Pedro M M Soares

List of Publications by Year
in descending order

107 papers	5,393 citations	101496 36 h-index	95218 68 g-index
141 all docs	141 docs citations	141 times ranked	5370 citing authors

#	Article	IF	Citations
1	Sensitivity of moist convection to environmental humidity. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3055-3079.	1.0	383
2	Towards process-informed bias correction of climate change simulations. Nature Climate Change, 2017, 7, 764-773.	8.1	329
3	A Combined Eddy-Diffusivity Mass-Flux Approach for the Convective Boundary Layer. Journals of the Atmospheric Sciences, 2007, 64, 1230-1248.	0.6	295
4	Regional climate downscaling over Europe: perspectives from the EURO-CORDEX community. Regional Environmental Change, 2020, 20, 1.	1.4	227
5	WRF high resolution dynamical downscaling of ERA-Interim for Portugal. Climate Dynamics, 2012, 39, 2497-2522.	1.7	207
6	A first-of-its-kind multi-model convection permitting ensemble for investigating convective phenomena over Europe and the Mediterranean. Climate Dynamics, 2020, 55, 3-34.	1.7	176
7	Regional climate hindcast simulations within EURO-CORDEX: evaluation of a WRF multi-physics ensemble. Geoscientific Model Development, 2015, 8, 603-618.	1.3	175
8	An intercomparison of a large ensemble of statistical downscaling methods over Europe: Results from the VALUE perfect predictor crossâ€validation experiment. International Journal of Climatology, 2019, 39, 3750-3785.	1.5	164
9	An eddy-diffusivity/mass-flux parametrization for dry and shallow cumulus convection. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3365-3383.	1.0	154
10	Tropical and Subtropical Cloud Transitions in Weather and Climate Prediction Models: The GCSS/WGNE Pacific Cross-Section Intercomparison (GPCI). Journal of Climate, 2011, 24, 5223-5256.	1.2	134
11	European temperature responses to blocking and ridge regional patterns. Climate Dynamics, 2018, 50, 457-477.	1.7	131
12	<scp>WRF</scp> high resolution simulation of Iberian mean and extreme precipitation climate. International Journal of Climatology, 2013, 33, 2591-2608.	1.5	126
13	The first multi-model ensemble of regional climate simulations at kilometer-scale resolution, part I: evaluation of precipitation. Climate Dynamics, 2021, 57, 275-302.	1.7	114
14	The first multi-model ensemble of regional climate simulations at kilometer-scale resolution part 2: historical and future simulations of precipitation. Climate Dynamics, 2021, 56, 3581-3602.	1.7	101
15	Observational uncertainty and regional climate model evaluation: A panâ€European perspective. International Journal of Climatology, 2019, 39, 3730-3749.	1.5	98
16	The diurnal cycle of shallow cumulus clouds over land: A single-column model intercomparison study. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3339-3364.	1.0	86
17	Landâ€atmosphere coupling in EUROâ€CORDEX evaluation experiments. Journal of Geophysical Research D: Atmospheres, 2017, 122, 79-103.	1.2	84
18	Mean and extreme temperatures in a warming climate: EURO CORDEX and WRF regional climate high-resolution projections for Portugal. Climate Dynamics, 2019, 52, 129-157.	1.7	84

