-trace levels using ion chromatography Orbitrap mass spectrometry. *Journal of Separation Science*, **2021**, 44, 2343-2357 | 3.4 | 0 |
| 413 | Sea Spray Aerosol Chamber Study on Selective Transfer and Enrichment of Free and Combined Amino Acids. *ACS Earth and Space Chemistry*, **2021**, 5, 1564-1574 | 3.2 | 1 |
| 412 | Aromatic Carbonyl and Nitro Compounds as Photosensitizers and Their Photophysical Properties in the Tropospheric Aqueous Phase. *Journal of Physical Chemistry A*, **2021**, 125, 5078-5095 | 2.8 | 1 |
| 411 | Importance of secondary organic aerosol formation of <i>□</i>-pinene, limonene, and <i>m</i>-cresol comparing day- and nighttime radical chemistry. *Atmospheric Chemistry and Physics*, **2021**, 21, 8479-8498 | 6.8 | 2 |
| 410 | The Importance of the Representation of DMS Oxidation in Global Chemistry-Climate Simulations. *Geophysical Research Letters*, **2021**, 48, e2021GL094068 | 4.9 | 2 |
| 409 | T- and pH-Dependent Kinetics of the Reactions of □OH(aq) with Glutaric and Adipic Acid for Atmospheric Aqueous-Phase Chemistry. *ACS Earth and Space Chemistry*, **2021**, 5, 1854-1864 | 3.2 | 1 |
| 408 | Terrestrial or marine □ndications towards the origin of ice-nucleating particles during melt season in the European Arctic up to 83.7□N. *Atmospheric Chemistry and Physics*, **2021**, 21, 11613-11636 | 6.8 | 3 |
| 407 | Opinion: The germicidal effect of ambient air (open-air factor) revisited. *Atmospheric Chemistry and Physics*, **2021**, 21, 13011-13018 | 6.8 | 3 |
| 406 | Acidity and the multiphase chemistry of atmospheric aqueous particles and clouds. *Atmospheric Chemistry and Physics*, **2021**, 21, | 6.8 | 14 |
| 405 | Reaction Kinetics of Green Leaf Volatiles with Sulfate, Hydroxyl, and Nitrate Radicals in Tropospheric Aqueous Phase. *Environmental Science & Technology*, **2021**, 55, 13666-13676 | 10.3 | 3 |
| 404 | Release of inhalable particles and viable microbes to the air during packaging peeling: Emission profiles and mechanisms. *Environmental Pollution*, **2021**, 285, 117338 | 9.3 | 1 |

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| 403 | Concerted measurements of free amino acids at the Cabo Verde islands: high enrichments in submicron sea spray aerosol particles and cloud droplets. *Atmospheric Chemistry and Physics*, **2021**, 21, 163-181 | 6.8 | 9 |
| 402 | Photochemical degradation of iron(III) citrate/citric acid aerosol quantified with the combination of three complementary experimental techniques and a kinetic process model. *Atmospheric Chemistry and Physics*, **2021**, 21, 315-338 | 6.8 | 9 |
| 401 | First insights into northern Africa high-altitude background aerosol chemical composition and source influences. *Atmospheric Chemistry and Physics*, **2021**, 21, 18147-18174 | 6.8 | |
| 400 | Capability of CI-Orbitrap for Gas-Phase Analysis in Atmospheric Chemistry: A Comparison with the CI-APi-TOF Technique. *Analytical Chemistry*, **2020**, 92, 8142-8150 | 7.8 | 5 |
| 399 | The Acidity of Atmospheric Particles and Clouds. *Atmospheric Chemistry and Physics*, **2020**, 20, 4809-4888 | 6.8 | 165 |
| 398 | Characterization of aerosol particles at Cabo Verde close to sea level and at the cloud level – Part 2: Ice-nucleating particles in air, cloud and seawater. *Atmospheric Chemistry and Physics*, **2020**, 20, 1451-1468 | 6.8 | 24 |
| 397 | Marine organic matter in the remote environment of the Cape Verde islands – an introduction and overview to the MarParCloud campaign. *Atmospheric Chemistry and Physics*, **2020**, 20, 6921-6951 | 6.8 | 14 |
| 396 | Characterization of aerosol particles at Cabo Verde close to sea level and at the cloud level – Part 1: Particle number size distribution, cloud condensation nuclei and their origins. *Atmospheric Chemistry and Physics*, **2020**, 20, 1431-1449 | 6.8 | 8 |
| 395 | Chemical characteristics of cloud water and the impacts on aerosol properties at a subtropical mountain site in Hong Kong SAR. *Atmospheric Chemistry and Physics*, **2020**, 20, 391-407 | 6.8 | 8 |
| 394 | Long-range and local air pollution: what can we learn from chemical speciation of particulate matter at paired sites?. *Atmospheric Chemistry and Physics*, **2020**, 20, 409-429 | 6.8 | 10 |
| 393 | The impact of biomass burning and aqueous-phase processing on air quality: a multi-year source apportionment study in the Po Valley, Italy. *Atmospheric Chemistry and Physics*, **2020**, 20, 1233-1254 | 6.8 | 26 |
| 392 | Organosulfates in Ambient Aerosol: State of Knowledge and Future Research Directions on Formation, Abundance, Fate, and Importance. *Environmental Science & Technology*, **2020**, 54, 3767-3782 | 10.3 | 49 |
| 391 | Seawater analysis by ambient mass-spectrometry-based seaomics. *Atmospheric Chemistry and Physics*, **2020**, 20, 6243-6257 | 6.8 | 2 |
| 390 | Multiphase MCM–CAPRAM modeling of the formation and processing of secondary aerosol constituents observed during the Mt. Tai summer campaign in 2014. *Atmospheric Chemistry and Physics*, **2020**, 20, 6725-6747 | 6.8 | 7 |
| 389 | Complexation of Fe(III)/Catechols in atmospheric aqueous phase and the consequent cytotoxicity assessment in human bronchial epithelial cells (BEAS-2B). *Ecotoxicology and Environmental Safety*, **2020**, 202, 110898 | 7 | 2 |
| 388 | Concerted measurements of free amino acids at the Cape Verde Islands: High enrichments in submicron sea spray aerosol particles and cloud droplets **2020**, | | 3 |
| 387 | Formation of Toxic Unsaturated Multifunctional and Organosulfur Compounds From the Photosensitized Processing of Fluorene and DMSO at the Air-Water Interface. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD031839 | 4.4 | 10 |
| 386 | Atmospheric HULIS in Different Environments: Polarities, Molecular Sizes, and Sources Suggest More Than 50% Are Not Humic-like *ACS Earth and Space Chemistry*, **2020**, 4, 272-282 | 3.2 | 3 |

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| 385 | Evolution of Indoor Cooking Emissions Captured by Using Secondary Electrospray Ionization High-Resolution Mass Spectrometry. *Environmental Science and Technology Letters*, **2020**, 7, 76-81 | 11 | 16 |
| 384 | pH- and Temperature-Dependent Kinetics of the Oxidation Reactions of OH with Succinic and Pimelic Acid in Aqueous Solution. *Atmosphere*, **2020**, 11, 320 | 2.7 | 5 |
| 383 | Chemical Characterization of Marine Aerosols in a South Mediterranean Coastal Area Located in Bou Ismaïl, Algeria. *Aerosol and Air Quality Research*, **2020**, 20, 2448-2473 | 4.6 | 2 |
| 382 | Treatment of non-ideality in the SPACCIM multiphase model – Part 2: Impacts on the multiphase chemical processing in deliquesced aerosol particles. *Atmospheric Chemistry and Physics*, **2020**, 20, 10351-10377 | 6.8 | 5 |
| 381 | Role of the dew water on the ground surface in HONO distribution: a case measurement in Melpitz. *Atmospheric Chemistry and Physics*, **2020**, 20, 13069-13089 | 6.8 | 6 |
| 380 | Evaluated kinetic and photochemical data for atmospheric chemistry: Volume VII – Criegee intermediates. *Atmospheric Chemistry and Physics*, **2020**, 20, 13497-13519 | 6.8 | 22 |
| 379 | The evolution of cloud and aerosol microphysics at the summit of Mt. Tai, China. *Atmospheric Chemistry and Physics*, **2020**, 20, 13735-13751 | 6.8 | 4 |
| 378 | Application of TXRF in monitoring trace metals in particulate matter and cloud water. *Atmospheric Measurement Techniques*, **2020**, 13, 4773-4790 | 4 | 9 |
| 377 | Multi-year ACSM measurements at the central European research station Melpitz (Germany) – Part 1: Instrument robustness, quality assurance, and impact of upper size cutoff diameter. *Atmospheric Measurement Techniques*, **2020**, 13, 4973-4994 | 4 | 8 |
| 376 | CAPRAM reduction towards an operational multiphase halogen and dimethyl sulfide chemistry treatment in the chemistry transport model COSMO-MUSCAT(5.04e). *Geoscientific Model Development*, **2020**, 13, 2587-2609 | 6.3 | 4 |
| 375 | A protocol for quantifying mono- and polysaccharides in seawater and related saline matrices by electro-dialysis (ED) combined with HPAEC-PAD. *Ocean Science*, **2020**, 16, 817-830 | 4 | 3 |
| 374 | Separation and quantification of imidazoles in atmospheric particles using LC-Orbitrap-MS. *Journal of Separation Science*, **2020**, 43, 577-589 | 3.4 | 5 |
| 373 | The MILAN Campaign: Studying Diel Light Effects on the Air–Sea Interface. *Bulletin of the American Meteorological Society*, **2020**, 101, E146-E166 | 6.1 | 8 |
| 372 | OH radicals reactivity towards phenol-related pollutants in water: temperature dependence of the rate constants and novel insights into the [OH-phenol] adduct formation. *Physical Chemistry Chemical Physics*, **2020**, 22, 1324-1332 | 3.6 | 9 |
| 371 | SO formation and peroxy radical isomerization in the atmospheric reaction of OH radicals with dimethyl disulfide. *Chemical Communications*, **2020**, 56, 13634-13637 | 5.8 | 3 |
| 370 | Inorganic composition and occult deposition of frost collected under severe polluted area in winter in the North China Plain. *Science of the Total Environment*, **2020**, 722, 137911 | 10.2 | 2 |
| 369 | Five-Membered Heterocycles as Potential Photosensitizers in the Tropospheric Aqueous Phase: Photophysical Properties of Imidazole-2-carboxaldehyde, 2-Furaldehyde, and 2-Acetylfuran. *Journal of Physical Chemistry A*, **2020**, 124, 10029-10039 | 2.8 | 2 |
| 368 | A More Important Role for the Ozone-S(IV) Oxidation Pathway Due to Decreasing Acidity in Clouds. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2020JD033220 | 4.4 | 6 |

