

Jose M Baldasano

List of Publications by Year in descending order

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papers

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123
docs citations

123
times ranked

7363
citing authors

#	ARTICLE	IF	CITATIONS
1	Review of Top-Down Method to Determine Atmospheric Emissions in Port. Case of Study: Port of Veracruz, Mexico. Journal of Marine Science and Engineering, 2022, 10, 96.	2.6	8
2	Estimation of atmospheric emissions from maritime activity in the Veracruz port, Mexico. Journal of the Air and Waste Management Association, 2021, 71, 934-948.	1.9	9
3	Atmospheric Emissions in Ports Due to Maritime Traffic in Mexico. Journal of Marine Science and Engineering, 2021, 9, 1186.	2.6	8
4	Comparison of Methodologies for Assessing Desert Dust Contribution to Regional PM10 and PM2.5 Levels: A One-Year Study Over Portugal. Atmosphere, 2020, 11, 134.	2.3	12
5	COVID-19 lockdown effects on air quality by NO2 in the cities of Barcelona and Madrid (Spain). Science of the Total Environment, 2020, 741, 140353.	8.0	318
6	2005â€“2017 ozone trends and potential benefits of local measures as deduced from air quality measurements in the north of the Barcelona metropolitan area. Atmospheric Chemistry and Physics, 2019, 19, 7445-7465.	4.9	21
7	Temporal patterns and trends of particulate matter over Portugal: a long-term analysis of background concentrations. Air Quality, Atmosphere and Health, 2018, 11, 397-407.	3.3	36
8	Mapping air pollutants at municipality level in Italy and Spain in support to health impact evaluations. Air Quality, Atmosphere and Health, 2018, 11, 69-82.	3.3	5
9	Vertically Resolved Precipitation Intensity Retrieved through a Synergy between the Ground-Based NASA MPLNET Lidar Network Measurements, Surface Disdrometer Datasets and an Analytical Model Solution. Remote Sensing, 2018, 10, 1102.	4.0	27
10	First Forecasts of Airborne Platanus and Pinus Pollen in Catalonia, NE Spain: Use of a Ground-Based Lidar to Estimate the Model Score. , 2018, , .		0
11	Modelling of pollen dispersion in the atmosphere: evaluation with a continuous $\hat{1}^2+1\hat{1}$ lidar. EPJ Web of Conferences, 2018, 176, 05006.	0.3	2
12	Relative humidity vertical profiling using lidar-based synergistic methods in the framework of the Hygra-CD campaign. Annales Geophysicae, 2018, 36, 213-229.	1.6	7
13	Direct radiative effects during intense Mediterranean desert dust outbreaks. Atmospheric Chemistry and Physics, 2018, 18, 8757-8787.	4.9	41
14	The association of air pollution and greenness with mortality and life expectancy in Spain: A small-area study. Environment International, 2017, 99, 170-176.	10.0	96
15	Trends and patterns of air quality in Santa Cruz de Tenerife (Canary Islands) in the period 2011â€“2015. Air Quality, Atmosphere and Health, 2017, 10, 939-954.	3.3	12
16	Planet Boundary Layer Parameterization in Weather Research and Forecasting (WRFv3.5): Assessment of Performance in High Spatial Resolution Simulations in Complex Topography of Mexico. Computacion Y Sistemas, 2017, 21, .	0.3	2
17	Overview of current regional and local scale air quality modelling practices: Assessment and planning tools in the EU. Environmental Science and Policy, 2016, 65, 13-21.	4.9	81
18	High-resolution dust modelling over complex terrains in West Asia. Aeolian Research, 2016, 23, 37-50.	2.7	28

