

Hartmut Herrmann

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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 | The formation, properties and impact of secondary organic aerosol: current and emerging issues. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 5155-5236 | 6.8 | 2861 |
| 437 | A European aerosol phenomenology B: Physical and chemical characteristics of particulate matter from 60 rural, urban, and kerbside sites across Europe. <i>Atmospheric Environment</i> , 2010 , 44, 1308-1320 | 5.3 | 563 |
| 436 | Tropospheric aqueous-phase chemistry: kinetics, mechanisms, and its coupling to a changing gas phase. <i>Chemical Reviews</i> , 2015 , 115, 4259-334 | 68.1 | 326 |
| 435 | Atmospheric stability of levoglucosan: a detailed laboratory and modeling study. <i>Environmental Science & Technology</i> , 2010 , 44, 694-9 | 10.3 | 295 |
| 434 | Aerosol-chamber study of the β -pinene/O ₃ reaction: influence of particle acidity on aerosol yields and products. <i>Atmospheric Environment</i> , 2004 , 38, 761-773 | 5.3 | 284 |
| 433 | Production of extremely low volatile organic compounds from biogenic emissions: Measured yields and atmospheric implications. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 7123-8 | 11.5 | 260 |
| 432 | Evidence for the existence of organosulfates from beta-pinene ozonolysis in ambient secondary organic aerosol. <i>Environmental Science & Technology</i> , 2007 , 41, 6678-83 | 10.3 | 247 |
| 431 | Kinetics of aqueous phase reactions relevant for atmospheric chemistry. <i>Chemical Reviews</i> , 2003 , 103, 4691-716 | 68.1 | 234 |
| 430 | Determination of levoglucosan in biomass combustion aerosol by high-performance anion-exchange chromatography with pulsed amperometric detection. <i>Atmospheric Environment</i> , 2006 , 40, 299-311 | 5.3 | 233 |
| 429 | General overview: European Integrated project on Aerosol Cloud Climate and Air Quality interactions (EUCAARI) Integrating aerosol research from nano to global scales. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 13061-13143 | 6.8 | 231 |
| 428 | Source characterization of biomass burning particles: The combustion of selected European conifers, African hardwood, savanna grass, and German and Indonesian peat. <i>Journal of Geophysical Research</i> , 2007 , 112, | | 231 |
| 427 | Enhanced role of transition metal ion catalysis during in-cloud oxidation of SO ₂ . <i>Science</i> , 2013 , 340, 727-303 | 30.3 | 224 |
| 426 | Time-resolved microwave conductivity. Part 1. NO ₂ photoreactivity and size quantization. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994 , 90, 3315-3322 | | 222 |
| 425 | Atmospheric chemistry and environmental impact of the use of amines in carbon capture and storage (CCS). <i>Chemical Society Reviews</i> , 2012 , 41, 6684-704 | 58.5 | 214 |
| 424 | Nitrate radicals and biogenic volatile organic compounds: oxidation, mechanisms, and organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 2103-2162 | 6.8 | 206 |
| 423 | Absolute OH quantum yields in the laser photolysis of nitrate, nitrite and dissolved H ₂ O ₂ at 308 and 351 nm in the temperature range 278-353 K. <i>Journal of Atmospheric Chemistry</i> , 1990 , 10, 411-425 | 3.2 | 195 |
| 422 | Methyl-nitrocatechols: atmospheric tracer compounds for biomass burning secondary organic aerosols. <i>Environmental Science & Technology</i> , 2010 , 44, 8453-9 | 10.3 | 194 |

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| 4 ²¹ | Temperature-dependent rate constants for hydroxyl radical reactions with organic compounds in aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , 2003 , 5, 1811-1824 | 3.6 | 186 |
| 4 ²⁰ | Tropospheric aqueous-phase free-radical chemistry: radical sources, spectra, reaction kinetics and prediction tools. <i>ChemPhysChem</i> , 2010 , 11, 3796-822 | 3.2 | 178 |
| 4 ¹⁹ | CAPRAM2.3: A Chemical Aqueous Phase Radical Mechanism for Tropospheric Chemistry. <i>Journal of Atmospheric Chemistry</i> , 2000 , 36, 231-284 | 3.2 | 173 |
| 4 ¹⁸ | The Acidity of Atmospheric Particles and Clouds. <i>Atmospheric Chemistry and Physics</i> , 2020 , 20, 4809-4888 | 6.8 | 165 |
