

# Christian KÃ¼hnlein

## List of Publications by Year in descending order

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papers

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759233

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	A consistent framework for discrete integrations of soundproof and compressible PDEs of atmospheric dynamics. <i>Journal of Computational Physics</i> , 2014, 263, 185-205.	3.8	81
2	DCMIP2016: a review of non-hydrostatic dynamical core design and intercomparison of participating models. <i>Geoscientific Model Development</i> , 2017, 10, 4477-4509.	3.6	58
3	Modelling atmospheric flows with adaptive moving meshes. <i>Journal of Computational Physics</i> , 2012, 231, 2741-2763.	3.8	52
4	FVM 1.0: a nonhydrostatic finite-volume dynamical core for the IFS. <i>Geoscientific Model Development</i> , 2019, 12, 651-676.	3.6	47
5	A finite-volume module for simulating global all-scale atmospheric flows. <i>Journal of Computational Physics</i> , 2016, 314, 287-304.	3.8	34
6	Atlas : A library for numerical weather prediction and climate modelling. <i>Computer Physics Communications</i> , 2017, 220, 188-204.	7.5	29
7	An unstructured-mesh finite-volume MPDATA for compressible atmospheric dynamics. <i>Journal of Computational Physics</i> , 2017, 334, 16-30.	3.8	25
8	Dimension of aircraft exhaust plumes at cruise conditions: effect of wake vortices. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 2713-2733.	4.9	19
9	The ESCAPE project: Energy-efficient Scalable Algorithms for Weather Prediction at Exascale. <i>Geoscientific Model Development</i> , 2019, 12, 4425-4441.	3.6	19
10	A finite-volume module for cloud-resolving simulations of global atmospheric flows. <i>Journal of Computational Physics</i> , 2017, 341, 208-229.	3.8	18
11	High-Resolution Doppler Lidar Observations of Transient Downslope Flows and Rotors. <i>Monthly Weather Review</i> , 2013, 141, 3257-3272.	1.4	17
12	Semi-implicit integrations of perturbation equations for all-scale atmospheric dynamics. <i>Journal of Computational Physics</i> , 2019, 376, 145-159.	3.8	17
13	MPDATA: Third-order accuracy for variable flows. <i>Journal of Computational Physics</i> , 2018, 359, 361-379.	3.8	11
14	DCMIP2016: the splitting supercell test case. <i>Geoscientific Model Development</i> , 2019, 12, 879-892.	3.6	11
15	Semi-implicit integration of the unified equations in a mass-based coordinate: model formulation and numerical testing. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2019, 145, 3387-3408.	2.7	4