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| 367 | Variations of the aerosol chemical composition during Asian dust storm at Dushanbe, Tajikistan. *E3S Web of Conferences*, **2019**, 99, 03007 | 0.5 | 2 |
| 366 | The impact of biomass burning and aqueous-phase processing on air quality: a multi-year source apportionment study in the Po Valley, Italy **2019**, | | 1 |
| 365 | 2D Liquid Chromatographic Fractionation with Ultra-high Resolution MS Analysis Resolves a Vast Molecular Diversity of Tropospheric Particle Organics. *Environmental Science & Technology*, **2019**, 53, 11353-11363 | 10.3 | 20 |
| 364 | OH-Initiated Oxidation of Imidazoles in Tropospheric Aqueous-Phase Chemistry. *Journal of Physical Chemistry A*, **2019**, 123, 1505-1513 | 2.8 | 11 |
| 363 | Chemical characteristics of cloud water and the impacts on aerosol properties at a subtropical mountain site in Hong Kong **2019**, | | 1 |
| 362 | The second ACTRIS inter-comparison (2016) for Aerosol Chemical Speciation Monitors (ACSM): Calibration protocols and instrument performance evaluations. *Aerosol Science and Technology*, **2019**, 53, 830-842 | 3.4 | 25 |
| 361 | A one year study of functionalised medium-chain carboxylic acids in atmospheric particles at a rural site in Germany revealing seasonal trends and possible sources. *Journal of Atmospheric Chemistry*, **2019**, 76, 115-132 | 3.2 | 4 |
| 360 | First oxidation products from the reaction of hydroxyl radicals with isoprene for pristine environmental conditions. *Communications Chemistry*, **2019**, 2, | 6.3 | 28 |
| 359 | Improving the accuracy and precision of broadband optical cavity measurements. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2019**, 218, 178-183 | 4.4 | 4 |
| 358 | Response of the Aerodyne Aerosol Mass Spectrometer to Inorganic Sulfates and Organosulfur Compounds: Applications in Field and Laboratory Measurements. *Environmental Science & Technology*, **2019**, 53, 5176-5186 | 10.3 | 30 |
| 357 | Development of an online-coupled MARGA upgrade for the 2 h interval quantification of low-molecular-weight organic acids in the gas and particle phases. *Atmospheric Measurement Techniques*, **2019**, 12, 281-298 | 4 | 3 |
| 356 | EURODELTA III exercise: An evaluation of air quality models□ capacity to reproduce the carbonaceous aerosol. *Atmospheric Environment: X*, **2019**, 2, 100018 | 2.8 | 7 |
| 355 | Aliphatic amines at the Cape Verde Atmospheric Observatory: Abundance, origins and sea-air fluxes. *Atmospheric Environment*, **2019**, 203, 183-195 | 5.3 | 14 |
| 354 | Kinetic and Theoretical Study of the Atmospheric Aqueous-Phase Reactions of OH Radicals with Methoxyphenolic Compounds. *Journal of Physical Chemistry A*, **2019**, 123, 7828-7838 | 2.8 | 20 |
| 353 | Quantification of known and unknown terpenoid organosulfates in PM10 using untargeted LC□HRMS/MS: contrasting summertime rural Germany and the North China Plain. *Environmental Chemistry*, **2019**, 16, 333 | 3.2 | 20 |
| 352 | Development of a protocol for the auto-generation of explicit aqueous-phase oxidation schemes of organic compounds. *Atmospheric Chemistry and Physics*, **2019**, 19, 9209-9239 | 6.8 | 15 |
| 351 | Assessing indoor gas phase oxidation capacity through real-time measurements of HONO and NO in Guangzhou, China. *Environmental Sciences: Processes and Impacts*, **2019**, 21, 1393-1402 | 4.3 | 23 |
| 350 | Glucose as a Potential Chemical Marker for Ice Nucleating Activity in Arctic Seawater and Melt Pond Samples. *Environmental Science & Technology*, **2019**, 53, 8747-8756 | 10.3 | 10 |

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| 349 | Fast Peroxy Radical Isomerization and OH Recycling in the Reaction of OH Radicals with Dimethyl Sulfide. *Journal of Physical Chemistry Letters*, **2019**, 10, 6478-6483 | 6.4 | 32 |
| 348 | Near-Explicit Multiphase Modeling of Halogen Chemistry in a Mixed Urban and Maritime Coastal Area. *ACS Earth and Space Chemistry*, **2019**, 3, 2452-2471 | 3.2 | 6 |
| 347 | New particle formation and its effect on cloud condensation nuclei abundance in the summer Arctic: a case study in the Fram Strait and Barents Sea. *Atmospheric Chemistry and Physics*, **2019**, 19, 14339-14364 | 6.8 | 15 |
| 346 | Marine organic matter in the remote environment of the Cape Verde Islands An introduction and overview to the MarParCloud campaign **2019**, | | 3 |
| 345 | Approaches for identifying PM source types and source areas at a remote background site of South China in spring. *Science of the Total Environment*, **2019**, 691, 1320-1327 | 10.2 | 14 |
| 344 | The Acidity of Atmospheric Particles and Clouds **2019**, | | 8 |
| 343 | Seawater Analysis by Ambient Mass Spectrometry-Based Seaomics and Implications on Secondary Organic Aerosol Formation **2019**, | | 1 |
| 342 | Aqueous-Phase Oxidation of -Isoprene Epoxydiol by Hydroxyl Radicals and Its Impact on Atmospheric Isoprene Processing. *Journal of Physical Chemistry A*, **2019**, 123, 10599-10608 | 2.8 | 9 |
| 341 | Enhanced Chlorine and Bromine Atom Activation by Hydrolysis of Halogen Nitrates from Marine Aerosols at Polluted Coastal Areas. *Environmental Science & Technology*, **2019**, 53, 771-778 | 10.3 | 8 |
| 340 | Trans-boundary PM10: Quantifying impact and sources during winter 2016/17 in eastern Germany. *Atmospheric Environment*, **2019**, 200, 119-130 | 5.3 | 11 |
| 339 | The Arctic Cloud Puzzle: Using ACLOUD/PASCAL Multiplatform Observations to Unravel the Role of Clouds and Aerosol Particles in Arctic Amplification. *Bulletin of the American Meteorological Society*, **2019**, 100, 841-871 | 6.1 | 85 |
| 338 | Bildung von Aufbauprodukten aus den Selbst- und Kreuzreaktionen von RO2-Radikalen in der Atmosphe. *Angewandte Chemie*, **2018**, 130, 3882-3886 | 3.6 | 2 |
| 337 | Long-term cloud condensation nuclei number concentration, particle number size distribution and chemical composition measurements at regionally representative observatories. *Atmospheric Chemistry and Physics*, **2018**, 18, 2853-2881 | 6.8 | 62 |
| 336 | Competition kinetics of OH radical reactions with oxygenated organic compounds in aqueous solution: rate constants and internal optical absorption effects. *Physical Chemistry Chemical Physics*, **2018**, 20, 10939-10948 | 3.6 | 12 |
| 335 | Oxidation of substituted aromatic hydrocarbons in the tropospheric aqueous phase: kinetic mechanism development and modelling. *Physical Chemistry Chemical Physics*, **2018**, 20, 10960-10977 | 3.6 | 33 |
| 334 | Carbon and hydrogen isotope fractionation of phthalate esters during degradation by sulfate and hydroxyl radicals. *Chemical Engineering Journal*, **2018**, 347, 111-118 | 14.7 | 25 |
| 333 | Accretion Product Formation from Self- and Cross-Reactions of RO Radicals in the Atmosphere. *Angewandte Chemie - International Edition*, **2018**, 57, 3820-3824 | 16.4 | 88 |
| 332 | Aqueous photodegradation of substituted chlorobenzenes: Kinetics, carbon isotope fractionation, and reaction mechanisms. *Water Research*, **2018**, 135, 95-103 | 12.5 | 10 |

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| 331 | Sensitivity analysis of observational nudging methodology to reduce error in wind resource assessment (WRA) in the North Sea. *Renewable Energy*, **2018**, 120, 446-456 | 8.1 | 3 |
| 330 | Assessment of trace metal levels in size-resolved particulate matter in the area of Leipzig. *Atmospheric Environment*, **2018**, 176, 60-70 | 5.3 | 25 |
| 329 | Bed flow photoreactor experiments to assess the photocatalytic nitrogen oxides abatement under simulated atmospheric conditions. *Applied Catalysis B: Environmental*, **2018**, 231, 161-172 | 21.8 | 21 |
| 328 | Measurements of PM10 ions and trace gases with the online system MARGA at the research station Melpitz in Germany □A five-year study. *Journal of Atmospheric Chemistry*, **2018**, 75, 33-70 | 3.2 | 25 |
| 327 | Molecular distributions of dicarboxylic acids, oxocarboxylic acids and <i>□</i>-dicarbonyls in PM<sub>2.5</sub> collected at the top of Mt. Tai, North China, during the wheat burning season of 2014. *Atmospheric Chemistry and Physics*, **2018**, 18, 10741-10758 | 6.8 | 19 |
| 326 | Organic Composition, Chemistry, and Photochemistry of Urban Film in Leipzig, Germany. *ACS Earth and Space Chemistry*, **2018**, 2, 935-945 | 3.2 | 11 |
| 325 | Chemical Transformation of Methanesulfonic Acid and Sodium Methanesulfonate through Heterogeneous OH Oxidation. *ACS Earth and Space Chemistry*, **2018**, 2, 895-903 | 3.2 | 13 |
| 324 | Carbon and hydrogen stable isotope analysis for characterizing the chemical degradation of tributyl phosphate. *Chemosphere*, **2018**, 212, 133-142 | 8.4 | 10 |
| 323 | Modelling Multiphase Aerosol-Cloud Processing with the 3-D CTM COSMO-MUSCAT: Application for Cloud Events During HCCT-2010. *Springer Proceedings in Complexity*, **2018**, 587-592 | 0.3 | 1 |
| 322 | Characterizing chemical transformation of organophosphorus compounds by C and H stable isotope analysis. *Science of the Total Environment*, **2018**, 615, 20-28 | 10.2 | 25 |
| 321 | Simulation of atmospheric organic aerosol using its volatility□oxygen-content distribution during the PEGASOS 2012 campaign. *Atmospheric Chemistry and Physics*, **2018**, 18, 10759-10772 | 6.8 | 1 |
| 320 | Source apportionment of the organic aerosol over the Atlantic Ocean from 53□N to 53□S: significant contributions from marine emissions and long-range transport. *Atmospheric Chemistry and Physics*, **2018**, 18, 18043-18062 | 6.8 | 18 |
| 319 | IUPAC in the (real) clouds. *Chemistry International*, **2018**, 40, 10-13 | 1.6 | 1 |
| 318 | Tropospheric Aqueous-Phase OH Oxidation Chemistry: Current Understanding, Uptake of Highly Oxidized Organics and Its Effects. *ACS Symposium Series*, **2018**, 49-85 | 0.4 | 11 |
| 317 | Simulation of Atmospheric Organic Aerosol using its Volatility-Oxygen Content Distribution during the PEGASOS 2012 campaign **2018**, | | 1 |
| 316 | Source apportionment of the submicron organic aerosols over the Atlantic Ocean from 53□N to 53□S using HR-ToF-AMS **2018**, | | 1 |
| 315 | The influence of impactor size cut-off shift caused by hygroscopic growth on particulate matter loading and composition measurements. *Atmospheric Environment*, **2018**, 195, 141-148 | 5.3 | 15 |
| 314 | Underestimated contribution of HONO to indoor OH radicals: an emerging concern. *Science Bulletin* , **2018**, 63, 1383-1384 | 10.6 | 4 |