| 4 ¹⁷ | Quantum teleportation from a telecom-wavelength photon to a solid-state quantum memory. <i>Nature Photonics</i> , 2014 , 8, 775-778 | 33.9 | 158 |
| 4 ¹⁶ | CAPRAM 2.4 (MODAC mechanism): An extended and condensed tropospheric aqueous phase mechanism and its application. <i>Journal of Geophysical Research</i> , 2003 , 108, | | 152 |
| 4 ¹⁵ | Time-resolved microwave conductivity. Part 2. Quantum-sized TiO ₂ and the effect of adsorbates and light intensity on charge-carrier dynamics. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1994 , 90, 3323-3330 | | 152 |
| 4 ¹⁴ | Rapid autoxidation forms highly oxidized RO ₂ radicals in the atmosphere. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 14596-600 | 16.4 | 147 |
| 4 ¹³ | Aerosol optical properties and related chemical apportionment at Xinken in Pearl River Delta of China. <i>Atmospheric Environment</i> , 2008 , 42, 6351-6372 | 5.3 | 145 |
| 4 ¹² | Terpenylic acid and related compounds from the oxidation of alpha-pinene: implications for new particle formation and growth above forests. <i>Environmental Science & Technology</i> , 2009 , 43, 6976-82 | 10.3 | 142 |
| 4 ¹¹ | Towards a more detailed description of tropospheric aqueous phase organic chemistry: CAPRAM 3.0. <i>Atmospheric Environment</i> , 2005 , 39, 4351-4363 | 5.3 | 141 |
| 4 ¹⁰ | Laboratory chamber studies on the formation of organosulfates from reactive uptake of monoterpene oxides. <i>Physical Chemistry Chemical Physics</i> , 2009 , 11, 7985-97 | 3.6 | 139 |
| 4 ⁰⁹ | On the photolysis of simple anions and neutral molecules as sources of O ⁻ /OH, SO(x) ⁻ and Cl in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , 2007 , 9, 3935-64 | 3.6 | 139 |
| 4 ⁰⁸ | 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. <i>Atmospheric Environment</i> , 2008 , 42, 6373-6397 | 5.3 | 136 |
| 4 ⁰⁷ | Terpenylic acid and related compounds: precursors for dimers in secondary organic aerosol from the ozonolysis of β - and ϵ -pinene. <i>Atmospheric Chemistry and Physics</i> , 2010 , 10, 9383-9392 | 6.8 | 129 |
| 4 ⁰⁶ | The formation of organic sulfate esters in the limonene ozonolysis secondary organic aerosol (SOA) under acidic conditions. <i>Atmospheric Environment</i> , 2007 , 41, 5571-5583 | 5.3 | 126 |
| 4 ⁰⁵ | Hydroxyl radical-induced formation of highly oxidized organic compounds. <i>Nature Communications</i> , 2016 , 7, 13677 | 17.4 | 124 |
| 4 ⁰⁴ | A highly resolved anion-exchange chromatographic method for determination of saccharidic tracers for biomass combustion and primary bio-particles in atmospheric aerosol. <i>Atmospheric Environment</i> , 2009 , 43, 1367-1371 | 5.3 | 120 |

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| 403 | Seasonal variation of aliphatic amines in marine sub-micrometer particles at the Cape Verde islands. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 9587-9597 | 6.8 | 120 |
| 402 | Ubiquity of organic nitrates from nighttime chemistry in the European submicron aerosol. <i>Geophysical Research Letters</i> , 2016 , 43, 7735-7744 | 4.9 | 119 |
| 401 | A new analytical approach for size-resolved speciation of organic compounds in atmospheric aerosol particles: Methods and first results. <i>Journal of Geophysical Research</i> , 2000 , 105, 4513-4527 | | 115 |
| 400 | An advanced modeling study on the impacts and atmospheric implications of multiphase dimethyl sulfide chemistry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 11776-11781 | 11.5 | 113 |
| 399 | Highly Oxidized Multifunctional Organic Compounds Observed in Tropospheric Particles: A Field and Laboratory Study. <i>Environmental Science & Technology</i> , 2015 , 49, 7754-61 | 10.3 | 110 |
| 398 | 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. <i>Journal of Geophysical Research</i> , 2006 , 111, | | 108 |
| 397 | Schmücke hill cap cloud and valley stations aerosol characterisation during FEBUKO (II): Organic compounds. <i>Atmospheric Environment</i> , 2005 , 39, 4305-4320 | 5.3 | 103 |
| 396 | Aerosol hygroscopicity derived from size-segregated chemical composition and its parameterization in the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 2525-2539 | 6.8 | 101 |
| 395 | Mineral dust photochemistry induces nucleation events in the presence of SO ₂ . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 20842-7 | 11.5 | 101 |
