Alexander Gohm

List of Publications by Year
in descending order

50	1,491	279798 23	345221 36
papers	citations	h-index	g-index

64	64	64	1235
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Cold-Air Pool Processes in the Inn Valley During FÃ¶hn: A Comparison of Four Cases During the PIANO Campaign. Boundary-Layer Meteorology, 2022, 182, 335-362.	2.3	7
2	Is it north or west foehn? A Lagrangian analysis of Penetration and Interruption of Alpine Foehn intensive observation period 1 (PIANO IOP 1). Weather and Climate Dynamics, 2022, 3, 279-303.	3.5	2
3	Influence of grid resolution of largeâ€eddy simulations on foehnâ€cold pool interaction. Quarterly Journal of the Royal Meteorological Society, 2022, 148, 1840-1863.	2.7	5
4	Energy and mass exchange at an urban site in mountainous terrain â€" the Alpine city of Innsbruck. Atmospheric Chemistry and Physics, 2022, 22, 6559-6593.	4.9	4
5	Largeâ€eddy simulation of foehnâ€"cold pool interactions in the InnÂValley during PIANO IOPâ€‰2. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 944-982.	2.7	17
6	CROSSINN: A Field Experiment to Study the Three-Dimensional Flow Structure in the Inn Valley, Austria. Bulletin of the American Meteorological Society, 2021, 102, E38-E60.	3.3	10
7	A process-based evaluation of the Intermediate Complexity Atmospheric Research Model (ICAR) 1.0.1. Geoscientific Model Development, 2021, 14, 1657-1680.	3.6	5
8	Spatial heterogeneity of the Inn Valley Cold Air Pool during south foehn: Observations from an array of temperature loggers during PIANO. Meteorologische Zeitschrift, 2021, 30, 153-168.	1.0	6
9	Crossâ€valley vortices in the Inn valley, Austria: Structure, evolution and governing force imbalances. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 3835-3861.	2.7	3
10	Foehnâ€"cold pool interactions in the Inn Valley during PIANO IOP2. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 1232-1263.	2.7	19
11	Studying Urban Climate and Air Quality in the Alps: The Innsbruck Atmospheric Observatory. Bulletin of the American Meteorological Society, 2020, 101, E488-E507.	3.3	17
12	Assessing the added value of the Intermediate Complexity Atmospheric Research (ICAR) model for precipitation in complex topography. Hydrology and Earth System Sciences, 2019, 23, 2715-2734.	4.9	8
13	Unravelling the March 1972 northwest Greenland windstorm with highâ€resolution numerical simulations. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 3409-3431.	2.7	9
14	A New Horizontal Length Scale for a Three-Dimensional Turbulence Parameterization in Mesoscale Atmospheric Modeling over Highly Complex Terrain. Journal of Applied Meteorology and Climatology, 2019, 58, 2087-2102.	1.5	14
15	The Impact of Three-Dimensional Effects on the Simulation of Turbulence Kinetic Energy in a Major Alpine Valley. Boundary-Layer Meteorology, 2018, 168, 1-27.	2.3	51
16	Exchange Processes in the Atmospheric Boundary Layer Over Mountainous Terrain. Atmosphere, 2018, 9, 102.	2.3	131
17	Toward Generalizing the Impact of Surface Heating, Stratification, and Terrain Geometry on the Daytime Heat Export from an Idealized Valley. Journal of Applied Meteorology and Climatology, 2017, 56, 2711-2727.	1.5	9
18	Investigating Exchange Processes over Complex Topography: The Innsbruck Box (i-Box). Bulletin of the American Meteorological Society, 2017, 98, 787-805.	3.3	49