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19	Scientific Challenges of Convective-Scale Numerical Weather Prediction. Bulletin of the American Meteorological Society, 2018, 99, 699-710.	1.7	82
20	Future precipitation in Portugal: high-resolution projections using WRF model and EURO-CORDEX multi-model ensembles. Climate Dynamics, 2017, 49, 2503-2530.	1.7	78
21	Uncertainty in gridded precipitation products: Influence of station density, interpolation method and grid resolution. International Journal of Climatology, 2019, 39, 3717-3729.	1.5	71
22	Parameterization of the Atmospheric Boundary Layer: A View from Just Above the Inversion. Bulletin of the American Meteorological Society, 2008, 89, 453-458.	1.7	70
23	Responses of European precipitation distributions and regimes to different blocking locations. Climate Dynamics, 2017, 48, 1141-1160.	1.7	69
24	Integrated Analysis of Climate, Soil, Topography and Vegetative Growth in Iberian Viticultural Regions. PLoS ONE, 2014, 9, e108078.	1.1	65
25	Comparison of statistical downscaling methods with respect to extreme events over Europe: Validation results from the perfect predictor experiment of the COST Action VALUE. International Journal of Climatology, 2019, 39, 3846-3867.	1.5	64
26	Biogeophysical impacts of forestation in Europe: first results from the LUCAS (Land Use and Climate) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.7	62
27	The synergy between drought and extremely hot summers in the Mediterranean. Environmental Research Letters, 2019, 14, 014011.	2.2	60
28	Western Iberian offshore wind resources: More or less in a global warming climate?. Applied Energy, 2017, 203, 72-90.	5.1	59
29	Assessment of the ENSEMBLES regional climate models in the representation of precipitation variability and extremes over Portugal. Journal of Geophysical Research, 2012, 117, .	3.3	54
30	Climatology of the Iberia coastal low-level wind jet: weather research forecasting model high-resolution results. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 66, 22377.	0.8	54
31	Iberia01: a new gridded dataset of daily precipitation and temperatures over Iberia. Earth System Science Data, 2019, 11, 1947-1956.	3.7	51
32	A simple method to assess the added value using highâ€resolution climate distributions: application to the EUROâ€CORDEX daily precipitation. International Journal of Climatology, 2018, 38, 1484-1498.	1.5	47
33	The VALUE perfect predictor experiment: Evaluation of temporal variability. International Journal of Climatology, 2019, 39, 3786-3818.	1.5	47
34	Distinct influences of large-scale circulation and regional feedbacks in two exceptional 2019 European heatwaves. Communications Earth & Environment, 2020, 1, .	2.6	46
35	Global marine heatwave events using the new CMIP6 multi-model ensemble: from shortcomings in present climate to future projections. Environmental Research Letters, 2020, 15, 124058.	2.2	46
36	Moisture recycling in the Iberian Peninsula from a regional climate simulation: Spatiotemporal analysis and impact on the precipitation regime. Journal of Geophysical Research D: Atmospheres, 2014, 119, 5895-5912.	1.2	42

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37	Climate change and the Portuguese precipitation: ENSEMBLES regional climate models results. Climate Dynamics, 2015, 45, 1771-1787.	1.7	42
38	Assessing energy savings in cooling demand of buildings using passive cooling systems based on ventilation. Applied Energy, 2014, 134, 426-438.	5.1	41
39	Dynamical and statistical downscaling of a global seasonal hindcast in eastern Africa. Climate Services, 2018, 9, 72-85.	1.0	36
40	Global offshore wind energy resources using the new ERA-5 reanalysis. Environmental Research Letters, 2020, 15, 1040a2.	2.2	36
41	The Gulf of Cadizâ€“Alboran Sea sub-basin: Model setup, exchange and seasonal variability. Ocean Modelling, 2013, 61, 49-67.	1.0	35
42	Effects of Recent Minimum Temperature and Water Deficit Increases on Pinus pinaster Radial Growth and Wood Density in Southern Portugal. Frontiers in Plant Science, 2016, 7, 1170.	1.7	35
43	Evaluating fire growth simulations using satellite active fire data. Remote Sensing of Environment, 2017, 190, 302-317.	4.6	34
44	Comparison of methodologies for generation of future weather data for building thermal energy simulation. Energy and Buildings, 2020, 206, 109556.	3.1	34
45	Processâ€based evaluation of the VALUE perfect predictor experiment of statistical downscaling methods. International Journal of Climatology, 2019, 39, 3868-3893.	1.5	32
46	The impact of climate change on the Iberian low-level wind jet: EURO-CORDEX regional climate simulation. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 68, 29005.	0.8	31
47	Climatic cooling potential and building cooling demand savings: High resolution spatiotemporal analysis of direct ventilation and evaporative cooling for the Iberian Peninsula. Renewable Energy, 2016, 85, 766-776.	4.3	30
48	High-resolution multi-model projections of onshore wind resources over Portugal under a changing climate. Theoretical and Applied Climatology, 2019, 136, 347-362.	1.3	28
49	The impact of climate change in wheat and barley yields in the Iberian Peninsula. Scientific Reports, 2021, 11, 15484.	1.6	28
50	Assessment of diffuse radiation models for cloudy atmospheric conditions in the Azores region. Solar Energy, 2014, 108, 538-547.	2.9	27
51	High resolution projections for the western Iberian coastal low level jet in a changing climate. Climate Dynamics, 2017, 49, 1547-1566.	1.7	27
52	Validation of spatial variability in downscaling results from the VALUE perfect predictor experiment. International Journal of Climatology, 2019, 39, 3819-3845.	1.5	27
53	Probabilistic fire spread forecast as a management tool in an operational setting. SpringerPlus, 2016, 5, 1205.	1.2	26
54	A Global View of Coastal Low-Level Wind Jets Using an Ensemble of Reanalyses. Journal of Climate, 2018, 31, 1525-1546.	1.2	25

