Athanasios Nenes

List of Publications by Year in Descending Order

413 papers	23,974 citations	81 h-index	143 g-index
579 ext. papers	27,684 ext. citations	6.7 avg, IF	7 L-index

#	Paper	IF	Citations
413	Secondary ice production processes in wintertime alpine mixed-phase clouds. *Atmospheric Chemistry and Physics*, **2022**, 22, 1965-1988	6.8	0
412	Multiphase processes in the EC-Earth model and their relevance to the atmospheric oxalate, sulfate, and iron cycles. *Geoscientific Model Development*, **2022**, 15, 3079-3120	6.3	2
411	Water soluble reactive phosphate (SRP) in atmospheric particles over East Mediterranean: The importance of dust and biomass burning events.. *Science of the Total Environment*, **2022**, 154263	10.2	
410	ISORROPIA-Lite: A Comprehensive Atmospheric Aerosol Thermodynamics Module for Earth System Models. *Tellus, Series B: Chemical and Physical Meteorology*, **2022**, 74, 1-23	3.3	1
409	Impact of COVID-19 Lockdown on Oxidative Potential of Particulate Matter: Case of Athens (Greece). *Toxics*, **2022**, 10, 280	4.7	1
408	Machine Learning Uncovers Aerosol Size Information From Chemistry and Meteorology to Quantify Potential Cloud-Forming Particles. *Geophysical Research Letters*, **2021**, 48,	4.9	1
407	Bioaerosols and dust are the dominant sources of organic P in atmospheric particles. *Npj Climate and Atmospheric Science*, **2021**, 4,	8	1
406	Molecular-scale description of interfacial mass transfer in phase-separated aqueous secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2021**, 21, 17687-17714	6.8	
405	Nighttime chemistry of biomass burning emissions in urban areas: A dual mobile chamber study. *Atmospheric Chemistry and Physics*, **2021**, 21, 15337-15349	6.8	1
404	Confronting Uncertainties of Simulated Air Pollution Concentrations during Persistent Cold Air Pool Events in the Salt Lake Valley, Utah. *Environmental Science & Technology*, **2021**, 55, 15072-15081	10.3	1
403	Aerosol acidity and liquid water content regulate the dry deposition of inorganic reactive nitrogen. *Atmospheric Chemistry and Physics*, **2021**, 21, 6023-6033	6.8	10
402	Challenging and Improving the Simulation of Mid-Level Mixed-Phase Clouds Over the High-Latitude Southern Ocean. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD033490	4.4	5
401	Determining the Role of Acidity, Fate and Formation of IEPOX-Derived SOA in CMAQ. *Atmosphere*, **2021**, 12, 707	2.7	2
400	Historical Changes in Seasonal Aerosol Acidity in the Po Valley (Italy) as Inferred from Fog Water and Aerosol Measurements. *Environmental Science & Technology*, **2021**, 55, 7307-7315	10.3	4
399	Ice multiplication from ice–ice collisions in the high Arctic: sensitivity to ice habit, rimed fraction, ice type and uncertainties in the numerical description of the process. *Atmospheric Chemistry and Physics*, **2021**, 21, 9741-9760	6.8	1
398	Developing a UV climatology for public health purposes using satellite data. *Environment International*, **2021**, 146, 106177	12.9	3
397	Secondary ice production in summer clouds over the Antarctic coast: an underappreciated process in atmospheric models. *Atmospheric Chemistry and Physics*, **2021**, 21, 755-771	6.8	12

396	Size-resolved aerosol pH over Europe during summer. *Atmospheric Chemistry and Physics*, **2021**, 21, 799-818	6.8	12
395	High-resolution hybrid inversion of IASI ammonia columns to constrain US ammonia emissions using the CMAQ adjoint model. *Atmospheric Chemistry and Physics*, **2021**, 21, 2067-2082	6.8	5
394	An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intEractionS) project: aerosol–cloud–radiation interactions in the southeast Atlantic basin. *Atmospheric Chemistry and Physics*, **2021**, 21, 1507-1563	6.8	37
393	Satellite-Based Personal UV Dose Estimation. *Atmosphere*, **2021**, 12, 268	2.7	1
392	The influence of chemical composition, aerosol acidity, and metal dissolution on the oxidative potential of fine particulate matter and redox potential of the lung lining fluid. *Environment International*, **2021**, 148, 106343	12.9	15
391	On the drivers of droplet variability in alpine mixed-phase clouds. *Atmospheric Chemistry and Physics*, **2021**, 21, 10993-11012	6.8	3
390	Changing atmospheric acidity as a modulator of nutrient deposition and ocean biogeochemistry. *Science Advances*, **2021**, 7,	14.3	11
389	Acidity and the multiphase chemistry of atmospheric aqueous particles and clouds. *Atmospheric Chemistry and Physics*, **2021**, 21,	6.8	14
388	Annual exposure to polycyclic aromatic hydrocarbons in urban environments linked to wintertime wood-burning episodes. *Atmospheric Chemistry and Physics*, **2021**, 21, 17865-17883	6.8	8
387	Fine Particle Iron in Soils and Road Dust Is Modulated by Coal-Fired Power Plant Sulfur. *Environmental Science & Technology*, **2020**, 54, 7088-7096	10.3	6
386	Biomass burning aerosol as a modulator of the droplet number in the southeast Atlantic region. *Atmospheric Chemistry and Physics*, **2020**, 20, 3029-3040	6.8	21
385	Constraining the Twomey effect from satellite observations: Issues and perspectives **2020**,		1
384	The Acidity of Atmospheric Particles and Clouds. *Atmospheric Chemistry and Physics*, **2020**, 20, 4809-4888	6.8	165
383	The impact of secondary ice production on Arctic stratocumulus. *Atmospheric Chemistry and Physics*, **2020**, 20, 1301-1316	6.8	17
382	Aerosol pH and liquid water content determine when particulate matter is sensitive to ammonia and nitrate availability. *Atmospheric Chemistry and Physics*, **2020**, 20, 3249-3258	6.8	39
381	Aerosol absorption over the Aegean Sea under northern summer winds. *Atmospheric Environment*, **2020**, 231, 117533	5.3	
380	Using flow cytometry and light-induced fluorescence to characterize the variability and characteristics of bioaerosols in springtime in Metro Atlanta, Georgia. *Atmospheric Chemistry and Physics*, **2020**, 20, 1817-1838	6.8	4
379	Drivers of cloud droplet number variability in the summertime in the southeastern United States. *Atmospheric Chemistry and Physics*, **2020**, 20, 12163-12176	6.8	3

378	Heterogeneous nucleation of water vapor on different types of black carbon particles. *Atmospheric Chemistry and Physics*, **2020**, 20, 13579-13589	6.8	8
377	Constraining the Twomey effect from satellite observations: issues and perspectives. *Atmospheric Chemistry and Physics*, **2020**, 20, 15079-15099	6.8	14
376	A multiphase CMAQ version 5.0 adjoint. *Geoscientific Model Development*, **2020**, 13, 2925-2944	6.3	7
375	On the Importance of Organic Mass for Global Cloud Condensation Nuclei Distributions. *Springer Proceedings in Complexity*, **2020**, 395-400	0.3	
374	Rapid dark aging of biomass burning as an overlooked source of oxidized organic aerosol. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 33028-33033	11.5	21
373	Hybrid multiple-site mass closure and source apportionment of PM and aerosol acidity at major cities in the Po Valley. *Science of the Total Environment*, **2020**, 704, 135287	10.2	18
372	Fine particle pH and sensitivity to NH₃ and HNO₃ over summertime South Korea during KORUS-AQ **2020**,		1
371	Greater Contribution From Agricultural Sources to Future Reactive Nitrogen Deposition in the United States. *Earth's Future*, **2020**, 8, e2019EF001453	7.9	1
370	Using High-Temporal-Resolution Ambient Data to Investigate Gas-Particle Partitioning of Ammonium over Different Seasons. *Environmental Science & Technology*, **2020**, 54, 9834-9843	10.3	2
369	Effects of Water-soluble Organic Carbon on Aerosol pH **2019**,		1
368	Retrieval of ice-nucleating particle concentrations from lidar observations and comparison with UAV in situ measurements. *Atmospheric Chemistry and Physics*, **2019**, 19, 11315-11342	6.8	31
367	Detailed Analysis of Estimated pH, Activity Coefficients, and Ion Concentrations between the Three Aerosol Thermodynamic Models. *Environmental Science & Technology*, **2019**, 53, 8903-8913	10.3	12
366	Cloud condensation nuclei activity of six pollenkitts and the influence of their surface activity. *Atmospheric Chemistry and Physics*, **2019**, 19, 4741-4761	6.8	13
365	Regional new particle formation as modulators of cloud condensation nuclei and cloud droplet number in the eastern Mediterranean. *Atmospheric Chemistry and Physics*, **2019**, 19, 6185-6203	6.8	15
364	Effects of Atmospheric Processing on the Oxidative Potential of Biomass Burning Organic Aerosols. *Environmental Science & Technology*, **2019**, 53, 6747-6756	10.3	30
363	Simultaneous Detection of Alkylamines in the Surface Ocean and Atmosphere of the Antarctic Sympagic Environment. *ACS Earth and Space Chemistry*, **2019**, 3, 854-862	3.2	23
362	Pyrogenic iron: The missing link to high iron solubility in aerosols. *Science Advances*, **2019**, 5, eaau7671	14.3	88
361	Yearlong variability of oxidative potential of particulate matter in an urban Mediterranean environment. *Atmospheric Environment*, **2019**, 206, 183-196	5.3	21