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| 313 | Aqueous-Phase Oxidation of Terpene-Derived Acids by Atmospherically Relevant Radicals. *Journal of Physical Chemistry A*, **2018**, 122, 9233-9241 | 2.8 | 12 |
| 312 | Accretion Product Formation from Ozonolysis and OH Radical Reaction of -Pinene: Mechanistic Insight and the Influence of Isoprene and Ethylene. *Environmental Science & Technology*, **2018**, 52, 11069-11077 | 10.3 | 48 |
| 311 | Indoor (Photo)chemistry in China and Resulting Health Effects. *Environmental Science & Technology*, **2018**, 52, 10909-10910 | 10.3 | 5 |
| 310 | Self-charging of identical grains in the absence of an external field. *Scientific Reports*, **2017**, 7, 39996 | 4.9 | 29 |
| 309 | The Essential Role for Laboratory Studies in Atmospheric Chemistry. *Environmental Science & Technology*, **2017**, 51, 2519-2528 | 10.3 | 55 |
| 308 | Influence of biomass burning on mixing state of sub-micron aerosol particles in the North China Plain. *Atmospheric Environment*, **2017**, 164, 259-269 | 5.3 | 11 |
| 307 | Two-Dimensional Offline Chromatographic Fractionation for the Characterization of Humic-Like Substances in Atmospheric Aerosol Particles. *Environmental Science & Technology*, **2017**, 51, 5061-5070 | 10.3 | 10 |
| 306 | Latitudinal and Seasonal Distribution of Particulate MSA over the Atlantic using a Validated Quantification Method with HR-ToF-AMS. *Environmental Science & Technology*, **2017**, 51, 418-426 | 10.3 | 31 |
| 305 | Direct Probing of Criegee Intermediates from Gas-Phase Ozonolysis Using Chemical Ionization Mass Spectrometry. *Journal of the American Chemical Society*, **2017**, 139, 13387-13392 | 16.4 | 26 |
| 304 | Tropospheric Aqueous-Phase Oxidation of Isoprene-Derived Dihydroxycarbonyl Compounds. *Journal of Physical Chemistry A*, **2017**, 121, 6460-6470 | 2.8 | 16 |
| 303 | Uptake of nitric acid, ammonia, and organics in orographic clouds: mass spectrometric analyses of droplet residual and interstitial aerosol particles. *Atmospheric Chemistry and Physics*, **2017**, 17, 1571-1593 | 6.8 | 20 |
| 302 | Contributions of nitrated aromatic compounds to the light absorption of water-soluble and particulate brown carbon in different atmospheric environments in Germany and China. *Atmospheric Chemistry and Physics*, **2017**, 17, 1653-1672 | 6.8 | 100 |
| 301 | Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms, and organic aerosol. *Atmospheric Chemistry and Physics*, **2017**, 17, 2103-2162 | 6.8 | 206 |
| 300 | A quantification method for heat-decomposable methylglyoxal oligomers and its application on 1,3,5-trimethylbenzene SOA. *Atmospheric Chemistry and Physics*, **2017**, 17, 3929-3943 | 6.8 | 6 |
| 299 | Regional modelling of polycyclic aromatic hydrocarbons: WRF-Chem-PAH model development and East Asia case studies. *Atmospheric Chemistry and Physics*, **2017**, 17, 12253-12267 | 6.8 | 2 |
| 298 | Real-time detection of highly oxidized organosulfates and BSOA marker compounds during the F-BEACH 2014 field study. *Atmospheric Chemistry and Physics*, **2017**, 17, 1453-1469 | 6.8 | 29 |
| 297 | Chemical composition and droplet size distribution of cloud at the summit of Mount Tai, China. *Atmospheric Chemistry and Physics*, **2017**, 17, 9885-9896 | 6.8 | 38 |
| 296 | The influence of environmental drivers on the enrichment of organic carbon in the sea surface microlayer and in submicron aerosol particles measurements from the Atlantic Ocean. *Elementa*, **2017**, 5, | 3.6 | 22 |

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| 295 | Perspectives on the Future of Ice Nucleation Research: Research Needs and Unanswered Questions Identified from Two International Workshops. *Atmosphere*, **2017**, 8, 138 | 2.7 | 43 |
| 294 | The Ocean's Vital Skin: Toward an Integrated Understanding of the Sea Surface Microlayer. *Frontiers in Marine Science*, **2017**, 4, | 4.5 | 90 |
| 293 | Different Pathways of the Formation of Highly Oxidized Multifunctional Organic Compounds (HOMs) from the Gas-Phase Ozonolysis of β-Caryophyllene **2016**, | | 1 |
| 292 | Atmospheric outflow of PM2.5 saccharides from megacity Shanghai to East China Sea: Impact of biological and biomass burning sources. *Atmospheric Environment*, **2016**, 143, 1-14 | 5.3 | 58 |
| 291 | Size distribution of particle-phase sugar and nitrophenol tracers during severe urban haze episodes in Shanghai. *Atmospheric Environment*, **2016**, 145, 115-127 | 5.3 | 54 |
| 290 | Ubiquity of organic nitrates from nighttime chemistry in the European submicron aerosol. *Geophysical Research Letters*, **2016**, 43, 7735-7744 | 4.9 | 119 |
| 289 | Size distributions of polycyclic aromatic hydrocarbons in urban atmosphere: sorption mechanism and source contributions to respiratory deposition. *Atmospheric Chemistry and Physics*, **2016**, 16, 2971-2983 | 6.8 | 43 |
| 288 | Effect of varying experimental conditions on the viscosity of <i>α</i>-pinene derived secondary organic material. *Atmospheric Chemistry and Physics*, **2016**, 16, 6027-6040 | 6.8 | 68 |
| 287 | Different pathways of the formation of highly oxidized multifunctional organic compounds (HOMs) from the gas-phase ozonolysis of <i>β</i>-caryophyllene. *Atmospheric Chemistry and Physics*, **2016**, 16, 9831-9845 | 6.8 | 15 |
| 286 | Cloud water composition during HCCT-2010: Scavenging efficiencies, solute concentrations, and droplet size dependence of inorganic ions and dissolved organic carbon. *Atmospheric Chemistry and Physics*, **2016**, 16, 3185-3205 | 6.8 | 42 |
| 285 | Evidence for ambient dark aqueous SOA formation in the Po Valley, Italy. *Atmospheric Chemistry and Physics*, **2016**, 16, 8095-8108 | 6.8 | 34 |
| 284 | Variation of CCN activity during new particle formation events in the North China Plain. *Atmospheric Chemistry and Physics*, **2016**, 16, 8593-8607 | 6.8 | 48 |
| 283 | Size-resolved aerosol composition at an urban and a rural site in the Po Valley in summertime: implications for secondary aerosol formation. *Atmospheric Chemistry and Physics*, **2016**, 16, 10879-10897 | 6.8 | 27 |
| 282 | A new source of methylglyoxal in the aqueous phase. *Atmospheric Chemistry and Physics*, **2016**, 16, 2689-2702 | 6.8 | 9 |
| 281 | Aerosol properties, source identification, and cloud processing in orographic clouds measured by single particle mass spectrometry on a central European mountain site during HCCT-2010. *Atmospheric Chemistry and Physics*, **2016**, 16, 505-524 | 6.8 | 38 |
| 280 | New and Emerging Technologies of Societal Relevance: Impact on Air Quality and Climate. *Chemie-Ingenieur-Technik*, **2016**, 88, 1257-1258 | 0.8 | |
| 279 | First Quantification of Imidazoles in Ambient Aerosol Particles: Potential Photosensitizers, Brown Carbon Constituents, and Hazardous Components. *Environmental Science & Technology*, **2016**, 50, 1166-73 | 10.3 | 55 |
| 278 | Regional air quality in Leipzig, Germany: detailed source apportionment of size-resolved aerosol particles and comparison with the year 2000. *Faraday Discussions*, **2016**, 189, 291-315 | 3.6 | 22 |