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55	Persistence of the high solar potential in Africa in a changing climate. Environmental Research Letters, 2019, 14, 124036.	2.2	25
56	The Opposing Effects of Reforestation and Afforestation on the Diurnal Temperature Cycle at the Surface and in the Lowest Atmospheric Model Level in the European Summer. Journal of Climate, 2020, 33, 9159-9179.	1.2	25
57	The impact of climate change on the global coastal low-level wind jets: EC-EARTH simulations. Global and Planetary Change, 2016, 137, 88-106.	1.6	23
58	Climate change impact on Northwestern African offshore wind energy resources. Environmental Research Letters, 2019, 14, 124065.	2.2	23
59	Challenges to link climate change data provision and user needs: Perspective from the COSTâ€action VALUE. International Journal of Climatology, 2019, 39, 3704-3716.	1.5	23
60	On the year-to-year changes of the Iberian Poleward Current. Journal of Geophysical Research: Oceans, 2015, 120, 4980-4999.	1.0	22
61	Infrared sounding of the tradeâ€wind boundary layer: AIRS and the RICO experiment. Geophysical Research Letters, 2010, 37, .	1.5	20
62	The unprecedented 2014 Legionnairesâ€™ disease outbreak in Portugal: atmospheric driving mechanisms. International Journal of Biometeorology, 2018, 62, 1167-1179.	1.3	20
63	Spatial and temporal variability of the Iberian Peninsula coastal lowâ€level jet. International Journal of Climatology, 2018, 38, 1605-1622.	1.5	19
64	Inter-annual variability and long term predictability of exchanges through the Strait of Gibraltar. Global and Planetary Change, 2014, 114, 23-37.	1.6	18
65	Landâ€Atmosphere Coupling Regimes in a Future Climate in Africa: From Model Evaluation to Projections Based on CORDEXâ€Africa. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11118-11142.	1.2	18
66	An integrated approach to project the future urban climate response: Changes to Lisbon's urban heat island and temperature extremes. Urban Climate, 2020, 34, 100683.	2.4	18
67	On the focal mechanism of the 26.05.1975 North Atlantic event contribution from tsunami modeling. Journal of Seismology, 2008, 12, 575-583.	0.6	17
68	On the Time Evolution of the Turbulent Kinetic Energy Spectrum for Decaying Turbulence in the Convective Boundary Layer. Boundary-Layer Meteorology, 2011, 138, 61-75.	1.2	17
69	Basic Concepts for Convection Parameterization in Weather Forecast and Climate Models: COST Action ES0905 Final Report. Atmosphere, 2015, 6, 88-147.	1.0	17
70	The shape of days to come: Effects of climate change on low energy buildings. Building and Environment, 2020, 181, 107125.	3.0	17
71	Impact of extreme rainfall events on landslide activity in Portugal under climate change scenarios. Landslides, 2022, 19, 2279-2293.	2.7	17
72	Impact of climate change on building cooling potential of direct ventilation and evaporative cooling: A high resolution view for the Iberian Peninsula. Energy and Buildings, 2019, 192, 31-44.	3.1	16

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73	Is there added value in the <scp>EUROâ€CORDEX</scp> hindcast temperature simulations? Assessing the added value using climate distributions in Europe. International Journal of Climatology, 2022, 42, 4024-4039.	1.5	16
74	Landâ€Atmosphere Coupling in CORDEXâ€Africa: Hindcast Regional Climate Simulations. Journal of Geophysical Research D: Atmospheres, 2018, 123, 11,048.	1.2	15
75	Evaluation of the EUROâ€CORDEX Regional Climate Models Over the Iberian Peninsula: Observational Uncertainty Analysis. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2020JD032880.	1.2	15
76	Future precipitation in a Mediterranean island and streamflow changes for a small basin using EURO-CORDEX regional climate simulations and the SWAT model. Journal of Hydrology, 2021, 603, 127025.	2.3	15
77	Assessing the climate change impact on the North African offshore surface wind and coastal low-level jet using coupled and uncoupled regional climate simulations. Climate Dynamics, 2019, 52, 7111-7132.	1.7	14
78	A Climatological Analysis of the Benguela Coastal Lowâ€Level Jet. Journal of Geophysical Research D: Atmospheres, 2019, 124, 3960-3978.	1.2	14
79	Added value of EURO-CORDEX high-resolution downscaling over the Iberian Peninsula revisited â€“ Part 1: Precipitation. Geoscientific Model Development, 2022, 15, 2635-2652.	1.3	14
80	The summer diurnal cycle of coastal cloudiness over west Iberia using Meteosat/SEVIRI and a WRF regional climate model simulation. International Journal of Climatology, 2016, 36, 1755-1772.	1.5	13
81	Using high-resolution simulated climate projections in forest process-based modelling. Agricultural and Forest Meteorology, 2018, 263, 100-106.	1.9	13
82	Internal variability versus multiâ€physics uncertainty in a regional climate model. International Journal of Climatology, 2021, 41, E656.	1.5	13
83	On the uncertainty of future projections of Marine Heatwave events in the North Atlantic Ocean. Climate Dynamics, 2021, 56, 2027-2056.	1.7	13
84	The present and future offshore wind resource in the Southwestern African region. Climate Dynamics, 2021, 56, 1371-1388.	1.7	13
85	Added value of EURO-CORDEX high-resolution downscaling over the Iberian Peninsula revisited â€“ Part 2: Max and min temperature. Geoscientific Model Development, 2022, 15, 2653-2671.	1.3	13
86	Mapping the suitability of groundwater-dependent vegetation in a semi-arid Mediterranean area. Hydrology and Earth System Sciences, 2019, 23, 3525-3552.	1.9	12
87	An Iberian climatology of solar radiation obtained from WRF regional climate simulations for 1950â€“2010 period. Atmospheric Research, 2017, 198, 151-162.	1.8	11
88	Mind the climate policy gaps: climate change public policy and reality in Portugal, Spain and Morocco. Climatic Change, 2020, 161, 151-169.	1.7	11
89	On the impact of atmospheric vs oceanic resolutions on the representation of the sea surface temperature in the South Eastern Tropical Atlantic. Climate Dynamics, 2020, 54, 4733-4757.	1.7	10
90	A surface modelling approach for attribution and disentanglement of the effects of global warming from urbanization in temperature extremes: application to Lisbon. Environmental Research Letters, 2019, 14, 114023.	2.2	9

