# Ulrike Lohmann

## List of Publications by Year in Descending Order



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| 378 papers | 26,891 citations | 77 h-index | 156 g-index |
| 472 ext. papers | 30,454 ext. citations | 6.1 avg, IF | 7.04 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 378 | Unveiling atmospheric transport and mixing mechanisms of ice-nucleating particles over the Alps. *Atmospheric Chemistry and Physics*, **2022**, 22, 3111-3130 | 6.8 | 0 |
| 377 | Assessing the potential for simplification in global climate model cloud microphysics. *Atmospheric Chemistry and Physics*, **2022**, 22, 4737-4762 | 6.8 | 1 |
| 376 | Sensitivity of precipitation formation to secondary ice production in winter orographic mixed-phase clouds. *Atmospheric Chemistry and Physics*, **2021**, 21, 15115-15134 | 6.8 | 1 |
| 375 | Continuous secondary-ice production initiated by updrafts through the melting layer in mountainous regions. *Atmospheric Chemistry and Physics*, **2021**, 21, 3855-3870 | 6.8 | 9 |
| 374 | How frequent is natural cloud seeding from ice cloud layers ( < 35 °C) over Switzerland?. *Atmospheric Chemistry and Physics*, **2021**, 21, 5195-5216 | 6.8 | 3 |
| 373 | Influence of low-level blocking and turbulence on the microphysics of a mixed-phase cloud in an inner-Alpine valley. *Atmospheric Chemistry and Physics*, **2021**, 21, 5151-5172 | 6.8 | 7 |
| 372 | Microphysical investigation of the seeder and feeder region of an Alpine mixed-phase cloud. *Atmospheric Chemistry and Physics*, **2021**, 21, 6681-6706 | 6.8 | 7 |
| 371 | On the drivers of droplet variability in alpine mixed-phase clouds. *Atmospheric Chemistry and Physics*, **2021**, 21, 10993-11012 | 6.8 | 3 |
| 370 | Vertical grid refinement for stratocumulus clouds in the radiation scheme of the global climate model ECHAM6.3-HAM2.3-P3. *Geoscientific Model Development*, **2021**, 14, 5413-5434 | 6.3 | 0 |
| 369 | Reducing the aerosol forcing uncertainty using observational constraints on warm rain processes. *Science Advances*, **2020**, 6, eaaz6433 | 14.3 | 18 |
| 368 | Evaluation of aerosol and cloud properties in three climate models using MODIS observations and its corresponding COSP simulator, as well as their application in aerosol–cloud interactions. *Atmospheric Chemistry and Physics*, **2020**, 20, 1607-1626 | 6.8 | 5 |
| 367 | Using a holographic imager on a tethered balloon system for microphysical observations of boundary layer clouds. *Atmospheric Measurement Techniques*, **2020**, 13, 925-939 | 4 | 12 |
| 366 | Coupling aerosols to (cirrus) clouds in the global EMAC-MADE3 aerosol–climate model. *Geoscientific Model Development*, **2020**, 13, 1635-1661 | 6.3 | 9 |
| 365 | Aging induced changes in ice nucleation activity of combustion aerosol as determined by near edge X-ray absorption fine structure (NEXAFS) spectroscopy. *Environmental Sciences: Processes and Impacts*, **2020**, 22, 895-907 | 4.3 | 9 |
| 364 | To what extent can cirrus cloud seeding counteract global warming?. *Environmental Research Letters*, **2020**, 15, 054002 | 6.2 | 9 |
| 363 | When Does the Saharan Air Layer Impede the Intensification of Tropical Cyclones?. *Journal of Climate*, **2020**, 33, 10609-10626 | 4.4 | 2 |
| 362 | The Impact of Warm and Moist Airmass Perturbations on Arctic Mixed-Phase Stratocumulus. *Journal of Climate*, **2020**, 33, 9615-9628 | 4.4 | 2 |

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| 361 | Climate and air quality impacts due to mitigation of non-methane near-term climate forcers. *Atmospheric Chemistry and Physics*, **2020**, 20, 9641-9663 | 6.8 | 11 |
