

# Riwal Plougonven

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8765583/publications.pdf>

Version: 2024-02-01

63  
papers

2,128  
citations

236925

25  
h-index

243625

44  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1678  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Observed and Modeled Mountain Waves from the Surface to the Mesosphere near the Drake Passage. <i>Journals of the Atmospheric Sciences</i> , 2022, 79, 909-932.   | 1.7 | 19        |
| 2  | How Skillful Are the European Subseasonal Predictions of Wind Speed and Surface Temperature?. <i>Monthly Weather Review</i> , 2022, 150, 1621-1637.   | 1.4 | 4         |
| 3  | Using Machine-Learning Methods to Improve Surface Wind Speed from the Outputs of a Numerical Weather Prediction Model. <i>Boundary-Layer Meteorology</i> , 2021, 179, 133-161.  | 2.3 | 6         |
| 4  | Observation of Gravity Waves at the Tropical Tropopause Using Superpressure Balloons. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD035165.   | 3.3 | 20        |
| 5  | Bimodality in ensemble forecasts of 2m temperature: identification. <i>Weather and Climate Dynamics</i> , 2021, 2, 1209-1224.   | 3.5 | 1         |
| 6  | Sub-hourly forecasting of wind speed and wind energy. <i>Renewable Energy</i> , 2020, 145, 2373-2379.   | 8.9 | 73        |
| 7  | Application of the Compressible, Nonhydrostatic, Balanced Omega Equation in Estimating Diabatic Forcing for Parameterization of Inertia-Gravity Waves: Case Study of Moist Baroclinic Waves Using WRF. <i>Journals of the Atmospheric Sciences</i> , 2020, 77, 113-129. | 1.7 | 2         |
| 8  | Probabilistic wind forecasting up to three months ahead using ensemble predictions for geopotential height. <i>International Journal of Forecasting</i> , 2020, 36, 515-530.  | 6.5 | 8         |
| 9  | Measuring the Risk of Supply and Demand Imbalance at the Monthly to Seasonal Scale in France. <i>Energies</i> , 2020, 13, 4888.   | 3.1 | 1         |
| 10 | How does knowledge of atmospheric gravity waves guide their parameterizations?. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 1529-1543.  | 2.7 | 40        |
| 11 | Lagrangian gravity wave spectra in the lower stratosphere of current (re)analyses. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 9331-9350.  | 4.9 | 8         |
| 12 | The Spatiotemporal Variability of Nonorographic Gravity Wave Energy and Relation to Its Source Functions. <i>Monthly Weather Review</i> , 2020, 148, 4837-4857.   | 1.4 | 1         |
| 13 | Accuracy of Balloon Trajectory Forecasts in the Lower Stratosphere. <i>Atmosphere</i> , 2019, 10, 102.  | 2.3 | 4         |
| 14 | Response of Surface Wind Divergence to Mesoscale SST Anomalies under Different Wind Conditions. <i>Journals of the Atmospheric Sciences</i> , 2019, 76, 2065-2082.  | 1.7 | 20        |
| 15 | Storm Track Response to Oceanic Eddies in Idealized Atmospheric Simulations. <i>Journal of Climate</i> , 2019, 32, 445-463.   | 3.2 | 41        |
| 16 | An adiabatic foehn mechanism. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2018, 144, 1369-1381.  | 2.7 | 5         |
| 17 | Comments on "The Gulf Stream Convergence Zone in the Time-Mean Winds". <i>Journals of the Atmospheric Sciences</i> , 2018, 75, 2139-2149.   | 1.7 | 23        |
| 18 | Impact of gravity waves on the motion and distribution of atmospheric ice particles. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 10799-10823.  | 4.9 | 23        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | From Numerical Weather Prediction Outputs to Accurate Local Surface Wind Speed: Statistical Modeling and Forecasts. Springer Proceedings in Mathematics and Statistics, 2018, , 23-44.                      | 0.2  | 8         |
| 20 | Around the World in 84 Days. Eos, 2018, 99, .   | 0.1  | 25        |
| 21 | On the Relation between Gravity Waves and Wind Speed in the Lower Stratosphere over the Southern Ocean. Journals of the Atmospheric Sciences, 2017, 74, 1075-1093.  | 1.7  | 28        |