| | | | |
|---|---|---|---|
| 277 | On-road vehicle emissions of glyoxal and methylglyoxal from tunnel tests in urban Guangzhou, China. *Atmospheric Environment*, **2016**, 127, 55-60 | 5.3 | 26 |
| 276 | Highly Oxidized RO2 Radicals and Consecutive Products from the Ozonolysis of Three Sesquiterpenes. *Environmental Science & Technology*, **2016**, 50, 2354-62 | 10.3 | 33 |
| 275 | Characterization of primary and secondary organic aerosols in Melbourne airshed: The influence of biogenic emissions, wood smoke and bushfires. *Atmospheric Environment*, **2016**, 130, 54-63 | 5.3 | 27 |
| 274 | Monoterpene SOA  Contribution of first-generation oxidation products to formation and chemical composition. *Atmospheric Environment*, **2016**, 130, 136-144 | 5.3 | 49 |
| 273 | Treatment of non-ideality in the SPACCIM multiphase model  Part 1: Model development. *Geoscientific Model Development*, **2016**, 9, 247-281 | 6.3 | 6 |
| 272 | Regional Scale Dispersion Modelling of Amines from Industrial CCS Processes with COSMO-MUSCAT. *Springer Proceedings in Complexity*, **2016**, 259-263 | 0.3 | |
| 271 | Contributions of nitrated aromatic compounds to the light absorption of water-soluble and particulate brown carbon in different atmospheric environments in Germany and China **2016**, | | 3 |
| 270 | Real-time detection of highly oxidized organosulfates and BSOA marker compounds during the FBEACh 2014 field study **2016**, | | 1 |
| 269 | Impact of photocatalytic remediation of pollutants on urban air quality. *Frontiers of Environmental Science and Engineering*, **2016**, 10, 1 | 5.8 | 25 |
| 268 | Verbessert Photokatalyse die Luftqualit?. *Nachrichten Aus Der Chemie*, **2016**, 64, 613-616 | 0.1 | |
| 267 | Competitive Counterion Binding Regulates the Aggregation Onset of Vimentin Intermediate Filaments. *Israel Journal of Chemistry*, **2016**, 56, 614-621 | 3.4 | 14 |
| 266 | Hydroxyl radical-induced formation of highly oxidized organic compounds. *Nature Communications*, **2016**, 7, 13677 | 17.4 | 124 |
| 265 | The filament forming reactions of vimentin tetramers studied in a serial-inlet microflow device by small angle x-ray scattering. *Biomicrofluidics*, **2016**, 10, 024108 | 3.2 | 20 |
| 264 | Highly Oxidized Second-Generation Products from the Gas-Phase Reaction of OH Radicals with Isoprene. *Journal of Physical Chemistry A*, **2016**, 120, 10150-10159 | 2.8 | 16 |
| 263 | A chamber study on the reactions of O3, NO, NO2 and selected VOCs with a photocatalytically active cementitious coating material. *Environmental Science and Pollution Research*, **2016**, 23, 15250-61 | 5.1 | 6 |
| 262 | Analyzing sites of OH radical attack (ring vs. side chain) in oxidation of substituted benzenes via dual stable isotope analysis ( 13)C and ( 2)H). *Science of the Total Environment*, **2016**, 542, 484-94 | 10.2 | 25 |
| 261 | An advanced modeling study on the impacts and atmospheric implications of multiphase dimethyl sulfide chemistry. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 11776-11781 | 11.5 | 113 |
| 260 | Highly Oxidized Multifunctional Organic Compounds Observed in Tropospheric Particles: A Field and Laboratory Study. *Environmental Science & Technology*, **2015**, 49, 7754-61 | 10.3 | 110 |

| | | | |
|---|---|---|---|
| 259 | Construction of a photocatalytic de-polluting field site in the Leopold II tunnel in Brussels. *Journal of Environmental Management*, **2015**, 155, 136-44 | 7.9 | 35 |
| 258 | Chemical properties of HULIS from three different environments. *Journal of Atmospheric Chemistry*, **2015**, 72, 65-80 | 3.2 | 25 |
| 257 | Tropospheric aqueous-phase chemistry: kinetics, mechanisms, and its coupling to a changing gas phase. *Chemical Reviews*, **2015**, 115, 4259-334 | 68.1 | 326 |
| 256 | Unravelling New Processes at Interfaces: Photochemical Isoprene Production at the Sea Surface. *Environmental Science & Technology*, **2015**, 49, 13199-205 | 10.3 | 75 |
| 255 | On-road measurements of NMVOCs and NO x : Determination of light-duty vehicles emission factors from tunnel studies in Brussels city center. *Atmospheric Environment*, **2015**, 122, 799-807 | 5.3 | 23 |
| 254 | Assembly of Simple Epithelial Keratin Filaments: Deciphering the Ion Dependence in Filament Organization. *Biomacromolecules*, **2015**, 16, 3313-21 | 6.9 | 16 |
| 253 | Chemistry of Urban Grime: Inorganic Ion Composition of Grime vs Particles in Leipzig, Germany. *Environmental Science & Technology*, **2015**, 49, 12688-96 | 10.3 | 29 |
| 252 | Gas-phase rate coefficients of the reaction of ozone with four sesquiterpenes at 295 ± 2 K. *Physical Chemistry Chemical Physics*, **2015**, 17, 11658-69 | 3.6 | 21 |
| 251 | Investigation of humic substance photosensitized reactions via carbon and hydrogen isotope fractionation. *Environmental Science & Technology*, **2015**, 49, 233-42 | 10.3 | 26 |
| 250 | Photocatalytic de-pollution in the Leopold II tunnel in Brussels: NOx abatement results. *Building and Environment*, **2015**, 84, 125-133 | 6.5 | 59 |
| 249 | Kinetics of nitrosamine and amine reactions with NO 3 radical and ozone related to aqueous particle and cloud droplet chemistry. *Atmospheric Research*, **2015**, 151, 64-71 | 5.4 | 8 |
| 248 | Photosensitized production of functionalized and unsaturated organic compounds at the air-sea interface. *Scientific Reports*, **2015**, 5, 12741 | 4.9 | 66 |
| 247 | Trace metal characterization of aerosol particles and cloud water during HCCT 2010. *Atmospheric Chemistry and Physics*, **2015**, 15, 8751-8765 | 6.8 | 34 |
| 246 | The influence of clouds on radical concentrations: observations and modelling studies of HO<sub>x</sub> during the Hill Cap Cloud Thuringia (HCCT) campaign in 2010. *Atmospheric Chemistry and Physics*, **2015**, 15, 3289-3301 | 6.8 | 21 |
| 245 | Some insights into the condensing vapors driving new particle growth to CCN sizes on the basis of hygroscopicity measurements. *Atmospheric Chemistry and Physics*, **2015**, 15, 13071-13083 | 6.8 | 19 |
| 244 | ACTRIS ACSM intercomparison – Part 1: Reproducibility of concentration and fragment results from 13 individual Quadrupole Aerosol Chemical Speciation Monitors (Q-ACSM) and consistency with co-located instruments. *Atmospheric Measurement Techniques*, **2015**, 8, 5063-5087 | 4 | 79 |
| 243 | Characterisation and optimisation of a sample preparation method for the detection and quantification of atmospherically relevant carbonyl compounds in aqueous medium. *Atmospheric Measurement Techniques*, **2015**, 8, 2409-2416 | 4 | 6 |
| 242 | ACTRIS ACSM intercomparison – Part 2: Intercomparison of ME-2 organic source apportionment results from 15 individual, co-located aerosol mass spectrometers. *Atmospheric Measurement Techniques*, **2015**, 8, 2555-2576 | 4 | 92 |

| | | | |
|---|---|---|---|
| 241 | Production of extremely low volatile organic compounds from biogenic emissions: Measured yields and atmospheric implications. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 7123-8 | 11.5 | 260 |
| 240 | ACTRIS ACSM intercomparison Part 2: Intercomparison of ME-2 organic source apportionment results from 15 individual, co-located aerosol mass spectrometers **2015**, | | 7 |
| 239 | Photocatalytic abatement results from a model street canyon. *Environmental Science and Pollution Research*, **2015**, 22, 18185-96 | 5.1 | 33 |
| 238 | Gas-Phase Ozonolysis of Cycloalkenes: Formation of Highly Oxidized RO2 Radicals and Their Reactions with NO, NO2, SO2, and Other RO2 Radicals. *Journal of Physical Chemistry A*, **2015**, 119, 10336-48 | 2.8 | 71 |
| 237 | Chemical characterization of sub-micrometer aerosol particles in the tropical Atlantic Ocean: marine and biomass burning influences. *Journal of Atmospheric Chemistry*, **2015**, 72, 105-125 | 3.2 | 21 |
| 236 | Multiphase chemistry of glyoxal: revised kinetics of the alkyl radical reaction with molecular oxygen and the reaction of glyoxal with OH, NO3, and SO4- in aqueous solution. *Environmental Science & Technology*, **2015**, 49, 343-50 | 10.3 | 27 |
| 235 | H2SO4 formation from the gas-phase reaction of stabilized Criegee Intermediates with SO2: Influence of water vapour content and temperature. *Atmospheric Environment*, **2014**, 89, 603-612 | 5.3 | 81 |
| 234 | Competing atmospheric reactions of CH2OO with SO2 and water vapour. *Physical Chemistry Chemical Physics*, **2014**, 16, 19130-6 | 3.6 | 79 |
| 233 | Modeling the impact of iron-carboxylate photochemistry on radical budget and carboxylate degradation in cloud droplets and particles. *Environmental Science & Technology*, **2014**, 48, 5652-9 | 10.3 | 52 |
| 232 | Quantum teleportation from a telecom-wavelength photon to a solid-state quantum memory. *Nature Photonics*, **2014**, 8, 775-778 | 33.9 | 158 |
| 231 | Atmospheric peroxides in a polluted subtropical environment: seasonal variation, sources and sinks, and importance of heterogeneous processes. *Environmental Science & Technology*, **2014**, 48, 1443-50 | 10.3 | 44 |
| 230 | 2-hydroxyterpenylic acid: an oxygenated marker compound for -pinene secondary organic aerosol in ambient fine aerosol. *Environmental Science & Technology*, **2014**, 48, 4901-8 | 10.3 | 23 |
| 229 | Modeling the multiphase processing of an urban and a rural air mass with COSMO MUSCAT. *Urban Climate*, **2014**, 10, 720-731 | 6.8 | 4 |
| 228 | Atmospheric aqueous phase radical chemistry of the isoprene oxidation products methacrolein, methyl vinyl ketone, methacrylic acid and acrylic acid--kinetics and product studies. *Physical Chemistry Chemical Physics*, **2014**, 16, 6257-72 | 3.6 | 54 |
| 227 | On the abundance and source contributions of dicarboxylic acids in size-resolved aerosol particles at continental sites in central Europe. *Atmospheric Chemistry and Physics*, **2014**, 14, 3913-3928 | 6.8 | 47 |
| 226 | Kinetic measurements of the reactivity of hydrogen peroxide and ozone towards small atmospherically relevant aldehydes, ketones and organic acids in aqueous solutions. *Atmospheric Chemistry and Physics*, **2014**, 14, 4503-4514 | 6.8 | 53 |
| 225 | Comprehensive assessment of meteorological conditions and airflow connectivity during HCCT-2010. *Atmospheric Chemistry and Physics*, **2014**, 14, 9105-9128 | 6.8 | 13 |
| 224 | Chemical mass balance of 300 C non-volatile particles at the tropospheric research site Melpitz, Germany. *Atmospheric Chemistry and Physics*, **2014**, 14, 10145-10162 | 6.8 | 39 |