360	High-Resolution Data Sets Unravel the Effects of Sources and Meteorological Conditions on Nitrate and Its Gas-Particle Partitioning. *Environmental Science & Technology*, **2019**, 53, 3048-3057	10.3	24
359	Aerosols in an arid environment: The role of aerosol water content, particulate acidity, precursors, and relative humidity on secondary inorganic aerosols. *Science of the Total Environment*, **2019**, 646, 564-572	10.2	28
358	Dimensionality Reduction and Network Inference for Climate Data Using ℍMAPS: Application to the CESM Large Ensemble Sea Surface Temperature. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 1479-1515	7.1	9
357	Atmospheric evolution of molecular-weight-separated brown carbon from biomass burning. *Atmospheric Chemistry and Physics*, **2019**, 19, 7319-7334	6.8	57
356	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
355	Thermodynamic Modeling Suggests Declines in Water Uptake and Acidity of Inorganic Aerosols in Beijing Winter Haze Events during 2014/2015 2018/2019. *Environmental Science and Technology Letters*, **2019**, 6, 752-760	11	35
354	Effects of water-soluble organic carbon on aerosol pH. *Atmospheric Chemistry and Physics*, **2019**, 19, 14665814620	6.8	29
353	The Acidity of Atmospheric Particles and Clouds **2019**,		8
352	Effects of regional and local atmospheric dynamics on the aerosol and CCN load over Athens. *Atmospheric Environment*, **2019**, 197, 53-65	5.3	5
351	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
350	Modeling biogenic secondary organic aerosol (BSOA) formation from monoterpene reactions with NO3: A case study of the SOAS campaign using CMAQ. *Atmospheric Environment*, **2018**, 184, 146-155	5.3	9
349	Advancing climate science with knowledge-discovery through data mining. *Npj Climate and Atmospheric Science*, **2018**, 1,	8	7
348	A new method to retrieve the real part of the equivalent refractive index of atmospheric aerosols. *Journal of Aerosol Science*, **2018**, 117, 54-62	4.3	11
347	Hygroscopic properties of atmospheric particles emitted during wintertime biomass burning episodes in Athens. *Atmospheric Environment*, **2018**, 178, 66-72	5.3	8
346	Synthesis of the Southeast Atmosphere Studies: Investigating Fundamental Atmospheric Chemistry Questions. *Bulletin of the American Meteorological Society*, **2018**, 99, 547-567	6.1	50
345	Initiation of secondary ice production in clouds. *Atmospheric Chemistry and Physics*, **2018**, 18, 1593-1610	6.8	37
344	A multi-year data set on aerosol-cloud-precipitation-meteorology interactions for marine stratocumulus clouds. *Scientific Data*, **2018**, 5, 180026	8.2	18
343	A comprehensive approach for the simulation of the Urban Heat Island effect with the WRF/SLUCM modeling system: The case of Athens (Greece). *Atmospheric Research*, **2018**, 201, 86-101	5.4	30

342	Solar Irradiance Prediction over the Aegean Sea: Shortwave Parameterization Schemes and Aerosol Radiation Feedback. *Springer Proceedings in Complexity*, **2018**, 141-145	0.3	
341	Understanding nitrate formation in a world with less sulfate **2018**,		2
340	Linked Response of Aerosol Acidity and Ammonia to SO and NO Emissions Reductions in the United States. *Environmental Science & Technology*, **2018**, 52, 9861-9873	10.3	28
339	Studying the impact of radioactive charging on the microphysical evolution and transport of radioactive aerosols with the TOMAS-RC v1 framework. *Journal of Environmental Radioactivity*, **2018**, 192, 150-159	2.4	0
338	Regional Similarities and NO-related Increases in Biogenic Secondary Organic Aerosol in Summertime Southeastern U.S. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 10620-10636	4.4	12
337	Characterization of aerosol composition, aerosol acidity, and organic acid partitioning at an agriculturally intensive rural southeastern US site. *Atmospheric Chemistry and Physics*, **2018**, 18, 11471-11491	6.8	55
336	Lidar Ice nuclei estimates and how they relate with airborne in-situ measurements. *EPJ Web of Conferences*, **2018**, 176, 05018	0.3	
335	High Aerosol Acidity Despite Declining Atmospheric Sulfate Concentrations: Lessons from Observations and Implications for Models. *Springer Proceedings in Complexity*, **2018**, 171-176	0.3	
334	Aerosols in the Mediterranean Region and Their Role in Cloud Formation. *Springer Proceedings in Complexity*, **2018**, 551-557	0.3	1
333	The effect of secondary ice production parameterization on the simulation of a cold frontal rainband. *Atmospheric Chemistry and Physics*, **2018**, 18, 16461-16480	6.8	15
332	Implementation of a comprehensive ice crystal formation parameterization for cirrus and mixed-phase clouds in the EMAC model (based on MESSy 2.53). *Geoscientific Model Development*, **2018**, 11, 4021-4041	6.3	8
331	Regional New Particle Formation as Modulators of Cloud Condensation Nuclei and Cloud Droplet Number in the Eastern Mediterranean **2018**,		1
330	Characterization of Aerosol Composition, Aerosol Acidity and Organic Acid Partitioning at an Agriculture-Intensive Rural Southeastern U.S. Site **2018**,		1
329	CCN activity of six pollenkitts and the influence of their surface activity **2018**,		1
328	Enhanced Iron Solubility at Low pH in Global Aerosols. *Atmosphere*, **2018**, 9, 201	2.7	22
327	The underappreciated role of nonvolatile cations in aerosol ammonium-sulfate molar ratios. *Atmospheric Chemistry and Physics*, **2018**, 18, 17307-17323	6.8	39
326	Reviews and syntheses: the GESAMP atmospheric iron deposition model intercomparison study. *Biogeosciences*, **2018**, 15, 6659-6684	4.6	44
325	Organic aerosol in the summertime southeastern United States: components and their link to volatility distribution, oxidation state and hygroscopicity. *Atmospheric Chemistry and Physics*, **2018**, 18, 5799-5819	6.8	12

