Karine N Sartelet

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6302819/publications.pdf

Version: 2024-02-01

77 papers	2,788 citations	172207 29 h-index	223531 46 g-index
99 all docs	99 docs citations	99 times ranked	2362 citing authors

#	Article	IF	Citations
1	Operational model evaluation for particulate matter in Europe and North America in the context of AQMEII. Atmospheric Environment, 2012, 53, 75-92.	1.9	214
2	Model evaluation and ensemble modelling of surface-level ozone in Europe and North America in the context of AQMEII. Atmospheric Environment, 2012, 53, 60-74.	1.9	192
3	Technical Note: The air quality modeling system Polyphemus. Atmospheric Chemistry and Physics, 2007, 7, 5479-5487.	1.9	146
4	Impact of biogenic emissions on air quality over Europe and North America. Atmospheric Environment, 2012, 53, 131-141.	1.9	124
5	MICS-Asia II: The model intercomparison study for Asia Phase II methodology and overview of findings. Atmospheric Environment, 2008, 42, 3468-3490.	1.9	113
6	Simulation of aerosols and gas-phase species over Europe with the Polyphemus system: Part Iâ€"Model-to-data comparison for 2001. Atmospheric Environment, 2007, 41, 6116-6131.	1.9	103
7	Technical Note: A new SIze REsolved Aerosol Model (SIREAM). Atmospheric Chemistry and Physics, 2007, 7, 1537-1547.	1.9	88
8	A hydrophilic/hydrophobic organic (H²O) aerosol model: Development, evaluation and sensitivity analysis. Journal of Geophysical Research, 2012, 117, .	3.3	82
9	MICS-Asia II: Model intercomparison and evaluation of ozone and relevant species. Atmospheric Environment, 2008, 42, 3491-3509.	1.9	67
10	Modeling secondary organic aerosol in an urban area: application to Paris, France. Atmospheric Chemistry and Physics, 2013, 13, 983-996.	1.9	65
11	Evaluation of the Weather Research and Forecast/Urban Model Over Greater Paris. Boundary-Layer Meteorology, 2013, 149, 105-132.	1.2	61
12	The Secondary Organic Aerosol Processor (SOAP v1.0) model: a unified model with different ranges of complexity based on the molecular surrogate approach. Geoscientific Model Development, 2015, 8, 1111-1138.	1.3	53
13	MICS-Asia II: Model inter-comparison and evaluation of acid deposition. Atmospheric Environment, 2008, 42, 3528-3542.	1.9	52
14	Comparison of Different Gas-Phase Mechanisms and Aerosol Modules for Simulating Particulate Matter Formation. Journal of the Air and Waste Management Association, 2011, 61, 1218-1226.	0.9	52
15	Application of WRF/Chem-MADRID and WRF/Polyphemus in Europe â€“ Part 2: Evaluation of chemical concentrations and sensitivity simulations. Atmospheric Chemistry and Physics, 2013, 13, 6845-6875.	1.9	52
16	Formation of secondary aerosols over Europe: comparison of two gas-phase chemical mechanisms. Atmospheric Chemistry and Physics, 2011, 11, 583-598.	1.9	51
17	Modelling aerosol number distributions from a vehicle exhaust with an aerosol CFD model. Atmospheric Environment, 2010, 44, 1126-1137.	1.9	50
18	Comparison of lidar-derived PM₁₀ with regional modeling and ground-based observations in the frame of MEGAPOLI experiment. Atmospheric Chemistry and Physics, 2011, 11, 10705-10726.	1.9	50