| 360 | Bounding Global Aerosol Radiative Forcing of Climate Change. *Reviews of Geophysics*, **2020**, 58, e2019RG000660 | 23.3 | 65 |
| 359 | Future warming exacerbated by aged-soot effect on cloud formation. *Nature Geoscience*, **2020**, 13, 674-680 | 18.3 | 13 |
| 358 | Developing a Cloud Scheme With Prognostic Cloud Fraction and Two Moment Microphysics for ECHAM-HAM. *Journal of Advances in Modeling Earth Systems*, **2020**, 12, e2019MS001824 | 7.1 | 6 |
| 357 | The Impact of Cloud Processing on the Ice Nucleation Abilities of Soot Particles at Cirrus Temperatures. *Journal of Geophysical Research D: Atmospheres*, **2020**, 125, e2019JD030922 | 4.4 | 29 |
| 356 | The global aerosol-climate model ECHAM6.3-HAM2.3 – Part 2: Cloud evaluation, aerosol radiative forcing and climate sensitivity **2019**, | | 2 |
| 355 | Elucidating ice formation pathways in the aerosol–climate model ECHAM6-HAM2. *Atmospheric Chemistry and Physics*, **2019**, 19, 9061-9080 | 6.8 | 9 |
| 354 | Response of Arctic mixed-phase clouds to aerosol perturbations under different surface forcings. *Atmospheric Chemistry and Physics*, **2019**, 19, 9847-9864 | 6.8 | 13 |
| 353 | Ice nucleation properties of K-feldspar polymorphs and plagioclase feldspars **2019**, | | 3 |
| 352 | Impact of Isolated Atmospheric Aging processes on the Cloud Condensation Nuclei-activation of Soot Particles **2019**, | | 3 |
| 351 | 100 Years of Progress in Cloud Physics, Aerosols, and Aerosol Chemistry Research. *Meteorological Monographs*, **2019**, 59, 11.1-11.72 | 5.7 | 16 |
| 350 | Estimation of Atlantic Tropical Cyclone Rainfall Frequency in the United States. *Journal of Applied Meteorology and Climatology*, **2019**, 58, 1853-1866 | 2.7 | 17 |
| 349 | The Impact of Mesoscale Gravity Waves on Homogeneous Ice Nucleation in Cirrus Clouds. *Geophysical Research Letters*, **2019**, 46, 5556-5565 | 4.9 | 8 |
| 348 | Anthropogenic aerosol forcing – insights from multiple estimates from aerosol-climate models with reduced complexity. *Atmospheric Chemistry and Physics*, **2019**, 19, 6821-6841 | 6.8 | 22 |
| 347 | The global aerosol–climate model ECHAM6.3–HAM2.3 – Part 1: Aerosol evaluation. *Geoscientific Model Development*, **2019**, 12, 1643-1677 | 6.3 | 57 |
| 346 | Pore condensation and freezing is responsible for ice formation below water saturation for porous particles. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 8184-8189 | 11.5 | 72 |
| 345 | Heterogeneous ice nucleation on dust particles sourced from nine deserts worldwide – Part 2: Deposition nucleation and condensation freezing. *Atmospheric Chemistry and Physics*, **2019**, 19, 1059-1076 | 6.8 | 15 |
| 344 | Evaluation of global simulations of aerosol particle and cloud condensation nuclei number, with implications for cloud droplet formation. *Atmospheric Chemistry and Physics*, **2019**, 19, 8591-8617 | 6.8 | 31 |

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| 343 | Ice nucleation properties of K-feldspar polymorphs and plagioclase feldspars. *Atmospheric Chemistry and Physics*, **2019**, 19, 10901-10918 | 6.8 | 7 |
| 342 | The global aerosol–climate model ECHAM6.3–HAM2.3 – Part 2: Cloud evaluation, aerosol radiative forcing, and climate sensitivity. *Geoscientific Model Development*, **2019**, 12, 3609-3639 | 6.3 | 24 |
| 341 | Impact of isolated atmospheric aging processes on the cloud condensation nuclei activation of soot particles. *Atmospheric Chemistry and Physics*, **2019**, 19, 15545-15567 | 6.8 | 4 |
