Gabriele Curci

List of Publications by Year
in descending order

79 papers	4,206 citations	136885 32 h-index	128225 60 g-index
127 all docs	127 docs citations	127 times ranked	5012 citing authors

#	Article	IF	Citations
1	CHIMERE 2013: a model for regional atmospheric composition modelling. Geoscientific Model Development, 2013, 6, 981-1028.	1.3	392
2	The AeroCom evaluation and intercomparison of organic aerosol in global models. Atmospheric Chemistry and Physics, 2014, 14, 10845-10895.	1.9	363
3	Modeling of gas and aerosol with WRF/Chem over Europe: Evaluation and sensitivity study. Journal of Geophysical Research, 2012, 117, .	3.3	185
4	Intra- and inter-annual variability of VOC emissions from natural and semi-natural vegetation in Europe and neighbouring countries. Atmospheric Environment, 2009, 43, 1380-1391.	1.9	174
5	Evaluation of operational on-line-coupled regional air quality models over Europe and North America in the context of AQMEII phase 2. Part I: Ozone. Atmospheric Environment, 2015, 115, 404-420.	1.9	168
6	Regional modeling of carbonaceous aerosols over Europeâ€"focus on secondary organic aerosols. Journal of Atmospheric Chemistry, 2008, 61, 175-202.	1.4	157
7	Modelling study of the impact of isoprene and terpene biogenic emissions on European ozone levels. Atmospheric Environment, 2009, 43, 1444-1455.	1.9	151
8	Evaluation of operational online-coupled regional air quality models over Europe and North America in the context of AQMEII phase 2. Part II: Particulate matter. Atmospheric Environment, 2015, 115, 421-441.	1.9	133
9	Modeling organic aerosols during MILAGRO: importance of biogenic secondary organic aerosols. Atmospheric Chemistry and Physics, 2009, 9, 6949-6981.	1.9	119
10	Feedbacks between air pollution and weather, Part 1: Effects on weather. Atmospheric Environment, 2015, 115, 442-469.	1.9	102
11	Feedbacks between air pollution and weather, part 2: Effects on chemistry. Atmospheric Environment, 2015, 115, 499-526.	1.9	99
12	Estimating European volatile organic compound emissions using satellite observations of formaldehyde from the Ozone Monitoring Instrument. Atmospheric Chemistry and Physics, 2010, 10, 11501-11517.	1.9	94
13	Energy demands of buildings in the framework of climate change: An investigation across Europe. Sustainable Cities and Society, 2020, 60, 102213.	5.1	94
14	Influence of the choice of gas-phase mechanism on predictions of key gaseous pollutants during the AQMEII phase-2 intercomparison. Atmospheric Environment, 2015, 115, 553-568.	1.9	92
15	European atmosphere in 2050, a regional air quality and climate perspective under CMIP5 scenarios. Atmospheric Chemistry and Physics, 2013, 13, 7451-7471.	1.9	87
16	Analysis of the WRF-Chem contributions to AQMEII phase2 with respect to aerosol radiative feedbacks on meteorology and pollutant distributions. Atmospheric Environment, 2015, 115, 630-645.	1.9	87
17	High albedo materials to counteract heat waves in cities: An assessment of meteorology, buildings energy needs and pedestrian thermal comfort. Building and Environment, 2019, 163, 106242.	3.0	86
18	Comparative analysis of meteorological performance of coupled chemistry-meteorology models in the context of AQMEII phase 2. Atmospheric Environment, 2015, 115, 470-498.	1.9	85