324	Understanding nitrate formation in a world with less sulfate. *Atmospheric Chemistry and Physics*, **2018**, 18, 12765-12775	6.8	45
323	Atmospheric Evolution of Molecular Weight Separated Brown Carbon from Biomass Burning **2018**,		2
322	Effectiveness of ammonia reduction on control of fine particle nitrate. *Atmospheric Chemistry and Physics*, **2018**, 18, 12241-12256	6.8	78
321	Simulating Biogenic Secondary Organic Aerosol During Summertime in China. *Journal of Geophysical Research D: Atmospheres*, **2018**, 123, 11,100	4.4	6
320	Source apportionment of organic carbon in Centreville, AL using organosulfates in organic tracer-based positive matrix factorization. *Atmospheric Environment*, **2018**, 186, 74-88	5.3	16
319	Highly Acidic Ambient Particles, Soluble Metals, and Oxidative Potential: A Link between Sulfate and Aerosol Toxicity. *Environmental Science & Technology*, **2017**, 51, 2611-2620	10.3	205
318	Air pollution-aerosol interactions produce more bioavailable iron for ocean ecosystems. *Science Advances*, **2017**, 3, e1601749	14.3	128
317	Simulating Aqueous-Phase Isoprene-Epoxydiol (IEPOX) Secondary Organic Aerosol Production During the 2013 Southern Oxidant and Aerosol Study (SOAS). *Environmental Science & Technology*, **2017**, 51, 5026-5034	10.3	64
316	The Global Aerosol Synthesis and Science Project (GASSP): Measurements and Modeling to Reduce Uncertainty. *Bulletin of the American Meteorological Society*, **2017**, 98, 1857-1877	6.1	43
315	Microphysical explanation of the RH-dependent water affinity of biogenic organic aerosol and its importance for climate. *Geophysical Research Letters*, **2017**, 44, 5167-5177	4.9	56
314	Changes in Light Absorptivity of Molecular Weight Separated Brown Carbon Due to Photolytic Aging. *Environmental Science & Technology*, **2017**, 51, 8414-8421	10.3	107
313	Top-of-atmosphere radiative forcing affected by brown carbon in the upper troposphere. *Nature Geoscience*, **2017**, 10, 486-489	18.3	114
312	Collocated observations of cloud condensation nuclei, particle size distributions, and chemical composition. *Scientific Data*, **2017**, 4, 170003	8.2	27
311	pH of Aerosols in a Polluted Atmosphere: Source Contributions to Highly Acidic Aerosol. *Environmental Science & Technology*, **2017**, 51, 4289-4296	10.3	102
310	Incorporating radioactive decay into charging and coagulation of multicomponent radioactive aerosols. *Journal of Aerosol Science*, **2017**, 114, 283-300	4.3	7
309	High levels of ammonia do not raise fine particle pH sufficiently to yield nitrogen oxide-dominated sulfate production. *Scientific Reports*, **2017**, 7, 12109	4.9	115
308	Modeling regional air quality and climate: improving organic aerosol and aerosol activation processes in WRF/Chem version 3.7.1. *Geoscientific Model Development*, **2017**, 10, 2333-2363	6.3	10
307	Profiling aerosol optical, microphysical and hygroscopic properties in ambient conditions by combining in situ and remote sensing. *Atmospheric Measurement Techniques*, **2017**, 10, 83-107	4	7

306	Studying the Impact of Radioactive Charging on the Microphysical Evolution and Transport of Radioactive Aerosols with the TOMAS-RC v1 framework **2017**,		1
305	The underappreciated role of nonvolatile cations on aerosol ammonium-sulfate molar ratios **2017**,		9
304	Fine particle pH and gas-particle phase partitioning of inorganic species in Pasadena, California, during the 2010 CalNex campaign **2017**,		1
303	Investigating the contribution of secondary ice production to in-cloud ice crystal numbers. *Journal of Geophysical Research D: Atmospheres*, **2017**, 122, 9391-9412	4.4	17
302	Revising the hygroscopicity of inorganic sea salt particles. *Nature Communications*, **2017**, 8, 15883	17.4	116
301	Validation of LIRIC aerosol concentration retrievals using airborne measurements during a biomass burning episode over Athens. *Atmospheric Research*, **2017**, 183, 255-267	5.4	8
300	From hygroscopic aerosols to cloud droplets: The HygrA-CD campaign in the Athens basin - An overview. *Science of the Total Environment*, **2017**, 574, 216-233	10.2	7
299	New particle formation in the southern Aegean Sea during the Etesians: importance for CCN production and cloud droplet number. *Atmospheric Chemistry and Physics*, **2017**, 17, 175-192	6.8	33
298	On the implications of aerosol liquid water and phase separation for organic aerosol mass. *Atmospheric Chemistry and Physics*, **2017**, 17, 343-369	6.8	122
297	Global impact of mineral dust on cloud droplet number concentration. *Atmospheric Chemistry and Physics*, **2017**, 17, 5601-5621	6.8	42
296	Fine particle pH and gas–particle phase partitioning of inorganic species in Pasadena, California, during the 2010 CalNex campaign. *Atmospheric Chemistry and Physics*, **2017**, 17, 5703-5719	6.8	128
295	Aerosol Vertical Profiling Utilizing the Synergy of Lidar, Sunphotometry and In-Situ Measurements in the Framework of the ACTRIS-2 Campaign in Athens. *Springer Atmospheric Sciences*, **2017**, 891-897	0.7	1
294	CCN Activity, Variability and Influence on Droplet Formation during the HygrA-Cd Campaign in Athens. *Atmosphere*, **2017**, 8, 108	2.7	8
293	From Hygroscopic Aerosols to Cloud Droplets: The HygrA-CD Campaign in the Athens Basin—An Overview. *Springer Atmospheric Sciences*, **2017**, 781-787	0.7	1
292	Impact of Chemical Composition on NPF, CCN and Droplet Formation at South Aegean Sea During Summertime Etesians. *Springer Atmospheric Sciences*, **2017**, 875-881	0.7	0
291	Fine Particle Water and PH in an Urban and Remote Location and the Role of Biomass Burning. *Springer Atmospheric Sciences*, **2017**, 837-843	0.7	1
290	Global atmospheric particle formation from CERN CLOUD measurements. *Science*, **2016**, 354, 1119-1124	33.3	207
289	Enhanced formation of isoprene-derived organic aerosol in sulfur-rich power plant plumes during Southeast Nexus. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 11,137-11,153	4.4	38

288	Understanding cirrus ice crystal number variability for different heterogeneous ice nucleation spectra. *Atmospheric Chemistry and Physics*, **2016**, 16, 2611-2629	6.8	9
287	Biomass-burning impact on CCN number, hygroscopicity and cloud formation during summertime in the eastern Mediterranean. *Atmospheric Chemistry and Physics*, **2016**, 16, 7389-7409	6.8	58
286	Charging and coagulation of radioactive and nonradioactive particles in the atmosphere. *Atmospheric Chemistry and Physics*, **2016**, 16, 3449-3462	6.8	8
285	Chemical and physical influences on aerosol activation in liquid clouds: a study based on observations from the Jungfraujoch, Switzerland. *Atmospheric Chemistry and Physics*, **2016**, 16, 4043-4061	6.8	10
284	Particle water and pH in the eastern Mediterranean: source variability and implications for nutrient availability. *Atmospheric Chemistry and Physics*, **2016**, 16, 4579-4591	6.8	115
283	Aircraft-measured indirect cloud effects from biomass burning smoke in the Arctic and subarctic. *Atmospheric Chemistry and Physics*, **2016**, 16, 715-738	6.8	22
282	Aerosol water parameterisation: a single parameter framework. *Atmospheric Chemistry and Physics*, **2016**, 16, 7213-7237	6.8	16
281	Chapter 7. Secondary Ice Production - current state of the science and recommendations for the future. *Meteorological Monographs*, **2016**,	5.7	74
280	Real-Time, Online Automated System for Measurement of Water-Soluble Reactive Phosphate Ions in Atmospheric Particles. *Analytical Chemistry*, **2016**, 88, 7163-70	7.8	7
279	Influence of Atmospheric Processes on the Solubility and Composition of Iron in Saharan Dust. *Environmental Science & Technology*, **2016**, 50, 6912-20	10.3	47
278	High aerosol acidity despite declining atmospheric sulfate concentrations over the past 15 years. *Nature Geoscience*, **2016**, 9, 282-285	18.3	250
277	Past, Present and Future Atmospheric Nitrogen Deposition. *Journals of the Atmospheric Sciences*, **2016**, 73, 2039-2047	2.1	147
276	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013. *Atmospheric Measurement Techniques*, **2016**, 9, 3063-3093	4	50
275	New Particle Formation in the South Aegean Sea during the Etesians: importance for CCN production and cloud droplet number **2016**,		2
274	Reply to Comment on Premature deaths attributed to source-specific BC emissions in six urban US regions *Environmental Research Letters*, **2016**, 11, 098002	6.2	
273	Bioavailable atmospheric phosphorous supply to the global ocean: a 3-D global modeling study. *Biogeosciences*, **2016**, 13, 6519-6543	4.6	43
272	Meteorological and aerosol effects on marine cloud microphysical properties. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 4142-4161	4.4	16
271	Utilizing The Synergy of Airborne Backscatter Lidar and In-Situ Measurements for Evaluating CALIPSO. *EPJ Web of Conferences*, **2016**, 119, 04007	0.3	