| 340 | Cloud Ice Processes Enhance Spatial Scales of Organization in Arctic Stratocumulus. *Geophysical Research Letters*, **2019**, 46, 14109-14117 | 4.9 | 4 |
| 339 | Unanticipated Side Effects of Stratospheric Albedo Modification Proposals Due to Aerosol Composition and Phase. *Scientific Reports*, **2019**, 9, 18825 | 4.9 | 3 |
| 338 | Effects of land use and anthropogenic aerosol emissions in the Roman Empire. *Climate of the Past*, **2019**, 15, 1885-1911 | 3.9 | 5 |
| 337 | Precipitation Susceptibility and Aerosol Buffering of Warm- and Mixed-Phase Orographic Clouds in Idealized Simulations. *Journals of the Atmospheric Sciences*, **2018**, 75, 1173-1194 | 2.1 | 6 |
| 336 | Background Free-Tropospheric Ice Nucleating Particle Concentrations at Mixed-Phase Cloud Conditions. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 10,506 | 4.4 | 15 |
| 335 | SALSA2.0: The sectional aerosol module of the aerosol-chemistry-climate model ECHAM6.3.0-HAM2.3-MOZ1.0 **2018**, | | 3 |
| 334 | Impact of surface and near-surface processes on ice crystal concentrations measured at mountain-top research stations. *Atmospheric Chemistry and Physics*, **2018**, 18, 8909-8927 | 6.8 | 16 |
| 333 | Marine and Terrestrial Organic Ice-Nucleating Particles in Pristine Marine to Continentally Influenced Northeast Atlantic Air Masses. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 6196-6212 | 4.4 | 72 |
| 332 | Cirrus Cloud Properties as Seen by the CALIPSO Satellite and ECHAM-HAM Global Climate Model. *Journal of Climate*, **2018**, 31, 1983-2003 | 4.4 | 18 |
| 331 | Prognostic parameterization of cloud ice with a single category in the aerosol-climate model ECHAM(v6.3.0)-HAM(v2.3). *Geoscientific Model Development*, **2018**, 11, 1557-1576 | 6.3 | 11 |
| 330 | How important are future marine and shipping aerosol emissions in a warming Arctic summer and autumn?. *Atmospheric Chemistry and Physics*, **2018**, 18, 10521-10555 | 6.8 | 19 |
| 329 | The chemistry–climate model ECHAM6.3-HAM2.3-MOZ1.0. *Geoscientific Model Development*, **2018**, 11, 1695-1723 | 6.3 | 33 |
| 328 | The importance of mixed-phase clouds for climate sensitivity in the global aerosol-climate model ECHAM6-HAM2 **2018**, | | 2 |
| 327 | Additional global climate cooling by clouds due to ice crystal complexity. *Atmospheric Chemistry and Physics*, **2018**, 18, 15767-15781 | 6.8 | 16 |
| 326 | The importance of mixed-phase and ice clouds for climate sensitivity in the global aerosol–climate model ECHAM6-HAM2. *Atmospheric Chemistry and Physics*, **2018**, 18, 8807-8828 | 6.8 | 35 |

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| 325 | A Modeling Study on the Sensitivities of Atmospheric Charge Separation According to the Relative Diffusional Growth Rate Theory to Nonspherical Hydrometeors and Cloud Microphysics. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 12,236-12,252 | 4.4 | 2 |
| 324 | SALSA2.0: The sectional aerosol module of the aerosol–chemistry–climate model ECHAM6.3.0-HAM2.3-MOZ1.0. *Geoscientific Model Development*, **2018**, 11, 3833-3863 | 6.3 | 27 |
| 323 | Ice nucleation abilities of soot particles determined with the Horizontal Ice Nucleation Chamber. *Atmospheric Chemistry and Physics*, **2018**, 18, 13363-13392 | 6.8 | 44 |
| 322 | A model intercomparison of CCN-limited tenuous clouds in the high Arctic. *Atmospheric Chemistry and Physics*, **2018**, 18, 11041-11071 | 6.8 | 38 |
| 321 | Implementing microscopic charcoal particles into a global aerosol–climate model. *Atmospheric Chemistry and Physics*, **2018**, 18, 11813-11829 | 6.8 | 6 |
