

Fleur Couvreur

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6434349/fleur-couvreur-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

56
papers

2,025
citations

23
h-index

44
g-index

61
ext. papers

2,349
ext. citations

5.1
avg, IF

4.62
L-index

#	Paper	IF	Citations
56	Use of large-eddy simulations to design an adaptive sampling strategy to assess cumulus cloud heterogeneities by remotely piloted aircraft. <i>Atmospheric Measurement Techniques</i> , 2022 , 15, 335-352	4	0
55	Uncertainty of SW Cloud Radiative Effect in Atmospheric Models Due to the Parameterization of Liquid Cloud Optical Properties. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2021MS002742	7.1	0
54	Modeling the GABLS4 Strongly-Stable Boundary Layer With a GCM Turbulence Parameterization: Parametric Sensitivity or Intrinsic Limits?. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2020MS002269	7.1	0
53	A case-study of the coupled ocean-atmosphere response to an oceanic diurnal warm layer. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2021 , 147, 2008-2032	6.4	1
52	Process-Based Climate Model Development Harnessing Machine Learning: III. The Representation of Cumulus Geometry and Their 3D Radiative Effects. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2020MS002423	7.1	1
51	Sahelian Heat Wave Characterization From Observational Data Sets. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021 , 126, e2020JD034465	4.4	1
50	Process-Based Climate Model Development Harnessing Machine Learning: II. Model Calibration From Single Column to Global. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2020MS002225	7.1	6
49	Process-Based Climate Model Development Harnessing Machine Learning: I. A Calibration Tool for Parameterization Improvement. <i>Journal of Advances in Modeling Earth Systems</i> , 2021 , 13, e2020MS002217	7.1	10
48	The April 2010 North African heatwave: when the water vapor greenhouse effect drives nighttime temperatures. <i>Climate Dynamics</i> , 2020 , 54, 3879-3905	4.2	7
47	Six hundred years of South American tree rings reveal an increase in severe hydroclimatic events since mid-20th century. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 16816-16823	11.5	51
46	Intercomparison of Large-Eddy Simulations of the Antarctic Boundary Layer for Very Stable Stratification. <i>Boundary-Layer Meteorology</i> , 2020 , 176, 369-400	3.4	10
45	Object-Oriented Identification of Coherent Structures in Large Eddy Simulations: Importance of Downdrafts in Stratocumulus. <i>Geophysical Research Letters</i> , 2019 , 46, 2854-2864	4.9	15
44	Unified Parameterization of Convective Boundary Layer Transport and Clouds With the Thermal Plume Model. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 2910-2933	7.1	15
43	A Path-Tracing Monte Carlo Library for 3-D Radiative Transfer in Highly Resolved Cloudy Atmospheres. <i>Journal of Advances in Modeling Earth Systems</i> , 2019 , 11, 2449-2473	7.1	12
42	Detection of Intraseasonal Large-Scale Heat Waves: Characteristics and Historical Trends during the Sahelian Spring. <i>Journal of Climate</i> , 2018 , 31, 61-80	4.4	22
41	Accounting for Vertical Subgrid-Scale Heterogeneity in Low-Level Cloud Fraction Parameterizations. <i>Journal of Advances in Modeling Earth Systems</i> , 2018 , 10, 2686-2705	7.1	6
40	Overview of the Meso-NH model version 5.4 and its applications. <i>Geoscientific Model Development</i> , 2018 , 11, 1929-1969	6.3	114

39	LES study of the impact of moist thermals on the oxidative capacity of the atmosphere in southern West Africa. <i>Atmospheric Chemistry and Physics</i> , 2018 , 18, 6601-6624	6.8	4
38	A short review of numerical cloud-resolving models. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2017 , 69, 1373578	2	22
37	Morphology of breeze circulations induced by surface flux heterogeneities and their impact on convection initiation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017 , 143, 463-478	6.4	15
36	A new downscaling method for sub-grid turbulence modeling. <i>Atmospheric Chemistry and Physics</i> , 2017 , 17, 6531-6546	6.8	1
35	Evaluation of a Buoyancy and Shear Based Mixing Length for a Turbulence Scheme. <i>Frontiers in Earth Science</i> , 2017 , 5,	3.5	9
34	Sampling the Structure of Convective Turbulence and Implications for Grey-Zone Parametrizations. <i>Boundary-Layer Meteorology</i> , 2016 , 160, 133-156	3.4	20
33	Representation of daytime moist convection over the semi-arid Tropics by parametrizations used in climate and meteorological models. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015 , 141, 2220-2236	6.4	20
32	Internal processes within the African Easterly Wave system. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015 , 141, 1121-1136	6.4	20
31	Atmospheric transport and chemistry of trace gases in LMDz5B: evaluation and implications for inverse modelling. <i>Geoscientific Model Development</i> , 2015 , 8, 129-150	6.3	37
30	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence. <i>Atmospheric Chemistry and Physics</i> , 2014 , 14, 10931-10960	6.8	126
29	Deep Convection Triggering by Boundary Layer Thermals. Part II: Stochastic Triggering Parameterization for the LMDZ GCM. <i>Journals of the Atmospheric Sciences</i> , 2014 , 71, 515-538	2.1	25
28	Atmospheric transport and chemistry of trace gases in LMDz5B: evaluation and implications for inverse modelling 2014 ,		1
27	Deep Convection Triggering by Boundary Layer Thermals. Part I: LES Analysis and Stochastic Triggering Formulation. <i>Journals of the Atmospheric Sciences</i> , 2014 , 71, 496-514	2.1	27
26	Modelling of the Thermodynamical Diurnal Cycle in the Lower Atmosphere: A Joint Evaluation of Four Contrasted Regimes in the Tropics Over Land. <i>Boundary-Layer Meteorology</i> , 2014 , 150, 185-214	3.4	12
25	Phenomenology of Sahelian convection observed in Niamey during the early monsoon. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2014 , 140, 500-516	6.4	20
24	Control of deep convection by sub-cloud lifting processes: the ALP closure in the LMDZ5B general circulation model. <i>Climate Dynamics</i> , 2013 , 40, 2271-2292	4.2	45
23	Resolved Versus Parametrized Boundary-Layer Plumes. Part III: Derivation of a Statistical Scheme for Cumulus Clouds. <i>Boundary-Layer Meteorology</i> , 2013 , 147, 421-441	3.4	26
22	Observations and Large-Eddy Simulations of Entrainment in the Sheared Sahelian Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2012 , 142, 79-101	3.4	11

