

# Zbigniew Sorbjan

## List of Publications by Year in descending order

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Version: 2024-02-01

44  
papers

1,259  
citations

361413

20  
h-index

377865

34  
g-index

49  
all docs

49  
docs citations

49  
times ranked

929  
citing authors

#	ARTICLE	IF	CITATIONS
1	On similarity in the atmospheric boundary layer. <i>Boundary-Layer Meteorology</i> , 1986, 34, 377-397.	2.3	131
2	Large-eddy simulations of convective boundary layers using nonoscillatory differencing. <i>Physica D: Nonlinear Phenomena</i> , 1999, 133, 390-397.	2.8	118
3	DECAY OF CONVECTIVE TURBULENCE REVISITED. <i>Boundary-Layer Meteorology</i> , 1997, 82, 503-517.	2.3	82
4	An Evaluation of the Flux-Gradient Relationship in the Stable Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2010, 135, 385-405.	2.3	81
5	Effects Caused by Varying the Strength of the Capping Inversion Based on a Large Eddy Simulation Model of the Shear-Free Convective Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 1996, 53, 2015-2024.	1.7	79
6	Numerical Study of Penetrative and Nonpenetrative Convective Boundary Layers. <i>Journals of the Atmospheric Sciences</i> , 1996, 53, 101-112.	1.7	56
7	Local Structure of Turbulence in Stably Stratified Boundary Layers. <i>Journals of the Atmospheric Sciences</i> , 2006, 63, 1526-1537.	1.7	55
8	Determination of Convective Boundary Layer Entrainment Fluxes, Dissipation Rates, and the Molecular Destruction of Variances: Theoretical Description and a Strategy for Its Confirmation with a Novel Lidar System Synergy. <i>Journals of the Atmospheric Sciences</i> , 2016, 73, 667-692.	1.7	53
9	Large-Eddy Simulations of the Baroclinic Mixed Layer. <i>Boundary-Layer Meteorology</i> , 2004, 112, 57-80.	2.3	42
10	Local similarity of spectral and cospectral characteristics in the stable-continuous boundary layer. <i>Boundary-Layer Meteorology</i> , 1986, 35, 257-275.	2.3	34
11	Evaluation of Local Similarity Functions in the Convective Boundary Layer. <i>Journal of Applied Meteorology and Climatology</i> , 1991, 30, 1565-1583.	1.7	32
12	Some numerical urban boundary-layer studies. <i>Boundary-Layer Meteorology</i> , 1982, 22, 481-502.	2.3	30
13	Statistics of Scalar Fields in the Atmospheric Boundary Layer Based on Large-eddy Simulations. Part I: Free Convection. <i>Boundary-Layer Meteorology</i> , 2005, 116, 467-486.	2.3	30
14	Microstructure of Turbulence in the Stably Stratified Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2008, 129, 191-210.	2.3	30
15	Structure of the stably-stratified boundary layer during the SESAME-1979 experiment. <i>Boundary-Layer Meteorology</i> , 1988, 44, 255-266.	2.3	28
16	A numerical study of daily transitions in the convective boundary layer. <i>Boundary-Layer Meteorology</i> , 2007, 123, 365-383.	2.3	28
17	Local similarity in the convective boundary layer (CBL). <i>Boundary-Layer Meteorology</i> , 1988, 45, 237-250.	2.3	27
18	Statistics of Scalar Fields in the Atmospheric Boundary Layer Based on Large-Eddy Simulations. Part II: Forced Convection. <i>Boundary-Layer Meteorology</i> , 2006, 119, 57-79.	2.3	23