270	Understanding the nature of atmospheric acid processing of mineral dusts in supplying bioavailable phosphorus to the oceans. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 14639-14644	11.5	47
269	Isoprene suppression of new particle formation: Potential mechanisms and implications. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 14,621	4.4	26
268	Aerosol Activity and Hygroscopicity Combined with Lidar Data in the Urban Atmosphere of Athens, Greece in the Frame of the HYGRA_CD Campaign. *EPJ Web of Conferences*, **2016**, 119, 15008	0.3	
267	Fine particle pH and the partitioning of nitric acid during winter in the northeastern United States. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 10,355	4.4	129
266	Surface fractal dimension, water adsorption efficiency, and cloud nucleation activity of insoluble aerosol. *Scientific Reports*, **2016**, 6, 25504	4.9	18
265	Three-dimensional modeling of the mixing state of particles over Greater Paris. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 5930-5947	4.4	12
264	Role of updraft velocity in temporal variability of global cloud hydrometeor number. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5791-6	11.5	23
263	Acceleration of oxygen decline in the tropical Pacific over the past decades by aerosol pollutants. *Nature Geoscience*, **2016**, 9, 443-447	18.3	53
262	Improving our fundamental understanding of the role of aerosol-cloud interactions in the climate system. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 5781-90	11.5	314
261	Reforestation and crop land conversion impacts on future regional air quality in the Southeastern U.S.. *Agricultural and Forest Meteorology*, **2015**, 209-210, 78-86	5.8	4
260	Differences between magnitudes and health impacts of BC emissions across the United States using 12 km scale seasonal source apportionment. *Environmental Science & Technology*, **2015**, 49, 4362-71	10.3	15
259	Impacts of potential CO2-reduction policies on air quality in the United States. *Environmental Science & Technology*, **2015**, 49, 5133-41	10.3	19
258	New approach for optimal electricity planning and dispatching with hourly time-scale air quality and health considerations. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 10884-9	11.5	28
257	Use of high-order sensitivity analysis and reduced-form modeling to quantify uncertainty in particulate matter simulations in the presence of uncertain emissions rates: A case study in Houston. *Atmospheric Environment*, **2015**, 122, 103-113	5.3	11
256	Incorporating an advanced aerosol activation parameterization into WRF-CAM5: Model evaluation and parameterization intercomparison. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 6952-6979	4.4	17
255	Primary marine aerosol-cloud interactions off the coast of California. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 4282-4303	4.4	66
254	Evolution of brown carbon in wildfire plumes. *Geophysical Research Letters*, **2015**, 42, 4623-4630	4.9	206
253	Fine-particle water and pH in the southeastern United States. *Atmospheric Chemistry and Physics*, **2015**, 15, 5211-5228	6.8	312

252	On the link between hygroscopicity, volatility, and oxidation state of ambient and water-soluble aerosols in the southeastern United States. *Atmospheric Chemistry and Physics*, **2015**, 15, 8679-8694	6.8	69
251	A critical evaluation of proxy methods used to estimate the acidity of atmospheric particles. *Atmospheric Chemistry and Physics*, **2015**, 15, 2775-2790	6.8	203
250	Formation and aging of secondary organic aerosol from toluene: changes in chemical composition, volatility, and hygroscopicity. *Atmospheric Chemistry and Physics*, **2015**, 15, 8301-8313	6.8	27
249	Examining the effects of anthropogenic emissions on isoprene-derived secondary organic aerosol formation during the 2013 Southern Oxidant and Aerosol Study (SOAS) at the Look Rock, Tennessee ground site. *Atmospheric Chemistry and Physics*, **2015**, 15, 8871-8888	6.8	170
248	Atmospheric new particle formation as a source of CCN in the eastern Mediterranean marine boundary layer. *Atmospheric Chemistry and Physics*, **2015**, 15, 9203-9215	6.8	39
247	A synthesis of cloud condensation nuclei counter (CCNC) measurements within the EUCAARI network. *Atmospheric Chemistry and Physics*, **2015**, 15, 12211-12229	6.8	35
246	The relationship between cloud condensation nuclei (CCN) concentration and light extinction of dried particles: indications of underlying aerosol processes and implications for satellite-based CCN estimates. *Atmospheric Chemistry and Physics*, **2015**, 15, 7585-7604	6.8	47
245	Premature deaths attributed to source-specific BC emissions in six urban US regions. *Environmental Research Letters*, **2015**, 10, 114014	6.2	13
244	CCN Properties of Organic Aerosol Collected Below and within Marine Stratocumulus Clouds near Monterey, California. *Atmosphere*, **2015**, 6, 1590-1607	2.7	5
243	Quantifying sensitivities of ice crystal number and sources of ice crystal number variability in CAM 5.1 using the adjoint of a physically based cirrus formation parameterization. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 2834-2854	4.4	6
242	Changes in dissolved iron deposition to the oceans driven by human activity: a 3-D global modelling study. *Biogeosciences*, **2015**, 12, 3973-3992	4.6	58
241	Effects of anthropogenic emissions on aerosol formation from isoprene and monoterpenes in the southeastern United States. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 37-42	11.5	393
240	CCN Data Interpretation Under Dynamic Operation Conditions. *Aerosol Science and Technology*, **2014**, 48, 552-561	3.4	6
239	Sensitivity of air quality to potential future climate change and emissions in the United States and major cities. *Atmospheric Environment*, **2014**, 94, 552-563	5.3	44
238	Observations of continental biogenic impacts on marine aerosol and clouds off the coast of California. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 6724-6748	4.4	32
237	Suppression in droplet growth kinetics by the addition of organics to sulfate particles. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 12,222-12,232	4.4	5
236	Atmospheric amines and ammonia measured with a chemical ionization mass spectrometer (CIMS). *Atmospheric Chemistry and Physics*, **2014**, 14, 12181-12194	6.8	99
235	Processing of biomass-burning aerosol in the eastern Mediterranean during summertime. *Atmospheric Chemistry and Physics*, **2014**, 14, 4793-4807	6.8	111

234	Understanding the contributions of aerosol properties and parameterization discrepancies to droplet number variability in a global climate model. *Atmospheric Chemistry and Physics*, **2014**, 14, 4809-4826	6.8	29
233	Inorganic salts interact with oxalic acid in submicron particles to form material with low hygroscopicity and volatility. *Atmospheric Chemistry and Physics*, **2014**, 14, 5205-5215	6.8	49
232	Incorporation of advanced aerosol activation treatments into CESM/CAM5: model evaluation and impacts on aerosol indirect effects. *Atmospheric Chemistry and Physics*, **2014**, 14, 7485-7497	6.8	39
231	Droplet activation parameterization: the population-splitting concept revisited. *Geoscientific Model Development*, **2014**, 7, 2345-2357	6.3	24
230	Ammonium nitrate evaporation and nitric acid condensation in DMT CCN counters. *Atmospheric Measurement Techniques*, **2014**, 7, 1377-1384	4	12
229	Development of two-moment cloud microphysics for liquid and ice within the NASA Goddard Earth Observing System Model (GEOS-5). *Geoscientific Model Development*, **2014**, 7, 1733-1766	6.3	59
228	P-NEXFS analysis of aerosol phosphorus delivered to the Mediterranean Sea. *Geophysical Research Letters*, **2014**, 41, 4043-4049	4.9	26
227	Toward the Determination of Joint Volatility-Hygroscopicity Distributions: Development and Response Characterization for Single-Component Aerosol. *Aerosol Science and Technology*, **2014**, 48, 296-312	3.4	7
226	Mineral Dust and its Microphysical Interactions with Clouds **2014**, 287-325		14
225	The Role of Aerosol Properties on Cloud Nucleation Processes. *NATO Science for Peace and Security Series C: Environmental Security*, **2014**, 27-34	0.3	
224	The 2010 California Research at the Nexus of Air Quality and Climate Change (CalNex) field study. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 5830-5866	4.4	178
223	Relative contributions of aerosol properties to cloud droplet number: Adjoint sensitivity approach in a GCM **2013**,		1
222	Constraining the water vapor uptake coefficient in ambient cloud droplet formation **2013**,		1
221	The effect of phase partitioning of semivolatile compounds on the measured CCN activity of aerosol particles **2013**,		2
220	Surfactants from the gas phase may promote cloud droplet formation. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2723-8	11.5	83
219	Analysis of CCN activity of Arctic aerosol and Canadian biomass burning during summer 2008. *Atmospheric Chemistry and Physics*, **2013**, 13, 2735-2756	6.8	103
218	Worldwide data sets constrain the water vapor uptake coefficient in cloud formation. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 3760-4	11.5	28
217	Downscaling a global climate model to simulate climate change over the US and the implication on regional and urban air quality. *Geoscientific Model Development*, **2013**, 6, 1429-1445	6.3	30

