# Jon C Petch

List of Publications by Year
in descending order

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|---|---|---|---|
| 36 papers | 1,972 citations | 279487 23 h-index | 377514 34 g-index |
| 38 all docs | 38 docs citations | 38 times ranked | 2295 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Vertical structure and physical processes of the Maddenâ€Julian oscillation: Exploring key model physics in climate simulations. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4718-4748. | 1.2 | 332 |
| 2 | An intercomparison of cloud-resolving models with the Atmospheric Radiation Measurement summer 1997 Intensive Observation Period data. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 593-624. | 1.0 | 192 |
| 3 | Daytime convective development over land: A model intercomparison based on LBA observations. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 317-344. | 1.0 | 160 |
| 4 | Intercomparison and evaluation of cumulus parametrizations under summertime midlatitude continental conditions. Quarterly Journal of the Royal Meteorological Society, 2002, 128, 1095-1135. | 1.0 | 119 |
| 5 | The first Met Office Unified Modelâ€"JULES Regional Atmosphere and Land configuration, RAL1. Geoscientific Model Development, 2020, 13, 1999-2029. | 1.3 | 96 |
| 6 | Diagnosis of regimeâ€dependent cloud simulation errors in CMIP5 models using â€œAâ€Trainâ€•satellite observations and reanalysis data. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2762-2780. | 1.2 | 90 |
| 7 | Sensitivity studies using a cloud-resolving model simulation of the tropical west Pacific. Quarterly Journal of the Royal Meteorological Society, 2001, 127, 2287-2306. | 1.0 | 69 |
| 8 | Sensitivity studies of developing convection in a cloud-resolving model. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 345-358. | 1.0 | 63 |
| 9 | Vertical structure and physical processes of the Maddenâ€Julian oscillation: Linking hindcast fidelity to simulated diabatic heating and moistening. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4690-4717. | 1.2 | 63 |
| 10 | CAUSES: Attribution of Surface Radiation Biases in NWP and Climate Models near the U.S. Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2018, 123, 3612-3644. | 1.2 | 62 |
| 11 | CAUSES: On the Role of Surface Energy Budget Errors to the Warm Surface Air Temperature Error Over the Central United States. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2888-2909. | 1.2 | 60 |
| 12 | Vertical structure and physical processes of the Maddenâ€Julian oscillation: Synthesis and summary. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4671-4689. | 1.2 | 58 |
| 13 | Introduction to CAUSES: Description of Weather and Climate Models and Their Nearâ€Surface Temperature Errors in 5Âday Hindcasts Near the Southern Great Plains. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2655-2683. | 1.2 | 53 |
| 14 | Two fast radiative transfer methods to improve the temporal sampling of clouds in numerical weather prediction and climate models. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 457-468. | 1.0 | 47 |
| 15 | Drivers of the UK summer heatwave of 2018. Weather, 2019, 74, 390-396. | 0.6 | 46 |
| 16 | Moist convection and its upscale effects in simulations of the Indian monsoon with explicit and parametrized convection. Quarterly Journal of the Royal Meteorological Society, 2017, 143, 1073-1085. | 1.0 | 41 |
| 17 | TWPâ€ICE global atmospheric model intercomparison: Convection responsiveness and resolution impact. Journal of Geophysical Research, 2012, 117, . | 3.3 | 38 |
| 18 | Modelling suppressed and active convection. Comparing a numerical weather prediction, cloudâ€resolving and singleâ€column model. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 1087-1100. | 1.0 | 34 |

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|---|---|---|---|
| 19 | Evaluation of two cloud parametrization schemes using ARM and Cloudâ€Net observations. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 964-979. | 1.0 | 33 |
| 20 | A singleâ€column model ensemble approach applied to the TWPâ€ICE experiment. Journal of Geophysical Research D: Atmospheres, 2013, 118, 6544-6563. | 1.2 | 33 |
| 21 | CAUSES: Diagnosis of the Summertime Warm Bias in CMIP5 Climate Models at the ARM Southern Great Plains Site. Journal of Geophysical Research D: Atmospheres, 2018, 123, 2968-2992. | 1.2 | 33 |
| 22 | A limited area model (LAM) intercomparison study of a TWP-ICE active monsoon mesoscale convective event. Journal of Geophysical Research, 2012, 117, n/a-n/a. | 3.3 | 27 |
| 23 | Vertical structure and physical processes of the Maddenâ€Julian Oscillation: Biases and uncertainties at short range. Journal of Geophysical Research D: Atmospheres, 2015, 120, 4749-4763. | 1.2 | 26 |
| 24 | Differences in the lower troposphere in twoâ€and threeâ€dimensional cloudâ€resolving model simulations of deep convection. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 1941-1946. | 1.0 | 23 |
| 25 | Using regime analysis to identify the contribution of clouds to surface temperature errors in weather and climate models. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 3190-3206. | 1.0 | 22 |
| 26 | Parametrizing the horizontal inhomogeneity of ice water content using CloudSat data products. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1784-1793. | 1.0 | 20 |
| 27 | Evaluation of intercomparisons of four different types of model simulating <scp>TWPâ€ICE</scp>. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 826-837. | 1.0 | 18 |
| 28 | How Well Can the Met Office Unified Model Forecast Tropical Cyclones in the Western North Pacific?. Weather and Forecasting, 2018, 33, 185-201. | 0.5 | 17 |
| 29 | Analysis of prognostic cloud scheme increments in a climate model. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 2061-2073. | 1.0 | 15 |
| 30 | Sensitivity of the 2018 UK summer heatwave to local sea temperatures and soil moisture. Atmospheric Science Letters, 2020, 21, e948. | 0.8 | 15 |
| 31 | The predictability of deep convection in cloud-resolving simulations over land. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3173-3187. | 1.0 | 14 |
| 32 | Reducing the spinâ€up of a regional NWP system withoutÂdata assimilation. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1623-1643. | 1.0 | 12 |
| 33 | Evaluating the impact of atmospheric forcing and airâ€“sea coupling on near-coastal regional ocean prediction. Ocean Science, 2019, 15, 761-778. | 1.3 | 9 |
| 34 | Deep Convective Clouds. , 2009, , 197-216. | | 4 |
| 35 | Cloud-controlling Factors. , 2009, , 269-290. | | 2 |
| 36 | Vertical Structure and Diabatic Processes of the Madden-Julian Oscillation. World Scientific Series on Asia-Pacific Weather and Climate, 2017, , 161-172. | 0.2 | 0 |