| 22 | Using Space Lidar Observations to Decompose Longwave Cloud Radiative Effect Variations Over the Last Decade. Geophysical Research Letters, 2017, 44, 11,994.  | 4.0  | 10        |
| 23 | On the Quantification of Imbalance and Inertiaâ€“Gravity Waves Generated in Numerical Simulations of Moist Baroclinic Waves Using the WRF Model. Journals of the Atmospheric Sciences, 2017, 74, 4241-4263. | 1.7  | 7         |
| 24 | Small-Scale Wind Fluctuations in the Tropical Tropopause Layer from Aircraft Measurements: Occurrence, Nature, and Impact on Vertical Mixing. Journals of the Atmospheric Sciences, 2017, 74, 3847-3869.    | 1.7  | 23        |
| 25 | Modelling the variability of the wind energy resource on monthly and seasonal timescales. Renewable Energy, 2017, 113, 1434-1446.   | 8.9  | 18        |
| 26 | On the Gravity Wave Forcing during the Southern Stratospheric Final Warming in LMDZ. Journals of the Atmospheric Sciences, 2016, 73, 3213-3226.   | 1.7  | 31        |
| 27 | On the Prediction of Stratospheric Balloon Trajectories: Improving Winds with Mesoscale Simulations. Journal of Atmospheric and Oceanic Technology, 2016, 33, 1629-1647.                                    | 1.3  | 7         |
| 28 | A modelling case study of a large-scale cirrus in the tropical tropopause layer. Atmospheric Chemistry and Physics, 2016, 16, 3881-3902.  | 4.9  | 9         |
| 29 | Effect of gravity wave temperature fluctuations on homogeneous ice nucleation in the tropical tropopause layer. Atmospheric Chemistry and Physics, 2016, 16, 35-46.   | 4.9  | 51        |
| 30 | Generation and backreaction of spontaneously emitted inertiaâ€“gravity waves. Geophysical Research Letters, 2016, 43, 3519-3525.  | 4.0  | 11        |
| 31 | Lagrangian temperature and vertical velocity fluctuations due to gravity waves in the lower stratosphere. Geophysical Research Letters, 2016, 43, 3543-3553.  | 4.0  | 70        |
| 32 | Gravity Waves Generated by Jets and Fronts and Their Relevance for Clear-Air Turbulence. , 2016, , 385-406.   |      | 7         |
| 33 | Comparison of Gravity Waves in the Southern Hemisphere Derived from Balloon Observations and the ECMWF Analyses. Journals of the Atmospheric Sciences, 2015, 72, 3449-3468.                                 | 1.7  | 75        |
| 34 | Case studies of nonorographic gravity waves over the Southern Ocean emphasize the role of moisture. Journal of Geophysical Research D: Atmospheres, 2015, 120, 1278-1299.                                   | 3.3  | 19        |
| 35 | Internal gravity waves from atmospheric jets and fronts. Reviews of Geophysics, 2014, 52, 33-76.  | 23.0 | 294       |
| 36 | Structure, Energy, and Parameterization of Inertiaâ€“Gravity Waves in Dry and Moist Simulations of a Baroclinic Wave Life Cycle. Journals of the Atmospheric Sciences, 2014, 71, 2390-2414.                 | 1.7  | 26        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Assessment of the accuracy of (re)analyses in the equatorial lower stratosphere. Journal of Geophysical Research D: Atmospheres, 2014, 119, 11,166.  | 3.3 | 54        |
| 38 | Inertial versus baroclinic instability of the Bickley jet in continuously stratified rotating fluid. Journal of Fluid Mechanics, 2014, 743, 1-31.  | 3.4 | 22        |
| 39 | Gravity waves over Antarctica and the Southern Ocean: consistent momentum fluxes in mesoscale simulations and stratospheric balloon observations. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 101-118. | 2.7 | 83        |
| 40 | Atmospheric response to sea surface temperature mesoscale structures. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9611-9621.  | 3.3 | 45        |
| 41 | Gravity waves generated by deep tropical convection: Estimates from balloon observations and mesoscale simulations. Journal of Geophysical Research D: Atmospheres, 2013, 118, 9690-9707.                                    | 3.3 | 52        |
