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5	Hygroscopicity of fresh and aged mineral dust aerosol	Mingjin Tang
6	Transport of black carbon from the planetary boundary layer to free troposphere during the summer monsoon over South Asia	Prashant Singh
9	Road Traffic Emission Inventory in an Urban Zone of West Africa: Case of Yopougon City (Abidjan, Côte d'Ivoire)	DOUMBIA Madina
13	ESTIMATION OF POLLUTANT EMISSIONS BY INDUSTRIAL SOURCES IN BOGOTÁ UNDER POWER MATRIXES SCENARIOS PROJECTED TO THE YEAR 2050 IMPLEMENTING THE LEAP MODEL	Karen Hernandez
30	The influence of change the fuel type used in power plants on reduction of carbon dioxide emission in the Energy Sector of Azerbaijan	Sadig Hasanov
31	Development of a regional airshed chemical transport model for priority airsheds in Western Australia	Sean Lam
33	Amazonian biogenic volatile organic compounds under global change	Ana Yañez-Serrano

34	Solar induced fluorescence and NO ₂ measurements from TROPOMI to constrain NO ₂ deposition fluxes to vegetation	Erin Delaria
37	Development and adaptation of sensors and samplers for vertical profiling using fixed-wing drones in the context of the Cooperation to Unravel the Role of Atmospheric Aerosols over the Amazonian Basin (CURE-3AB).	Maximilien Desservettaz
40	The PM _{2.5} carbonaceous abundance and chemical constituents in ambient atmosphere of tropical urban city	Hanashriah Hassan
43	Air pollution measurements in Coyhaique, Patagonia	Zoe Fleming
45	Understanding of the space-time variations of hydroxyl (OH) using methyl chloroform (CH ₃ CCl ₃)	Prabir Patra
46	Ozone production in African biomass burning	James Lee
55	Characterising oceanic emissions of alkenes and their impacts	Ryan Pound
58	Coupling interactive fire with atmospheric composition and climate in the UK Earth System Model (UKESM)	Joao Teixeira

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102	Source Apportionment of Volatile Organic Compounds and Trace Metals in Houston	Morshad Ahmed
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107	Development of an Aerosol and Cloud Analysis System in the Caribbean	Bighnaraj Sarangi

108	Development of a Multi-Scale Infrastructure for Chemistry and Aerosols – MUSICA	Louisa Emmons
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110	Trends and seasonal variability of ammonia across major biomes inferred from long-term series of ground-based and satellite measurements	Money Ossohou
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125	Incorporating interactive surface exchange of ammonia into chemistry-climate models	Jize Jiang

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141	Trends of surface ozone and its precursors over 20 years in Southern Germany	Dagmar Kubistin
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199	Impact of biomass burning aerosol from Amazon associated with changes of snow albedo over the Central Andes mountains using satellite remote sensing data	Tomás R. Bolaño-Ortiz
200	First observations of gas-phase urea in the atmosphere	Emily Matthews
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211	Anthropogenic point sources of ethylene revealed from space	Bruno Franco
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218	Large contribution of biomass burning emissions to ozone throughout the global remote troposphere	Ilann Bourgeois
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222	Coexistence of three liquid phases in individual atmospheric aerosol particles	Fabian Mahrt

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226	Meteorology-aerosol-chemistry multiphase data assimilation system improves estimation of wildfire carbonaceous emissions and transport	Benjamin Gaubert
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232	Effects of marine nitrogen fixation on the formation of atmospheric water-soluble organic nitrogen revealed by a laboratory incubation experiment	Yuzo Miyazaki
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240	Evaluation of black carbon emissions in East Asia: Comparisons of six inventories and constraints from surface observations and model simulations	Kohei Ikeda
244	Investigation of major emission sources and photochemical processes of Volatile Organic Compounds (VOCs) at a suburban site of New Delhi, India in the winter	Nidhi Tripathi
246	Impact of aerosol chemical parameterization in a regional chemical transport model on PM distribution over Thailand.	Sherin Bran

248	A chemistry-transport modeling to support satellite observations of NO ₂ and CO ₂ emitted from megacities	Yousuke Yamashita
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277	How detailed should a vegetation canopy be represented for ozone deposition impact assessments?	Auke Visser
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307	First year of real-time VOC measurements at the SIRTA facility (Paris region, France): diurnal and seasonal variabilities, impact of COVID-19 lockdown on air quality	Leïla Simon