| | | | |
|---|---|---|---|
| 223 | Reactivity of stabilized Criegee intermediates (sCIs) from isoprene and monoterpene ozonolysis toward SO<sub>2</sub> and organic acids. *Atmospheric Chemistry and Physics*, **2014**, 14, 12143-12153 | 6.8 | 76 |
| 222 | Mass deposition fluxes of Saharan mineral dust to the tropical northeast Atlantic Ocean: an intercomparison of methods. *Atmospheric Chemistry and Physics*, **2014**, 14, 2245-2266 | 6.8 | 18 |
| 221 | Aerosol hygroscopicity derived from size-segregated chemical composition and its parameterization in the North China Plain. *Atmospheric Chemistry and Physics*, **2014**, 14, 2525-2539 | 6.8 | 101 |
| 220 | Campholenic aldehyde ozonolysis: a mechanism leading to specific biogenic secondary organic aerosol constituents. *Atmospheric Chemistry and Physics*, **2014**, 14, 719-736 | 6.8 | 27 |
| 219 | Influence of cloud processing on CCN activation behaviour in the Thuringian Forest, Germany during HCCT-2010. *Atmospheric Chemistry and Physics*, **2014**, 14, 7859-7868 | 6.8 | 21 |
| 218 | Long-term chemical characterization of tropical and marine aerosols at the Cape Verde Atmospheric Observatory (CVAO) from 2007 to 2011. *Atmospheric Chemistry and Physics*, **2014**, 14, 8883-8904 | 6.8 | 56 |
| 217 | In-cloud sulfate addition to single particles resolved with sulfur isotope analysis during HCCT-2010. *Atmospheric Chemistry and Physics*, **2014**, 14, 4219-4235 | 6.8 | 23 |
| 216 | Hydroxymethanesulfonic acid in size-segregated aerosol particles at nine sites in Germany. *Atmospheric Chemistry and Physics*, **2014**, 14, 4531-4538 | 6.8 | 17 |
| 215 | Schnelle Autoxidation bildet hochoxidierte RO2-Radikale in der Atmosphäre. *Angewandte Chemie*, **2014**, 126, 14825-14829 | 3.6 | 7 |
| 214 | Rapid autoxidation forms highly oxidized RO2 radicals in the atmosphere. *Angewandte Chemie - International Edition*, **2014**, 53, 14596-600 | 16.4 | 147 |
| 213 | Compound specific stable isotope analysis (CSIA) to characterize transformation mechanisms of α-hexachlorocyclohexane. *Journal of Hazardous Materials*, **2014**, 280, 750-7 | 12.8 | 40 |
| 212 | Determination of nitrophenolic compounds from atmospheric particles using hollow-fiber liquid-phase microextraction and capillary electrophoresis/mass spectrometry analysis. *Electrophoresis*, **2014**, 35, 1353-61 | 3.6 | 16 |
| 211 | Emerging areas in atmospheric photochemistry. *Topics in Current Chemistry*, **2014**, 339, 1-53 | | 16 |
| 210 | The Influence of Cloud Chemical Processes on the Formation of Secondary Particulate Matter. *Springer Proceedings in Complexity*, **2014**, 97-101 | 0.3 | |
| 209 | Mechanism development and modelling of tropospheric multiphase halogen chemistry: The CAPRAM Halogen Module 2.0 (HM2). *Journal of Atmospheric Chemistry*, **2013**, 70, 19-52 | 3.2 | 20 |
| 208 | Long-term size-segregated particle (PM10, PM2.5, PM1) characterization study at Melpitz -- influence of air mass inflow, weather conditions and season. *Journal of Atmospheric Chemistry*, **2013**, 70, 165-195 | 3.2 | 60 |
| 207 | The effect of surgical and transcatheter aortic valve replacement on mitral annular anatomy. *Annals of Thoracic Surgery*, **2013**, 95, 614-9 | 2.7 | 18 |
| 206 | Comprehensive chemical characterisation of size-segregated PM10 in Dresden and estimation of changes due to global warming. *Atmospheric Environment*, **2013**, 75, 365-373 | 5.3 | 4 |

| | | | |
|---|---|---|---|
| 205 | Complexation of trace metals in size-segregated aerosol particles at nine sites in Germany. *Atmospheric Environment*, **2013**, 74, 102-109 | 5.3 | 30 |
| 204 | Modelling multiphase chemistry in deliquescent aerosols and clouds using CAPRAM3.0i. *Journal of Atmospheric Chemistry*, **2013**, 70, 221-256 | 3.2 | 45 |
| 203 | Enhanced role of transition metal ion catalysis during in-cloud oxidation of SO2. *Science*, **2013**, 340, 727-30 | 33.3 | 224 |
| 202 | Sulfate radical-initiated formation of isoprene-derived organosulfates in atmospheric aerosols. *Faraday Discussions*, **2013**, 165, 237-59 | 3.6 | 78 |
| 201 | Formation of secondary organic aerosol marker compounds from the photooxidation of isoprene and isoprene-derived alkene diols under low-NO(x) conditions. *Faraday Discussions*, **2013**, 165, 261-72 | 3.6 | 4 |
| 200 | Photolysis of Fe(III) carboxylato complexes: Fe(II) quantum yields and reaction mechanisms. *Journal of Photochemistry and Photobiology A: Chemistry*, **2013**, 268, 24-36 | 4.7 | 58 |
| 199 | Effects of Fe(III)-concentration, speciation, excitation-wavelength and light intensity on the quantum yield of iron(III)-oxalato complex photolysis. *Journal of Photochemistry and Photobiology A: Chemistry*, **2013**, 255, 41-49 | 4.7 | 66 |
| 198 | Ozone-driven secondary organic aerosol production chain. *Environmental Science & Technology*, **2013**, 47, 3639-47 | 10.3 | 24 |
| 197 | An improved method for the quantification of SOA bound peroxides. *Atmospheric Environment*, **2013**, 67, 365-369 | 5.3 | 33 |
| 196 | Gas-phase products and secondary organic aerosol formation from the ozonolysis and photooxidation of myrcene. *Atmospheric Environment*, **2013**, 79, 553-560 | 5.3 | 20 |
| 195 | Nitro- and Nitro-Oxy-Compounds in Multiphase Particle Chemistry: Field and Analytical Studies. *NATO Science for Peace and Security Series C: Environmental Security*, **2013**, 185-193 | 0.3 | 1 |
| 194 | Measurement of areal density in the ablators of inertial-confinement-fusion capsules via detection of ablator (n, n?)gamma-ray emission. *Physics of Plasmas*, **2013**, 20, 042705 | 2.1 | 24 |
| 193 | Aerosol size-resolved trace metal composition in remote northern tropical Atlantic marine environment: case study Cape Verde islands. *Atmospheric Chemistry and Physics*, **2013**, 13, 4801-4814 | 6.8 | 44 |
| 192 | Explicit modeling of volatile organic compounds partitioning in the atmospheric aqueous phase. *Atmospheric Chemistry and Physics*, **2013**, 13, 1023-1037 | 6.8 | 32 |
| 191 | Glyoxal and methylglyoxal in Atlantic seawater and marine aerosol particles: method development and first application during the Polarstern cruise ANT XXVII/4. *Atmospheric Chemistry and Physics*, **2013**, 13, 11791-11802 | 6.8 | 17 |
| 190 | Particle hygroscopicity during atmospheric new particle formation events: implications for the chemical species contributing to particle growth. *Atmospheric Chemistry and Physics*, **2013**, 13, 6637-6646 | 6.8 | 22 |
| 189 | Relating particle hygroscopicity and CCN activity to chemical composition during the HCCT-2010 field campaign. *Atmospheric Chemistry and Physics*, **2013**, 13, 7983-7996 | 6.8 | 78 |
| 188 | Hollow fibre liquid-phase microextraction of functionalised carboxylic acids from atmospheric particles combined with capillary electrophoresis/mass spectrometric analysis. *Journal of Chromatography A*, **2012**, 1267, 178-88 | 4.5 | 14 |

| | | | |
|---|---|---|---|
| 187 | Atmospheric chemistry and environmental impact of the use of amines in carbon capture and storage (CCS). *Chemical Society Reviews*, **2012**, 41, 6684-704 | 58.5 | 214 |
| 186 | Laboratory kinetic and mechanistic studies on the OH-initiated oxidation of acetone in aqueous solution. *Journal of Physical Chemistry A*, **2012**, 116, 6317-26 | 2.8 | 49 |
| 185 | Chemical characterization of dissolved organic compounds from coastal sea surface microlayers (Baltic Sea, Germany). *Environmental Science & Technology*, **2012**, 46, 10455-62 | 10.3 | 40 |
| 184 | Hygroscopic growth and CCN activity of HULIS from different environments. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a | | 28 |
| 183 | Gas-Phase Ozonolysis of Selected Olefins: The Yield of Stabilized Criegee Intermediate and the Reactivity toward SO2. *Journal of Physical Chemistry Letters*, **2012**, 3, 2892-2896 | 6.4 | 78 |
| 182 | Ultrafine and Fine Particles in the Atmosphere Sampling, Chemical Characterization and Sources. *Chemie-Ingenieur-Technik*, **2012**, 84, 1130-1136 | 0.8 | 2 |
| 181 | Size-segregated characterization of PM10 at the EMEP site Melpitz (Germany) using a five-stage impactor: a six year study. *Journal of Atmospheric Chemistry*, **2012**, 69, 127-157 | 3.2 | 36 |
| 180 | Alternative pathway for atmospheric particles growth. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 6840-4 | 11.5 | 78 |
| 179 | Mineral dust photochemistry induces nucleation events in the presence of SO2. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 20842-7 | 11.5 | 101 |
| 178 | A new method to determine the mixing state of light absorbing carbonaceous using the measured aerosol optical properties and number size distributions. *Atmospheric Chemistry and Physics*, **2012**, 12, 2381-2397 | 6.8 | 70 |
| 177 | Stable water isotopologue ratios in fog and cloud droplets of liquid clouds are not size-dependent. *Atmospheric Chemistry and Physics*, **2012**, 12, 9855-9863 | 6.8 | 3 |
| 176 | Temporal evolution of stable water isotopologues in cloud droplets in a hill cap cloud in central Europe (HCCT-2010). *Atmospheric Chemistry and Physics*, **2012**, 12, 11679-11694 | 6.8 | 7 |
| 175 | General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) Integrating aerosol research from nano to global scales. *Atmospheric Chemistry and Physics*, **2011**, 11, 13061-13143 | 6.8 | 231 |
| 174 | Seasonal and diurnal variations of particulate nitrate and organic matter at the IfT research station Melpitz. *Atmospheric Chemistry and Physics*, **2011**, 11, 12579-12599 | 6.8 | 67 |
| 173 | Diurnal variations of ambient particulate wood burning emissions and their contribution to the concentration of Polycyclic Aromatic Hydrocarbons (PAHs) in Seiffen, Germany. *Atmospheric Chemistry and Physics*, **2011**, 11, 12697-12713 | 6.8 | 40 |
| 172 | Hygroscopic behavior of atmospherically relevant water-soluble carboxylic salts and their influence on the water uptake of ammonium sulfate. *Atmospheric Chemistry and Physics*, **2011**, 11, 12617-12626 | 6.8 | 72 |
| 171 | A study to discriminate local, urban and regional source contributions to the particulate matter concentrations in the city of Dresden, Germany. *Journal of Atmospheric Chemistry*, **2011**, 68, 199-231 | 3.2 | 13 |
| 170 | Denuder sampling techniques for the determination of gas-phase carbonyl compounds: a comparison and characterisation of in situ and ex situ derivatisation methods. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2011**, 879, 1402-11 | 3.2 | 22 |