21	Observations of Diurnal Cycles Over a West African Meridional Transect: Pre-Monsoon and Full-Monsoon Seasons. <i>Boundary-Layer Meteorology</i> , 2012 , 144, 329-357	3.4	26
20	Initiation of daytime local convection in a semi-arid region analysed with high-resolution simulations and AMMA observations. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2012 , 138, 56-71	6.4	29
19	Diurnal and Seasonal Cycles of Cloud Occurrences, Types, and Radiative Impact over West Africa. <i>Journal of Applied Meteorology and Climatology</i> , 2012 , 51, 534-553	2.7	48
18	Controls on precipitation and cloudiness in simulations of trade-wind cumulus as observed during RICO. <i>Journal of Advances in Modeling Earth Systems</i> , 2011 , 3, n/a-n/a	7.1	189
17	A Diagnostic for Evaluating the Representation of Turbulence in Atmospheric Models at the Kilometric Scale. <i>Journals of the Atmospheric Sciences</i> , 2011 , 68, 3112-3131	2.1	129
16	Evaluation of Statistical Distributions for the Parametrization of Subgrid Boundary-Layer Clouds. <i>Boundary-Layer Meteorology</i> , 2011 , 140, 263-294	3.4	19
15	Life Cycle of a Mesoscale Circular Gust Front Observed by a C-Band Doppler Radar in West Africa. <i>Monthly Weather Review</i> , 2011 , 139, 1370-1388	2.4	37
14	Frequency of Sahelian storm initiation enhanced over mesoscale soil-moisture patterns. <i>Nature Geoscience</i> , 2011 , 4, 430-433	18.3	190
13	Understanding the Daily Cycle of Evapotranspiration: A Method to Quantify the Influence of Forcings and Feedbacks. <i>Journal of Hydrometeorology</i> , 2010 , 11, 1405-1422	3.7	74
12	Resolved Versus Parametrized Boundary-Layer Plumes. Part I: A Parametrization-Oriented Conditional Sampling in Large-Eddy Simulations. <i>Boundary-Layer Meteorology</i> , 2010 , 134, 441-458	3.4	64
11	Resolved Versus Parametrized Boundary-Layer Plumes. Part II: Continuous Formulations of Mixing Rates for Mass-Flux Schemes. <i>Boundary-Layer Meteorology</i> , 2010 , 135, 469-483	3.4	54
10	Synoptic variability of the monsoon flux over West Africa prior to the onset. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2010 , 136, 159-173	6.4	39
9	Nature of the Mesoscale Boundary Layer Height and Water Vapor Variability Observed 14 June 2002 during the IHOP_2002 Campaign. <i>Monthly Weather Review</i> , 2009 , 137, 414-432	2.4	13
8	A Parameterization of Dry Thermals and Shallow Cumuli for Mesoscale Numerical Weather Prediction. <i>Boundary-Layer Meteorology</i> , 2009 , 132, 83-106	3.4	182
7	Negative water vapour skewness and dry tongues in the convective boundary layer: observations and large-eddy simulation budget analysis. <i>Boundary-Layer Meteorology</i> , 2007 , 123, 269-294	3.4	35
6	Impact of coherent eddies on airborne measurements of vertical turbulent fluxes. <i>Boundary-Layer Meteorology</i> , 2007 , 124, 425-447	3.4	20
5	Water-vapour variability within a convective boundary-layer assessed by large-eddy simulations and IHOP_2002 observations. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2005 , 131, 2665-2693	6.4	58
4	La campagne IHOP 2002 - Une campagne de mesure de la vapeur d'eau dans la couche limite. <i>La Météorologie</i> , 2003 , 8, 38	2.5	2

3	Parameterization of the Dry Convective Boundary Layer Based on a Mass Flux Representation of Thermals. <i>Journals of the Atmospheric Sciences</i> , 2002 , 59, 1105-1123	2.1	87
2	The BLLAST field experiment: Boundary-Layer Late Afternoon and Sunset Turbulence		15
1	EUREC4A		1