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91	How Will a Warming Climate Affect the Benguela Coastal Lowâ€Level Wind Jet?. Journal of Geophysical Research D: Atmospheres, 2019, 124, 5010-5028.	1.2	9
92	The North African coastal low level wind jet: a high resolution view. Climate Dynamics, 2019, 53, 1211-1230.	1.7	9
93	A high-resolution view of the recent drought trends over the Iberian Peninsula. Weather and Climate Extremes, 2021, 32, 100320.	1.6	9
94	The Convective Parameterization Problem: Breadth and Depth. Bulletin of the American Meteorological Society, 2015, 96, ES127-ES130.	1.7	6
95	Waves along Eastern boundary currents â€“ The regional winds effect. Ocean Modelling, 2018, 129, 39-57.	1.0	6
96	Uncertainty in different precipitation products in the case of two atmospheric river events. Environmental Research Letters, 2021, 16, 045012.	2.2	5
97	Afforestation impact on soil temperature in regional climate model simulations over Europe. Geoscientific Model Development, 2022, 15, 595-616.	1.3	5
98	Landâ€“atmosphere interactions in sub-polar and alpine climates in the CORDEX Flagship Pilot Study Land Use and Climate Across Scales (LUCAS) models â€“ Part 2: The role of changing vegetation. Cryosphere, 2022, 16, 1383-1397.	1.5	5
99	Thermal stratification of Portuguese reservoirs: potential impact of extreme climate scenarios. Journal of Water and Climate Change, 2015, 6, 544-560.	1.2	4
100	Global coastal <scp>lowâ€level</scp> wind jets revisited through the new <scp>ERA5</scp> reanalysis. International Journal of Climatology, 2022, 42, 4491-4507.	1.5	4
101	Modeling reservoir surface temperatures for regional and global climate models: a multi-model study on the inflow and level variation effects. Geoscientific Model Development, 2022, 15, 173-197.	1.3	4
102	Landâ€“atmosphere interactions in sub-polar and alpine climates in the CORDEX flagship pilot study Land Use and Climate Across Scales (LUCAS) modelsÂâ€“ PartÂ1: Evaluation of the snow-albedo effect. Cryosphere, 2022, 16, 2403-2419.	1.5	3
103	Evaluation of the performance of a dynamic wave climate ensemble simulated using with <scp>EUROâ€CORDEX</scp> winds in the Black Sea and Sea of Azov. International Journal of Climatology, 2022, 42, 8345-8367.	1.5	2
104	Tritium dispersion simulation in the atmosphere by the integral transform technique using micrometeorological parameters generated by large eddy simulation. International Journal of Nuclear Energy Science and Technology, 2010, 5, 11.	0.2	1
105	On the new parameterisation of the eddy diffusivity for radioactive pollutant dispersion. International Journal of Nuclear Energy Science and Technology, 2011, 6, 166.	0.2	1
106	Theoretical study of the decaying convective turbulence in a shear-buoyancy PBL. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 3320-3328.	1.2	0
107	An analytical approach to simulate radioactive pollutant dispersion from nuclear power plant in atmosphere. , 2009, , .		0