| | | | |
|---|---|---|---|
| 169 | Methyl-nitrocatechols: atmospheric tracer compounds for biomass burning secondary organic aerosols. *Environmental Science & Technology*, **2010**, 44, 8453-9 | 10.3 | 194 |
| 168 | Atmospheric stability of levoglucosan: a detailed laboratory and modeling study. *Environmental Science & Technology*, **2010**, 44, 694-9 | 10.3 | 295 |
| 167 | Temperature and Ionic Strength Dependence of NO3-radical Reactions with Substituted Phenols in Aqueous Solution. *Zeitschrift Fur Physikalische Chemie*, **2010**, 224, 1261-1287 | 3.1 | 8 |
| 166 | Particle characterization at the Cape Verde atmospheric observatory during the 2007 RHaMBLe intensive. *Atmospheric Chemistry and Physics*, **2010**, 10, 2709-2721 | 6.8 | 57 |
| 165 | Reactive Halogens in the Marine Boundary Layer (RHaMBLe): the tropical North Atlantic experiments. *Atmospheric Chemistry and Physics*, **2010**, 10, 1031-1055 | 6.8 | 58 |
| 164 | Terpenylic acid and related compounds: precursors for dimers in secondary organic aerosol from the ozonolysis of □- and □pinene. *Atmospheric Chemistry and Physics*, **2010**, 10, 9383-9392 | 6.8 | 129 |
| 163 | A GIS based approach to back trajectory analysis for the source apportionment of aerosol constituents and its first application. *Journal of Atmospheric Chemistry*, **2010**, 67, 1-28 | 3.2 | 32 |
| 162 | Seasonal characteristics of tropical marine boundary layer air measured at the Cape Verde Atmospheric Observatory. *Journal of Atmospheric Chemistry*, **2010**, 67, 87-140 | 3.2 | 81 |
| 161 | A four-year size-segregated characterization study of particles PM10, PM2.5 and PM1 depending on air mass origin at Melpitz. *Atmospheric Environment*, **2010**, 44, 164-173 | 5.3 | 95 |
| 160 | A European aerosol phenomenology □: Physical and chemical characteristics of particulate matter from 60 rural, urban, and kerbside sites across Europe. *Atmospheric Environment*, **2010**, 44, 1308-1320 | 5.3 | 563 |
| 159 | Radical-driven carbonyl-to-acid conversion and acid degradation in tropospheric aqueous systems studied by CAPRAM. *Atmospheric Environment*, **2010**, 44, 5415-5422 | 5.3 | 89 |
| 158 | Tropospheric aqueous-phase free-radical chemistry: radical sources, spectra, reaction kinetics and prediction tools. *ChemPhysChem*, **2010**, 11, 3796-822 | 3.2 | 178 |
| 157 | Performance of an Aerodyne Aerosol Mass Spectrometer (AMS) during Intensive Campaigns in China in the Summer of 2006. *Aerosol Science and Technology*, **2009**, 43, 189-204 | 3.4 | 51 |
| 156 | Size segregated water uptake of the urban submicrometer aerosol in Beijing. *Atmospheric Environment*, **2009**, 43, 1578-1589 | 5.3 | 71 |
| 155 | A highly resolved anion-exchange chromatographic method for determination of saccharidic tracers for biomass combustion and primary bio-particles in atmospheric aerosol. *Atmospheric Environment*, **2009**, 43, 1367-1371 | 5.3 | 120 |
| 154 | Influence of seasons, air mass origin and day of the week on size-segregated chemical composition of aerosol particles at a kerbside. *Atmospheric Environment*, **2009**, 43, 2456-2463 | 5.3 | 42 |
| 153 | Feinst□be und Umweltzonen#. *Chemie-Ingenieur-Technik*, **2009**, 81, 1363-1367 | 0.8 | 1 |
| 152 | Rate constants for the OH reactions with oxygenated organic compounds in aqueous solution. *International Journal of Chemical Kinetics*, **2009**, 41, 309-326 | 1.4 | 28 |

| | | | |
|---|---|---|---|
| 151 | Towards an operational aqueous phase chemistry mechanism for regional chemistry-transport models: CAPRAM-RED and its application to the COSMO-MUSCAT model. *Journal of Atmospheric Chemistry*, **2009**, 64, 1-35 | 3.2 | 23 |
| 150 | Quantification of organic acids in particulate matter by coupling of thermally assisted hydrolysis and methylation with thermodesorption-gas chromatography-mass spectrometry. *Journal of Chromatography A*, **2009**, 1216, 6642-50 | 4.5 | 19 |
| 149 | Terpenylic acid and related compounds from the oxidation of alpha-pinene: implications for new particle formation and growth above forests. *Environmental Science & Technology*, **2009**, 43, 6976-82 | 10.3 | 142 |
| 148 | Diaterebic acid acetate and diaterpenylic acid acetate: atmospheric tracers for secondary organic aerosol formation from 1,8-cineole oxidation. *Environmental Science & Technology*, **2009**, 43, 280-5 | 10.3 | 39 |
| 147 | Characterization of the volatile fraction of laboratory-generated aerosol particles by thermodenuder-aerosol mass spectrometer coupling experiments. *Journal of Aerosol Science*, **2009**, 40, 603-612 | 4.3 | 18 |
| 146 | Laboratory chamber studies on the formation of organosulfates from reactive uptake of monoterpene oxides. *Physical Chemistry Chemical Physics*, **2009**, 11, 7985-97 | 3.6 | 139 |
| 145 | Reactivity of poly-alcohols towards OH, NO3 and SO4- in aqueous solution. *Physical Chemistry Chemical Physics*, **2009**, 11, 9351-63 | 3.6 | 29 |
| 144 | Variability of submicron aerosol observed at a rural site in Beijing in the summer of 2006. *Journal of Geophysical Research*, **2009**, 114, | | 68 |
| 143 | Size- and time-resolved chemical particle characterization during CAREBeijing-2006: Different pollution regimes and diurnal profiles. *Journal of Geophysical Research*, **2009**, 114, | | 57 |
| 142 | The formation, properties and impact of secondary organic aerosol: current and emerging issues. *Atmospheric Chemistry and Physics*, **2009**, 9, 5155-5236 | 6.8 | 2861 |
| 141 | Hygroscopic growth of urban aerosol particles in Beijing (China) during wintertime: a comparison of three experimental methods. *Atmospheric Chemistry and Physics*, **2009**, 9, 6865-6880 | 6.8 | 68 |
| 140 | Composition and properties of atmospheric particles in the eastern Atlantic and impacts on gas phase uptake rates. *Atmospheric Chemistry and Physics*, **2009**, 9, 9299-9314 | 6.8 | 51 |
| 139 | Seasonal variation of aliphatic amines in marine sub-micrometer particles at the Cape Verde islands. *Atmospheric Chemistry and Physics*, **2009**, 9, 9587-9597 | 6.8 | 120 |
| 138 | Size distribution and source analysis of ionic compositions of aerosols in polluted periods at Xinken in Pearl River Delta (PRD) of China. *Atmospheric Environment*, **2008**, 42, 6284-6295 | 5.3 | 81 |
| 137 | Aerosol optical properties and related chemical apportionment at Xinken in Pearl River Delta of China. *Atmospheric Environment*, **2008**, 42, 6351-6372 | 5.3 | 145 |
| 136 | Relative humidity dependence of aerosol optical properties and direct radiative forcing in the surface boundary layer at Xinken in Pearl River Delta of China: An observation based numerical study. *Atmospheric Environment*, **2008**, 42, 6373-6397 | 5.3 | 136 |
| 135 | Size-segregated particulate chemical composition in Xinken, Pearl River Delta, China: OC/EC and organic compounds. *Atmospheric Environment*, **2008**, 42, 6296-6309 | 5.3 | 38 |
| 134 | Hygroscopic properties and extinction of aerosol particles at ambient relative humidity in South-Eastern China. *Atmospheric Environment*, **2008**, 42, 6321-6334 | 5.3 | 70 |

