Sonia Jerez

List of Publications by Year in descending order

53 papers	2,969 citations	186265 28 h-index	189892 50 g-index
66 all docs	66 docs citations	66 times ranked	3634 citing authors

#	Article	IF	Citations
1	Exacerbated fires in Mediterranean Europe due to anthropogenic warming projected with non-stationary climate-fire models. Nature Communications, 2018, 9, 3821.	12.8	275
2	The impact of climate change on photovoltaic power generation in Europe. Nature Communications, 2015, 6, 10014.	12.8	236
3	Regional climate downscaling over Europe: perspectives from the EURO-CORDEX community. Regional Environmental Change, 2020, 20, 1.	2.9	227
4	Assessing climate change impacts on European wind energy from ENSEMBLES high-resolution climate projections. Climatic Change, 2015, 128, 99-112.	3.6	171
5	Climate drivers of the 2017 devastating fires in Portugal. Scientific Reports, 2019, 9, 13886.	3.3	167
6	Homogenization and Assessment of Observed Near-Surface Wind Speed Trends over Spain and Portugal, 1961â€“2011*. Journal of Climate, 2014, 27, 3692-3712.	3.2	132
7	Climate change impacts on the power generation potential of a European mid-century wind farms scenario. Environmental Research Letters, 2016, 11, 034013.	5.2	120
8	The Impact of the North Atlantic Oscillation on Renewable Energy Resources in Southwestern Europe. Journal of Applied Meteorology and Climatology, 2013, 52, 2204-2225.	1.5	98
9	Vulnerabilities and resilience of European power generation to 1.5â€‰Â°C, 2â€‰Â°C and 3â€‰Â°C warming. Environmental Research Letters, 2018, 13, 044024.	5.2	88
10	Sand invasion along the Portuguese coast forced by westerly shifts during cold climate events. Quaternary Science Reviews, 2012, 42, 15-28.	3.0	84
11	Trends of daily peak wind gusts in Spain and Portugal, 1961â€“2014. Journal of Geophysical Research D: Atmospheres, 2016, 121, 1059-1078.	3.3	84
12	Projected changes in surface solar radiation in CMIP5 global climate models and in EURO-CORDEX regional climate models for Europe. Climate Dynamics, 2017, 49, 2665-2683.	3.8	82
13	A regional climate simulation over the Iberian Peninsula for the last millennium. Climate of the Past, 2011, 7, 451-472.	3.4	73
14	A multi-physics ensemble of present-day climate regional simulations over the Iberian Peninsula. Climate Dynamics, 2013, 40, 3023-3046.	3.8	66
15	Spatio-temporal Complementarity between Solar and Wind Power in the Iberian Peninsula. Energy Procedia, 2013, 40, 48-57.	1.8	59
16	Skilful forecasting of global fire activity using seasonal climate predictions. Nature Communications, 2018, 9, 2718.	12.8	57
17	What is the role of the observational dataset in the evaluation and scoring of climate models?. Geophysical Research Letters, 2012, 39, .	4.0	56
18	Time-scale and extent at which large-scale circulation modes determine the wind and solar potential in the Iberian Peninsula. Environmental Research Letters, 2013, 8, 044035.	5.2	53