216	Performance of McRAS-AC in the GEOS-5 AGCM: aerosol-cloud-microphysics, precipitation, cloud radiative effects, and circulation. *Geoscientific Model Development*, **2013**, 6, 57-79	6.3	12
215	Microbiome of the upper troposphere: species composition and prevalence, effects of tropical storms, and atmospheric implications. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 2575-80	11.5	297
214	Reply to Smith and Griffin: Methods, air flows, and conclusions are robust in the DeLeon-Rodriguez et al. study. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, E2085	11.5	2
213	Eastern Pacific Emitted Aerosol Cloud Experiment. *Bulletin of the American Meteorological Society*, **2013**, 94, 709-729	6.1	71
212	CCN activity and volatility of Ecaryophyllene secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2013**, 13, 2283-2297	6.8	23
211	Droplet number uncertainties associated with CCN: an assessment using observations and a global model adjoint. *Atmospheric Chemistry and Physics*, **2013**, 13, 4235-4251	6.8	42
210	Aerosol mixing state, hygroscopic growth and cloud activation efficiency during MIRAGE 2006. *Atmospheric Chemistry and Physics*, **2013**, 13, 5049-5062	6.8	50
209	Composition and hygroscopicity of the Los Angeles Aerosol: CalNex. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 3016-3036	4.4	78
208	Cirrus cloud seeding has potential to cool climate. *Geophysical Research Letters*, **2013**, 40, 178-182	4.9	40
207	Potential impact of land use change on future regional climate in the Southeastern U.S.: Reforestation and crop land conversion. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 11,577-11,588	4.4	24
206	Assessing the Impact of Mineral Dust and Adsorption Activation on Cloud Droplet Formation. *Springer Atmospheric Sciences*, **2013**, 515-520	0.7	1
205	Strong evidence of surface tension reduction in microscopic aqueous droplets. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	38
204	Using a global aerosol model adjoint to unravel the footprint of spatially-distributed emissions on cloud droplet number and cloud albedo. *Geophysical Research Letters*, **2012**, 39,	4.9	7
203	CCN spectra, hygroscopicity, and droplet activation kinetics of secondary organic aerosol resulting from the 2010 Deepwater Horizon oil spill. *Environmental Science & Technology*, **2012**, 46, 3093-100	10.3	30
202	Sensitivity of cirrus and mixed-phase clouds to the ice nuclei spectra in McRAS-AC: single column model simulations. *Atmospheric Chemistry and Physics*, **2012**, 12, 10679-10692	6.8	10
201	Importance of composition and hygroscopicity of BC particles to the effect of BC mitigation on cloud properties: Application to California conditions. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		7
200	Hygroscopicity and composition of California CCN during summer 2010. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		59
199	Development and initial application of the global-through-urban weather research and forecasting model with chemistry (GU-WRF/Chem). *Journal of Geophysical Research*, **2012**, 117,		55

198	Modeling an air pollution episode in northwestern United States: identifying the effect of nitrogen oxide and volatile organic compound emission changes on air pollutants formation using direct sensitivity analysis. *Journal of the Air and Waste Management Association*, **2012**, 62, 1150-65	2.4	8
197	Multi-wavelength Raman lidar, sun photometric and aircraft measurements in combination with inversion models for the estimation of the aerosol optical and physico-chemical properties over Athens, Greece. *Atmospheric Measurement Techniques*, **2012**, 5, 1793-1808	4	30
196	Performance of McRAS-AC in the GEOS-5 AGCM: aerosol-cloud-microphysics, precipitation, cloud radiative effects, and circulation **2012**,		1
195	Development of the high-order decoupled direct method in three dimensions for particulate matter: enabling advanced sensitivity analysis in air quality models. *Geoscientific Model Development*, **2012**, 5, 355-368	6.3	36
194	Optical-microphysical properties of Saharan dust aerosols and composition relationship using a multi-wavelength Raman lidar, in situ sensors and modelling: a case study analysis. *Atmospheric Chemistry and Physics*, **2012**, 12, 4011-4032	6.8	30
193	Saharan dust event impacts on cloud formation and radiation over Western Europe. *Atmospheric Chemistry and Physics*, **2012**, 12, 4045-4063	6.8	112
192	A coupled observation modeling approach for studying activation kinetics from measurements of CCN activity. *Atmospheric Chemistry and Physics*, **2012**, 12, 4227-4243	6.8	27
191	ANISORROPIA: the adjoint of the aerosol thermodynamic model ISORROPIA. *Atmospheric Chemistry and Physics*, **2012**, 12, 527-543	6.8	29
190	Implementation of dust emission and chemistry into the Community Multiscale Air Quality modeling system and initial application to an Asian dust storm episode. *Atmospheric Chemistry and Physics*, **2012**, 12, 10209-10237	6.8	91
189	Mixing state and compositional effects on CCN activity and droplet growth kinetics of size-resolved CCN in an urban environment. *Atmospheric Chemistry and Physics*, **2012**, 12, 10239-10255	6.8	43
188	Climatic effects of 19502050 changes in US anthropogenic aerosols Part 1: Aerosol trends and radiative forcing. *Atmospheric Chemistry and Physics*, **2012**, 12, 3333-3348	6.8	136
187	Differences between downscaling with spectral and grid nudging using WRF. *Atmospheric Chemistry and Physics*, **2012**, 12, 3601-3610	6.8	93
186	Global distribution and climate forcing of marine organic aerosol Part 2: Effects on cloud properties and radiative forcing. *Atmospheric Chemistry and Physics*, **2012**, 12, 6555-6563	6.8	27
185	Ship impacts on the marine atmosphere: insights into the contribution of shipping emissions to the properties of marine aerosol and clouds. *Atmospheric Chemistry and Physics*, **2012**, 12, 8439-8458	6.8	62
184	Adjoint sensitivity of global cloud droplet number to aerosol and dynamical parameters. *Atmospheric Chemistry and Physics*, **2012**, 12, 9041-9055	6.8	42
183	Sensitivity studies of dust ice nuclei effect on cirrus clouds with the Community Atmosphere Model CAM5. *Atmospheric Chemistry and Physics*, **2012**, 12, 12061-12079	6.8	69
182	Climatic effects of 19502050 changes in US anthropogenic aerosols Part 2: Climate response. *Atmospheric Chemistry and Physics*, **2012**, 12, 3349-3362	6.8	119
181	Effect of primary organic sea spray emissions on cloud condensation nuclei concentrations. *Atmospheric Chemistry and Physics*, **2012**, 12, 89-101	6.8	50

180	Cloud condensation nuclei activity of isoprene secondary organic aerosol. *Journal of Geophysical Research*, **2011**, 116,		65
179	Airborne cloud condensation nuclei measurements during the 2006 Texas Air Quality Study. *Journal of Geophysical Research*, **2011**, 116,		75
178	Global distribution of cloud droplet number concentration, autoconversion rate, and aerosol indirect effect under diabatic droplet activation. *Journal of Geophysical Research*, **2011**, 116,		16
177	Evaluation of an entraining droplet activation parameterization using in situ cloud data. *Journal of Geophysical Research*, **2011**, 116,		15
176	Ozone oxidation of oleic acid surface films decreases aerosol cloud condensation nuclei activity. *Journal of Geophysical Research*, **2011**, 116,		14
175	Hygroscopic properties of volcanic ash. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	47
174	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic Climate (ARCPAC) Project. *Atmospheric Chemistry and Physics*, **2011**, 11, 2423-2453	6.8	217
173	Global distribution and climate forcing of marine organic aerosol: 1. Model improvements and evaluation. *Atmospheric Chemistry and Physics*, **2011**, 11, 11689-11705	6.8	74
172	Hygroscopicity and composition of Alaskan Arctic CCN during April 2008. *Atmospheric Chemistry and Physics*, **2011**, 11, 11807-11825	6.8	73
171	Aerosol hygroscopicity and CCN activation kinetics in a boreal forest environment during the 2007 EUCAARI campaign. *Atmospheric Chemistry and Physics*, **2011**, 11, 12369-12386	6.8	95
170	Measurements of cloud condensation nuclei activity and droplet activation kinetics of fresh unprocessed regional dust samples and minerals. *Atmospheric Chemistry and Physics*, **2011**, 11, 3527-3541	6.8	100
169	Dynamical states of low temperature cirrus. *Atmospheric Chemistry and Physics*, **2011**, 11, 3757-3771	6.8	30
168	In-cloud oxalate formation in the global troposphere: a 3-D modeling study. *Atmospheric Chemistry and Physics*, **2011**, 11, 5761-5782	6.8	179
167	Atmospheric acidification of mineral aerosols: a source of bioavailable phosphorus for the oceans. *Atmospheric Chemistry and Physics*, **2011**, 11, 6265-6272	6.8	130
166	Cloud condensation nuclei as a modulator of ice processes in Arctic mixed-phase clouds. *Atmospheric Chemistry and Physics*, **2011**, 11, 8003-8015	6.8	61
165	Cloud condensation nuclei activity and droplet activation kinetics of wet processed regional dust samples and minerals. *Atmospheric Chemistry and Physics*, **2011**, 11, 8661-8676	6.8	59
164	An integrated modeling study on the effects of mineral dust and sea salt particles on clouds and precipitation. *Atmospheric Chemistry and Physics*, **2011**, 11, 873-892	6.8	100
163	Size-resolved CCN distributions and activation kinetics of aged continental and marine aerosol. *Atmospheric Chemistry and Physics*, **2011**, 11, 8791-8808	6.8	74