| | | | |
|---|---|---|---|
| 133 | A case of extreme particulate matter concentrations over Central Europe caused by dust emitted over the southern Ukraine. *Atmospheric Chemistry and Physics*, **2008**, 8, 997-1016 | 6.8 | 71 |
| 132 | Analysis of nitrophenols in cloud water with a miniaturized light-phase rotary perforator and HPLC-MS. *Analytical and Bioanalytical Chemistry*, **2008**, 391, 161-9 | 4.4 | 59 |
| 131 | Hydroxyl radical reactions with halogenated ethanols in aqueous solution: Kinetics and thermochemistry. *International Journal of Chemical Kinetics*, **2008**, 40, 174-188 | 1.4 | 28 |
| 130 | Capram Modeling Of Aqueous Aerosol And Cloud Chemistry. *NATO Science for Peace and Security Series C: Environmental Security*, **2008**, 107-122 | 0.3 | |
| 129 | On the photolysis of simple anions and neutral molecules as sources of O-/OH, SO(x)- and Cl in aqueous solution. *Physical Chemistry Chemical Physics*, **2007**, 9, 3935-64 | 3.6 | 139 |
| 128 | Study of nitrate radical (NO3) reactions with carbonyls and acids in aqueous solution as a function of temperature. *Physical Chemistry Chemical Physics*, **2007**, 9, 958-68 | 3.6 | 12 |
| 127 | Evidence for the existence of organosulfates from beta-pinene ozonolysis in ambient secondary organic aerosol. *Environmental Science & Technology*, **2007**, 41, 6678-83 | 10.3 | 247 |
| 126 | Source characterization of biomass burning particles: The combustion of selected European conifers, African hardwood, savanna grass, and German and Indonesian peat. *Journal of Geophysical Research*, **2007**, 112, | | 231 |
| 125 | Chemie in Wolken, Nebel und Niederschlag. *Chemie in Unserer Zeit*, **2007**, 41, 254-265 | 0.2 | 1 |
| 124 | Atmosphärische Aerosole: Quellen, Vorkommen, Zusammensetzung. *Chemie in Unserer Zeit*, **2007**, 41, 220-230 | 0.2 | 5 |
| 123 | Applications of CE-ESI-MS/MS analysis to structural elucidation of methylenecyclohexane ozonolysis products in the particle phase. *Electrophoresis*, **2007**, 28, 1364-70 | 3.6 | 22 |
| 122 | Development of a method for fast analysis of phenolic molecular markers in biomass burning particles using high performance liquid chromatography/atmospheric pressure chemical ionisation mass spectrometry. *Journal of Chromatography A*, **2007**, 1143, 168-75 | 4.5 | 40 |
| 121 | Determination of functionalised carboxylic acids in atmospheric particles and cloud water using capillary electrophoresis/mass spectrometry. *Journal of Chromatography A*, **2007**, 1171, 112-23 | 4.5 | 44 |
| 120 | The formation of organic sulfate esters in the limonene ozonolysis secondary organic aerosol (SOA) under acidic conditions. *Atmospheric Environment*, **2007**, 41, 5571-5583 | 5.3 | 126 |
| 119 | Scavenging of $SO_4^{\bullet-}$ radical anions by mono- and dicarboxylic acids in the Mn(II)-catalyzed S(IV) oxidation in aqueous solution. *Atmospheric Environment*, **2007**, 41, 9187-9194 | 5.3 | 21 |
| 118 | Relative Humidity Dependence of Aerosol Optical Properties and Direct Radiative Forcing in the Surface Boundary Layer of Southeastern China **2007**, 489-493 | | |
| 117 | Biogenic contributions to the chemical composition of airborne particles in a coniferous forest in Germany. *Atmospheric Environment*, **2006**, 40, 103-115 | 5.3 | 71 |
| 116 | Biogenic carbonyl compounds within and above a coniferous forest in Germany. *Atmospheric Environment*, **2006**, 40, 81-91 | 5.3 | 55 |

| | | | |
|---|---|---|---|
| 115 | Formation of secondary organic particle phase compounds from isoprene gas-phase oxidation products: An aerosol chamber and field study. *Atmospheric Environment*, **2006**, 40, 2501-2509 | 5.3 | 97 |
| 114 | Determination of levoglucosan in biomass combustion aerosol by high-performance anion-exchange chromatography with pulsed amperometric detection. *Atmospheric Environment*, **2006**, 40, 299-311 | 5.3 | 233 |
| 113 | Mixing state of elemental carbon and non-light-absorbing aerosol components derived from in situ particle optical properties at Xinken in Pearl River Delta of China. *Journal of Geophysical Research*, **2006**, 111, | | 108 |
| 112 | A source study of PM in Saxony by Size-Segregated Characterisation. *Journal of Atmospheric Chemistry*, **2006**, 55, 103-130 | 3.2 | 32 |
| 111 | Laboratory studies on secondary organic aerosol formation from terpenes. *Faraday Discussions*, **2005**, 130, 279-94; discussion 363-86, 519-24 | 3.6 | 56 |
| 110 | Missing cloud condensation nuclei in peat smoke. *Geophysical Research Letters*, **2005**, 32, | 4.9 | 22 |
| 109 | FEBUKO and MODMEP: Field measurements and modelling of aerosol and cloud multiphase processes. *Atmospheric Environment*, **2005**, 39, 4169-4183 | 5.3 | 50 |
| 108 | Meteorological characterisation of the FEBUKO hill cap cloud experiments, Part I: Synoptic characterisation of measurement periods. *Atmospheric Environment*, **2005**, 39, 4185-4194 | 5.3 | 16 |
| 107 | Aerosol characterisation at the FEBUKO upwind station Goldlauter (I): Particle mass, main ionic components, OCEC, and mass closure. *Atmospheric Environment*, **2005**, 39, 4209-4218 | 5.3 | 23 |
| 106 | Aerosol characterisation at the FEBUKO upwind station Goldlauter (II): Detailed organic chemical characterisation. *Atmospheric Environment*, **2005**, 39, 4219-4231 | 5.3 | 35 |
| 105 | Cloud physics and cloud water sampler comparison during FEBUKO. *Atmospheric Environment*, **2005** , 39, 4267-4277 | 5.3 | 31 |
| 104 | Schmücke hill cap cloud and valley stations aerosol characterisation during FEBUKO (I): Particle size distribution, mass, and main components. *Atmospheric Environment*, **2005**, 39, 4291-4303 | 5.3 | 32 |
| 103 | Schmücke hill cap cloud and valley stations aerosol characterisation during FEBUKO (II): Organic compounds. *Atmospheric Environment*, **2005**, 39, 4305-4320 | 5.3 | 103 |
| 102 | Towards a more detailed description of tropospheric aqueous phase organic chemistry: CAPRAM 3.0. *Atmospheric Environment*, **2005**, 39, 4351-4363 | 5.3 | 141 |
| 101 | SPACCIM: Simulations of the multiphase chemistry occurring in the FEBUKO hill cap cloud experiments. *Atmospheric Environment*, **2005**, 39, 4389-4401 | 5.3 | 34 |
| 100 | Meteorological characterisation of the FEBUKO hill cap cloud experiments, Part II: Tracer experiments and flow characterisation with nested non-hydrostatic atmospheric models. *Atmospheric Environment*, **2005**, 39, 4195-4207 | 5.3 | 18 |
| 99 | SPACCIM: A parcel model with detailed microphysics and complex multiphase chemistry. *Atmospheric Environment*, **2005**, 39, 4375-4388 | 5.3 | 53 |
| 98 | Comparison of different model approaches for the simulation of multiphase processes. *Atmospheric Environment*, **2005**, 39, 4403-4417 | 5.3 | 23 |

| | | | |
|---|---|---|---|
| 97 | Uptake of the NO 3 Radical on Aqueous Surfaces. *Journal of Atmospheric Chemistry*, **2005**, 52, 1-18 | 3.2 | 8 |
| 96 | SIMULATION OF AEROSOL-CLOUD CHEMISTRY INTERACTIONS DURING A HILL CAP CLOUD PASSAGE EXPERIMENT. *Journal of Aerosol Science*, **2004**, 35, S863-S864 | 4.3 | |
| 95 | Numerical Treatment of Aqueous-Phase Chemistry in Atmospheric Chemistry-Transport Modelling **2004**, 399-407 | | |
| 94 | Aerosol-chamber study of the □-pinene/O3 reaction: influence of particle acidity on aerosol yields and products. *Atmospheric Environment*, **2004**, 38, 761-773 | 5.3 | 284 |
| 93 | Long-term size-segregated characterization of PM10, PM2.5, and PM1 at the IfT research station Melpitz downwind of Leipzig (Germany) using high and low-volume filter samplers. *Atmospheric Environment*, **2004**, 38, 5333-5347 | 5.3 | 74 |
| 92 | Size-Resolved Aerosol Characterization for a Polluted Episode at the IfT Research Station Melpitz in Autumn 1997. *Journal of Atmospheric Chemistry*, **2004**, 48, 131-156 | 3.2 | 19 |
| 91 | Uptake of acetone, 2-butanone, 2,3-butanedione and 2-oxopropanal on a water surface. *Physical Chemistry Chemical Physics*, **2004**, 6, 965-971 | 3.6 | 12 |
| 90 | Kinetics and mechanisms of reactions of the nitrate radical (NO3) with substituted phenols in aqueous solution. *Physical Chemistry Chemical Physics*, **2004**, 6, 5379 | 3.6 | 20 |
| 89 | Kinetics of reactions of OH with organic carbonyl compounds in aqueous solution. *Physical Chemistry Chemical Physics*, **2004**, 6, 4118 | 3.6 | 34 |
| 88 | SIZE-SEGREGATED PHYSICAL-CHEMICAL CHARACTERIZATION OF TROPOSPHERIC PARTICLES IN WINTER 2003 AT MELPITZ (GERMANY). *Journal of Aerosol Science*, **2004**, 35, S1157-S1158 | 4.3 | |
| 87 | Determination of biogenic organic compounds in airborne particles by solvent extraction, derivatisation and mass spectrometric detection. *Chromatographia*, **2003**, 57, S253-S259 | 2.1 | 8 |
| 86 | Wet annular denuder measurements of nitrous acid: laboratory study of the artefact reaction of NO2 with S(IV) in aqueous solution and comparison with field measurements. *Atmospheric Environment*, **2003**, 37, 2643-2662 | 5.3 | 59 |
| 85 | Method development for the analysis of particle phase substituted methoxy phenols and aromatic acids from biomass burning using capillary electrophoresis/electrospray ionization mass spectrometry (CE/ESI-MS). *Journal of Chromatography A*, **2003**, 1018, 105-15 | 4.5 | 39 |
| 84 | CAPRAM 2.4 (MODAC mechanism): An extended and condensed tropospheric aqueous phase mechanism and its application. *Journal of Geophysical Research*, **2003**, 108, | | 152 |
| 83 | Halogen production from aqueous tropospheric particles. *Chemosphere*, **2003**, 52, 485-502 | 8.4 | 36 |
| 82 | Temperature-dependent rate constants for hydroxyl radical reactions with organic compounds in aqueous solutions. *Physical Chemistry Chemical Physics*, **2003**, 5, 1811-1824 | 3.6 | 186 |
| 81 | Kinetics of aqueous phase reactions relevant for atmospheric chemistry. *Chemical Reviews*, **2003**, 103, 4691-716 | 68.1 | 234 |
| 80 | Laser based spectroscopic and kinetic investigations of reactions of the Cl atom with oxygenated hydrocarbons in aqueous solution. *Physical Chemistry Chemical Physics*, **2003**, 5, 2562 | 3.6 | 25 |

