Paul Connolly

List of Publications by Year
in descending order

70 papers	3,547 citations	159585 30 h-index	161849 54 g-index
80 all docs	80 docs citations	80 times ranked	3064 citing authors

#	Article	IF	Citations
1	Modelling the effect of condensed-phase diffusion on the homogeneous nucleation of ice in ultra-viscous particles. Atmospheric Chemistry and Physics, 2020, 20, 683-698.	4.9	14
2	A Review of Ice Particle Shapes in Cirrus formed In Situ and in Anvils. Journal of Geophysical Research D: Atmospheres, 2019, 124, 10049-10090.	3.3	54
3	Aerosol influences on low-level clouds in the West African monsoon. Atmospheric Chemistry and Physics, 2019, 19, 8503-8522.	4.9	19
4	The Fall Speed Variability of Similarly Sized Ice Particle Aggregates. Journal of Applied Meteorology and Climatology, 2019, 58, 1751-1761.	1.5	8
5	Relating large-scale subsidence to convection development in Arctic mixed-phase marine stratocumulus. Atmospheric Chemistry and Physics, 2018, 18, 1475-1494.	4.9	15
6	Maxwellâ€“Stefan diffusion: a framework for predicting condensed phase diffusion and phase separation in atmospheric aerosol. Atmospheric Chemistry and Physics, 2018, 18, 1629-1642.	4.9	16
7	Uncertainty in aerosol hygroscopicity resulting from semi-volatile organic compounds. Atmospheric Chemistry and Physics, 2018, 18, 275-287.	4.9	3
8	The efficiency of secondary organic aerosol particles acting as ice-nucleating particles under mixed-phase cloud conditions. Atmospheric Chemistry and Physics, 2018, 18, 9393-9409.	4.9	5
9	Competition for water vapour results in suppression of ice formation in mixed-phase clouds. Atmospheric Chemistry and Physics, 2018, 18, 7237-7250.	4.9	4
10	A parameterisation for the co-condensation of semi-volatile organics into multiple aerosol particle modes. Geoscientific Model Development, 2018, 11, 3261-3278.	3.6	5
11	A model intercomparison of CCN-limited tenuous clouds in the high Arctic. Atmospheric Chemistry and Physics, 2018, 18, 11041-11071.	4.9	54
12	PyBox: An automated box-model generator for atmospheric chemistry and aerosol simulations.. Journal of Open Source Software, 2018, 3, 755.	4.6	13
13	Microphysical sensitivity of coupled springtime Arctic stratocumulus to modelled primary ice over the ice pack, marginal ice, and ocean. Atmospheric Chemistry and Physics, 2017, 17, 4209-4227.	4.9	21
14	Intercomparison study and optical asphericity measurements of small ice particles in the CERN CLOUD experiment. Atmospheric Measurement Techniques, 2017, 10, 3231-3248.	3.1	4
15	Equilibrium absorptive partitioning theory between multiple aerosol particle modes. Geoscientific Model Development, 2016, 9, 3617-3637.	3.6	0
16	Exact and near backscattering measurements of the linear depolarisation ratio of various ice crystal habits generated in a laboratory cloud chamber. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 178, 361-378.	2.3	8
17	A global view of atmospheric ice particle complexity. Geophysical Research Letters, 2016, 43, 11,913.	4.0	10
18	Comparing model and measured ice crystal concentrations in orographic clouds during the INUPIAQ campaign. Atmospheric Chemistry and Physics, 2016, 16, 4945-4966.	4.9	21

