Sergio Rodriguez

List of Publications by Year
in descending order

98	9,487	57758 44	42399 92
papers	citations	h-index	g-index

131	131	131	7417
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A European aerosol phenomenologyâ€"2: chemical characteristics of particulate matter at kerbside, urban, rural and background sites in Europe. Atmospheric Environment, 2004, 38, 2579-2595.	4.1	801
2	A European aerosol phenomenology â€“ 3: Physical and chemical characteristics of particulate matter from 60 rural, urban, and kerbside sites across Europe. Atmospheric Environment, 2010, 44, 1308-1320.	4.1	654
3	PM10 and PM2.5 source apportionment in the Barcelona Metropolitan area, Catalonia, Spain. Atmospheric Environment, 2001, 35, 6407-6419.	4.1	563
4	A European aerosol phenomenologyâ€"1: physical characteristics of particulate matter at kerbside, urban, rural and background sites in Europe. Atmospheric Environment, 2004, 38, 2561-2577.	4.1	494
5	Saharan dust contributions to PM10 and TSP levels in Southern and Eastern Spain. Atmospheric Environment, 2001, 35, 2433-2447.	4.1	482
6	Chemical composition and complex refractive index of Saharan Mineral Dust at IzaÃ±a, Tenerife (Spain) derived by electron microscopy. Atmospheric Environment, 2007, 41, 8058-8074.	4.1	376
7	New considerations for PM, Black Carbon and particle number concentration for air quality monitoring across different European cities. Atmospheric Chemistry and Physics, 2011, 11, 6207-6227.	4.9	317
8	Spatial and temporal variations in airborne particulate matter (PM10 and PM2.5) across Spain 1999â€"2005. Atmospheric Environment, 2008, 42, 3964-3979.	4.1	287
9	Characterization and intercomparison of aerosol absorption photometers: result of two intercomparison workshops. Atmospheric Measurement Techniques, 2011, 4, 245-268.	3.1	284
10	Speciation and origin of PM10 and PM2.5 in Spain. Journal of Aerosol Science, 2004, 35, 1151-1172.	3.8	246
11	Monitoring of PM10 and PM2.5 around primary particulate anthropogenic emission sources. Atmospheric Environment, 2001, 35, 845-858.	4.1	220
12	Transport of desert dust mixed with North African industrial pollutants in the subtropical Saharan Air Layer. Atmospheric Chemistry and Physics, 2011, 11, 6663-6685.	4.9	218
13	Comparative PM10â€"PM2.5 source contribution study at rural, urban and industrial sites during PM episodes in Eastern Spain. Science of the Total Environment, 2004, 328, 95-113.	8.0	216
14	Wet and dry African dust episodes over eastern Spain. Journal of Geophysical Research, 2005, 110, .	3.3	210
15	Source apportionment of urban fine and ultra-fine particle number concentration in a Western Mediterranean city. Atmospheric Environment, 2009, 43, 4407-4415.	4.1	189
16	Atmospheric Transport and Deposition of Mineral Dust to the Ocean: Implications for Research Needs. Environmental Science & Technology, 2012, 46, 10390-10404.	10.0	187
17	Influence of African dust on the levels of atmospheric particulates in the Canary Islands air quality network. Atmospheric Environment, 2002, 36, 5861-5875.	4.1	180
18	A methodology for the quantification of the net African dust load in air quality monitoring networks. Atmospheric Environment, 2007, 41, 5516-5524.	4.1	174