| 394 | Contributions of nitrated aromatic compounds to the light absorption of water-soluble and particulate brown carbon in different atmospheric environments in Germany and China. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 1653-1672 | 6.8 | 100 |
| 393 | Time-resolved UV/VIS diode array absorption spectroscopy of SO _x (x=3, 4, 5) radical anions in aqueous solution. <i>Journal of Molecular Structure</i> , 1995 , 348, 183-186 | 3.4 | 98 |
| 392 | Formation of secondary organic particle phase compounds from isoprene gas-phase oxidation products: An aerosol chamber and field study. <i>Atmospheric Environment</i> , 2006 , 40, 2501-2509 | 5.3 | 97 |
| 391 | A four-year size-segregated characterization study of particles PM ₁₀ , PM _{2.5} and PM ₁ depending on air mass origin at Melpitz. <i>Atmospheric Environment</i> , 2010 , 44, 164-173 | 5.3 | 95 |
| 390 | ACTRIS ACSM intercomparison [Part 2: Intercomparison of ME-2 organic source apportionment results from 15 individual, co-located aerosol mass spectrometers. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 2555-2576 | 4 | 92 |
| 389 | The Ocean's Vital Skin: Toward an Integrated Understanding of the Sea Surface Microlayer. <i>Frontiers in Marine Science</i> , 2017 , 4, | 4.5 | 90 |
| 388 | Radical-driven carbonyl-to-acid conversion and acid degradation in tropospheric aqueous systems studied by CAPRAM. <i>Atmospheric Environment</i> , 2010 , 44, 5415-5422 | 5.3 | 89 |
| 387 | Accretion Product Formation from Self- and Cross-Reactions of RO Radicals in the Atmosphere. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 3820-3824 | 16.4 | 88 |
| 386 | The Arctic Cloud Puzzle: Using ACLOUD/PASCAL Multiplatform Observations to Unravel the Role of Clouds and Aerosol Particles in Arctic Amplification. <i>Bulletin of the American Meteorological Society</i> , 2019 , 100, 841-871 | 6.1 | 85 |

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| 385 | H ₂ SO ₄ formation from the gas-phase reaction of stabilized Criegee Intermediates with SO ₂ : Influence of water vapour content and temperature. <i>Atmospheric Environment</i> , 2014 , 49, 603-612 | 5.3 | 81 |
| 384 | Seasonal characteristics of tropical marine boundary layer air measured at the Cape Verde Atmospheric Observatory. <i>Journal of Atmospheric Chemistry</i> , 2010 , 67, 87-140 | 3.2 | 81 |
| 383 | Size distribution and source analysis of ionic compositions of aerosols in polluted periods at Xinken in Pearl River Delta (PRD) of China. <i>Atmospheric Environment</i> , 2008 , 42, 6284-6295 | 5.3 | 81 |
| 382 | Competing atmospheric reactions of CH ₂ OO with SO ₂ and water vapour. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 19130-6 | 3.6 | 79 |
| 381 | 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. <i>Atmospheric Measurement Techniques</i> , 2015 , 8, 5063-5087 | 4 | 79 |
| 380 | Sulfate radical-initiated formation of isoprene-derived organosulfates in atmospheric aerosols. <i>Faraday Discussions</i> , 2013 , 165, 237-59 | 3.6 | 78 |
| 379 | Gas-Phase Ozonolysis of Selected Olefins: The Yield of Stabilized Criegee Intermediate and the Reactivity toward SO ₂ . <i>Journal of Physical Chemistry Letters</i> , 2012 , 3, 2892-2896 | 6.4 | 78 |
| 378 | Relating particle hygroscopicity and CCN activity to chemical composition during the HCCT-2010 field campaign. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 7983-7996 | 6.8 | 78 |
| 377 | Alternative pathway for atmospheric particles growth. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 6840-4 | 11.5 | 78 |
| 376 | Reactivity of stabilized Criegee intermediates (sCIs) from isoprene and monoterpene ozonolysis toward SO ₂ and organic acids. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 12143-12153 | 6.8 | 76 |
| 375 | Unravelling New Processes at Interfaces: Photochemical Isoprene Production at the Sea Surface. <i>Environmental Science & Technology</i> , 2015 , 49, 13199-205 | 10.3 | 75 |
| 374 | Long-term size-segregated characterization of PM ₁₀ , PM _{2.5} , and PM ₁ at the IFT research station Melpitz downwind of Leipzig (Germany) using high and low-volume filter samplers. <i>Atmospheric Environment</i> , 2004 , 38, 5333-5347 | 5.3 | 74 |