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19	Impact of WRF model PBL schemes on air quality simulations over Catalonia, Spain. <i>Science of the Total Environment</i> , 2016, 572, 98-113.	8.0	62
20	Forecasting the northern African dust outbreak towards Europe in April 2011: a model intercomparison. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 4967-4986.	4.9	32
21	Mediterranean intense desert dust outbreaks and their vertical structure based on remote sensing data. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 8609-8642.	4.9	85
22	Presentation of the EURODELTA III intercomparison exercise "evaluation of the chemistry transport models' performance on criteria pollutants and joint analysis with meteorology. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 12667-12701.	4.9	109
23	Near-surface and columnar measurements with a micro pulse lidar of atmospheric pollen in Barcelona, Spain. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 6805-6821.	4.9	47
24	Profiling of aerosol microphysical properties at several EARLINET/AERONET sites during the July 2012 ChArMEx/EMEP campaign. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 7043-7066.	4.9	26
25	Atmospheric dispersion of airborne pollen evidenced by near-surface and columnar measurements in Barcelona, Spain. , 2016, , .		4
26	Air quality plan for ozone: an urgent need for North Portugal. <i>Air Quality, Atmosphere and Health</i> , 2016, 9, 447-460.	3.3	21
27	Ozone attributed to Madrid and Barcelona on-road transport emissions: Characterization of plume dynamics over the Iberian Peninsula. <i>Science of the Total Environment</i> , 2016, 543, 670-682.	8.0	35
28	Sensitivity of boundary-layer variables to PBL schemes in the WRF model based on surface meteorological observations, lidar, and radiosondes during the HygrA-CD campaign. <i>Atmospheric Research</i> , 2016, 176-177, 185-201.	4.1	127
29	A model-based analysis of SO ₂ and NO ₂ dynamics from coal-fired power plants under representative synoptic circulation types over the Iberian Peninsula. <i>Science of the Total Environment</i> , 2016, 541, 701-713.	8.0	25
30	Performance Evaluation of the Boundary-Layer Height from Lidar and the Weather Research and Forecasting Model at an Urban Coastal Site in the North-East Iberian Peninsula. <i>Boundary-Layer Meteorology</i> , 2015, 157, 265-292.	2.3	64
31	Development towards a global operational aerosol consensus: basic climatological characteristics of the International Cooperative for Aerosol Prediction Multi-Model Ensemble (ICAP-MME). <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 335-362.	4.9	76
32	The MACC-II 2007-2008 reanalysis: atmospheric dust evaluation and characterization over northern Africa and the Middle East. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 3991-4024.	4.9	76
33	Corrigendum to "Development towards a global operational aerosol consensus: basic climatological characteristics of the International Cooperative for Aerosol Prediction Multi-Model Ensemble (ICAP-MME)" published in <i>Atmos. Chem. Phys.</i> , 15, 335-362, 2015. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 2533-2534.	4.9	2
34	Circulation-type classification derived on a climatic basis to study air quality dynamics over the Iberian Peninsula. <i>International Journal of Climatology</i> , 2015, 35, 2877-2897.	3.5	24
35	A methodology for investigating dust model performance using synergistic EARLINET/AERONET dust concentration retrievals. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 3577-3600.	3.1	76
36	EARLINET: potential operability of a research network. <i>Atmospheric Measurement Techniques</i> , 2015, 8, 4587-4613.	3.1	39

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37	Performance of European chemistry transport models as function of horizontal resolution. Atmospheric Environment, 2015, 112, 90-105.	4.1	85
38	Modelling wind resources in climate change scenarios in complex terrains. Renewable Energy, 2015, 76, 670-678.	8.9	15
39	An empirical equation to estimate mineral dust concentrations from visibility observations in Northern Africa. Aeolian Research, 2015, 16, 55-68.	2.7	31
40	Seasonal patterns of Saharan dust over Cape Verde – a combined approach using observations and modelling. Tellus, Series B: Chemical and Physical Meteorology, 2015, 67, 24410.	1.6	37
41	Soil Dust Aerosols and Wind as Predictors of Seasonal Meningitis Incidence in Niger. Environmental Health Perspectives, 2014, 122, 679-686.	6.0	111
42	Air quality forecasts on a kilometer-scale grid over complex Spanish terrains. Geoscientific Model Development, 2014, 7, 1979-1999.	3.6	22
43	Seasonal to yearly assessment of temperature and precipitation trends in the North Western Mediterranean Basin by dynamical downscaling of climate scenarios at high resolution (1971–2050). Climatic Change, 2014, 122, 243-256.	3.6	25
44	Projections of temperature and precipitation extremes in the North Western Mediterranean Basin by dynamical downscaling of climate scenarios at high resolution (1971–2050). Climatic Change, 2014, 122, 567-582.	3.6	37
45	Implementation of plume rise and its impacts on emissions and air quality modelling. Atmospheric Environment, 2014, 99, 618-629.	4.1	14
46	Inter-comparison between HERMESv2.0 and TNO-MACC-II emission data using the CALIOPE air quality system (Spain). Atmospheric Environment, 2014, 98, 134-145.	4.1	20
47	Large Scale Air Pollution Estimation Method Combining Land Use Regression and Chemical Transport Modeling in a Geostatistical Framework. Environmental Science & Technology, 2014, 48, 4452-4459.	10.0	39
48	Integrated assessment of air pollution using observations and modelling in Santa Cruz de Tenerife (Canary Islands). Science of the Total Environment, 2014, 473-474, 576-588.	8.0	20
49	Effects of sources and meteorology on particulate matter in the Western Mediterranean Basin: An overview of the DAURE campaign. Journal of Geophysical Research D: Atmospheres, 2014, 119, 4978-5010.	3.3	49
50	Aerosol radiative effects in the ultraviolet, visible, and near-infrared spectral ranges using long-term aerosol data series over the Iberian Peninsula. Atmospheric Chemistry and Physics, 2014, 14, 13497-13514.	4.9	41
51	Online coupled regional meteorology chemistry models in Europe: current status and prospects. Atmospheric Chemistry and Physics, 2014, 14, 317-398.	4.9	271
52	Aerosol characterization at the Saharan AERONET site Tamanrasset. Atmospheric Chemistry and Physics, 2014, 14, 11753-11773.	4.9	48
53	EARLINET dust observations vs. BSC-DREAM8b modeled profiles: 12-year-long systematic comparison at Potenza, Italy. Atmospheric Chemistry and Physics, 2014, 14, 8781-8793.	4.9	53
54	Operational Dust Prediction. , 2014, , 223-265.		28