162	Water Vapor Depletion in the DMT Continuous-Flow CCN Chamber: Effects on Supersaturation and Droplet Growth. *Aerosol Science and Technology*, **2011**, 45, 604-615	3.4	78
161	On the effect of dust particles on global cloud condensation nuclei and cloud droplet number. *Journal of Geophysical Research*, **2011**, 116, n/a-n/a		116
160	Droplet nucleation: Physically-based parameterizations and comparative evaluation. *Journal of Advances in Modeling Earth Systems*, **2011**, 3,	7.1	90
159	Identification of chemistry-dependent artifacts on gravimetric PM fine readings at the T1 site during the MILAGRO field campaign. *Atmospheric Environment*, **2011**, 45, 244-252	5.3	6
158	Impact of fuel quality regulation and speed reductions on shipping emissions: implications for climate and air quality. *Environmental Science & Technology*, **2011**, 45, 9052-60	10.3	95
157	Development of the high-order decoupled direct method in three dimensions for particulate matter: enabling advanced sensitivity analysis in air quality models **2011**,		1
156	Description and evaluation of GMXe: a new aerosol submodel for global simulations (v1). *Geoscientific Model Development*, **2010**, 3, 391-412	6.3	142
155	Corrigendum to "Description and evaluation of GMXe: a new aerosol submodel for global simulations (v1)" published in Geosci. Model Dev., 3, 391–412, 2010. *Geoscientific Model Development*, **2010**, 3, 413-413	6.3	11
154	Effects of Ocean Ecosystem on Marine Aerosol-Cloud Interaction. *Advances in Meteorology*, **2010**, 2010, 1-13	1.7	16
153	Investigation of cloud condensation nuclei properties and droplet growth kinetics of the water-soluble aerosol fraction in Mexico City. *Journal of Geophysical Research*, **2010**, 115,		75
152	Characteristic updrafts for computing distribution-averaged cloud droplet number and stratocumulus cloud properties. *Journal of Geophysical Research*, **2010**, 115,		51
151	Will black carbon mitigation dampen aerosol indirect forcing?. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	81
150	Sensitivity of the global distribution of cirrus ice crystal concentration to heterogeneous freezing. *Journal of Geophysical Research*, **2010**, 115,		44
149	Global climate response to anthropogenic aerosol indirect effects: Present day and year 2100. *Journal of Geophysical Research*, **2010**, 115,		23
148	Scanning Mobility CCN Analysis—A Method for Fast Measurements of Size-Resolved CCN Distributions and Activation Kinetics. *Aerosol Science and Technology*, **2010**, 44, 861-871	3.4	120
147	Water-soluble SOA from Alkene ozonolysis: composition and droplet activation kinetics inferences from analysis of CCN activity. *Atmospheric Chemistry and Physics*, **2010**, 10, 1585-1597	6.8	78
146	Comprehensively accounting for the effect of giant CCN in cloud activation parameterizations. *Atmospheric Chemistry and Physics*, **2010**, 10, 2467-2473	6.8	87
145	Aerosol hygroscopicity at high (99 to 100%) relative humidities. *Atmospheric Chemistry and Physics*, **2010**, 10, 1329-1344	6.8	39

144	Simulating the fine and coarse inorganic particulate matter concentrations in a polluted megacity. *Atmospheric Environment*, **2010**, 44, 608-620	5.3	49
143	Sensitivity of boreal-summer circulation and precipitation to atmospheric aerosols in selected regions Part 1: Africa and India. *Annales Geophysicae*, **2009**, 27, 3989-4007	2	17
142	Cloud Formation in the Plumes of Solar Chimney Power Generation Facilities: A Modeling Study. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2009**, 131,	2.3	11
141	Scanning Flow CCN Analysis A Method for Fast Measurements of CCN Spectra. *Aerosol Science and Technology*, **2009**, 43, 1192-1207	3.4	55
140	Distinct CCN activation kinetics above the marine boundary layer along the California coast. *Geophysical Research Letters*, **2009**, 36, n/a-n/a	4.9	33
139	Importance of adsorption for CCN activity and hygroscopic properties of mineral dust aerosol. *Geophysical Research Letters*, **2009**, 36,	4.9	66
138	Comprehensive simultaneous shipboard and airborne characterization of exhaust from a modern container ship at sea. *Environmental Science & Technology*, **2009**, 43, 4626-40	10.3	162
137	On the representation of droplet coalescence and autoconversion: Evaluation using ambient cloud droplet size distributions. *Journal of Geophysical Research*, **2009**, 114,		29
136	Parameterization of cloud droplet size distributions: Comparison with parcel models and observations. *Journal of Geophysical Research*, **2009**, 114,		25
135	Cloud condensation nuclei activity, closure, and droplet growth kinetics of Houston aerosol during the Gulf of Mexico Atmospheric Composition and Climate Study (GoMACCS). *Journal of Geophysical Research*, **2009**, 114,		78
134	On the link between ocean biota emissions, aerosol, and maritime clouds: Airborne, ground, and satellite measurements off the coast of California. *Global Biogeochemical Cycles*, **2009**, 23, n/a-n/a	5.9	98
133	Thermodynamic characterization of Mexico City aerosol during MILAGRO 2006. *Atmospheric Chemistry and Physics*, **2009**, 9, 2141-2156	6.8	86
132	Cloud condensation nuclei measurements in the marine boundary layer of the Eastern Mediterranean: CCN closure and droplet growth kinetics. *Atmospheric Chemistry and Physics*, **2009**, 9, 7053-7066	6.8	130
131	Parameterization of cloud droplet formation for global and regional models: including adsorption activation from insoluble CCN. *Atmospheric Chemistry and Physics*, **2009**, 9, 2517-2532	6.8	88
130	Gas/particle partitioning of water-soluble organic aerosol in Atlanta. *Atmospheric Chemistry and Physics*, **2009**, 9, 3613-3628	6.8	125
129	Parameterizing the competition between homogeneous and heterogeneous freezing in cirrus cloud formation monodisperse ice nuclei. *Atmospheric Chemistry and Physics*, **2009**, 9, 369-381	6.8	62
128	Parameterizing the competition between homogeneous and heterogeneous freezing in ice cloud formation polydisperse ice nuclei. *Atmospheric Chemistry and Physics*, **2009**, 9, 5933-5948	6.8	93
127	Relating CCN activity, volatility, and droplet growth kinetics of caryophyllene secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2009**, 9, 795-812	6.8	148