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19	Levels of particulate matter in rural, urban and industrial sites in Spain. Science of the Total Environment, 2004, 334-335, 359-376.	8.0	159
20	Recreational atmospheric pollution episodes: Inhalable metalliferous particles from firework displays. Atmospheric Environment, 2007, 41, 913-922.	4.1	158
21	A study on the relationship between mass concentrations, chemistry and number size distribution of urban fine aerosols in Milan, Barcelona and London. Atmospheric Chemistry and Physics, 2007, 7, 2217-2232.	4.9	138
22	Origin of high summer PM10 and TSP concentrations at rural sites in Eastern Spain. Atmospheric Environment, 2002, 36, 3101-3112.	4.1	127
23	Climatology of aerosol radiative properties in the free troposphere. Atmospheric Research, 2011, 102, 365-393.	4.1	121
24	Sources and processes affecting levels and composition of atmospheric aerosol in the western Mediterranean. Journal of Geophysical Research, 2002, 107, AAC 12-1.	3.3	114
25	Variability of carbonaceous aerosols in remote, rural, urban and industrial environments in Spain: implications for air quality policy. Atmospheric Chemistry and Physics, 2013, 13, 6185-6206.	4.9	104
26	Variations of urban aerosols in the western Mediterranean. Atmospheric Environment, 2008, 42, 9052-9062.	4.1	102
27	Modulation of Saharan dust export by the North African dipole. Atmospheric Chemistry and Physics, 2015, 15, 7471-7486.	4.9	99
28	Ice nucleating particles in the Saharan Air Layer. Atmospheric Chemistry and Physics, 2016, 16, 9067-9087.	4.9	93
29	Events Affecting Levels and Seasonal Evolution of Airborne Particulate Matter Concentrations in the Western Mediterranean. Environmental Science & Technology, 2003, 37, 216-222.	10.0	88
30	Influence of sea breeze circulation and road traffic emissions on the relationship between particle number, black carbon, PM1, PM2.5 and PM2.5â€“10 concentrations in a coastal city. Atmospheric Environment, 2008, 42, 6523-6534.	4.1	86
31	Assessment of atmospheric processes driving ozone variations in the subtropical North Atlantic free troposphere. Atmospheric Chemistry and Physics, 2013, 13, 1973-1998.	4.9	78
32	AÂEuropean aerosol phenomenology â€“ 6: scattering properties of atmospheric aerosol particles from 28ÂACTRIS sites. Atmospheric Chemistry and Physics, 2018, 18, 7877-7911.	4.9	76
33	Ultrafine particles pollution in urban coastal air due to ship emissions. Atmospheric Environment, 2011, 45, 4907-4914.	4.1	74
34	The contributions of â€œminimum primary emissionsâ€•and â€œnew particle formation enhancementsâ€•to the particle number concentration in urban air. Journal of Aerosol Science, 2007, 38, 1207-1219.	3.8	73
35	Nucleation and growth of new particles in the rural atmosphere of Northern Italyâ€”relationship to air quality monitoring. Atmospheric Environment, 2005, 39, 6734-6746.	4.1	72
36	Monitoring of atmospheric particulate matter around sources of secondary inorganic aerosol. Atmospheric Environment, 2004, 38, 4979-4992.	4.1	70

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37	Urban aerosol size distributions over the Mediterranean city of Barcelona, NE Spain. Atmospheric Chemistry and Physics, 2012, 12, 10693-10707.	4.9	67
38	Assessment of airborne particulate levels in Spain in relation to the new EU-directive. Atmospheric Environment, 2001, 35, 43-53.	4.1	65
39	Atmospheric particulate matter and air quality in the Mediterranean: a review. Environmental Chemistry Letters, 2007, 5, 1-7.	16.2	62
40	Ultrafine particle and fine trace metal (As, Cd, Cu, Pb and Zn) pollution episodes induced by industrial emissions in Huelva, SW Spain. Atmospheric Environment, 2012, 61, 507-517.	4.1	61
41	A review of methods for long term in situ characterization of aerosol dust. Aeolian Research, 2012, 6, 55-74.	2.7	61
42	Atmospheric nanoparticle observations in the low free troposphere during upward orographic flows at IzaÃ±a Mountain Observatory. Atmospheric Chemistry and Physics, 2009, 9, 6319-6335.	4.9	57
43	Short-term effects of ultrafine particles on daily mortality by primary vehicle exhaust versus secondary origin in three Spanish cities. Environment International, 2018, 111, 144-151.	10.0	55
44	Atmospheric ice nuclei at the high-altitude observatory Jungfraujoch, Switzerland. Tellus, Series B: Chemical and Physical Meteorology, 2022, 67, 25014.	1.6	53
45	Urban NH3 levels and sources in six major Spanish cities. Chemosphere, 2015, 119, 769-777.	8.2	53
46	Ultrafine particle formation in the inland sea breeze airflow in Southwest Europe. Atmospheric Chemistry and Physics, 2010, 10, 9615-9630.	4.9	51
47	Geochemical characterization of Cu-smelter emission plumes with impact in an urban area of SW Spain. Atmospheric Research, 2010, 96, 590-601.	4.1	43
48	Accomplishments of the MUSICA project to provide accurate, long-term, global and high-resolution observations of tropospheric {H₂O,<i>Î´</i>D} pairs â€“ a review. Atmospheric Measurement Techniques, 2016, 9, 2845-2875.	3.1	42
49	Using 137Cs and 40K to identify natural Saharan dust contributions to PM10 concentrations and air quality impairment in the Canary Islands. Atmospheric Environment, 2008, 42, 7034-7042.	4.1	37
50	Levels and chemical composition of PM in a city near a large Cu-smelter in Spain. Journal of Environmental Monitoring, 2011, 13, 1276.	2.1	37
51	The pulsating nature of large-scale Saharan dust transport as a result of interplays between mid-latitude Rossby waves and the North African Dipole Intensity. Atmospheric Environment, 2017, 167, 586-602.	4.1	37
52	Origin of observed high 7Be and mineral dust concentrations in ambient air on the Island of Tenerife. Atmospheric Environment, 2008, 42, 4247-4256.	4.1	34
53	Monitoring of sources and atmospheric processes controlling air quality in an urban Mediterranean environment. Atmospheric Environment, 2010, 44, 4879-4890.	4.1	34
54	Climatology of new particle formation at IzaÃ±a mountain GAW observatory in the subtropical North Atlantic. Atmospheric Chemistry and Physics, 2014, 14, 3865-3881.	4.9	34