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55	Saharan Dust Deposition May Affect Phytoplankton Growth in the Mediterranean Sea at Ecological Time Scales. PLoS ONE, 2014, 9, e110762.	2.5	71
56	Assessing Sensitivity Regimes of Secondary Inorganic Aerosol Formation in Europe with the CALIOPE-EU Modelling System. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 523-527.	0.2	0
57	An improved system for modelling Spanish emissions: HERMESv2.0. Atmospheric Environment, 2013, 81, 209-221.	4.1	61
58	Evaluation of the CALIOPE air quality forecasting system for epidemiological research: The example of NO ₂ in the province of Girona (Spain). Atmospheric Environment, 2013, 72, 134-141.	4.1	11
59	Effect of High-Resolution Meteorological Forcing on Nearshore Wave and Current Model Performance. Journal of Atmospheric and Oceanic Technology, 2013, 30, 1021-1037.	1.3	27
60	Modeling and evaluation of the global sea-salt aerosol distribution: sensitivity to size-resolved and sea-surface temperature dependent emission schemes. Atmospheric Chemistry and Physics, 2013, 13, 11735-11755.	4.9	69
61	Optimizing CALIPSO Saharan dust retrievals. Atmospheric Chemistry and Physics, 2013, 13, 12089-12106.	4.9	120
62	Changes in particulate matter physical properties during Saharan advections over Rome (Italy): a four-year study, 2001â€“2004. Atmospheric Chemistry and Physics, 2013, 13, 7395-7404.	4.9	32
63	Estimation of future emission scenarios for analysing the impact of traffic mobility on a large Mediterranean conurbation in the Barcelona Metropolitan Area (Spain). Atmospheric Pollution Research, 2013, 4, 22-32.	3.8	10
64	Atmospheric dust modeling from meso to global scales with the online NMMB/BSC-Dust model â€“ Part 2: Experimental campaigns in Northern Africa. Atmospheric Chemistry and Physics, 2012, 12, 2933-2958.	4.9	87
65	Aerosols in the CALIOPE air quality modelling system: evaluation and analysis of PM levels, optical depths and chemical composition over Europe. Atmospheric Chemistry and Physics, 2012, 12, 3363-3392.	4.9	63
66	Assessing sensitivity regimes of secondary inorganic aerosol formation in Europe with the CALIOPE-EU modeling system. Atmospheric Environment, 2012, 51, 146-164.	4.1	64
67	Assessment of Kalman filter bias-adjustment technique to improve the simulation of ground-level ozone over Spain. Science of the Total Environment, 2012, 416, 329-342.	8.0	11
68	Seasonal variability of aerosol optical properties observed by means of a Raman lidar at an EARLINET site over Northeastern Spain. Atmospheric Chemistry and Physics, 2011, 11, 175-190.	4.9	65
69	Atmospheric dust modeling from meso to global scales with the online NMMB/BSC-Dust model â€“ Part 1: Model description, annual simulations and evaluation. Atmospheric Chemistry and Physics, 2011, 11, 13001-13027.	4.9	198
70	Comparison of two different sea-salt aerosol schemes as implemented in air quality models applied to the Mediterranean Basin. Atmospheric Chemistry and Physics, 2011, 11, 4833-4850.	4.9	18
71	Comprehensive air quality planning for the Barcelona Metropolitan Area through traffic management. Atmospheric Pollution Research, 2011, 2, 255-266.	3.8	19
72	An annual assessment of air quality with the CALIOPE modeling system over Spain. Science of the Total Environment, 2011, 409, 2163-2178.	8.0	82