| 320 | Global relevance of marine organic aerosol as ice nucleating particles. *Atmospheric Chemistry and Physics*, **2018**, 18, 11423-11445 | 6.8 | 21 |
| 319 | Why does knowledge of past aerosol forcing matter for future climate change?. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 5021-5023 | 4.4 | 9 |
| 318 | Anthropogenic Aerosol Influences on Mixed-Phase Clouds. *Current Climate Change Reports*, **2017**, 3, 32-44 | 9 | 32 |
| 317 | Constraining the instantaneous aerosol influence on cloud albedo. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 4899-4904 | 11.5 | 57 |
| 316 | The Horizontal Ice Nucleation Chamber HINC: INP measurements at Conditions Relevant for Mixed-Phase Clouds at the High Altitude Research Station Jungfraujoch **2017**, | | 1 |
| 315 | HoloGondel: in situ cloud observations on a cable car in the Swiss Alps using a holographic imager. *Atmospheric Measurement Techniques*, **2017**, 10, 459-476 | 4 | 19 |
| 314 | A cirrus cloud climate dial?. *Science*, **2017**, 357, 248-249 | 33.3 | 44 |
| 313 | Cirrus Clouds. *Meteorological Monographs*, **2017**, 58, 2.1-2.26 | 5.7 | 57 |
| 312 | Formation and Development of Orographic Mixed-Phase Clouds. *Journals of the Atmospheric Sciences*, **2017**, 74, 3703-3724 | 2.1 | 8 |
| 311 | Mixed-Phase Clouds: Progress and Challenges. *Meteorological Monographs*, **2017**, 58, 5.1-5.50 | 5.7 | 100 |
| 310 | Cloud response and feedback processes in stratiform mixed-phase clouds perturbed by ship exhaust. *Geophysical Research Letters*, **2017**, 44, 1964 | 4.9 | 24 |
| 309 | The Horizontal Ice Nucleation Chamber (HINC): INP measurements at conditions relevant for mixed-phase clouds at the High Altitude Research Station Jungfraujoch. *Atmospheric Chemistry and Physics*, **2017**, 17, 15199-15224 | 6.8 | 26 |
| 308 | Unveiling aerosol–cloud interactions – Part 2: Minimising the effects of aerosol swelling and wet scavenging in ECHAM6-HAM2 for comparison to satellite data. *Atmospheric Chemistry and Physics*, **2017**, 17, 13165-13185 | 6.8 | 13 |

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| 307 | Classical nucleation theory of immersion freezing: sensitivity of contact angle schemes to thermodynamic and kinetic parameters. *Atmospheric Chemistry and Physics*, **2017**, 17, 1713-1739 | 6.8 | 21 |
| 306 | Is increasing ice crystal sedimentation velocity in geoengineering simulations a good proxy for cirrus cloud seeding?. *Atmospheric Chemistry and Physics*, **2017**, 17, 4871-4885 | 6.8 | 12 |
| 305 | Effect of anthropogenic aerosol emissions on precipitation in warm conveyor belts in the western North Pacific in winter – a model study with ECHAM6-HAM. *Atmospheric Chemistry and Physics*, **2017**, 17, 6243-6255 | 6.8 | 8 |
| 304 | Impact of Saharan dust on North Atlantic marine stratocumulus clouds: importance of the semidirect effect. *Atmospheric Chemistry and Physics*, **2017**, 17, 6305-6322 | 6.8 | 21 |
| 303 | A comparison of two chemistry and aerosol schemes on the regional scale and the resulting impact on radiative properties and liquid- and ice-phase aerosol–cloud interactions. *Atmospheric Chemistry and Physics*, **2017**, 17, 8651-8680 | 6.8 | 11 |
| 302 | Understanding the drivers of marine liquid-water cloud occurrence and properties with global observations using neural networks. *Atmospheric Chemistry and Physics*, **2017**, 17, 9535-9546 | 6.8 | 32 |
| 301 | Why cirrus cloud seeding cannot substantially cool the planet. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4877-4893 | 4.4 | 37 |