126	Parameterization of cirrus cloud formation in large-scale models: Homogeneous nucleation. *Journal of Geophysical Research*, **2008**, 113,		68
125	Molar mass, surface tension, and droplet growth kinetics of marine organics from measurements of CCN activity. *Geophysical Research Letters*, **2008**, 35, n/a-n/a	4.9	62
124	How quickly do cloud droplets form on atmospheric particles?. *Atmospheric Chemistry and Physics*, **2008**, 8, 1043-1055	6.8	80
123	On the volatility and production mechanisms of newly formed nitrate and water soluble organic aerosol in Mexico City. *Atmospheric Chemistry and Physics*, **2008**, 8, 3761-3768	6.8	80
122	CCN activity and droplet growth kinetics of fresh and aged monoterpene secondary organic aerosol. *Atmospheric Chemistry and Physics*, **2008**, 8, 3937-3949	6.8	174
121	Comprehensive airborne characterization of aerosol from a major bovine source. *Atmospheric Chemistry and Physics*, **2008**, 8, 5489-5520	6.8	124
120	Investigation of molar volume and surfactant characteristics of water-soluble organic compounds in biomass burning aerosol. *Atmospheric Chemistry and Physics*, **2008**, 8, 799-812	6.8	120
119	Effect of solute dissolution kinetics on cloud droplet formation: Extended Köhler theory. *Journal of Geophysical Research*, **2007**, 112,		46
118	Atlantic Southern Ocean productivity: Fertilization from above or below?. *Global Biogeochemical Cycles*, **2007**, 21, n/a-n/a	5.9	44
117	Aerosol–cloud drop concentration closure for clouds sampled during the International Consortium for Atmospheric Research on Transport and Transformation 2004 campaign. *Journal of Geophysical Research*, **2007**, 112,		84
116	Prediction of cloud condensation nucleus number concentration using measurements of aerosol size distributions and composition and light scattering enhancement due to humidity. *Journal of Geophysical Research*, **2007**, 112,		108
115	Cloud condensation nuclei closure during the International Consortium for Atmospheric Research on Transport and Transformation 2004 campaign: Effects of size-resolved composition. *Journal of Geophysical Research*, **2007**, 112,		103
114	Cloud condensation nuclei prediction error from application of Köhler theory: Importance for the aerosol indirect effect. *Journal of Geophysical Research*, **2007**, 112,		43
113	Parameterization of cloud droplet formation in large-scale models: Including effects of entrainment. *Journal of Geophysical Research*, **2007**, 112,		51
112	Cloud Activating Properties of Aerosol Observed during CELTIC. *Journals of the Atmospheric Sciences*, **2007**, 64, 441-459	2.1	77
111	Comment on "Wandering minds: the default network and stimulus-independent thought". *Science*, **2007**, 317, 43; author reply 43	33.3	111
110	ISORROPIA II: a computationally efficient thermodynamic equilibrium model for K⁺–Ca²⁺–Mg²⁺–NH₄<sup&g aerosols. *Atmospheric Chemistry and Physics*, **2007**, 7, 4639-4659	6.8	1809
109	Inferring thermodynamic properties from CCN activation experiments: single-component and binary aerosols. *Atmospheric Chemistry and Physics*, **2007**, 7, 5263-5274	6.8	58

108	Measurements of the Rate of Cloud Droplet Formation on Atmospheric Particles **2007**, 585-590		
107	Characterization of Sesquiterpene Secondary Organic Aerosol: Thermodynamic Properties, Aging Characteristics, CCN Activity, and Droplet Growth Kinetic Analysis **2007**, 1195-1199		1
106	Mapping the Operation of the DMT Continuous Flow CCN Counter. *Aerosol Science and Technology*, **2006**, 40, 242-254	3.4	256
105	Phytoplankton and cloudiness in the Southern Ocean. *Science*, **2006**, 314, 1419-23	33.3	263
104	CCN predictions: Is theory sufficient for assessments of the indirect effect?. *Geophysical Research Letters*, **2006**, 33,	4.9	30
103	Effects of aqueous organosulfur chemistry on particulate methanesulfonate to non‐sea salt sulfate ratios in the marine atmosphere. *Journal of Geophysical Research*, **2006**, 111,		25
102	Analysis of urban gas phase ammonia measurements from the 2002 Atlanta Aerosol Nucleation and Real-Time Characterization Experiment (ANARChE). *Journal of Geophysical Research*, **2006**, 111,		80
101	An assessment of the ability of three-dimensional air quality models with current thermodynamic equilibrium models to predict aerosol NO3‐. *Journal of Geophysical Research*, **2005**, 110,		95
100	Dust and pollution: A recipe for enhanced ocean fertilization?. *Journal of Geophysical Research*, **2005**, 110,		170
99	Continued development of a cloud droplet formation parameterization for global climate models. *Journal of Geophysical Research*, **2005**, 110,		203
98	Evaluation of a new cloud droplet activation parameterization with in situ data from CRYSTAL-FACE and CSTRIPE. *Journal of Geophysical Research*, **2005**, 110,		76
97	Organic aerosol and global climate modelling: a review. *Atmospheric Chemistry and Physics*, **2005**, 5, 1053-1123	6.8	2482
96	Coupling between Land Ecosystems and the Atmospheric Hydrologic Cycle through Biogenic Aerosol Pathways. *Bulletin of the American Meteorological Society*, **2005**, 86, 1738-1742	6.1	39
95	A Continuous-Flow Streamwise Thermal-Gradient CCN Chamber for Atmospheric Measurements. *Aerosol Science and Technology*, **2005**, 39, 206-221	3.4	648
94	Chemical Amplification (or Dampening) of the Twomey Effect: Conditions Derived from Droplet Activation Theory. *Journals of the Atmospheric Sciences*, **2004**, 61, 919-930	2.1	64
93	Particle phase acidity and oligomer formation in secondary organic aerosol. *Environmental Science & Technology*, **2004**, 38, 6582-9	10.3	323
92	Development and application of the Model of Aerosol Dynamics, Reaction, Ionization, and Dissolution (MADRID). *Journal of Geophysical Research*, **2004**, 109,		158
91	Aerosol‐cloud drop concentration closure in warm cumulus. *Journal of Geophysical Research*, **2004**, 109, n/a-n/a		95

90	Chemical and dynamical effects on cloud droplet number: Implications for estimates of the aerosol indirect effect. *Journal of Geophysical Research*, **2004**, 109, n/a-n/a		68
89	Effects of film-forming compounds on the growth of giant cloud condensation nuclei: Implications for cloud microphysics and the aerosol indirect effect. *Journal of Geophysical Research*, **2004**, 109,		14
88	Concept for a New Cloud Condensation Nucleus (CCN) Spectrometer. *Aerosol Science and Technology*, **2004**, 38, 639-654	3.4	6
87	Inorganic chemistry calculations using HETV vectorized solver for the SO42NO3NH4+ system based on the ISORROPIA algorithms. *Atmospheric Environment*, **2003**, 37, 2279-2294	5.3	71
86	Impact of biomass burning on cloud properties in the Amazon Basin. *Journal of Geophysical Research*, **2003**, 108,		73
85	Modification of aerosol mass and size distribution due to aqueous-phase SO2 oxidation in clouds: Comparisons of several models. *Journal of Geophysical Research*, **2003**, 108,		104
84	Parameterization of cloud droplet formation in global climate models. *Journal of Geophysical Research*, **2003**, 108,		248
83	Iron mobilization in mineral dust: Can anthropogenic SO2 emissions affect ocean productivity?. *Geophysical Research Letters*, **2003**, 30,	4.9	231
82	Can chemical effects on cloud droplet number rival the first indirect effect?. *Geophysical Research Letters*, **2002**, 29, 29-1-29-4	4.9	156
81	Black carbon radiative heating effects on cloud microphysics and implications for the aerosol indirect effect 1. Extended Kler theory. *Journal of Geophysical Research*, **2002**, 107, AAC 23-1-AAC 23-9		52
80	Black carbon radiative heating effects on cloud microphysics and implications for the aerosol indirect effect 2. Cloud microphysics. *Journal of Geophysical Research*, **2002**, 107, AAC 24-1-AAC 24-11		33
79	. *Tellus, Series B: Chemical and Physical Meteorology*, **2001**, 53, 133-149	3.3	105
78	A theoretical analysis of cloud condensation nucleus (CCN) instruments. *Journal of Geophysical Research*, **2001**, 106, 3449-3474		41
77	Kinetic limitations on cloud droplet formation and impact on cloud albedo. *Tellus, Series B: Chemical and Physical Meteorology*, **2001**, 53, 133-149	3.3	58
76	Chemical physics. Single-molecule spectroscopy comes of age. *Science*, **2001**, 292, 1671-2	33.3	144
75	Design of a CCN Instrument for Airborne Measurement. *Journal of Atmospheric and Oceanic Technology*, **2000**, 17, 1005-1019	2	19
74	THE SCANNING FLOW DMA. *Journal of Aerosol Science*, **2000**, 31, 1129-1144	4.3	15
73	MADM-A New Multicomponent Aerosol Dynamics Model. *Aerosol Science and Technology*, **2000**, 32, 482-502	3.4	101

