Piero Di Carlo

List of Publications by Year
in descending order

63 papers	2,675 citations	218677 26 h-index	206112 48 g-index
79 all docs	79 docs citations	79 times ranked	3887 citing authors

#	Article	IF	Citations
1	Missing OH Reactivity in a Forest: Evidence for Unknown Reactive Biogenic VOCs. Science, 2004, 304, 722-725.	12.6	431
2	Recursive neural network model for analysis and forecast of PM10 and PM2.5. Atmospheric Pollution Research, 2017, 8, 652-659.	3.8	223
3	A Laser-induced Fluorescence Instrument for Detecting Tropospheric OH and HO2: Characteristics and Calibration. Journal of Atmospheric Chemistry, 2004, 47, 139-167.	3.2	182
4	Nitrogen management is essential to prevent tropical oil palm plantations from causing ground-level ozone pollution. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 18447-18451.	7.1	161
5	Overview: oxidant and particle photochemical processes above a south-east Asian tropical rainforest (the OP3 project): introduction, rationale, location characteristics and tools. Atmospheric Chemistry and Physics, 2010, 10, 169-199.	4.9	130
6	In Vitro Genotoxicity of Polystyrene Nanoparticles on the Human Fibroblast Hs27 Cell Line. Nanomaterials, 2019, 9, 1299.	4.1	124
7	Measurement of the pressure dependence of air fluorescence emission induced by electrons. Astroparticle Physics, 2007, 28, 41-57.	4.3	91
8	Direct observations of daytime NO3: Implications for urban boundary layer chemistry. Journal of Geophysical Research, 2003, 108, .	3.3	84
9	Effects of land use on surfaceâ€“atmosphere exchanges of trace gases and energy in Borneo: comparing fluxes over oil palm plantations and a rainforest. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 3196-3209.	4.0	78
10	Interferences in photolytic NO₂ measurements: explanation for an apparent missing oxidant?. Atmospheric Chemistry and Physics, 2016, 16, 4707-4724.	4.9	71
11	Influence of aerosol chemical composition on N₂O₅ uptake: airborne regional measurements in northwestern Europe. Atmospheric Chemistry and Physics, 2015, 15, 973-990.	4.9	66
12	Earthquakes trigger the loss of groundwater biodiversity. Scientific Reports, 2014, 4, 6273.	3.3	66
13	Ozone photochemistry in boreal biomass burning plumes. Atmospheric Chemistry and Physics, 2013, 13, 7321-7341.	4.9	64
14	Properties and evolution of biomass burning organic aerosol from Canadian boreal forest fires. Atmospheric Chemistry and Physics, 2015, 15, 3077-3095.	4.9	61
15	Interference Testing for Atmospheric HOxMeasurements by Laser-induced Fluorescence. Journal of Atmospheric Chemistry, 2004, 47, 169-190.	3.2	59
16	Seasonal variation of ozone and black carbon observed at Paknajol, an urban site in the Kathmandu Valley, Nepal. Atmospheric Chemistry and Physics, 2015, 15, 13957-13971.	4.9	56
17	Quantifying the impact of BOReal forest fires on Tropospheric oxidants over the Atlantic using Aircraft and Satellites (BORTAS) experiment: design, execution and science overview. Atmospheric Chemistry and Physics, 2013, 13, 6239-6261.	4.9	52
18	Analysis of surface ozone using a recurrent neural network. Science of the Total Environment, 2015, 514, 379-387.	8.0	52

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19	Laser induced fluorescence instrument for NO2 measurements: Observations at a central Italy background site. Atmospheric Environment, 2009, 43, 970-977.	4.1	45
20	Radical chemistry at night: comparisons between observed and modelled HO_x, NO₃ and N₂O₅ during the RONOCO project. Atmospheric Chemistry and Physics, 2014, 14, 1299-1321.	4.9	42
21	WRF-Chem model predictions of the regional impacts of N₂O₅ heterogeneous processes on night-time chemistry over north-western Europe. Atmospheric Chemistry and Physics, 2015, 15, 1385-1409.	4.9	38
22	Evolution of surface ozone in central Italy based on observations and statistical model. Journal of Geophysical Research, 2007, 112, .	3.3	37
23	Precise measurement of the absolute fluorescence yield of the 337nm band in atmospheric gases. Astroparticle Physics, 2013, 42, 90-102.	4.3	37
24	Air and surface measurements of SARS-CoV-2 inside a bus during normal operation. PLoS ONE, 2020, 15, e0235943.	2.5	36
25	Instrumental monitoring of the birth and development of truffles in a Tuber melanosporum orchard. Mycorrhiza, 2014, 24, 65-72.	2.8	34
26	Temperature and humidity dependence of air fluorescence yield measured by AIRFLY. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 597, 50-54.	1.6	30
27	Aircraft based four-channel thermal dissociation laser induced fluorescence instrument for simultaneous measurements of NO₂, total peroxy nitrate, total alkyl nitrate, and HNO₃. Atmospheric Measurement Techniques, 2013, 6, 971-980.	3.1	29
28	Spectrally resolved pressure dependence measurements of air fluorescence emission with AIRFLY. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 597, 41-45.	1.6	23
29	Observations and box model analysis of radon-222 in the atmospheric surface layer at Lâ€™Aquila, Italy: March 2009 case study. Environmental Earth Sciences, 2014, 71, 2353-2359.	2.7	20
30	Effects of Natural Ventilation and Saliva Standard Ejectors during the COVID-19 Pandemic: A Quantitative Analysis of Aerosol Produced during Dental Procedures. International Journal of Environmental Research and Public Health, 2021, 18, 7472.	2.6	19
31	A novel method for the absolute fluorescence yield measurement by AIRFLY. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 597, 55-60.	1.6	18
32	Energy dependence of air fluorescence yield measured by AIRFLY. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 597, 46-49.	1.6	18
33	Precipitation intensity under a warming climate is threatening some Italian premium wines. Science of the Total Environment, 2019, 685, 508-513.	8.0	14
34	Observations of surface radon in Central Italy. Environmental Geology, 2009, 58, 431-436.	1.2	13
35	Effects of ozone exposure on human epithelial adenocarcinoma and normal fibroblasts cells. PLoS ONE, 2017, 12, e0184519.	2.5	13
36	Desert dust transported over Europe: Lidar observations and model evaluation of the radiative impact. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2881-2898.	3.3	12