| 373 | Hygroscopic behavior of atmospherically relevant water-soluble carboxylic salts and their influence on the water uptake of ammonium sulfate. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 12617-12626 | 6.8 | 72 |
| 372 | Gas-Phase Ozonolysis of Cycloalkenes: Formation of Highly Oxidized RO ₂ Radicals and Their Reactions with NO, NO ₂ , SO ₂ , and Other RO ₂ Radicals. <i>Journal of Physical Chemistry A</i> , 2015 , 119, 10336-48 | 2.8 | 71 |
| 371 | Size segregated water uptake of the urban submicrometer aerosol in Beijing. <i>Atmospheric Environment</i> , 2009 , 43, 1578-1589 | 5.3 | 71 |
| 370 | A case of extreme particulate matter concentrations over Central Europe caused by dust emitted over the southern Ukraine. <i>Atmospheric Chemistry and Physics</i> , 2008 , 8, 997-1016 | 6.8 | 71 |
| 369 | Biogenic contributions to the chemical composition of airborne particles in a coniferous forest in Germany. <i>Atmospheric Environment</i> , 2006 , 40, 103-115 | 5.3 | 71 |
| 368 | A new method to determine the mixing state of light absorbing carbonaceous using the measured aerosol optical properties and number size distributions. <i>Atmospheric Chemistry and Physics</i> , 2012 , 12, 2381-2397 | 6.8 | 70 |

- 367 Hygroscopic properties and extinction of aerosol particles at ambient relative humidity in South-Eastern China. *Atmospheric Environment*, **2008**, 42, 6321-6334 5.3 70
- 366 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
- 365 Effect of varying experimental conditions on the viscosity of α -pinene derived secondary organic material. *Atmospheric Chemistry and Physics*, **2016**, 16, 6027-6040 6.8 68
- 364 Variability of submicron aerosol observed at a rural site in Beijing in the summer of 2006. *Journal of Geophysical Research*, **2009**, 114, 6807-6817 6.8 68
- 363 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
- 362 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
- 361 Photosensitized production of functionalized and unsaturated organic compounds at the air-sea interface. *Scientific Reports*, **2015**, 5, 12741 4.9 66
- 360 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
- 359 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
- 358 Long-term size-segregated particle (PM₁₀, PM_{2.5}, 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
- 357 Photocatalytic de-pollution in the Leopold II tunnel in Brussels: NO_x abatement results. *Building and Environment*, **2015**, 84, 125-133 6.5 59
- 356 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
- 355 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
- 354 Atmospheric outflow of PM_{2.5} saccharides from megacity Shanghai to East China Sea: Impact of biological and biomass burning sources. *Atmospheric Environment*, **2016**, 143, 1-14 5.3 58
- 353 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
- 352 Reactive Halogens in the Marine Boundary Layer (RHAMBLe): the tropical North Atlantic experiments. *Atmospheric Chemistry and Physics*, **2010**, 10, 1031-1055 6.8 58
- 351 Size- and time-resolved chemical particle characterization during CAREBeijing-2006: Different pollution regimes and diurnal profiles. *Journal of Geophysical Research*, **2009**, 114, 6807-6817 5.3 57
- 350 Particle characterization at the Cape Verde atmospheric observatory during the 2007 RHAMBLe intensive. *Atmospheric Chemistry and Physics*, **2010**, 10, 2709-2721 6.8 57

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| 349 | Laser-Based Studies of Reactions of the Nitrate Radical in Aqueous Solution. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , 1992 , 96, 470-477 | | 57 |
| 348 | Long-term chemical characterization of tropical and marine aerosols at the Cape Verde Atmospheric Observatory (CVAO) from 2007 to 2011. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 8883-8904 | 6.8 | 56 |
| 347 | Laboratory studies on secondary organic aerosol formation from terpenes. <i>Faraday Discussions</i> , 2005 , 130, 279-94; discussion 363-86, 519-24 | 3.6 | 56 |
| 346 | The Essential Role For Laboratory Studies in Atmospheric Chemistry. <i>Environmental Science & Technology</i> , 2017 , 51, 2519-2528 | 10.3 | 55 |