72	Continued development and testing of a new thermodynamic aerosol module for urban and regional air quality models. *Atmospheric Environment*, **1999**, 33, 1553-1560	5.3	271
71	A STUDY OF PROCESSES THAT GOVERN THE MAINTENANCE OF AEROSOLS IN THE MARINE BOUNDARY LAYER. *Journal of Aerosol Science*, **1999**, 30, 503-532	4.3	88
70	ISORROPIA: A New Thermodynamic Equilibrium Model for Multiphase Multicomponent Inorganic Aerosols. *Aquatic Geochemistry*, **1998**, 4, 123-152	1.7	967
69	Marginal direct climate forcing by atmospheric aerosols. *Atmospheric Environment*, **1998**, 32, 2531-2542	5.3	26
68	Modeling of aerosol properties related to direct climate forcing. *Journal of Geophysical Research*, **1998**, 103, 17009-17032		19
67	Eastern Pacific Emitted Aerosol Cloud Experiment (E-PEACE). *Bulletin of the American Meteorological Society*,130109100058001	6.1	7
66	Size-resolved aerosol pH over Europe during summer		3
65	Aerosol pH and liquid water content determine when particulate matter is sensitive to ammonia and nitrate availability		2
64	On the drivers of droplet variability in Alpine mixed-phase clouds		3
63	Aerosol acidity and liquid water content regulate the dry deposition of inorganic reactive nitrogen		2
62	An overview of the ORACLES (ObseRvations of Aerosols above CLouds and their intEractionS) project: aerosol-cloud-radiation interactions in the Southeast Atlantic basin		14
61	Characteristics, sources, and transport of aerosols measured in spring 2008 during the aerosol, radiation, and cloud processes affecting Arctic climate (ARCPAC) project		9
60	Measurements of cloud condensation nuclei activity and droplet activation kinetics of fresh unprocessed regional dust samples and minerals		5
59	Measurements of cloud condensation nuclei activity and droplet activation kinetics of wet processed regional dust samples and minerals		4
58	Aerosol hygroscopicity and CCN activation kinetics in a boreal forest environment during the 2007 EUCAARI campaign		6
57	Climatic effects of 1950–2050 changes in US anthropogenic aerosols – Part 1: Aerosol trends and radiative forcing		8
56	Climatic effects of 1950–2050 changes in US anthropogenic aerosols – Part 2: Climate response		3
55	Saharan dust event impacts on cloud formation and radiation over Western Europe		1

54	Mixing state and compositional effects on CCN activity and droplet growth kinetics of size-resolved CCN in an urban environment	5
53	In-cloud oxalate formation in the global troposphere: a 3-D modeling study	4
52	Effect of primary organic sea spray emissions on cloud condensation nuclei concentrations	4
51	Atmospheric acidification of mineral aerosols: a source of bioavailable phosphorus for the oceans	10
50	Cloud condensation nuclei as a modulator of ice processes in Arctic mixed-phase clouds	1
49	Adjoint sensitivity of global cloud droplet number to aerosol and dynamical parameters	3
48	Sensitivity studies of dust ice nuclei effect on cirrus clouds with the Community Atmosphere Model CAM5	4
47	Implementation of dust emission and chemistry into the Community Multiscale Air Quality modeling system and initial application to an Asian dust storm episode	5
46	Ship impacts on the marine atmosphere: insights into the contribution of shipping emissions to the properties of marine aerosol and clouds	1
45	Aerosol mixing-state, hygroscopic growth and cloud activation efficiency during MIRAGE 2006	6
44	A coupled observation modeling approach for studying activation kinetics from measurements of CCN activity	1
43	Droplet number prediction uncertainties from CCN: an integrated assessment using observations and a global adjoint model	3
42	Analysis of CCN activity of Arctic aerosol and Canadian biomass burning during summer 2008	2
41	Global distribution and climate forcing of marine organic aerosol Part 2: Effects on cloud properties and radiative forcing	2
40	Processing of biomass burning aerosol in the Eastern Mediterranean during summertime	2
39	Understanding the contributions of aerosol properties and parameterization discrepancies to droplet number variability in a Global Climate Model	2
38	Atmospheric amines and ammonia measured with a Chemical Ionization Mass Spectrometer (CIMS)	4
37	Particle water and pH in the southeastern United States	17

[-]

36	A critical evaluation of proxy methods used to estimate the acidity of atmospheric particles	3
35	On the link between hygroscopicity, volatility, and oxidation state of ambient and water-soluble aerosol in the Southeastern United States	9
34	Aging of secondary organic aerosol from small aromatic VOCs: changes in chemical composition, mass yield, volatility and hygroscopicity	8
33	Influence of biomass burning on CCN number and hygroscopicity during summertime in the eastern Mediterranean	3
32	Understanding cirrus ice crystal number variability for different heterogeneous ice nucleation spectra	1
31	Particle water and pH in the Eastern Mediterranean: sources variability and implications for nutrients availability	1
30	Examining the effects of anthropogenic emissions on isoprene-derived secondary organic aerosol formation during the 2013 Southern Oxidant and Aerosol Study (SOAS) at the Look Rock, Tennessee, ground site	7
29	Predicting diurnal variability of fine inorganic aerosols and their gas-phase precursors near downtown Mexico City	4
28	How quickly do cloud droplets form on atmospheric particles?	3
27	Aerosol-cloud interactions in the NASA GMI: model development and indirect forcing assessments	6
26	ISORROPIA II: a computationally efficient thermodynamic equilibrium model for K⁺Ca²⁺Mg²⁺NH₄<sup&g	6
25	Cloud droplet activation: solubility revisited	11
24	Investigation of molar volume and surfactant characteristics of water-soluble organic compounds in biomass burning aerosol	6
23	Inferring thermodynamic properties from CCN activation experiments: a) single-component and binary aerosols	4
22	Alkene ozonolysis SOA: inferences of composition and droplet growth kinetics from Köhler theory analysis	13
21	Thermodynamic characterization of Mexico City aerosol during MILAGRO 2006	16
20	Relating CCN activity, volatility, and droplet growth kinetics of β-caryophyllene secondary organic aerosol	5
19	Comprehensive airborne characterization of aerosol from a major bovine source	2

18	On the volatility and production mechanisms of newly formed nitrate and water soluble organic aerosol in Mexico City		3
17	CCN activity and droplet growth kinetics of fresh and aged monoterpene secondary organic aerosol		5
16	Cloud condensation nuclei measurements in the eastern Mediterranean marine boundary layer: CCN closure and droplet growth kinetics		5
15	Parameterizing the competition between homogeneous and heterogeneous freezing in ice cloud formation polydisperse ice nuclei		1
14	Aerosol hygroscopicity at high (99 to 100%) relative humidities		3
13	Gas/particle partitioning of water-soluble organic aerosol in Atlanta		2
12	Instrumentation and Measurement Strategy for the NOAA SENEX Aircraft Campaign as Part of the Southeast Atmosphere Study 2013		6
11	Bioavailable atmospheric phosphorous supply to the global ocean: a 3-D global modelling study		4
10	Description and evaluation of GMXe: a new aerosol submodel for global simulations (v1)		2
9	Downscaling a global climate model to simulate climate change impacts on US regional and urban air quality		1
8	Development of two-moment cloud microphysics for liquid and ice within the NASA Goddard earth observing system model (GEOS-5)		4
7	Droplet activation parameterization: the population splitting concept revisited		2
6	Molecular simulations of interfacial systems: challenges, applications and future perspectives. *Molecular Simulation*,1-38	2	2
5	The relationship between cloud condensation nuclei (CCN) concentration and light extinction of dried particles: indications of underlying aerosol processes and implications for satellite-based CCN estimates		2
4	Atmospheric new particle formation as source of CCN in the Eastern Mediterranean marine boundary layer		1
3	An integrated modeling study on the effects of mineral dust and sea salt particles on clouds and precipitation		1
2	Size-resolved CCN distributions and activation kinetics of aged continental and marine aerosol		1
1	Acidity and the multiphase chemistry of atmospheric aqueous particles and clouds		4