#	Article	IF	Citations
19	Evaluating the capability of regional-scale air quality models to capture the vertical distribution of pollutants. Geoscientific Model Development, 2013, 6, 791-818.	1.3	49
20	Modeling of photolysis rates over Europe: impact on chemical gaseous species and aerosols. Atmospheric Chemistry and Physics, 2011, 11, 1711-1727.	1.9	47
21	Comparison of two gas-phase chemical kinetic mechanisms of ozone formation over Europe. Journal of Atmospheric Chemistry, 2009, 62, 89-119.	1.4	46
22	Application of WRF/Chem-MADRID and WRF/Polyphemus in Europe â€“ Part 1: Model description, evaluation of meteorological predictions, and aerosolâ€“meteorology interactions. Atmospheric Chemistry and Physics, 2013, 13, 6807-6843.	1.9	45
23	Assimilation of lidar signals: application to aerosol forecasting in the western Mediterranean basin. Atmospheric Chemistry and Physics, 2014, 14, 12031-12053.	1.9	44
24	Sources and mixing state of summertime background aerosol in the north-western Mediterranean basin. Atmospheric Chemistry and Physics, 2017, 17, 6975-7001.	1.9	41
25	MICS-Asia II: Impact of global emissions on regional air quality in Asia. Atmospheric Environment, 2008, 42, 3543-3561.	1.9	40
26	Influence of an urban canopy model and PBL schemes on vertical mixing for air quality modeling over Greater Paris. Atmospheric Environment, 2015, 107, 289-306.	1.9	37
27	Assimilation of ground versus lidar observations for PM₁₀ forecasting. Atmospheric Chemistry and Physics, 2013, 13, 269-283.	1.9	36
28	Emission of intermediate, semi and low volatile organic compounds from traffic and their impact on secondary organic aerosol concentrations over Greater Paris. Atmospheric Environment, 2018, 180, 126-137.	1.9	34
29	MICS-Asia II: Model intercomparison and evaluation of particulate sulfate, nitrate and ammonium. Atmospheric Environment, 2008, 42, 3510-3527.	1.9	33
30	Decadal simulation and comprehensive evaluation of <scp>CESM</scp>/<scp>CAM</scp>5.1 with advanced chemistry, aerosol microphysics, and aerosolâ€cloud interactions. Journal of Advances in Modeling Earth Systems, 2015, 7, 110-141.	1.3	32
31	Development and Preliminary Validation of a Modal Aerosol Model for Tropospheric Chemistry: MAM. Aerosol Science and Technology, 2006, 40, 118-127.	1.5	31
32	Modelling organic aerosol concentrations and properties during ChArMEx summer campaigns of 2012 and 2013 in the western Mediterranean region. Atmospheric Chemistry and Physics, 2017, 17, 12509-12531.	1.9	29
33	Modelling and assimilation of lidar signals over Greater Paris during the MEGAPOLI summer campaign. Atmospheric Chemistry and Physics, 2014, 14, 3511-3532.	1.9	28
34	Effect of measurement protocol on organic aerosol measurements of exhaust emissions from gasoline and diesel vehicles. Atmospheric Environment, 2016, 140, 176-187.	1.9	27
35	Simulation of fine organic aerosols in the western Mediterranean area during the ChArMEx 2013 summer campaign. Atmospheric Chemistry and Physics, 2018, 18, 7287-7312.	1.9	27
36	Spatial extent of new particle formation events over the Mediterranean Basin from multiple ground-based and airborne measurements. Atmospheric Chemistry and Physics, 2017, 17, 9567-9583.	1.9	24

#	Article	IF	Citations
37	A first annual assessment of air quality modeling over Lebanon using WRF/Polyphemus. Atmospheric Pollution Research, 2018, 9, 643-654.	1.8	24
38	Modeling air pollution in Lebanon: evaluation at a suburban site in Beirut during summer. Atmospheric Chemistry and Physics, 2013, 13, 5873-5886.	1.9	23
39	Continental pollution in the western Mediterranean basin: vertical profiles of aerosol and trace gases measured over the sea during TRAQA 2012 and SAFMED 2013. Atmospheric Chemistry and Physics, 2015, 15, 9611-9630.	1.9	23
40	Simulation of particle diversity and mixing state over Greater Paris: a modelâ€“measurement inter-comparison. Faraday Discussions, 2016, 189, 547-566.	1.6	23
41	Modeling the effect of non-ideality, dynamic mass transfer and viscosity on SOA formation in a 3-D air quality model. Atmospheric Chemistry and Physics, 2019, 19, 1241-1261.	1.9	23
42	Precursors and formation of secondary organic aerosols from wildfires in the Euro-Mediterranean region. Atmospheric Chemistry and Physics, 2019, 19, 5543-5569.	1.9	23
43	Impact of wildfires on particulate matter in the Euro-Mediterranean in 2007: sensitivity to some parameterizations of emissions in air quality models. Atmospheric Chemistry and Physics, 2019, 19, 785-812.	1.9	23
44	Simulation of aerosols and gas-phase species over Europe with the Polyphemus system. Part II: Model sensitivity analysis for 2001. Atmospheric Environment, 2010, 44, 4219-4229.	1.9	22
45	A size-composition resolved aerosol model for simulating the dynamics of externally mixed particles: SCRAM (v 1.0). Geoscientific Model Development, 2015, 8, 1595-1612.	1.3	22
46	Aerosol composition and the contribution of SOA formation over Mediterranean forests. Atmospheric Chemistry and Physics, 2018, 18, 7041-7056.	1.9	22
47	Influence of boundary conditions and anthropogenic emission inventories on simulated O 3 and PM 2.5 concentrations over Lebanon. Atmospheric Pollution Research, 2016, 7, 971-979.	1.8	21
48	MICS Asia Phase IIâ€”Sensitivity to the aerosol module. Atmospheric Environment, 2008, 42, 3562-3570.	1.9	19
49	Investigating the Impact of Aqueous-Phase Chemistry and Wet Deposition on Organic Aerosol Formation Using a Molecular Surrogate Modeling Approach. Environmental Science & Technology, 2013, 47, 914-922.	4.6	19
50	Aerosol sources in the western Mediterranean during summertime: a model-based approach. Atmospheric Chemistry and Physics, 2018, 18, 9631-9659.	1.9	18
51	Nonstationary modeling of NO₂, NO and NO_{<i>x</i>} in Paris using the Street-in-Grid model: coupling local and regional scales with a two-way dynamic approach. Atmospheric Chemistry and Physics, 2020, 20, 7717-7740.	1.9	18
52	Diesel, petrol or electric vehicles: What choices to improve urban air quality in the Ile-de-France region? A simulation platform and case study. Atmospheric Environment, 2020, 241, 117752.	1.9	17
53	Threeâ€dimensional modeling of the mixing state of particles over Greater Paris. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5930-5947.	1.2	16
54	SSH-Aerosol v1.1: A Modular Box Model to Simulate the Evolution of Primary and Secondary Aerosols. Atmosphere, 2020, 11, 525.	1.0	16