#	Article	IF	Citations
19	Lake and Orographic Effects on a Snowstorm at Lake Constance. Monthly Weather Review, 2016, 144, 4687-4707.	1.4	12
20	The Missing Link between Terrain-Induced Potential Vorticity Banners and Banded Convection. Monthly Weather Review, 2016, 144, 4063-4080.	1.4	9
21	Current challenges for numerical weather prediction in complex terrain: Topography representation and parameterizations. , 2016, , .		15
22	Quantifying horizontal and vertical tracer mass fluxes in an idealized valley during daytime. Atmospheric Chemistry and Physics, 2016, 16, 13049-13066.	4.9	27
23	The impact of valley geometry on daytime thermally driven flows and vertical transport processes. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1780-1794.	2.7	54
24	Influence of along-valley terrain heterogeneity on exchange processes over idealized valleys. Atmospheric Chemistry and Physics, 2015, 15, 6589-6603.	4.9	25
25	The impact of embedded valleys on daytime pollution transport over a mountain range. Atmospheric Chemistry and Physics, 2015, 15, 11981-11998.	4.9	27
26	The Impact of the Temperature Inversion Breakup on the Exchange of Heat and Mass in an Idealized Valley: Sensitivity to the Radiative Forcing. Journal of Applied Meteorology and Climatology, 2015, 54, 2199-2216.	1.5	31
27	Nature and climatology of PfÃnderwind. Meteorologische Zeitschrift, 2015, 24, 243-259.	1.0	3
28	The Impact of Horizontal Model Grid Resolution on the Boundary Layer Structure over an Idealized Valley. Monthly Weather Review, 2014, 142, 3446-3465.	1.4	46
29	The World is Not Flat: Implications for the Global Carbon Balance. Bulletin of the American Meteorological Society, 2014, 95, 1021-1028.	3.3	60
30	The mesoscale structure of a polar low: airborne lidar measurements and simulations. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1516-1531.	2.7	27
31	The orographic impact on patterns of embedded convection during the August 2005 Alpine flood. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 2092-2105.	2.7	13
32	Idealised Simulations of Daytime Pollution Transport in a Steep Valley and its Sensitivity to Thermal Stratification and Surface Albedo. Boundary-Layer Meteorology, 2010, 134, 327-351.	2.3	35
33	Evolution and structure of a cold front in an Alpine valley as revealed by a Doppler lidar. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 962-977.	2.7	12
34	Spatial distribution of aerosols in the Inn Valley atmosphere during wintertime. Meteorology and Atmospheric Physics, 2009, 103, 223-235.	2.0	39
35	Air Pollution Transport in an Alpine Valley: Results From Airborne and Ground-Based Observations. Boundary-Layer Meteorology, 2009, 131, 441-463.	2.3	93
36	Temporal precipitation variability versus altitude on a tropical high mountain: Observations and mesoscale atmospheric modelling. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1439-1455.	2.7	51

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37	A multimethodological approach to study the spatial distribution of air pollution in an Alpine valley during wintertime. Atmospheric Chemistry and Physics, 2009, 9, 3385-3396.	4.9	35
38	The impact of the PBL scheme and the vertical distribution of model layers on simulations of Alpine foehn. Meteorology and Atmospheric Physics, 2008, 99, 105-128.	2.0	26
39	On the onset of bora and the formation of rotors and jumps near a mountain gap. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 21-46.	2.7	80
40	Gap flows: Results from the Mesoscale Alpine Programme. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 881-896.	2.7	76
41	Small-scale dynamics of the south foehn in the lower Wipp Valley. Meteorology and Atmospheric Physics, 2006, 93, 79-95.	2.0	8
42	Numerical and observational case-study of a deep Adriatic bora. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 1363-1392.	2.7	53
43	Hydraulic aspects of foÂ¨hn winds in an Alpine valley. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 449-480.	2.7	51
44	Gap flow measurements during the Mesoscale Alpine Programme. Meteorology and Atmospheric Physics, 2004, 86, 99-119.	2.0	36
45	South foehn in the Wipp Valley ? Innsbruck region: Numerical simulations of the 24 October 1999 case (MAP-IOP 10). Meteorology and Atmospheric Physics, 2004, 86, 213-243.	2.0	25
46	South Foehn in the Wipp Valley on 24 October 1999 (MAP IOP 10): Verification of High-Resolution Numerical Simulations with Observations. Monthly Weather Review, 2004, 132, 78-102.	1.4	50
47	Observations of the Temporal Evolution and Spatial Structure of the Gap Flow in the Wipp Valley on 2 and 3 October 1999. Monthly Weather Review, 2004, 132, 2684-2697.	1.4	24
48	An Automobile Platform for the Measurement of Foehn and Gap Flows. Journal of Atmospheric and Oceanic Technology, 2002, 19, 1545-1556.	1.3	13
49	2D Airflow over a Double Bell-Shaped Mountain. Meteorology and Atmospheric Physics, 2000, 72, 13-27.	2.0	13
50	On the Vertical Exchange of Heat, Mass, and Momentum Over Complex, Mountainous Terrain. Frontiers in Earth Science, 0, 3, .	1.8	48