| 345 | First Quantification of Imidazoles in Ambient Aerosol Particles: Potential Photosensitizers, Brown Carbon Constituents, and Hazardous Components. <i>Environmental Science & Technology</i> , 2016 , 50, 1166-73 | 10.3 | 55 |
| 344 | Biogenic carbonyl compounds within and above a coniferous forest in Germany. <i>Atmospheric Environment</i> , 2006 , 40, 81-91 | 5.3 | 55 |
| 343 | Size distribution of particle-phase sugar and nitrophenol tracers during severe urban haze episodes in Shanghai. <i>Atmospheric Environment</i> , 2016 , 145, 115-127 | 5.3 | 54 |
| 342 | Atmospheric aqueous phase radical chemistry of the isoprene oxidation products methacrolein, methyl vinyl ketone, methacrylic acid and acrylic acid—kinetics and product studies. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 6257-72 | 3.6 | 54 |
| 341 | Kinetic measurements of the reactivity of hydrogen peroxide and ozone towards small atmospherically relevant aldehydes, ketones and organic acids in aqueous solutions. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 4503-4514 | 6.8 | 53 |
| 340 | SPACCIM: A parcel model with detailed microphysics and complex multiphase chemistry. <i>Atmospheric Environment</i> , 2005 , 39, 4375-4388 | 5.3 | 53 |
| 339 | Modeling the impact of iron-carboxylate photochemistry on radical budget and carboxylate degradation in cloud droplets and particles. <i>Environmental Science & Technology</i> , 2014 , 48, 5652-9 | 10.3 | 52 |
| 338 | Performance of an Aerodyne Aerosol Mass Spectrometer (AMS) during Intensive Campaigns in China in the Summer of 2006. <i>Aerosol Science and Technology</i> , 2009 , 43, 189-204 | 3.4 | 51 |
| 337 | Composition and properties of atmospheric particles in the eastern Atlantic and impacts on gas phase uptake rates. <i>Atmospheric Chemistry and Physics</i> , 2009 , 9, 9299-9314 | 6.8 | 51 |
| 336 | FEBUKO and MODMEP: Field measurements and modelling of aerosol and cloud multiphase processes. <i>Atmospheric Environment</i> , 2005 , 39, 4169-4183 | 5.3 | 50 |
| 335 | Organosulfates in Ambient Aerosol: State of Knowledge and Future Research Directions on Formation, Abundance, Fate, and Importance. <i>Environmental Science & Technology</i> , 2020 , 54, 3767-3782 | 10.3 | 49 |
| 334 | Monoterpene SOA [Contribution of first-generation oxidation products to formation and chemical composition. <i>Atmospheric Environment</i> , 2016 , 130, 136-144 | 5.3 | 49 |
| 333 | Laboratory kinetic and mechanistic studies on the OH-initiated oxidation of acetone in aqueous solution. <i>Journal of Physical Chemistry A</i> , 2012 , 116, 6317-26 | 2.8 | 49 |
| 332 | Variation of CCN activity during new particle formation events in the North China Plain. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 8593-8607 | 6.8 | 48 |

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| 331 | The Carbonate Radical ($\text{HCO}_3^-/\text{CO}_3^{2-}$) as a Reactive Intermediate in Water Chemistry: Kinetics and Modelling. <i>Clean - Soil, Air, Water</i> , 1999 , 27, 214-222 | | 48 |
| 330 | Accretion Product Formation from Ozonolysis and OH Radical Reaction of β -Pinene: Mechanistic Insight and the Influence of Isoprene and Ethylene. <i>Environmental Science & Technology</i> , 2018 , 52, 11069-11077 | 10.3 | 48 |
| 329 | On the abundance and source contributions of dicarboxylic acids in size-resolved aerosol particles at continental sites in central Europe. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 3913-3928 | 6.8 | 47 |
| 328 | Modelling multiphase chemistry in deliquescent aerosols and clouds using CAPRAM3.0i. <i>Journal of Atmospheric Chemistry</i> , 2013 , 70, 221-256 | 3.2 | 45 |
| 327 | Atmospheric peroxides in a polluted subtropical environment: seasonal variation, sources and sinks, and importance of heterogeneous processes. <i>Environmental Science & Technology</i> , 2014 , 48, 1443-50 | 10.3 | 44 |
| 326 | Aerosol size-resolved trace metal composition in remote northern tropical Atlantic marine environment: case study Cape Verde islands. <i>Atmospheric Chemistry and Physics</i> , 2013 , 13, 4801-4814 | 6.8 | 44 |