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316	Methane: At the Interface between Hydrology, Atmospheric Composition, Air Quality, and Climate	Fiona O'Connor
319	Evaluation of new 4D-variational inverse modeling system, CIF-CHIMERE: Inversion of NO _x emissions over China using NO ₂ OMI observations	Dilek Savas
320	Local and global impacts of C1-C3 alkyl nitrate chemistry and emissions on tropospheric ozone	Maria Zamyatina
321	Global tropospheric ozone responses to reduced NO _x emissions linked to the COVID-19 world-wide lockdowns	Kazuyuki Miyazaki
335	Tropospheric NO ₂ observed from space with Copernicus Sentinel-5 Precursor TROPOMI: Validation with ground-based network data.	Tijl Verhoelst
343	Using Measurements of Atmospheric ¹⁴ CO in a Global Network to Improve Understanding of OH Spatial and Temporal Variability	Vasilii Petrenko
344	Role of oceanic ozone deposition in explaining short-term variability of surface ozone at high-Arctic sites	Johannes Barten

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348	Criegee intermediate yields from seven atmospherically important ozone-alkene systems	Beth Nelson
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350	Investigating the performance of WRF-Chem in simulating the Indian Summer Monsoon and associated chemistry-feedback processes	Sreyashi Debnath
352	Renoxification on Aerosol Particles over the Atlantic Ocean	Simone Andersen
355	Long-term trends in tropospheric ozone at the Cape Verde Atmospheric Observatory	Matthew Rowlinson
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361	Assessing nitrogen dioxide intra-urban spatial variability in the West African city of Dakar, Senegal	Aissatou Faye

362	Vegetation feedbacks during drought exacerbate ozone air pollution extremes in Europe	Meiyun Lin
366	Dust emissions modelling over the semi-arid Argentinian territory	Ramiro Espada
367	Contributions of World Regions to the Global Tropospheric Ozone Burden Change From 1980 to 2010	Yuqiang Zhang
369	New insights on NO _x sources and sinks from the divergence of the mean flux	Steffen Beirle
371	Characterization of aerosol oxidative potential over African cities: a metric for relating air pollution and health effects	Cathy Leal-Liousse
372	WRF-Chem numerical analysis of YAK-AEROSIB aircraft data with BC emissions from Russian oil/gas flarings evaluated by satellite data	T. ONISHI
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377	Using WRF-Chem Volcano to model the in-plume halogen chemistry of Etna's 2018 eruption	Luke Surl

380	Quantification and characterization of PM _{2.5} in Buenos Aires, Argentina.	Pablo Lichtig
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386	Assessing fine scale variability of urban pollution with aircraft data and the implications for satellite validation and model evaluation	David Edwards
390	Graph Theory and Atmospheric Chemistry	Sam Silva
394	Modelling changes in secondary inorganic aerosol formation and nitrogen deposition in Europe from 2005 to 2030	Jan Eiof Jonson
395	Ultrafine Aerosol Particles in Merida, Yucatan (Mexico)	Joshua Muñoz-Salazar
400	Black carbon dispersion in central and southern Chile in winter and summer 2016	Kevin Basoa
401	An Update on Low-cost Sensors for the Measurement of Atmospheric Composition	Richard Peltier

403	Black Carbon atmospheric emissions from biomass burning in the Amazon reaching the Chilean Central Andes: evidence from a multi-technical approach	Maria Ruggeri
405	Increasing trends in secondary aerosols in Santiago: empirical analysis and modeling approach	Camilo Menares
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412	Examining the Competition Between Oxidation and Deposition in the Fate of Reactive Organic Carbon	Gabriel Isaacman-VanWertz
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427	An Overview of the COALA-2020 campaign at Cataract (Characterising Organics and Aerosol Loading in Australia)	Clare Murphy (Paton-Walsh)
434	Contribution of fossil fuel sources to PM _{2.5} in Seoul constrained by carbon, nitrogen, and oxygen isotopic ratios	Meehye Lee
442	The TOAR-II Ozone and its Precursors in the Tropics Focus Working Group's activities	Audrey Gaudel
444	Expanded observations of oxygenated organic compounds in urban emissions via ammonium-adduct chemical ionization mass spectrometry	Drew Gentner
446	Modeling the combined impacts of changing human activity and a changing climate on air quality	Hannah Horowitz
447	The impact of biomass burning emissions on Protected Natural Areas in central and southern Mexico	Fabiola Trujano