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55	Detecting moisture transport pathways to the subtropical North Atlantic free troposphere using paired H₂O-<i>Î´</i>D in situ measurements. Atmospheric Chemistry and Physics, 2016, 16, 4251-4269.	4.9	32
56	An empirical equation to estimate mineral dust concentrations from visibility observations in Northern Africa. Aeolian Research, 2015, 16, 55-68.	2.7	31
57	Identification of topographic features influencing aerosol observations at high altitude stations. Atmospheric Chemistry and Physics, 2018, 18, 12289-12313.	4.9	31
58	A comparative study on the ultrafine particle episodes induced by vehicle exhaust: A crude oil refinery and ship emissions. Atmospheric Research, 2013, 120-121, 43-54.	4.1	29
59	Predicting the mineral composition of dust aerosols: Insights from elemental composition measured at the IzaÃ±a Observatory. Geophysical Research Letters, 2016, 43, 10520-10529.	4.0	29
60	Transport pathways of ozone to marine and free-troposphere sites in Tenerife, Canary Islands. Atmospheric Environment, 2004, 38, 4733-4747.	4.1	28
61	Monitoring of ozone in a marine environment in Tenerife (Canary Islands). Atmospheric Environment, 2001, 35, 1829-1841.	4.1	24
62	Empirical validation and proof of added value of MUSICA's tropospheric Î´D remote sensing products. Atmospheric Measurement Techniques, 2015, 8, 483-503.	3.1	24
63	Soluble iron dust export in the high altitude Saharan Air Layer. Atmospheric Environment, 2016, 133, 49-59.	4.1	24
64	Impact of North America on the aerosol composition in the North Atlantic free troposphere. Atmospheric Chemistry and Physics, 2017, 17, 7387-7404.	4.9	23
65	Estudio comparativo de las partÃculas en aire ambiente en pacientes ingresados por insuficiencia cardiaca y sÃndrome coronario agudo. Revista Espanola De Cardiologia, 2011, 64, 661-666.	1.2	22
66	Intercomparisons of Mobility Size Spectrometers and Condensation Particle Counters in the Frame of the Spanish Atmospheric Observational Aerosol Network. Aerosol Science and Technology, 2015, 49, 777-785.	3.1	21
67	Field comparison of dry deposition samplers for collection of atmospheric mineral dust: results from single-particle characterization. Atmospheric Measurement Techniques, 2019, 12, 6647-6665.	3.1	21
68	Impact of Desert Dust Events on the Cardiovascular Disease: A Systematic Review and Meta-Analysis. Journal of Clinical Medicine, 2021, 10, 727.	2.4	21
69	Study on the formation and transport of ozone in relation to the air quality management and vegetation protection in Tenerife (Canary Islands). Chemosphere, 2004, 56, 1157-1167.	8.2	20
70	Speciation of organic aerosols in the Saharan Air Layer and in the free troposphere westerlies. Atmospheric Chemistry and Physics, 2017, 17, 8939-8958.	4.9	20
71	Temporal and spatial variability of atmospheric particle number size distributions across Spain. Atmospheric Environment, 2018, 190, 146-160.	4.1	20
72	Saharan Dust Events in the Dust Belt -Canary Islands- and the Observed Association with in-Hospital Mortality of Patients with Heart Failure. Journal of Clinical Medicine, 2020, 9, 376.	2.4	17