| 325 | Determination of functionalised carboxylic acids in atmospheric particles and cloud water using capillary electrophoresis/mass spectrometry. <i>Journal of Chromatography A</i> , 2007 , 1171, 112-23 | 4.5 | 44 |
| 324 | Size distributions of polycyclic aromatic hydrocarbons in urban atmosphere: sorption mechanism and source contributions to respiratory deposition. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 2971-2983 | 6.8 | 43 |
| 323 | Perspectives on the Future of Ice Nucleation Research: Research Needs and Unanswered Questions Identified from Two International Workshops. <i>Atmosphere</i> , 2017 , 8, 138 | 2.7 | 43 |
| 322 | Cloud water composition during HCCT-2010: Scavenging efficiencies, solute concentrations, and droplet size dependence of inorganic ions and dissolved organic carbon. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 3185-3205 | 6.8 | 42 |
| 321 | Influence of seasons, air mass origin and day of the week on size-segregated chemical composition of aerosol particles at a kerbside. <i>Atmospheric Environment</i> , 2009 , 43, 2456-2463 | 5.3 | 42 |
| 320 | Compound specific stable isotope analysis (CSIA) to characterize transformation mechanisms of β -hexachlorocyclohexane. <i>Journal of Hazardous Materials</i> , 2014 , 280, 750-7 | 12.8 | 40 |
| 319 | Chemical characterization of dissolved organic compounds from coastal sea surface microlayers (Baltic Sea, Germany). <i>Environmental Science & Technology</i> , 2012 , 46, 10455-62 | 10.3 | 40 |
| 318 | Diurnal variations of ambient particulate wood burning emissions and their contribution to the concentration of Polycyclic Aromatic Hydrocarbons (PAHs) in Seiffen, Germany. <i>Atmospheric Chemistry and Physics</i> , 2011 , 11, 12697-12713 | 6.8 | 40 |
| 317 | 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. <i>Journal of Chromatography A</i> , 2007 , 1143, 168-75 | 4.5 | 40 |
| 316 | Chemical mass balance of 300 $^{\circ}\text{C}$ non-volatile particles at the tropospheric research site Melpitz, Germany. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 10145-10162 | 6.8 | 39 |
| 315 | Diaterebic acid acetate and diaterpenylic acid acetate: atmospheric tracers for secondary organic aerosol formation from 1,8-cineole oxidation. <i>Environmental Science & Technology</i> , 2009 , 43, 280-5 | 10.3 | 39 |
| 314 | 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). <i>Journal of Chromatography A</i> , 2003 , 1018, 105-15 | 4.5 | 39 |

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| 313 | 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. <i>Faraday Discussions</i> , 1995 , 100, 129 | 3.6 | 39 |
| 312 | 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. <i>Atmospheric Chemistry and Physics</i> , 2016 , 16, 505-524 | 6.8 | 38 |
| 311 | Chemical composition and droplet size distribution of cloud at the summit of Mount Tai, China. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 9885-9896 | 6.8 | 38 |
| 310 | Size-segregated particulate chemical composition in Xinken, Pearl River Delta, China: OC/EC and organic compounds. <i>Atmospheric Environment</i> , 2008 , 42, 6296-6309 | 5.3 | 38 |
| 309 | On the formation of benzene oxide/oxepin in the gas-phase reaction of OH radicals with benzene. <i>Chemical Physics Letters</i> , 1999 , 314, 435-442 | 2.5 | 37 |
| 308 | Size-segregated characterization of PM ₁₀ at the EMEP site Melpitz (Germany) using a five-stage impactor: a six year study. <i>Journal of Atmospheric Chemistry</i> , 2012 , 69, 127-157 | 3.2 | 36 |
| 307 | Halogen production from aqueous tropospheric particles. <i>Chemosphere</i> , 2003 , 52, 485-502 | 8.4 | 36 |
| 306 | Construction of a photocatalytic de-polluting field site in the Leopold II tunnel in Brussels. <i>Journal of Environmental Management</i> , 2015 , 155, 136-44 | 7.9 | 35 |
| 305 | Aerosol characterisation at the FEBUKO upwind station Goldlauter (II): Detailed organic chemical characterisation. <i>Atmospheric Environment</i> , 2005 , 39, 4219-4231 | 5.3 | 35 |
| 304 | A mechanistic study of the oxidation of phenol by OH/NO ₂ /NO ₃ in aqueous solution. <i>Physical Chemistry Chemical Physics</i> , 2002 , 4, 3669-3675 | 3.6 | 35 |
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