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19	Uncertainties of simulated aerosol optical properties induced by assumptions on aerosol physical and chemical properties: An AQMEII-2 perspective. Atmospheric Environment, 2015, 115, 541-552.	1.9	84
20	Evaluation and error apportionment of an ensemble of atmospheric chemistry transport modeling systems: multivariable temporal and spatial breakdown. Atmospheric Chemistry and Physics, 2017, 17, 3001-3054.	1.9	69
21	Assessment and economic valuation of air pollution impacts on human health over Europe and the United States as calculated by a multi-model ensemble in the framework of AQMEII3. Atmospheric Chemistry and Physics, 2018, 18, 5967-5989.	1.9	68
22	A model for European Biogenic Volatile Organic Compound emissions: Software development and first validation. Environmental Modelling and Software, 2010, 25, 1845-1856.	1.9	67
23	An important fingerprint of wildfires on the European aerosol load. Atmospheric Chemistry and Physics, 2011, 11, 10487-10501.	1.9	65
24	Analysis of meteorologyâ€“chemistry interactions during air pollution episodes using online coupled models within AQMEII phase-2. Atmospheric Environment, 2015, 115, 527-540.	1.9	61
25	WRF-Chem model sensitivity to chemical mechanisms choice in reconstructing aerosol optical properties. Atmospheric Environment, 2015, 115, 604-619.	1.9	60
26	Assessment of the MACC reanalysis and its influence as chemical boundary conditions for regional air quality modeling in AQMEII-2. Atmospheric Environment, 2015, 115, 371-388.	1.9	59
27	Biomass burning aerosol transport and vertical distribution over the South Africanâ€Atlantic region. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6391-6415.	1.2	59
28	Aerosol singleâ€scattering albedo over the global oceans: Comparing PARASOL retrievals with AERONET, OMI, and AeroCom models estimates. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9814-9836.	1.2	58
29	Influence of Input Climatic Data on Simulations of Annual Energy Needs of a Building: EnergyPlus and WRF Modeling for a Case Study in Rome (Italy). Energies, 2018, 11, 2835.	1.6	53
30	Modeled deposition of nitrogen and sulfur in Europe estimated by 14 air quality model systems: evaluation, effects of changes in emissions and implications for habitat protection. Atmospheric Chemistry and Physics, 2018, 18, 10199-10218.	1.9	47
31	How much is particulate matter near the ground influenced by upper-level processes within and above the PBL? A summertime case study in Milan (Italy) evidences the distinctive role of nitrate. Atmospheric Chemistry and Physics, 2015, 15, 2629-2649.	1.9	42
32	Sensitivity of feedback effects in CBMZ/MOSAIC chemical mechanism. Atmospheric Environment, 2015, 115, 646-656.	1.9	37
33	Sensitivity analysis of the microphysics scheme in WRF-Chem contributions to AQMEII phase 2. Atmospheric Environment, 2015, 115, 620-629.	1.9	37
34	Sulfur deposition changes under sulfate geoengineering conditions: quasi-biennial oscillation effects on the transport and lifetime of stratospheric aerosols. Atmospheric Chemistry and Physics, 2018, 18, 2787-2808.	1.9	33
35	Influence of anthropogenic emissions and boundary conditions on multi-model simulations of major air pollutants over Europe and North America in the framework of AQMEII3. Atmospheric Chemistry and Physics, 2018, 18, 8929-8952.	1.9	32
36	WRF-chem sensitivity to vertical resolution during a saharan dust event. Physics and Chemistry of the Earth, 2016, 94, 188-195.	1.2	31

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37	MODIS and OMI satellite observations supporting air quality monitoring. Radiation Protection Dosimetry, 2009, 137, 280-287.	0.4	30
38	High-resolution air quality modeling: Sensitivity tests to horizontal resolution and urban canopy with WRF-CHIMERE. Atmospheric Environment, 2018, 187, 241-254.	1.9	29
39	Estimating building cooling energy demand through the Cooling Degree Hours in a changing climate: A modeling study. Sustainable Cities and Society, 2022, 76, 103518.	5.1	28
40	Assessing uncertainties of a geophysical approach to estimate surface fine particulate matter distributions from satellite-observed aerosol optical depth. Atmospheric Chemistry and Physics, 2019, 19, 295-313.	1.9	26
41	Sensitivity of heating performance of an energy self-sufficient building to climate zone, climate change and HVAC system solutions. Sustainable Cities and Society, 2020, 61, 102300.	5.1	26
42	A new chemistry option in WRF-Chem v. 3.4 for the simulation of direct and indirect aerosol effects using VBS: evaluation against IMPACT-EUCAARI data. Geoscientific Model Development, 2015, 8, 2749-2776.	1.3	25
43	Direct Radiative Effect of Absorbing Aerosols: Sensitivity to Mixing State, Brown Carbon, and Soil Dust Refractive Index and Shape. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD030967.	1.2	25
44	Modelling black carbon absorption of solar radiation: combining external and internal mixing assumptions. Atmospheric Chemistry and Physics, 2019, 19, 181-204.	1.9	24
45	Insights into the deterministic skill of air quality ensembles from the analysis of AQMEII data. Atmospheric Chemistry and Physics, 2016, 16, 15629-15652.	1.9	23
46	First Topâ€Down Estimates of Anthropogenic NO_x Emissions Using Highâ€Resolution Airborne Remote Sensing Observations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 3269-3284.	1.2	21
47	Defining ecological regions in Italy based on a multivariate clustering approach: A first step towards a targeted vector borne disease surveillance. PLoS ONE, 2019, 14, e0219072.	1.1	21
48	Modelling air quality impact of a biomass energy power plant in a mountain valley in Central Italy. Atmospheric Environment, 2012, 62, 248-255.	1.9	19
49	A global modelâ€“measurement evaluation of particle light scattering coefficients at elevated relative humidity. Atmospheric Chemistry and Physics, 2020, 20, 10231-10258.	1.9	19
50	Building a local climate reference dataset: Application to the Abruzzo region (Central Italy), 1930â€“2019. International Journal of Climatology, 2021, 41, 4414-4436.	1.5	18
51	High-resolution inventory of NO emissions from agricultural soils over the Ile-de-France region. Environmental Pollution, 2010, 158, 711-722.	3.7	17
52	Aerosol optical properties over Europe: an evaluation of the AQMEII Phase 3 simulations against satellite observations. Atmospheric Chemistry and Physics, 2019, 19, 2965-2990.	1.9	17
53	Impact of Highly Reflective Materials on Meteorology, PM10 and Ozone in Urban Areas: A Modeling Study with WRF-CHIMERE at High Resolution over Milan (Italy). Urban Science, 2018, 2, 18.	1.1	16
54	Sensitivity of near-surface meteorology to PBL schemes in WRF simulations in a port-industrial area with complex terrain. Atmospheric Research, 2021, 264, 105824.	1.8	15