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73	Implementation of resuspension from paved roads for the improvement of CALIOPE air quality system in Spain. <i>Atmospheric Environment</i> , 2011, 45, 802-807.	4.1	41
74	A comprehensive assessment of PM emissions from paved roads: Real-world Emission Factors and intense street cleaning trials. <i>Science of the Total Environment</i> , 2010, 408, 4309-4318.	8.0	92
75	Air pollution impacts of speed limitation measures in large cities: The need for improving traffic data in a metropolitan area. <i>Atmospheric Environment</i> , 2010, 44, 2997-3006.	4.1	50
76	EC-Earth. <i>Bulletin of the American Meteorological Society</i> , 2010, 91, 1357-1364.	3.3	474
77	Systematic lidar observations of Saharan dust layers over Athens, Greece in the frame of EARLINET project (2004–2006). <i>Annales Geophysicae</i> , 2009, 27, 3611-3620.	1.6	46
78	High resolution modeling of the effects of alternative fuels use on urban air quality: Introduction of natural gas vehicles in Barcelona and Madrid Greater Areas (Spain). <i>Science of the Total Environment</i> , 2009, 407, 776-790.	8.0	15
79	Emissions variation in urban areas resulting from the introduction of natural gas vehicles: Application to Barcelona and Madrid Greater Areas (Spain). <i>Science of the Total Environment</i> , 2009, 407, 3269-3281.	8.0	18
80	Parallel software for retrieval of aerosol distribution from LIDAR data in the framework of EARLINET-ASOS. <i>Computer Physics Communications</i> , 2009, 180, 2095-2102.	7.5	17
81	Aerosol characterization in Northern Africa, Northeastern Atlantic, Mediterranean Basin and Middle East from direct-sun AERONET observations. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 8265-8282.	4.9	199
82	Contribution of atmospheric processes affecting the dynamics of air pollution in South-Western Europe during a typical summertime photochemical episode. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 849-864.	4.9	68
83	Linking the advanced research WRF meteorological model with the CHIMERE chemistry-transport model. <i>Environmental Modelling and Software</i> , 2008, 23, 1092-1094.	4.5	6
84	Development of a high-resolution (1km ³ –1km, 1h) emission model for Spain: The High-Resolute Resolution Modelling Emission System (HERMES). <i>Atmospheric Environment</i> , 2008, 42, 7215-7233.	4.1	73
85	Air quality models sensitivity to on-road traffic speed representation: Effects on air quality of 80 km h ⁻¹ speed limit in the Barcelona Metropolitan area. <i>Atmospheric Environment</i> , 2008, 42, 8389-8402.	4.1	21
86	The use of a modelling system as a tool for air quality management: Annual high-resolution simulations and evaluation. <i>Science of the Total Environment</i> , 2008, 390, 323-340.	8.0	77
87	Contribution of Saharan dust in an integrated air quality system and its online assessment. <i>Geophysical Research Letters</i> , 2008, 35, .	4.0	46
88	High resolution modelling results of the wind flow over Canary Islands during the meteorological situation of the extratropical storm Delta (28–30 November 2005). <i>Advances in Science and Research</i> , 2008, 2, 81-87.	1.0	3
89	Caliope: an operational air quality forecasting system for the Iberian Peninsula, Balearic Islands and Canary Islands – first annual evaluation and ongoing developments. <i>Advances in Science and Research</i> , 2008, 2, 89-98.	1.0	48
90	EARLINET correlative measurements for CALIPSO. , 2007, , .		9