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73	Rapid changes of dust geochemistry in the Saharan Air Layer linked to sources and meteorology. Atmospheric Environment, 2020, 223, 117186.	4.1	16
74	Impacts of Desert Dust Outbreaks on Air Quality in Urban Areas. Atmosphere, 2020, 11, 23.	2.3	16
75	Black carbon exposure, oxidative stress markers and major adverse cardiovascular events in patients with acute coronary syndromes. International Journal of Cardiology, 2015, 188, 47-49.	1.7	13
76	Anthropogenic Perturbations to the Atmospheric Molybdenum Cycle. Global Biogeochemical Cycles, 2021, 35, e2020GB006787.	4.9	12
77	Measurements and simulation of speciated PM2.5 in south-west Europe. Atmospheric Environment, 2013, 77, 36-50.	4.1	11
78	Tracking the changes of iron solubility and air pollutants traces as African dust transits the Atlantic in the Saharan dust outbreaks. Atmospheric Environment, 2021, 246, 118092.	4.1	11
79	Black Carbon aerosol measurements and simulation in two cities in south-west Spain. Atmospheric Environment, 2016, 126, 55-65.	4.1	10
80	Assessment of ultrafine particles and noise measurements using fuzzy logic and data mining techniques. Science of the Total Environment, 2015, 512-513, 103-113.	8.0	9
81	Comparative Study of Ambient Air Particles in Patients Hospitalized for Heart Failure and Acute Coronary Syndrome. Revista Espanola De Cardiologia (English Ed), 2011, 64, 661-666.	0.6	8
82	Impact of Saharan dust exposure on airway inflammation in patients with ischemic heart disease. Translational Research, 2020, 224, 16-25.	5.0	7
83	Origin of PM10 Pollution Episodes in an Industrialized Mega-City in Central China. Aerosol and Air Quality Research, 2014, 14, 338-346.	2.1	7
84	Short-term effects of air pollution, markers of endothelial activation, and coagulation to predict major adverse cardiovascular events in patients with acute coronary syndrome: insights from AIRACOS study. Biomarkers, 2017, 22, 389-393.	1.9	5
85	The impact of naturally generated particulate matter emanating from desert dust storms and cardiovascular pathophysiology: an alarming worldwide reality. European Heart Journal, 2019, 40, 2375-2376.	2.2	5
86	Estudio y evaluaciÃ³n de la contaminaciÃ³n atmosfÃ©rica por material particulado en EspaÃ±a: necesidades derivadas de la propuesta de la directiva del consejo relativa a partÃculas PM₁₀ y PM_{2.5} e implicaciones en la industria cerÃ¡mica. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2000, 39, 135-148.	1.9	5
87	Relationship Between Exposure to Sulphur Dioxide Air Pollution, White Cell Inflammatory Biomarkers and Enzymatic Infarct Size in Patients With ST-segment Elevation Acute Coronary Syndromes. European Cardiology Review, 2021, 16, e50.	2.2	5
88	Influencia de las condiciones meteorolÃ³gicas en el ingreso hospitalario en pacientes con sÃndrome coronario agudo con y sin elevaciÃ³n del segmento ST: resultados del estudio AIRACOS. Medicina Intensiva, 2016, 40, 201-207.	0.7	4
89	Air pollution is intimately linked to global climate change: change in Cardiovascular Disease Statistics 2019. European Heart Journal, 2020, 41, 2601-2601.	2.2	4
90	Dust and tropical PMx aerosols in Cape Verde: Sources, vertical distributions and stratified transport from North Africa. Atmospheric Research, 2021, 263, 105793.	4.1	4

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91	Impact of exposure of emergency patients with acute heart failure to atmospheric Saharan desert dust. Emergencias, 2019, 31, 161-166.	0.6	4
92	Air pollution and heart failure: Relationship with the ejection fraction. World Journal of Cardiology, 2013, 5, 49.	1.5	3
93	Influence of meteorological conditions on hospital admission in patients with acute coronary syndrome with and without ST-segment elevation: Results of the AIRACOS study. Medicina Intensiva (English Edition), 2016, 40, 201-207.	0.2	2
94	PM10 AND PM2.5 IN A STREET CANYON IN NE SPAIN. Journal of Aerosol Science, 2001, 32, 675-676.	3.8	2
95	Atmospheric Particle Size Distributions in the Spanish Network of Environmental DMAs (REDMAAS). IOP Conference Series: Earth and Environmental Science, 2015, 28, 012001.	0.3	1
96	Impact of Saharan dust on the incidence of acute coronary syndrome. Revista Espanola De Cardiologia (English Ed), 2021, 74, 321-328.	0.6	1
97	SOURCE APPORTIONMENT OF PM10 IN A RURAL SITE IN NORTHEAST SPAIN. Journal of Aerosol Science, 2001, 32, 789-790.	3.8	0
98	Chapter 10 New Considerations for PM, Black Carbon, and Particle Number Concentration for Air Quality Monitoring Across Different European Cities. , 2016, , 177-218.		0