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	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
2	Combined Effect of High-Resolution Land Cover and Grid Resolution on Surface NO2 Concentrations. Climate, 2022, 10, 19.	1.2	3
3	On the mitigation potential of higher urban albedo in a temperate oceanic metropolis. Sustainable Cities and Society, 2022, 81, 103850.	5.1	7
4	On the Redox-Activity and Health-Effects of Atmospheric Primary and Secondary Aerosol: Phenomenology. Atmosphere, 2022, 13, 704.	1.0	7
5	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
6	Climatic Suitability of Different Areas in Abruzzo, Central Italy, for the Cultivation of Hazelnut. Horticulturae, 2022, 8, 580.	1.2	7
7	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
8	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
9	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
10	Present-day radiative effect from radiation-absorbing aerosols in snow. Atmospheric Chemistry and Physics, 2021, 21, 6875-6893.	1.9	9
11	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
12	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
13	Parametric analysis for global single scattering albedo calculations. Atmospheric Environment, 2020, 234, 117616.	1.9	5
14	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
15	Energy demands of buildings in the framework of climate change: An investigation across Europe. Sustainable Cities and Society, 2020, 60, 102213.	5.1	94
16	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
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	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

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19	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
20	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
21	Modelling black carbon absorption of solar radiation: combining external and internal mixing assumptions. Atmospheric Chemistry and Physics, 2019, 19, 181-204.	1.9	24
22	Monitoring Air Pollution from Wildfires Using Ground Data, Satellite Products and Modeling: The Austral Summer 2016-2017 In Argentina. , 2019, , .		1
23	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
24	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
25	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
26	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
27	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
28	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
29	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
30	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
31	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
32	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
33	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
34	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
35	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
36	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

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37	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
38	WRF-chem sensitivity to vertical resolution during a saharan dust event. Physics and Chemistry of the Earth, 2016, 94, 188-195.	1.2	31
39	Analysis of climatic factors involved in the BTV-1 incursion in Central Italy in 2014. Veterinaria Italiana, 2016, 52, 223-229.	0.5	3
40	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
41	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
42	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
43	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
44	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
45	Sensitivity of feedback effects in CBMZ/MOSAIC chemical mechanism. Atmospheric Environment, 2015, 115, 646-656.	1.9	37
46	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
47	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
48	WRF-Chem model sensitivity to chemical mechanisms choice in reconstructing aerosol optical properties. Atmospheric Environment, 2015, 115, 604-619.	1.9	60
49	Sensitivity analysis of the microphysics scheme in WRF-Chem contributions to AQMEII phase 2. Atmospheric Environment, 2015, 115, 620-629.	1.9	37
50	Feedbacks between air pollution and weather, Part 1: Effects on weather. Atmospheric Environment, 2015, 115, 442-469.	1.9	102
51	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
52	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
53	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
54	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

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55	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
56	Feedbacks between air pollution and weather, part 2: Effects on chemistry. Atmospheric Environment, 2015, 115, 499-526.	1.9	99
57	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
58	The AeroCom evaluation and intercomparison of organic aerosol in global models. Atmospheric Chemistry and Physics, 2014, 14, 10845-10895.	1.9	363
59	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
60	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
61	CHIMERE 2013: a model for regional atmospheric composition modelling. Geoscientific Model Development, 2013, 6, 981-1028.	1.3	392
62	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
63	2012 hyperspectral airborne campaign on Etna: Multi data acquisition for ASI-PRISMA project. , 2013, , .		1
64	Modeling of gas and aerosol with WRF/Chem over Europe: Evaluation and sensitivity study. Journal of Geophysical Research, 2012, 117, .	3.3	185
65	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
66	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
67	An important fingerprint of wildfires on the European aerosol load. Atmospheric Chemistry and Physics, 2011, 11, 10487-10501.	1.9	65
68	An Air Quality Forecasting Tool over Italy (ForeChem). NATO Science for Peace and Security Series C: Environmental Security, 2011, , 397-401.	0.1	3
69	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
70	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
71	High-resolution inventory of NO emissions from agricultural soils over the Ile-de-France region. Environmental Pollution, 2010, 158, 711-722.	3.7	17
72	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

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73	MODIS and OMI satellite observations supporting air quality monitoring. Radiation Protection Dosimetry, 2009, 137, 280-287.	0.4	30
74	Modelling study of the impact of isoprene and terpene biogenic emissions on European ozone levels. Atmospheric Environment, 2009, 43, 1444-1455.	1.9	151
75	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
76	Modeling organic aerosols during MILAGRO: importance of biogenic secondary organic aerosols. Atmospheric Chemistry and Physics, 2009, 9, 6949-6981.	1.9	119
77	Regional modeling of carbonaceous aerosols over Europeâ€"focus on secondary organic aerosols. Journal of Atmospheric Chemistry, 2008, 61, 175-202.	1.4	157
78	Tropospheric fate of Tunguska generated nitrogen oxides. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	6
79	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