| 42 | On the Intermittency of Gravity Wave Momentum Flux in the Stratosphere. Journals of the Atmospheric Sciences, 2012, 69, 3433-3448.   | 1.7 | 113       |
| 43 | Gravity Waves Generated by Sheared Three-Dimensional Potential Vorticity Anomalies. Journals of the Atmospheric Sciences, 2012, 69, 2134-2151.   | 1.7 | 28        |
| 44 | Internal gravity waves convectively forced in the atmospheric residual layer during the morning transition. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1610-1624.                                     | 2.7 | 18        |
| 45 | Sensitivity study for mesoscale simulations of gravity waves above Antarctica during Vorcore. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1371-1377.   | 2.7 | 9         |
| 46 | Quasigeostrophic Dynamics of a Finite-Thickness Tropopause. Journals of the Atmospheric Sciences, 2010, 67, 3149-3163.   | 1.7 | 8         |
| 47 | Gravity Waves Generated by Sheared Potential Vorticity Anomalies. Journals of the Atmospheric Sciences, 2010, 67, 157-170.   | 1.7 | 34        |
| 48 | Nonlinear development of inertial instability in a barotropic shear. Physics of Fluids, 2009, 21, .  | 4.0 | 33        |
| 49 | Comments on "Application of the Lighthill-Ford Theory of Spontaneous Imbalance to Clear-Air Turbulence Forecasting", Journals of the Atmospheric Sciences, 2009, 66, 2506-2510.  | 1.7 | 10        |
| 50 | Mechanisms for Spontaneous Gravity Wave Generation within a Dipole Vortex. Journals of the Atmospheric Sciences, 2009, 66, 3464-3478.  | 1.7 | 33        |
| 51 | Ageostrophic instabilities of fronts in a channel in a stratified rotating fluid. Journal of Fluid Mechanics, 2009, 627, 485-507.  | 3.4 | 24        |
| 52 | Instabilities of two-layer shallow-water flows with vertical shear in the rotating annulus. Journal of Fluid Mechanics, 2009, 638, 27-47.  | 3.4 | 13        |
| 53 | Inertia-Generated Gravity Waves Generated within a Dipole Vortex. Journals of the Atmospheric Sciences, 2007, 64, 4417-4431.   | 1.7 | 68        |
| 54 | Inertia-Generated Gravity Waves Spontaneously Generated by Jets and Fronts. Part I: Different Baroclinic Life Cycles. Journals of the Atmospheric Sciences, 2007, 64, 2502-2520.   | 1.7 | 182       |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | On the Forcing of Inertiaâ€™ Gravity Waves by Synoptic-Scale Flows. <i>Journals of the Atmospheric Sciences</i> , 2007, 64, 1737-1742.   | 1.7 | 31        |
| 56 | A Baroclinic Instability that Couples Balanced Motions and Gravity Waves. <i>Journals of the Atmospheric Sciences</i> , 2005, 62, 1545-1559.   | 1.7 | 44        |
| 57 | Lagrangian approach to geostrophic adjustment of frontal anomalies in a stratified fluid. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2005, 99, 101-135.   | 1.2 | 29        |
| 58 | Numerical Simulations of Gravity Waves and Turbulence During the ATReC Campaign. , 2005, , .   |     | 2         |
| 59 | Uncertainties in using the hodograph method to retrieve gravity wave characteristics from individual soundings. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.   | 4.0 | 41        |
| 60 | Observations and Numerical Simulations of Inertiaâ€™ Gravity Waves and Shearing Instabilities in the Vicinity of a Jet Stream. <i>Journals of the Atmospheric Sciences</i> , 2004, 61, 2692-2706.  | 1.7 | 72        |
| 61 | On periodic inertiaâ€™ gravity waves of finite amplitude propagating without change of form at sharp density-gradient interfaces in the rotating fluid. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2003, 314, 140-149. | 2.1 | 7         |
| 62 | Singularity formation during relaxation of jets and fronts toward the state of geostrophic equilibrium. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2003, 8, 415-442.  | 3.3 | 12        |
| 63 | Frontal geostrophic adjustment, slow manifold and nonlinear wave phenomena in one-dimensional rotating shallow water. Part 1. Theory. <i>Journal of Fluid Mechanics</i> , 2003, 481, 269-290.  | 3.4 | 41        |