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19	Observed microphysical changes in Arctic mixed-phase clouds when transitioning from sea ice to open ocean. Atmospheric Chemistry and Physics, 2016, 16, 13945-13967.	4.9	31
20	Observations of fluorescent aerosolâ€“cloud interactions in the free troposphere at the High-Altitude Research Station Jungfraujoch. Atmospheric Chemistry and Physics, 2016, 16, 2273-2284.	4.9	34
21	Using laboratory and field measurements to constrain a single habit shortwave optical parameterization for cirrus. Atmospheric Research, 2016, 180, 226-240.	4.1	3
22	The origins of ice crystals measured in mixed-phase clouds at the high-alpine site Jungfraujoch. Atmospheric Chemistry and Physics, 2015, 15, 12953-12969.	4.9	53
23	A new temperature- and humidity-dependent surface site density approach for deposition ice nucleation. Atmospheric Chemistry and Physics, 2015, 15, 3703-3717.	4.9	36
24	Investigating the discrepancy between wet-suspension- and dry-dispersion-derived ice nucleation efficiency of mineral particles. Atmospheric Chemistry and Physics, 2015, 15, 11311-11326.	4.9	40
25	Observations and comparisons of cloud microphysical properties in spring and summertime Arctic stratocumulus clouds during the ACCACIA campaign. Atmospheric Chemistry and Physics, 2015, 15, 3719-3737.	4.9	33
26	Cloud chamber laboratory investigations into scattering properties of hollow ice particles. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 157, 106-118.	2.3	25
27	An investigation into the performance of four cloud droplet activation parameterisations. Geoscientific Model Development, 2014, 7, 1535-1542.	3.6	27
28	Microphysical properties of cold frontal rainbandsâ€. Quarterly Journal of the Royal Meteorological Society, 2014, 140, 1257-1268.	2.7	41
29	Factors determining the most efficient spray distribution for marine cloud brightening. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20140056.	3.4	14
30	Gravityâ€waveâ€induced perturbations in marine stratocumulus. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 32-45.	2.7	17
31	Numerical simulation of tropical island thunderstorms (Hectors) during the ACTIVE campaign. Meteorological Applications, 2013, 20, 357-370.	2.1	7
32	Can aerosols influence deep tropical convection? Aerosol indirect effects in the Hector island thunderstorm. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 2190-2208.	2.7	13
33	Cloud droplet number enhanced by co-condensation of organic vapours. Nature Geoscience, 2013, 6, 443-446.	12.9	105
34	Corrigendum to: "Studies of heterogeneous freezing by three different desert dust samples", Atmos. Chem. Phys., 9, 2805â€“2824, 2009. Atmospheric Chemistry and Physics, 2013, 13, 10079-10080.	4.9	1
35	The accommodation coefficient of water molecules on ice â€“ cirrus cloud studies at the AIDA simulation chamber. Atmospheric Chemistry and Physics, 2013, 13, 4451-4466.	4.9	62
36	A Particle-Surface-Area-Based Parameterization of Immersion Freezing on Desert Dust Particles. Journals of the Atmospheric Sciences, 2012, 69, 3077-3092.	1.7	338

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37	Marine cloud brightening. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4217-4262.	3.4	125
38	Ice formation and development in aged, wintertime cumulus over the UK: observations and modelling. Atmospheric Chemistry and Physics, 2012, 12, 4963-4985.	4.9	92
39	A laboratory investigation into the aggregation efficiency of small ice crystals. Atmospheric Chemistry and Physics, 2012, 12, 2055-2076.	4.9	97
40	Observations and modelling of microphysical variability, aggregation and sedimentation in tropical anvil cirrus outflow regions. Atmospheric Chemistry and Physics, 2012, 12, 6609-6628.	4.9	29
41	Factors influencing ice formation and growth in simulations of a mixedâ€phase wave cloud. Journal of Advances in Modeling Earth Systems, 2012, 4, .	3.8	9
42	The effect of observed vertical structure, habits, and size distributions on the solar radiative properties and cloud evolution of cirrus clouds. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1221-1232.	2.7	17
43	Studies of propane flame soot acting as heterogeneous ice nuclei in conjunction with single particle soot photometer measurements. Atmospheric Chemistry and Physics, 2011, 11, 9549-9561.	4.9	58
44	South East Pacific atmospheric composition and variability sampled along 20Â° S during VOCALS-REx. Atmospheric Chemistry and Physics, 2011, 11, 5237-5262.	4.9	119
45	The breakup of levitating water drops observed with a high speed camera. Atmospheric Chemistry and Physics, 2011, 11, 10205-10218.	4.9	12
46	Observations of ice multiplication in a weakly convective cell embedded in supercooled mid-level stratus. Atmospheric Chemistry and Physics, 2011, 11, 257-273.	4.9	119
47	Evaluating the effects of microphysical complexity in idealised simulations of trade wind cumulus using the Factorial Method. Atmospheric Chemistry and Physics, 2011, 11, 2729-2746.	4.9	13
48	Lidar atmospheric measurements on Mars and Earth. Planetary and Space Science, 2011, 59, 942-951.	1.7	16
49	Using in situ estimates of ice water content, volume extinction coefficient, and the total solar optical depth obtained during the tropical ACTIVE campaign to test an ensemble model of cirrus ice crystals. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 199-218.	2.7	25
50	An aerosol chamber investigation of the heterogeneous ice nucleating potential of refractory nanoparticles. Atmospheric Chemistry and Physics, 2010, 10, 1227-1247.	4.9	38
51	Testing an ensemble model of cirrus ice crystals using midlatitude in situ estimates of ice water content, volume extinction coefficient and the total solar optical depth. Journal of Quantitative Spectroscopy and Radiative Transfer, 2009, 110, 1579-1598.	2.3	38
52	Aerosol and thermodynamic effects on tropical cloud systems during TWPICE and ACTIVE. Atmospheric Chemistry and Physics, 2009, 9, 15-24.	4.9	22
53	Studies of heterogeneous freezing by three different desert dust samples. Atmospheric Chemistry and Physics, 2009, 9, 2805-2824.	4.9	291
54	Microphysical properties of tropical anvil cirrus observed during ACTIVE: a statistical analysis. Proceedings of SPIE, 2008, , .	0.8	0