| 300 | Heterogeneous ice nucleation on dust particles sourced from nine deserts worldwide – Part 1: Immersion freezing. *Atmospheric Chemistry and Physics*, **2016**, 16, 15075-15095 | 6.8 | 68 |
| 299 | On the characteristics of aerosol indirect effect based on dynamic regimes in global climate models. *Atmospheric Chemistry and Physics*, **2016**, 16, 2765-2783 | 6.8 | 52 |
| 298 | Ice nucleating particles in the Saharan Air Layer. *Atmospheric Chemistry and Physics*, **2016**, 16, 9067-9087 | 6.8 | 74 |
| 297 | Comparing contact and immersion freezing from continuous flow diffusion chambers. *Atmospheric Chemistry and Physics*, **2016**, 16, 8899-8914 | 6.8 | 19 |
| 296 | Ice nucleation efficiency of AgI: review and new insights. *Atmospheric Chemistry and Physics*, **2016**, 16, 8915-8937 | 6.8 | 62 |
| 295 | Persistence of orographic mixed-phase clouds. *Geophysical Research Letters*, **2016**, 43, 10,512-10,519 | 4.9 | 23 |
| 294 | A Blue-Sky Approach to Understanding Cloud Formation. *Bulletin of the American Meteorological Society*, **2016**, 97, 1797-1802 | 6.1 | 12 |
| 293 | Tropical Temperature and Precipitation Responses to Large Volcanic Eruptions: Observations and AMIP5 Simulations. *Journal of Climate*, **2016**, 29, 1325-1338 | 4.4 | 2 |
| 292 | Disentangling greenhouse warming and aerosol cooling to reveal Earth's climate sensitivity. *Nature Geoscience*, **2016**, 9, 286-289 | 18.3 | 69 |
| 291 | Challenges in constraining anthropogenic aerosol effects on cloud radiative forcing using present-day spatiotemporal variability. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5804-11 | 11.5 | 97 |
| 290 | An Introduction to Clouds: From the Microscale to Climate **2016**, | | 73 |

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| 289 | The SPectrometer for Ice Nuclei (SPIN): an instrument to investigate ice nucleation. *Atmospheric Measurement Techniques*, **2016**, 9, 2781-2795 | 4 | 44 |
| 288 | Effect of anthropogenic aerosol emissions on precipitation in warm conveyor belts in the western North Pacific in winter a model study with ECHAM6-HAM **2016**, | | 1 |
| 287 | Classical nucleation theory of immersion freezing: Sensitivity of contact angle schemes to thermodynamic and kinetic parameters **2016**, | | 2 |
| 286 | Constraining Precipitation Susceptibility of Warm-, Ice-, and Mixed-Phase Clouds with Microphysical Equations. *Journals of the Atmospheric Sciences*, **2016**, 73, 5003-5023 | 2.1 | 16 |
| 285 | Comparing contact and immersion freezing from continuous flow diffusion chambers **2016**, | | 1 |
| 284 | Is increasing ice crystal sedimentation velocity in geoengineering simulations a good proxy for cirrus cloud seeding? **2016**, | | 1 |
| 283 | Immersion mode ice nucleation measurements with the new Portable Immersion Mode Cooling chAmber (PIMCA). *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4713-4733 | 4.4 | 13 |
| 282 | The resolution dependence of cloud effects and ship-induced aerosol-cloud interactions in marine stratocumulus. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4810-4829 | 4.4 | 11 |
| 281 | Evaluation of the aerosol vertical distribution in global aerosol models through comparison against CALIOP measurements: AeroCom phase II results. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 7254-7283 | 4.4 | 62 |
| 280 | Ice Nucleating Particle Measurements at 241 K during Winter Months at 3580 m MSL in the Swiss Alps. *Journals of the Atmospheric Sciences*, **2016**, 73, 2203-2228 | 2.1 | 45 |