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91	Influence of initial and boundary conditions for ozone modeling in very complex terrains: A case study in the northeastern Iberian Peninsula. <i>Environmental Modelling and Software</i> , 2007, 22, 1294-1306.	4.5	47
92	Fuzzy approach to life cycle impact assessment. <i>International Journal of Life Cycle Assessment</i> , 2007, 12, 488-496.	4.7	15
93	Multiscale modeling of air pollutants dynamics in the northwestern Mediterranean basin during a typical summertime episode. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	54
94	Interactive dust-radiation modeling: A step to improve weather forecasts. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	286
95	Development of the high spatial resolution EMICAT2000 emission model for air pollutants from the north-eastern Iberian Peninsula (Catalonia, Spain). <i>Environmental Pollution</i> , 2006, 140, 200-219.	7.5	41
96	Optical characteristics of desert dust over the East Mediterranean during summer: a case study. <i>Annales Geophysicae</i> , 2006, 24, 807-821.	1.6	51
97	Life cycle assessment of two biowaste management systems for Barcelona, Spain. <i>Resources, Conservation and Recycling</i> , 2006, 49, 32-48.	10.8	93
98	Mixed-Layer Depth Determination in the Barcelona Coastal Area From Regular Lidar Measurements: Methods, Results and Limitations. <i>Boundary-Layer Meteorology</i> , 2006, 119, 135-157.	2.3	132
99	Evaluation of MM5-EMICAT2000-CMAQ performance and sensitivity in complex terrain: High-resolution application to the northeastern Iberian Peninsula. <i>Atmospheric Environment</i> , 2006, 40, 5056-5072.	4.1	65
100	Influence of the PBL scheme on high-resolution photochemical simulations in an urban coastal area over the Western Mediterranean. <i>Atmospheric Environment</i> , 2006, 40, 5274-5297.	4.1	52
101	Influence of high-model grid resolution on photochemical modelling in very complex terrains. <i>International Journal of Environment and Pollution</i> , 2005, 24, 180.	0.2	20
102	Modeling the ozone weekend effect in very complex terrains: a case study in the Northeastern Iberian Peninsula. <i>Atmospheric Environment</i> , 2005, 39, 429-444.	4.1	79
103	Control of Ozone Precursors in a Complex Industrial Terrain by Using Multiscale-Nested Air Quality Models with Fine Spatial Resolution (1 km ²). <i>Journal of the Air and Waste Management Association</i> , 2005, 55, 1085-1099.	1.9	6
104	Determination of the mixing layer height from regular lidar measurements in the Barcelona area. , 2004, , .		9
105	Estimating the biogenic emissions of non-methane volatile organic compounds from the North Western Mediterranean vegetation of Catalonia, Spain. <i>Science of the Total Environment</i> , 2004, 329, 241-259.	8.0	51
106	Summertime re-circulations of air pollutants over the north-eastern Iberian coast observed from systematic EARLINET lidar measurements in Barcelona. <i>Atmospheric Environment</i> , 2004, 38, 3983-4000.	4.1	98
107	Ozone response to precursor controls in very complex terrains: Use of photochemical indicators to assess O ₃ -NO _x -VOC sensitivity in the northeastern Iberian Peninsula. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	51
108	Regional Circulations Within the Iberian Peninsula East Coast. , 2004, , 453-461.		4

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109	Comparison of photochemical mechanisms for air quality modeling. Atmospheric Environment, 2003, 37, 4179-4194.	4.1	85
110	Air quality data from large cities. Science of the Total Environment, 2003, 307, 141-165.	8.0	227
111	Environmental performance review and cost analysis of MSW landfilling by baling-wrapping technology versus conventional system. Waste Management, 2003, 23, 795-806.	7.4	27
112	Urban Photochemical Pollution in the Iberian Peninsula: Lisbon and Barcelona Airsheds. Journal of the Air and Waste Management Association, 2003, 53, 347-359.	1.9	56
113	Stabilization/solidification of MSW incineration residues from facilities with different air pollution control systems. Durability of matrices versus carbonation. Waste Management, 2001, 21, 313-323.	7.4	69
114	Remote Sensing of Three-dimensional Winds with Elastic Lidar: Explanation of Maximum Cross-correlation Method. Boundary-Layer Meteorology, 2001, 101, 305-327.	2.3	12
115	Circulatory Patterns of Air Pollutants within the Barcelona Air Basin in a Summertime situation: Lidar and Numerical Approaches. Boundary-Layer Meteorology, 2001, 98, 33-55.	2.3	41
116	Emission inventory for greenhouse gases in the City of Barcelona, 1987-1996. Atmospheric Environment, 1999, 33, 3765-3775.	4.1	81
117	<title>Confirmation of a multilayer arrangement of aerosols in the Barcelona air basin using two independent lidar systems</title>. , 1998, , .		6
118	On the Application of Meteorological Models and Lidar Techniques for Air Quality Studies at a Regional Scale. , 1998, , 591-600.		3