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450	3-D modeling of bromine chemistry and boundary-layer mercury depletion across the springtime Arctic	Kenjiro Toyota
452	Assessment of statistical models to improve performance of low-cost optical aerosol sensors in a warm and humid urban environment	Pongpichit Chuanraksasat
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455	Dynamical downscaling of a global chemistry-climate model to study the influence of climate change and variability on mid-21st century PM2.5 in the continental US	Surendra Kunwar
456	Assimilating CrIS Observations to Improve U.S. Ammonia Emissions within CMAQ	Shannon Capps
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458	The observation and modelling study of ozone enhancement in NOx-saturated megacity during the 2018 summer heat wave	Junsu Gil

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461	From Low-Cost Sensors to High-Quality Data: the Importance of Collocated Calibration Model Development	Michael Giordano
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465	Accuracy assessment of TRMM precipitation product across different Agro-Climatic Zones of Tamil Nadu, India	VENKADESH SAMYKANNU
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469	Aerosols in Western Mediterranean Basin: three complementary approaches for source emission identification	Abdelfettah Benchrif
470	Assessment of Atmospheric Particulate Matter (PM _{2.5} and PM _{2.5-10}) and Source Apportionment in the Ambient Air of Kenitra City, Morocco	Mounia TAHRI
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473	Online Measurement of Fine Aerosol Nitrite via a Versatile Aerosol Concentration Enrichment System Coupled with Ion Chromatography	Xiaona Shang
474	A comprehensive and spatially resolved Mercury Emission Inventory for Indian Subcontinent	Madhusmita Mishra

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482	Quantification of methane emissions from offshore oil & gas platforms in the Norwegian Sea.	Amy Foulds

483	Experimental determination of isoprene and other BVOCs emissions from <i>Platanus x hispanica</i> under urban conditions	Carmen Kalalian
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486	Personal PM _{2.5} exposures of solid fuel users in rural China: in vitro toxicity and chemical composition	Alexandra Lai
487	Combining light-absorption observation and source-oriented modelling for characterization and source apportionment of black carbon aerosol pollution in a typical Mediterranean coastal area	Andrea Milinković
488	Nitrate-mediated photooxidation of organic acids in the aqueous phase	Theodora Nah
489	Intercontinental Air Pollution Transport in the Southern Hemisphere	Lily Sheridan
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494	Assessment of Respirable Crystalline Silica Exposure among Miners of Konkola Underground Mine	Mwaba Sifanu
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496	Modelling Air Quality in the Arctic and Northern Latitudes: An assessment of surface ozone.	Stephen Beagley
497	Emission sources and health risk of volatile organic compounds during heating season in rural northern China	Hui Chen
498	The CAMS Global Anthropogenic Emissions	Antonin Soulié

499	Estimation of Methane emissions from Akouédo landfill through a modelling approach	Séka Yapo
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501	Direct Comparison of the Submicron Aerosol Hygroscopicity of Water-Soluble Sugars	Kotiba Malek
502	Impacts of biomass burning over Southeast Asia on regional air quality, radiation, and meteorology	Jiawei Li
503	Effects of fire diurnal variation on U.S. air quality during FIREX-AQ based on the Multi-Scale Infrastructure for Chemistry and Aerosols (MUSICA-V0)	Wenfu Tang
504	TOAR-II Chemical Reanalysis Focus Working Group	Kazuyuki Miyazaki
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506	Assessing population exposure to air pollution in Metropolitan Lima and Callao, Peru: Creating a high-resolution spatial emissions inventory with limited data, supported by air quality monitoring	Ben Richmond

507	A comparison of the impact of TROPOMI and OMI tropospheric NO ₂ on global chemical data assimilation and emission inversion	Takashi Sekiya
508	The impact of COVID-19 on projections, and the use of scenario analysis tools for modelling impacts of mitigation strategies on air pollutant emissions and concentrations.	Ben Pearson
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510	Characterizing the Physical and Chemical Evolution of Organic Aerosol in Biomass Burning Smoke using Gas- and Particle-phase Molecular Tracers from Laboratory and FIREX-AQ Observations	Melinda Schueneman
511	Radon Dosimetry in Nchanga Underground Mine on The Copperbelt Province	RABBISON BANDA
512	Hemispheric Lightning NO _x Emissions and the Impact on Ground-Level Ozone	Mike Madden
513	Simulating brown carbon aerosol over High Mountain Asia: WRF-Chem model implementation and application	Cenlin He
514	Global Wildfire Plume-Rise Data Set and Parameterizations for Climate Model Applications	Ziming Ke