| | | | |
|---|---|---|---|
| 79 | Carbonaceous aerosol over the Indian Ocean: OC/EC fractions and selected specifications from size-segregated onboard samples. *Journal of Geophysical Research*, **2002**, 107, INX2 30-1 | | 70 |
| 78 | Laser-based studies of NO3 radical reactions with selected aromatic compounds in aqueous solution. *Physical Chemistry Chemical Physics*, **2002**, 4, 2975-2982 | 3.6 | 29 |
| 77 | Determination of phase transfer parameters for the uptake of HNO3, N2O5 and O3 on single aqueous drops. *Physical Chemistry Chemical Physics*, **2002**, 4, 60-67 | 3.6 | 29 |
| 76 | A mechanistic study of the oxidation of phenol by OH/NO2/NO3 in aqueous solution. *Physical Chemistry Chemical Physics*, **2002**, 4, 3669-3675 | 3.6 | 35 |
| 75 | Monoterpene emissions and carbonyl compound air concentrations during the blooming period of rape (Brassica napus). *Chemosphere*, **2002**, 49, 1247-56 | 8.4 | 31 |
| 74 | Tropospheric Multiphase Chemistry in Field, Modelling and Laboratory Studies **2002**, 31-36 | | |
| 73 | Mechanism Development for Tropospheric Multiphase Chemistry with CAPRAM **2002**, 413-421 | | |
| 72 | . *Tellus, Series B: Chemical and Physical Meteorology*, **2001**, 53, 529-545 | 3.3 | 27 |
| 71 | Scenarios for Modeling Multiphase Tropospheric Chemistry. *Journal of Atmospheric Chemistry*, **2001** , 40, 77-86 | 3.2 | 13 |
| 70 | Trends of pollution in rain over East Germany caused by changing emissions. *Tellus, Series B: Chemical and Physical Meteorology*, **2001**, 53, 529-545 | 3.3 | |
| 69 | Subproject CMD Laboratory Studies and Mechanism Development for Tropospheric Aqueous Particle Chemistry **2001**, 62-68 | | |
| 68 | KINETIC STUDIES OF HALOGEN CONTAINING RADICALS IN THE AQUEOUS PHASE. *Journal of Aerosol Science*, **2001**, 32, 307-308 | 4.3 | |
| 67 | MODELING STUDY ON CHEMISTRY OF HALOGENS IN MARINE AEROSOLS. *Journal of Aerosol Science*, **2001**, 32, 303-304 | 4.3 | |
| 66 | DETERMINATION OF PHASE TRANSFER PARAMETERS OF THE ATMOSPHERIC TRACE GASES NITRIC ACID, OZONE, AND DINITROGENPENTOXIDE AT LIQUID SURFACES. *Journal of Aerosol Science*, **2001**, 32, 301-302 | 4.3 | |
| 65 | LASER-BASED STUDIES OF OH/RO2 REACTIONS FOR CLOUD AND AEROSOL CHEMISTRY. *Journal of Aerosol Science*, **2001**, 32, 305-306 | 4.3 | 1 |
| 64 | CAPRAM2.3: A Chemical Aqueous Phase Radical Mechanism for Tropospheric Chemistry. *Journal of Atmospheric Chemistry*, **2000**, 36, 231-284 | 3.2 | 173 |
| 63 | Reply to Comment on A chemical aqueous phase radical mechanism for tropospheric chemistry by R. Sander and P. Crutzen *Chemosphere*, **2000**, 41, 633-634 | 8.4 | 1 |
| 62 | Organic acids in atmospheric particles: Results from different field campaigns in Europe. *Journal of Aerosol Science*, **2000**, 31, 238-239 | 4.3 | 3 |

| | | | |
|---|---|---|---|
| 61 | Chemical and structural characterisation of size segregated wintertime aerosol from two urban and a rural sampling site in NW-saxony (Germany). *Journal of Aerosol Science*, **2000**, 31, 378-379 | 4.3 | |
| 60 | A new analytical approach for size-resolved speciation of organic compounds in atmospheric aerosol particles: Methods and first results. *Journal of Geophysical Research*, **2000**, 105, 4513-4527 | | 115 |
| 59 | On the formation of benzene oxide/oxepin in the gas-phase reaction of OH radicals with benzene. *Chemical Physics Letters*, **1999**, 314, 435-442 | 2.5 | 37 |
| 58 | Main particulate matter components in Saxony (Germany): Trends and sampling aspects. *Environmental Science and Pollution Research*, **1999**, 6, 89-94 | 5.1 | 12 |
| 57 | Laboratory and modelling studies of tropospheric multiphase conversions involving some C1 and C2 peroxyl radicals. *Physics and Chemistry of the Earth*, **1999**, 24, 287-290 | | 11 |
| 56 | A laser flash photolysis kinetic study of reactions of the $Cl_2^-$ radical anion with oxygenated hydrocarbons in aqueous solution. *International Journal of Chemical Kinetics*, **1999**, 31, 169-181 | 1.4 | 28 |
| 55 | The Carbonate Radical ($HCO_3^-$/$CO_3^-$) as a Reactive Intermediate in Water Chemistry: Kinetics and Modelling. *Clean - Soil, Air, Water*, **1999**, 27, 214-222 | | 48 |
| 54 | Chemical composition and mass closure of the size-segregated atmospheric aerosol in Falkenberg during LACE. *Journal of Aerosol Science*, **1999**, 30, S913-S914 | 4.3 | 4 |
| 53 | A chemical aqueous phase radical mechanism for tropospheric chemistry. *Chemosphere*, **1999**, 38, 1223-1232 | 1.4 | 31 |
| 52 | Free radical chemical conversions within tropospheric aqueous aerosols. *Journal of Aerosol Science*, **1998**, 29, S989-S990 | 4.3 | |
| 51 | Modelling of radiation quantities and photolysis frequencies in the aqueous phase in the troposphere. *Atmospheric Environment*, **1997**, 31, 3137-3150 | 5.3 | 29 |
| 50 | A laser flash photolysis study of the decay of Cl-Atoms and $Cl_2^-$ radical anions in aqueous solution at 298 K. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1997**, 101, 1909-1913 | | 15 |
| 49 | Lidar calibration experiments. *Applied Physics B: Lasers and Optics*, **1997**, 64, 355-361 | 1.9 | 18 |
| 48 | A spectroscopic study of small organic peroxyl radicals ($RO_2$) in aqueous solution. *Journal of Molecular Structure*, **1997**, 408-409, 539-542 | 3.4 | 7 |
| 47 | Laser-spectroscopic laboratory studies of atmospheric aqueous phase free radical chemistry. *Analytical and Bioanalytical Chemistry*, **1996**, 355, 343-4 | 4.4 | 11 |
| 46 | Time-Resolved Radio Frequency Conductivity (TRRFC) Studies of Charge-Carrier Dynamics in Aqueous Semiconductor Suspensions. *The Journal of Physical Chemistry*, **1995**, 99, 16641-16645 | | 11 |
| 45 | Laboratory studies of atmospheric aqueous-phase free-radical chemistry: kinetic and spectroscopic studies of reactions of $NO_3$ and $SO_4^-$ radicals with aromatic compounds. *Faraday Discussions*, **1995**, 100, 129 | 3.6 | 39 |
| 44 | Time-resolved UV/VIS diode array absorption spectroscopy of $SO_x^-$ (x=3, 4, 5) radical anions in aqueous solution. *Journal of Molecular Structure*, **1995**, 348, 183-186 | 3.4 | 98 |

| | | | |
|---|---|---|---|
| 43 | Rate constants for the reactions of the NO3 radical with HCOOH/HCOO and CH3COOH/CH3COO in aqueous solution between 278 and 328 K. *Journal of Atmospheric Chemistry*, **1994**, 18, 359-378 | 3.2 | 26 |
| 42 | Reactivity trends in reactions of the nitrate radical (NO3) with inorganic and organic cloudwater constituents. *Geochimica Et Cosmochimica Acta*, **1994**, 58, 3239-3244 | 5.5 | 17 |
| 41 | Time-resolved microwave conductivity. Part 2. Quantum-sized TiO2 and the effect of adsorbates and light intensity on charge-carrier dynamics. *Journal of the Chemical Society, Faraday Transactions*, **1994**, 90, 3323-3330 | | 152 |
| 40 | Time-resolved microwave conductivity. Part 1. TiO2 photoreactivity and size quantization. *Journal of the Chemical Society, Faraday Transactions*, **1994**, 90, 3315-3322 | | 222 |
| 39 | A diode-pumped Nd: YAG lidar for airborne cloud measurements. *Optics and Laser Technology*, **1993**, 25, 283-287 | 4.2 | 18 |
| 38 | Laser-Based Studies of Reactions of the Nitrate Radical in Aqueous Solution. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1992**, 96, 470-477 | | 57 |
| 37 | The Absorption Spectrum of the Nitrate (NO3) Radical in Aqueous Solution. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1991**, 95, 598-604 | | 14 |
| 36 | A laser-spectrometric study of the NO3 radical in the aqueous phase. *Freseniusf Journal of Analytical Chemistry*, **1991**, 340, 638-640 | | 1 |
| 35 | Absolute OH quantum yields in the laser photolysis of nitrate, nitrite and dissolved H2O2 at 308 and 351 nm in the temperature range 278–353 K. *Journal of Atmospheric Chemistry*, **1990**, 10, 411-425 | 3.2 | 195 |
| 34 | Zur Ermittlung und Verwendung von Fehlerspektren gemessener Partikelgrößenverteilungen. *Chemie-Ingenieur-Technik*, **1982**, 54, 404-405 | 0.8 | |
| 33 | Ein allgemeines Verfahren zur Verbesserung des Meßfehlers in der Partikelgrößenanalyse. *Chemie-Ingenieur-Technik*, **1979**, 51, 1140-1141 | 0.8 | 1 |
| 32 | Airborne lidar aerosol measurements during the ASSESS II mission. *Review of Scientific Instruments*, **1978**, 49, 974 | 1.7 | 3 |
| 31 | DFVLR mobile lidar system. *Review of Scientific Instruments*, **1977**, 48, 247-251 | 1.7 | 1 |
| 30 | Seasonal and diurnal variations of particulate nitrate and organic matter in the Central European atmospheric aerosol | | 2 |
| 29 | General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) – Integrating aerosol research from nano to global scales | | 11 |
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| 3 | In-cloud sulfate addition to single particles resolved with sulfur isotope analysis during HCCT-2010 | | 1 |
| 2 | Acidity and the multiphase chemistry of atmospheric aqueous particles and clouds | | 4 |
| 1 | Sea Ice Microbiota in the Antarctic Peninsula Modulates Cloud-Relevant Sea Spray Aerosol Production. *Frontiers in Marine Science*,9, | 4.5 | 1 |