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37	Aircraft observations of the lower troposphere above a megacity: Alkyl nitrate and ozone chemistry. Atmospheric Environment, 2014, 94, 479-488.	4.1	11
38	Wildfires impact on surface nitrogen oxides and ozone in Central Italy. Atmospheric Pollution Research, 2015, 6, 29-35.	3.8	10
39	Analysis of Summer Ozone Observations at a High Mountain Site in Central Italy (Campo Imperatore,) Tj ETQq1 1 0.784314 rgBT /Ov	1.9	9
40	Aerosol Measurements in the Atmospheric Surface Layer at Lâ€™Aquila, Italy: Focus on Biogenic Primary Particles. Pure and Applied Geophysics, 2014, 171, 2425-2441.	1.9	8
41	Production of peroxy nitrates in boreal biomass burning plumes over Canada during the BORTAS campaign. Atmospheric Chemistry and Physics, 2016, 16, 3485-3497.	4.9	7
42	Exposure to particle debris generated from passenger and truck tires induces different genotoxicity and inflammatory responses in the RAW 264.7 cell line. PLoS ONE, 2019, 14, e0222044.	2.5	7
43	Normal breathing releases SARS-CoV-2 into the air. Journal of Medical Microbiology, 2021, 70, .	1.8	7
44	Lidar and SAGE II observations of Shishaldin Volcano aerosols and lower stratospheric transport. Geophysical Research Letters, 2000, 27, 3445-3448.	4.0	6
45	AIRFLY: Measurement of the Air Fluorescence Radiation Induced by Electrons. Nuclear Physics, Section B, Proceedings Supplements, 2006, 150, 186-189.	0.4	6
46	AIRFLY: Measurement of the uorescence yield in atmospheric gases. European Physical Journal D, 2006, 56, A361-A367.	0.4	6
47	Megacity and local contributions to regional air pollution: an aircraft case study over London. Atmospheric Chemistry and Physics, 2020, 20, 7193-7216.	4.9	6
48	Corrigendum to "Overview: oxidant and particle photochemical processes above a south-east Asian tropical rainforest (the OP3 project): introduction, rationale, location characteristics and tools" published in Atmos. Chem. Phys., 10, 169â€“199, 2010. Atmospheric Chemistry and Physics, 2010, 10, 563-563.	4.9	5
49	Precise measurement of the absolute yield of fluorescence photons in atmospheric gases. Nuclear Physics, Section B, Proceedings Supplements, 2011, 212-213, 356-361.	0.4	5
50	Aerosol measurements at L'Aquila EARLINET station in central Italy: Impact of local sources and large scale transport resolved by LIDAR. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 92, 116-123.	1.6	5
51	Impact of biomass burning emission on total peroxy nitrates: fire plume identification during the BORTAS campaign. Atmospheric Measurement Techniques, 2016, 9, 5591-5606.	3.1	5
52	Increasing the maturity of measurements of essential climate variables (ECVs) at Italian atmospheric WMO/GAW observatories by implementing automated data elaboration chains. Computers and Geosciences, 2020, 137, 104432.	4.2	5
53	Seasonal variation of night-time accumulated Rn-222 in central Italy. Environmental Earth Sciences, 2015, 73, 8589-8597.	2.7	4
54	In SituTrace Gas Measurements. , 0, , 77-155.		4

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55	Partitioning of Organonitrates in the Production of Secondary Organic Aerosols from Î±-Pinene Photo-Oxidation. Environmental Science & Technology, 2022, 56, 5421-5429.	10.0	4
56	The Relationship between PM2.5 and PM10 in Central Italy: Application of Machine Learning Model to Segregate Anthropogenic from Natural Sources. Atmosphere, 2022, 13, 484.	2.3	3
57	An Assessment of Stratospheric Intrusions in Italian Mountain Regions Using STEFLUX. Atmosphere, 2018, 9, 413.	2.3	2
58	Neural Network Model Analysis for Investigation of NO Origin in a High Mountain Site. Atmosphere, 2020, 11, 173.	2.3	2
59	High-resolution spectrometer for atmospheric studies. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1383-1388.	1.6	1
60	Precise Measurement of the Absolute Fluorescence Yield. , 2011, , .		0
61	Air pollution: new insight from direct measurements of ozone production. Environmental Chemistry, 2015, 12, 706.	1.5	0
62	The Relativity of Consciousness: The Application of Time Dilation to The Theory of Integrated Information. NeuroQuantology, 2019, 17, .	0.2	0
63	An Introduction to Measurements of Atmospheric Composition. , 2011, , 115-128.		0