515	Refining Ammonia Emissions Estimates with Satellite-based Observations Using a Novel Framework and an Air Quality Model	Congmeng Lyu
516	Investigating the relationship of meteorology and atmospheric composition to snow cover: A comparative study over High-Mountain Asia and Andes	Chayan Roychoudhury
517	Unveiling Processes in Secondary Organic Aerosol Particles during Isothermal Evaporation	Zijun Li
518	The importance of alkyl nitrates and sea ice emissions to atmospheric NO _x sources and cycling in the summertime Southern Ocean marine boundary layer.	Jessica Burger
519	A Southern Ocean-wide examination of Multi-year Trends in Sea Ice, Chlorophyll Concentration, and Marine Aerosol Optical Depth	Srishti Dasarathy
520	Global Emission trends to 2020 from the Community Emissions Data System (CEDS)	Steven Smith
521	Do satellite-based HCHO and NO ₂ observations help with the quantitative prediction of surface ozone during the pandemic?	Amir Souri
522	Mapping Urban CO with BEACO ₂ N and Bayesian Inversions	Naomi Asimow

523	Observational Metrics that Relate to the Answers we seek from Chemistry-Climate Models	Michael Prather
524	Formation of secondary aerosols, particulate nitrogen- and sulfur-containing organics through anthropogenic-biogenic interactions at night	Li Xu
525	Annual changes of ship emissions around China under gradually promoted control policies from 2016 to 2019	Xiaotong Wang
526	Persistent Influence of Biomass Burning Aerosols during Clean Air Conditions in the Western United States	Ryan Farley
527	We compared first satellite and CTM model derived total columns of ammonia over South and East-Asia and found that dissipation of gas-phase NH ₃ to particle-phase ammonium aerosols is rapid over East-Asia due to larger emissions of acidic precursor gases (SO ₂ and NO _x) and quicker secondary aerosol formation than the South-Asia.	Pooja Pawar
528	Third Revision of the Bottom-up Global Surface Seawater Dimethyl Sulphide Climatology (DMS-Rev3)	Shrivardhan Hulswar
529	Ammonia temporal variability from urban ground-based FTIR measurements	Beatriz Herrera
530	14CO in Glacial Ice from Law Dome, Antarctica as a Tracer of Changes in Atmospheric OH Abundance from 1870 AD to Present	Peter Neff

531	Impact of COVID-19 on NO _x and VOC levels over China based on multi-species satellite data and modeling	Jenny Stavrakou
532	Highly oxygenated organic nitrates formed from NO ₃ radical initiated oxidation of β-pinene	Hongru Shen
533	A Technological Inventory of Particulate Matter Emission for Indian Megacity Kolkata	Poonam Mangaraj
534	Unfolding Inventory of Indoor Air Pollutant Emission in Indian Household: An Invisible Potential Threat	Saroj Sahu
535	Current organizational and research plans of the TOAR-II Statistics Focus Working Group	Kai-Lan Chang
536	EMISSIONS FROM STATIONARY SOURCES AND THEIR IMPACT ON AIR QUALITY IN CUBA	Cuesta Osvaldo
537	Multi-drugs Resistant Bacteria Associated Particulate Matter in the Ambient Air over Dhaka, Bangladesh	Razia Ankhy
538	Polycyclic Aromatic Hydrocarbons (PAHs) in the Atmospheric Suspended Particulate Matter from Fertilizer Industries in Bangladesh	Snigdha Aziz

539	Effect of Global Atmospheric Datasets in Modeling Meteorology and Air Quality in the Andean Region of Ecuador	René Parra
540	Evidence of Long-Term Trend of Visibility in the Sahel and Coevolution with Meteorological Conditions and Vegetation Cover during the Recent Period	N'Datchoh TOURE
541	Urban inland wintertime N ₂ O ₅ deposition and snowpack ClNO ₂ production	Kathryn Kulju
542	Efficient vertical transport of black carbon in the planetary boundary layer	Kang Hu
543	An evaluation of the unexplored generation of hydrogen from the photolysis of aldehydes using two photochemistry models	Maria Pérez-Peña
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596	Light Absorption Properties of Atmospheric Brown Carbon during Winter in Dhaka, Bangladesh.	ASFAY RAIHAN
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598	A case study to clarify emissions of biogenic volatile organic compounds (BVOCs) based on measurements of total ozone reactivity in the ambient air of a suburban forest in Japan	Jun Matsumoto
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603	O ₂ --induced SO ₂ oxidation in aerosol formation	Narcisse Tsona

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801	Fog-forecast over the northern region of India employing realistic aerosol	Gaurav Govardhan
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803	Aqueous production of secondary organic aerosol from fossil-fuel emissions in winter Beijing haze	Junfeng Wang
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805	Biogenic Volatile Organic Compounds (BVOCs) and roles on Air Quality (Ozone and PM2.5) over Northern Thailand	Vanisa Surapipith
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