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19	Statistics of Turbulence in the Stable Boundary Layer Affected by Gravity Waves. <i>Boundary-Layer Meteorology</i> , 2013, 148, 73-91.	2.3	23
20	The Height Correction of Similarity Functions in the Stable Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2012, 142, 21-31.	2.3	21
21	An examination of local similarity theory in the stably stratified boundary layer. <i>Boundary-Layer Meteorology</i> , 1987, 38, 63-71.	2.3	20
22	Toward Evaluation of Heat Fluxes in the Convective Boundary Layer. <i>Journal of Applied Meteorology and Climatology</i> , 1995, 34, 1092-1098.	1.7	19
23	Statistics of shallow convection on Mars based on large-eddy simulations. Part 1: shearless conditions. <i>Boundary-Layer Meteorology</i> , 2007, 123, 121-142.	2.3	18
24	An Evaluation Of Local Similarity At The Top Of The Mixed Layer Based On Large-Eddy Simulations. <i>Boundary-Layer Meteorology</i> , 2001, 101, 183-207.	2.3	16
25	Similarity of Scalar Fields in the Convective Boundary Layer. <i>Journals of the Atmospheric Sciences</i> , 1999, 56, 2212-2221.	1.7	15
26	Gradient-based similarity in the atmospheric boundary layer. <i>Acta Geophysica</i> , 2008, 56, 220-233.	2.0	15
27	Thermal structure of the atmospheric boundary layer on Mars based on Mini-ATES observations. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2009, 135, 1776-1787.	2.7	14
28	Similarity scaling applied to sodar observations of the convective boundary layer above an irregular hill. <i>Boundary-Layer Meteorology</i> , 1991, 56, 33-50.	2.3	13
29	Convective Structures in a Cold Air Outbreak over Lake Michigan during Lake-ICE. <i>Journals of the Atmospheric Sciences</i> , 2005, 62, 2414-2432.	1.7	13
30	A Study of the Stable Boundary Layer Based on a Single-Column K-Theory Model. <i>Boundary-Layer Meteorology</i> , 2012, 142, 33-53.	2.3	13
31	A Model Study of the Stably Stratified Steady-State Atmospheric Boundary Layer over a Slightly Inclined Terrain. <i>Journals of the Atmospheric Sciences</i> , 1984, 41, 1863-1874.	1.7	10
32	On the vertical distribution of passive species in the atmospheric boundary layer. <i>Boundary-Layer Meteorology</i> , 1986, 35, 73-81.	2.3	10
33	Comments on 'Flux-gradient relationship, self-correlation and intermittency in the stable boundary layer'. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2006, 132, 1371-1373.	2.7	10
34	Local Scales of Turbulence in the Stable Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2008, 127, 261-271.	2.3	9
35	Similarity scaling systems for stably stratified turbulent flows. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 805-810.	2.7	9
36	Comments on 'scaling the atmospheric boundary layer?'. <i>Boundary-Layer Meteorology</i> , 1987, 38, 411-413.	2.3	8

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37	Improving Non-local Parameterization of the Convective Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2009, 130, 57-69.	2.3	8
38	Statistics of shallow convection on Mars based on large-eddy simulations. Part 2: effects of wind shear. <i>Boundary-Layer Meteorology</i> , 2007, 123, 143-157.	2.3	7
39	Assessment of Gradient-Based Similarity Functions in the Stable Boundary Layer Derived from a Large-Eddy Simulation. <i>Boundary-Layer Meteorology</i> , 2017, 163, 375-392.	2.3	7
40	Modelling of the Evolving Stable Boundary Layer. <i>Boundary-Layer Meteorology</i> , 2014, 151, 407-428.	2.3	6
41	Gradient-Based Similarity in the Stable Atmospheric Boundary Layer. <i>GeoPlanet: Earth and Planetary Sciences</i> , 2014, , 351-375.	0.2	4
42	Local similarity functions derived from second-moment budgets in the convective boundary layer. <i>Boundary-Layer Meteorology</i> , 1989, 46, 1-11.	2.3	3
43	On the temperature spectrum in the convective boundary layer. <i>Boundary-Layer Meteorology</i> , 1989, 47, 195-203.	2.3	3
44	Comments on 'the velocity spectra in the stable atmospheric boundary layer?'. <i>Boundary-Layer Meteorology</i> , 1989, 48, 203-204.	2.3	0