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19	Characterization of surface winds over the Iberian Peninsula. International Journal of Climatology, 2015, 35, 1007-1026.	3.5	47
20	The CLIMIX model: A tool to create and evaluate spatially-resolved scenarios of photovoltaic and wind power development. Renewable and Sustainable Energy Reviews, 2015, 42, 1-15.	16.4	47
21	Future changes, or lack thereof, in the temporal variability of the combined wind-plus-solar power production in Europe. Renewable Energy, 2019, 139, 251-260.	8.9	45
22	The role of the landâ€surface model for climate change projections over the Iberian Peninsula. Journal of Geophysical Research, 2012, 117, .	3.3	42
23	Impact of atmospheric circulation patterns on coastal dune dynamics, NW Spain. Geomorphology, 2013, 185, 96-109.	2.6	37
24	Internal and external variability in regional simulations of the Iberian Peninsula climate over the last millennium. Climate of the Past, 2012, 8, 25-36.	3.4	36
25	A 49 year hindcast of surface winds over the Iberian Peninsula. International Journal of Climatology, 2015, 35, 3007-3023.	3.5	35
26	Evaluating fire growth simulations using satellite active fire data. Remote Sensing of Environment, 2017, 190, 302-317.	11.0	34
27	Temperature sensitivity to the land-surface model in MM5 climate simulations over the Iberian Peninsula. Meteorologische Zeitschrift, 2010, 19, 363-374.	1.0	32
28	Warming patterns in regional climate change projections over the Iberian Peninsula. Meteorologische Zeitschrift, 2010, 19, 275-285.	1.0	32
29	Assessing the impact of measurement time interval when calculating wind speed means and trends under the stilling phenomenon. International Journal of Climatology, 2017, 37, 480-492.	3.5	32
30	Impact of the North Atlantic Oscillation on European aerosol ground levels through local processes: a seasonal model-based assessment using fixed anthropogenic emissions. Atmospheric Chemistry and Physics, 2013, 13, 11195-11207.	4.9	31
31	Sensitivity of two Iberian lakes to North Atlantic atmospheric circulation modes. Climate Dynamics, 2015, 45, 3403-3417.	3.8	31
32	Impacts of climate change on ground level gas-phase pollutants and aerosols in the Iberian Peninsula for the late XXI century. Atmospheric Environment, 2012, 55, 483-495.	4.1	29
33	A multi-physics ensemble of regional climate change projections over the Iberian Peninsula. Climate Dynamics, 2013, 41, 1749-1768.	3.8	28
34	Coastal recirculation potential affecting air pollutants in Portugal: The role of circulation weather types. Atmospheric Environment, 2016, 135, 9-19.	4.1	27
35	An evaluation of offshore wind power production by floatable systems: A case study from SW Portugal. Energy, 2017, 131, 239-250.	8.8	27
36	Impact of evolving greenhouse gas forcing on the warming signal in regional climate model experiments. Nature Communications, 2018, 9, 1304.	12.8	27

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37	Assessment of ski condition reliability in the Spanish and Andorran Pyrenees for the second half of the 20th century. Applied Geography, 2017, 79, 127-142.	3.7	25
38	The response of piezometric levels in Portugal to NAO, EA, and SCAND climate patterns. Journal of Hydrology, 2019, 568, 1105-1117.	5.4	24
39	On the Spinâ€Up Period in WRF Simulations Over Europe: Tradeâ€Offs Between Length and Seasonality. Journal of Advances in Modeling Earth Systems, 2020, 12, e2019MS001945.	3.8	24
40	Isolating the effects of climate change in the variation of secondary inorganic aerosols (SIA) in Europe for the 21st century (1991â€“2100). Atmospheric Environment, 2011, 45, 1059-1063.	4.1	21
41	A seasonal study of the atmospheric dynamics over the Iberian Peninsula based on circulation types. Theoretical and Applied Climatology, 2012, 110, 291-310.	2.8	21
42	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
43	Unusual Atmosphericâ€Riverâ€Like Structures Coming From Africa Induce Extreme Precipitation Over the Western Mediterranean Sea. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031280.	3.3	14
44	Precipitation response to aerosolâ€“radiation and aerosolâ€“cloud interactions in regional climate simulations over Europe. Atmospheric Chemistry and Physics, 2021, 21, 415-430.	4.9	13
45	A Global Probabilistic Dataset for Monitoring Meteorological Droughts. Bulletin of the American Meteorological Society, 2020, 101, E1628-E1644.	3.3	12
46	Uncertainties in future ozone and PM10 projections over Europe from a regional climate multiphysics ensemble. Geophysical Research Letters, 2013, 40, 5764-5769.	4.0	9
47	Optimizing the execution of a parallel meteorology simulation code. , 2009, , .		8
48	Added Value of Aerosol-Cloud Interactions for Representing Aerosol Optical Depth in an Online Coupled Climate-Chemistry Model over Europe. Atmosphere, 2020, 11, 360.	2.3	8
49	Sensitivity of surface solar radiation to aerosolâ€“radiation and aerosolâ€“cloud interactions over Europe in WRFv3.6.1 climatic runs with fully interactive aerosols. Geoscientific Model Development, 2021, 14, 1533-1551.	3.6	8
50	EOLMAP: A web tool to assess the wind resource over Spain. Renewable Energy and Power Quality Journal, 0, , 1264-1269.	0.2	5
51	Impacts of Green Vegetation Fraction Derivation Methods on Regional Climate Simulations. Atmosphere, 2019, 10, 281.	2.3	4
52	Assessment of Aerosol-Radiation (ARI) and Aerosol-Cloud (ACI) Interactions from Dust: Modelled Dust Optical Properties and Remote Sensing Observations. Springer Proceedings in Complexity, 2018, , 183-187.	0.3	1
53	Future Air Pollution in Europe from a Multi-physics Ensemble of Climate Change-Air Quality Projections. NATO Science for Peace and Security Series C: Environmental Security, 2014, , 3-7.	0.2	0