| 279 | Chemical characterization of freshly emitted particulate matter from aircraft exhaust using single particle mass spectrometry. *Atmospheric Environment*, **2016**, 134, 181-197 | 5.3 | 26 |
| 278 | AEROSOLS \| Aerosol Cloud Interactions and Their Radiative Forcing **2015**, 17-22 | | 9 |
| 277 | Effective density and mass mobility exponents of particulate matter in aircraft turbine exhaust: Dependence on engine thrust and particle size. *Journal of Aerosol Science*, **2015**, 88, 135-147 | 4.3 | 29 |
| 276 | Organic Emissions from a Wood Stove and a Pellet Stove Before and After Simulated Atmospheric Aging. *Aerosol Science and Technology*, **2015**, 49, 1037-1050 | 3.4 | 26 |
| 275 | Classical nucleation theory of homogeneous freezing of water: thermodynamic and kinetic parameters. *Physical Chemistry Chemical Physics*, **2015**, 17, 5514-37 | 3.6 | 105 |
| 274 | Did the 2011 Nabro eruption affect the optical properties of ice clouds?. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 9500-9513 | 4.4 | 4 |
| 273 | The influence of absorbed solar radiation by Saharan dust on hurricane genesis. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 1902-1917 | 4.4 | 18 |
| 272 | Black carbon surface oxidation and organic composition of beech-wood soot aerosols. *Atmospheric Chemistry and Physics*, **2015**, 15, 11885-11907 | 6.8 | 31 |

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| 271 | Particulate matter, air quality and climate: lessons learned and future needs. *Atmospheric Chemistry and Physics*, **2015**, 15, 8217-8299 | 6.8 | 462 |
| 270 | Prognostic precipitation with three liquid water classes in the ECHAM5–HAM GCM. *Atmospheric Chemistry and Physics*, **2015**, 15, 8717-8738 | 6.8 | 20 |
| 269 | A synthesis of cloud condensation nuclei counter (CCNC) measurements within the EUCAARI network. *Atmospheric Chemistry and Physics*, **2015**, 15, 12211-12229 | 6.8 | 35 |
| 268 | Sensitivity estimations for cloud droplet formation in the vicinity of the high-alpine research station Jungfraujoch (3580 m a.s.l.). *Atmospheric Chemistry and Physics*, **2015**, 15, 10309-10323 | 6.8 | 12 |
| 267 | Comparison of measured and calculated collision efficiencies at low temperatures. *Atmospheric Chemistry and Physics*, **2015**, 15, 13759-13776 | 6.8 | 8 |
| 266 | Real-case simulations of aerosol–cloud interactions in ship tracks over the Bay of Biscay. *Atmospheric Chemistry and Physics*, **2015**, 15, 2185-2201 | 6.8 | 12 |
| 265 | Microphysical processing of aerosol particles in orographic clouds. *Atmospheric Chemistry and Physics*, **2015**, 15, 9217-9236 | 6.8 | 5 |
| 264 | Peak-fitting and integration imprecision in the Aerodyne aerosol mass spectrometer: effects of mass accuracy on location-constrained fits. *Atmospheric Measurement Techniques*, **2015**, 8, 4615-4636 | 4 | 14 |
| 263 | Peak fitting and integration uncertainties for the Aerodyne Aerosol Mass Spectrometer **2015**, | | 2 |
| 262 | Intercomparison of the cloud water phase among global climate models. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 3372-3400 | 4.4 | 100 |
| 261 | Exploring the Mechanisms of Ice Nucleation on Kaolinite: From Deposition Nucleation to Condensation Freezing. *Journals of the Atmospheric Sciences*, **2014**, 71, 16-36 | 2.1 | 43 |
| 260 | Online coupled regional meteorology chemistry models in Europe: current status and prospects. *Atmospheric Chemistry and Physics*, **2014**, 14, 317-398 | 6.8 | 223 |
| 259 | Impact of the representation of marine stratocumulus clouds on the anthropogenic aerosol effect. *Atmospheric Chemistry and Physics*, **2014**, 14, 11997-12022 | 6.8 | 40 |