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55	Aerosol and traceâ€gas measurements in the Darwin area during the wet season. Journal of Geophysical Research, 2008, 113, .	3.3	49
56	Classifying atmospheric ice crystals by spatial light scattering. Optics Letters, 2008, 33, 1545.	3.3	58
57	Correction to â€œAerosol and trace-gas measurements in the Darwin area during the wet seasonâ€• Journal of Geophysical Research, 2008, 113, .	3.3	5
58	The influence of small aerosol particles on the properties of water and ice clouds. Faraday Discussions, 2008, 137, 205-222.	3.2	43
59	The development of ice in a cumulus cloud over southwest England. New Journal of Physics, 2008, 10, 105021.	2.9	31
60	Scavenging of black carbon in mixed phase clouds at the high alpine site Jungfraujoch. Atmospheric Chemistry and Physics, 2007, 7, 1797-1807.	4.9	123
61	Calibration of the Cloud Particle Imager Probes Using Calibration Beads and Ice Crystal Analogs: The Depth of Field. Journal of Atmospheric and Oceanic Technology, 2007, 24, 1860-1879.	1.3	71
62	Counterflow Virtual Impactor Based Collection of Small Ice Particles in Mixed-Phase Clouds for the Physico-Chemical Characterization of Tropospheric Ice Nuclei: Sampler Description and First Case Study. Aerosol Science and Technology, 2007, 41, 848-864.	3.1	83
63	Aerosol partitioning between the interstitial and the condensed phase in mixedâ€phase clouds. Journal of Geophysical Research, 2007, 112, .	3.3	80
64	Some ice nucleation characteristics of Asian and Saharan desert dust. Atmospheric Chemistry and Physics, 2006, 6, 2991-3006.	4.9	177
65	Efficiency of the deposition mode ice nucleation on mineral dust particles. Atmospheric Chemistry and Physics, 2006, 6, 3007-3021.	4.9	328
66	Modelling the influence of rimer surface temperature on the glaciation of intense thunderstorms: The rimeâ€“splinter mechanism of ice multiplication. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 3059-3077.	2.7	8
67	Cloudâ€resolving simulations of intense tropical Hector thunderstorms: Implications for aerosolâ€“cloud interactions. Quarterly Journal of the Royal Meteorological Society, 2006, 132, 3079-3106.	2.7	51
68	Aircraft observations of the influence of electric fields on the aggregation of ice crystals. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1695-1712.	2.7	62
69	An overview of the microphysical structure of cirrus clouds observed during EMERALD-1. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1143-1169.	2.7	41
70	Anatomy of cirrus clouds: Results from the Emerald airborne campaigns. Geophysical Research Letters, 2004, 31, .	4.0	47