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55	First Implementation of the WRF-CHIMERE-EDGAR Modeling System Over Argentina. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 5304-5314.	2.3	13
56	Effect of the Aerosol Model Assumption on the Atmospheric Correction over Land: Case Studies with CHRIS/PROBA Hyperspectral Images over Benelux. Remote Sensing, 2015, 7, 8391-8415.	1.8	11
57	Two-scale multi-model ensemble: is a hybrid ensemble of opportunity telling us more?. Atmospheric Chemistry and Physics, 2018, 18, 8727-8744.	1.9	10
58	Analysis of Rainfall Erosivity Trends 1980â€“2018 in a Complex Terrain Region (Abruzzo, Central Italy) from Rain Gauges and Gridded Datasets. Atmosphere, 2021, 12, 657.	1.0	10
59	Present-day radiative effect from radiation-absorbing aerosols in snow. Atmospheric Chemistry and Physics, 2021, 21, 6875-6893.	1.9	9
60	Evaluating cloud properties in an ensemble of regional online coupled models against satellite observations. Atmospheric Chemistry and Physics, 2018, 18, 15183-15199.	1.9	8
61	On the association between high outdoor thermo-hygrometric comfort index and severe ground-level ozone: A first investigation. Environmental Research, 2021, 195, 110306.	3.7	8
62	On the mitigation potential of higher urban albedo in a temperate oceanic metropolis. Sustainable Cities and Society, 2022, 81, 103850.	5.1	7
63	On the Redox-Activity and Health-Effects of Atmospheric Primary and Secondary Aerosol: Phenomenology. Atmosphere, 2022, 13, 704.	1.0	7
64	Climatic Suitability of Different Areas in Abruzzo, Central Italy, for the Cultivation of Hazelnut. Horticulturae, 2022, 8, 580.	1.2	7
65	Tropospheric fate of Tunguska generated nitrogen oxides. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	6
66	Origin of atmospheric aerosols at the Pierre Auger Observatory using studies of air mass trajectories in South America. Atmospheric Research, 2014, 149, 120-135.	1.8	6
67	Interpreting elevated space-borne HCHO columns over the Mediterranean Sea using the OMI sensor. Atmospheric Chemistry and Physics, 2011, 11, 12787-12798.	1.9	5
68	Parametric analysis for global single scattering albedo calculations. Atmospheric Environment, 2020, 234, 117616.	1.9	5
69	Regional impacts of black carbon morphologies on shortwave aerosolâ€“radiation interactions: a comparative study between the US and China. Atmospheric Chemistry and Physics, 2022, 22, 7647-7666.	1.9	5
70	Simulation of size-segregated aerosol chemical composition over northern Italy in clear sky and wind calm conditions. Atmospheric Research, 2013, 125-126, 1-11.	1.8	4
71	Distribution of sulfur aerosol precursors in the SPCZ released by continuous volcanic degassing at Ambrym, Vanuatu. Journal of Volcanology and Geothermal Research, 2016, 322, 76-104.	0.8	4
72	An Air Quality Forecasting Tool over Italy (ForeChem). NATO Science for Peace and Security Series C: Environmental Security, 2011, , 397-401.	0.1	3

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73	Combined Effect of High-Resolution Land Cover and Grid Resolution on Surface NO2 Concentrations. Climate, 2022, 10, 19.	1.2	3
74	Analysis of climatic factors involved in the BTV-1 incursion in Central Italy in 2014. Veterinaria Italiana, 2016, 52, 223-229.	0.5	3
75	EVALUATION OF THE AEROSOL TYPE EFFECT ON THE SURFACE REFLECTANCE RETRIEVAL USING CHRIS/PROBA IMAGES OVER LAND. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7/W3, 1311-1316.	0.2	2
76	2012 hyperspectral airborne campaign on Etna: Multi data acquisition for ASI-PRISMA project. , 2013, , .		1
77	Monitoring Air Pollution from Wildfires Using Ground Data, Satellite Products and Modeling: The Austral Summer 2016-2017 In Argentina. , 2019, , .		1
78	Aerosol Simulation with Fully Coupled â€œOnlineâ€•Meteorology-Chemistry Model WRF/Chem over Europe: Preliminary Results. NATO Science for Peace and Security Series C: Environmental Security, 2011, , 559-563.	0.1	0
79	On the Interplay Between Upper and Ground Levels Dynamics and Chemistry in Determining the Surface Aerosol Budget. Springer Proceedings in Complexity, 2014, , 85-89.	0.2	0