| 258 | Mass spectrometry of refractory black carbon particles from six sources: carbon-cluster and oxygenated ions. *Atmospheric Chemistry and Physics*, **2014**, 14, 2591-2603 | 6.8 | 51 |
| 257 | Single-particle characterization of the high-Arctic summertime aerosol. *Atmospheric Chemistry and Physics*, **2014**, 14, 7409-7430 | 6.8 | 19 |
| 256 | Technical Note: On the use of nudging for aerosol–climate model intercomparison studies. *Atmospheric Chemistry and Physics*, **2014**, 14, 8631-8645 | 6.8 | 112 |
| 255 | Dust ice nuclei effects on cirrus clouds. *Atmospheric Chemistry and Physics*, **2014**, 14, 3027-3046 | 6.8 | 55 |
| 254 | A Case Study in Modeling Low-Lying Inversions and Stratocumulus Cloud Cover in the Bay of Biscay. *Weather and Forecasting*, **2014**, 29, 289-304 | 2.1 | 8 |

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| 253 | Hygroscopic properties of fresh and aged wood burning particles. *Journal of Aerosol Science*, **2013**, 56, 15-29 | 4.3 | 66 |
| 252 | Fire in the Air: Biomass Burning Impacts in a Changing Climate. *Critical Reviews in Environmental Science and Technology*, **2013**, 43, 40-83 | 11.1 | 96 |
| 251 | Bounding the role of black carbon in the climate system: A scientific assessment. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 5380-5552 | 4.4 | 3330 |
| 250 | Energy budget constraints on climate response. *Nature Geoscience*, **2013**, 6, 415-416 | 18.3 | 228 |
| 249 | Inter-comparison of the phase partitioning of cloud water among global climate models **2013**, | | 1 |
| 248 | Heterogeneous ice nucleation of mineral dust particles exposed to ozone **2013**, | | 1 |
| 247 | HOLIMO II: a digital holographic instrument for ground-based in situ observations of microphysical properties of mixed-phase clouds. *Atmospheric Measurement Techniques*, **2013**, 6, 2975-2987 | 4 | 39 |
| 246 | Performance of a Triclass Parameterization for the Collision□Coalescence Process in Shallow Clouds. *Journals of the Atmospheric Sciences*, **2013**, 70, 1744-1767 | 2.1 | 9 |
| 245 | Modelling the impact of fungal spore ice nuclei on clouds and precipitation. *Environmental Research Letters*, **2013**, 8, 014029 | 6.2 | 46 |
| 244 | CGILS: Results from the first phase of an international project to understand the physical mechanisms of low cloud feedbacks in single column models. *Journal of Advances in Modeling Earth Systems*, **2013**, 5, 826-842 | 7.1 | 115 |
| 243 | Atmospheric component of the MPI-M Earth System Model: ECHAM6. *Journal of Advances in Modeling Earth Systems*, **2013**, 5, 146-172 | 7.1 | 835 |
| 242 | Contact freezing: a review of experimental studies. *Atmospheric Chemistry and Physics*, **2013**, 13, 9745-9769 | 6.8 | 77 |
| 241 | Effect of photochemical ageing on the ice nucleation properties of diesel and wood burning particles. *Atmospheric Chemistry and Physics*, **2013**, 13, 761-772 | 6.8 | 41 |
| 240 | Laboratory studies of immersion and deposition mode ice nucleation of ozone aged mineral dust particles. *Atmospheric Chemistry and Physics*, **2013**, 13, 9097-9118 | 6.8 | 63 |
| 239 | Microphysical and radiative changes in cirrus clouds by geoengineering the stratosphere. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 4533-4548 | 4.4 | 23 |
| 238 | Evaluating the suitability of the SWAN/COSMO-2 model system to simulate short-crested surface waves for a narrow lake with complex bathymetry. *Meteorologische Zeitschrift*, **2013**, 22, 257-272 | 3.1 | 6 |
| 237 | The present-day decadal solar cycle modulation of Earth's radiative forcing via charged H2SO4/H2O aerosol nucleation. *Geophysical Research Letters*, **2012**, 39, n/a-n/a | 4.9 | 21 |