#	Article	IF	Citations
55	Modeling coagulation of externally mixed particles: Sectional approach for both size and chemical composition. Journal of Aerosol Science, 2013, 58, 17-32.	1.8	13
56	Determination of gaseous and particulate emission factors from road transport in a Middle Eastern capital. Transportation Research, Part D: Transport and Environment, 2020, 83, 102361.	3.2	13
57	Modeling organic aerosol concentrations and properties during winter 2014 in the northwestern Mediterranean region. Atmospheric Chemistry and Physics, 2018, 18, 18079-18100.	1.9	10
58	Simulation of primary and secondary particles in the streets of Paris using MUNICH. Faraday Discussions, 2021, 226, 432-456.	1.6	10
59	Detailed Speciation of Non-Methane Volatile Organic Compounds in Exhaust Emissions from Diesel and Gasoline Euro 5 Vehicles Using Online and Offline Measurements. Toxics, 2022, 10, 184.	1.6	10
60	Dominant aerosol processes during highâ€pollution episodes over Greater Tokyo. Journal of Geophysical Research, 2007, 112, .	3.3	8
61	Black carbon modeling in urban areas: investigating the influence of resuspension and non-exhaust emissions in streets using the Street-in-Grid model for inert particles (SinG-inert). Geoscientific Model Development, 2021, 14, 7001-7019.	1.3	8
62	A new algorithm to solve condensation/evaporation for ultra fine, fine, and coarse particles. Journal of Aerosol Science, 2013, 55, 116-136.	1.8	7
63	Impact of mixing state on aerosol optical properties during severe wildfires over the Euro-Mediterranean region. Atmospheric Environment, 2020, 220, 117042.	1.9	6
64	Influence of emission size distribution and nucleation on number concentrations over Greater Paris. Atmospheric Chemistry and Physics, 2022, 22, 8579-8596.	1.9	6
65	Parametrization of Horizontal and Vertical Transfers for the Street-Network Model MUNICH Using the CFD Model Code_Saturne. Atmosphere, 2022, 13, 527.	1.0	5
66	Combining homogeneous and heterogeneous chemistry to model inorganic compound concentrations in indoor environments: the H²I model (v1.0). Geoscientific Model Development, 2021, 14, 2747-2780.	1.3	4
67	Improvement in Modeling of OH and HO2 Radical Concentrations during Toluene and Xylene Oxidation with RACM2 Using MCM/GECKO-A. Atmosphere, 2021, 12, 732.	1.0	4
68	Improvement of solar irradiance modelling during cloudy-sky days using measurements. Solar Energy, 2021, 230, 1175-1188.	2.9	4
69	Representation of aerosol optical properties using a chemistry transport model to improve solar irradiance modelling. Solar Energy, 2018, 176, 439-452.	2.9	3
70	Three-dimensional computational fluid dynamics modelling of sodium oxide aerosol atmospheric dispersion from indoor sodium fire. Journal of Aerosol Science, 2019, 137, 105433.	1.8	3
71	Evolution under dark conditions of particles from old and modern diesel vehicles in a new environmental chamber characterized with fresh exhaust emissions. Atmospheric Measurement Techniques, 2021, 14, 7627-7655.	1.2	3
72	O₃â€“NO_y photochemistry in boundary layer polluted plumes: insights from the MEGAPOLI (Paris), ChArMEx/SAFMED (North West Mediterranean) and DACCIWA (southern) Tj ETQq0 0 0 rgBT /Overlock 10 T	3	

#	Article	IF	Citations
73	General discussion: Aerosol formation and growth; VOC sources and secondary organic aerosols. Faraday Discussions, 2021, 226, 479-501.	1.6	1
74	Effect of vehicle fleet composition and mobility on outdoor population exposure: A street resolution analysis in Paris. Atmospheric Pollution Research, 2022, 13, 101365.	1.8	1
75	Modeling the Contribution of Aerosols to Fog Evolution through Their Influence on Solar Radiation. Climate, 2022, 10, 61.	1.2	1
76	Numerical modelling strategies for the urban atmosphere: general discussion. Faraday Discussions, 2016, 189, 635-660.	1.6	0
77	Modelling of Externally-Mixed Particles in the Atmosphere. Springer Proceedings in Complexity, 2016, , 43-48.	0.2	0