| 236 | Climate impacts of ice nucleation. *Journal of Geophysical Research*, **2012**, 117, | | 101 |

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| 235 | Bacteria in the ECHAM5-HAM global climate model. *Atmospheric Chemistry and Physics*, **2012**, 12, 8645-8661 | 6.8 | 60 |
| 234 | Uncertainty associated with convective wet removal of entrained aerosols in a global climate model. *Atmospheric Chemistry and Physics*, **2012**, 12, 10725-10748 | 6.8 | 37 |
| 233 | The global aerosol-climate model ECHAM-HAM, version 2: sensitivity to improvements in process representations. *Atmospheric Chemistry and Physics*, **2012**, 12, 8911-8949 | 6.8 | 255 |
| 232 | Time dependence of immersion freezing: an experimental study on size selected kaolinite particles. *Atmospheric Chemistry and Physics*, **2012**, 12, 9893-9907 | 6.8 | 82 |
| 231 | Effects of stratospheric sulfate aerosol geo-engineering on cirrus clouds. *Geophysical Research Letters*, **2012**, 39, n/a-n/a | 4.9 | 56 |
| 230 | Implementation and evaluation of aerosol and cloud microphysics in a regional climate model. *Journal of Geophysical Research*, **2011**, 116, | | 40 |
| 229 | Effects of ice nuclei on cirrus clouds in a global climate model. *Journal of Geophysical Research*, **2011**, 116, | | 74 |
| 228 | Simulation of dimming and brightening in Europe from 1958 to 2001 using a regional climate model. *Journal of Geophysical Research*, **2011**, 116, | | 26 |
| 227 | Contact freezing experiments of kaolinite particles with cloud droplets. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a | | 39 |
| 226 | 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 |
| 225 | Ice nuclei properties within a Saharan dust event at the Jungfraujoch in the Swiss Alps. *Atmospheric Chemistry and Physics*, **2011**, 11, 4725-4738 | 6.8 | 104 |
| 224 | Soot microphysical effects on liquid clouds, a multi-model investigation. *Atmospheric Chemistry and Physics*, **2011**, 11, 1051-1064 | 6.8 | 51 |
| 223 | Cloud condensation nuclei closure study on summer arctic aerosol. *Atmospheric Chemistry and Physics*, **2011**, 11, 11335-11350 | 6.8 | 65 |
| 222 | Intercomparison of aerosol climatologies for use in a regional climate model over Europe. *Geophysical Research Letters*, **2011**, 38, | 4.9 | 22 |
| 221 | Experimental Study of Collection Efficiencies between Submicron Aerosols and Cloud Droplets. *Journals of the Atmospheric Sciences*, **2011**, 68, 1853-1864 | 2.1 | 33 |
| 220 | Improvement and Implementation of a Parameterization for Shallow Cumulus in the Global Climate Model ECHAM5-HAM. *Journals of the Atmospheric Sciences*, **2011**, 68, 515-532 | 2.1 | 7 |
| 219 | Statistical Analysis of Aerosol Effects on Simulated Mixed-Phase Clouds and Precipitation in the Alps. *Journals of the Atmospheric Sciences*, **2011**, 68, 1474-1492 | 2.1 | 26 |
| 218 | Modeling of the WegenerBergeronFindeisen process Implications for aerosol indirect effects. *Environmental Research Letters*, **2010**, 5, 019801 | 6.2 | 5 |

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| 217 | Experimental study on the ice nucleation ability of size-selected kaolinite particles in the immersion mode. *Journal of Geophysical Research*, **2010**, 115, | | 131 |
| 216 | Influence of a future climate on the microphysical and optical properties of orographic cirrus clouds in ECHAM5. *Journal of Geophysical Research*, **2010**, 115, | | 8 |
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