Chin-Hoh Moeng

List of Publications by Year
in descending order

64 papers	8,831 citations	71102 41 h-index	118850 62 g-index
65 all docs	65 docs citations	65 times ranked	4302 citing authors

#	Article	IF	Citations
1	A Large-Eddy-Simulation Model for the Study of Planetary Boundary-Layer Turbulence. Journals of the Atmospheric Sciences, 1984, 41, 2052-2062.	1.7	1,062
2	A Comparison of Shear- and Buoyancy-Driven Planetary Boundary Layer Flows. Journals of the Atmospheric Sciences, 1994, 51, 999-1022.	1.7	622
3	A Large Eddy Simulation Intercomparison Study of Shallow Cumulus Convection. Journals of the Atmospheric Sciences, 2003, 60, 1201-1219.	1.7	607
4	Langmuir turbulence in the ocean. Journal of Fluid Mechanics, 1997, 334, 1-30.	3.4	547
5	Evaluation of Large-Eddy Simulations via Observations of Nocturnal Marine Stratocumulus. Monthly Weather Review, 2005, 133, 1443-1462.	1.4	519
6	A subgrid-scale model for large-eddy simulation of planetary boundary-layer flows. Boundary-Layer Meteorology, 1994, 71, 247-276.	2.3	427
7	Eddy Diffusivity and Countergradient Transport in the Convective Atmospheric Boundary Layer. Journals of the Atmospheric Sciences, 1991, 48, 1690-1698.	1.7	329
8	Structure of the Entrainment Zone Capping the Convective Atmospheric Boundary Layer. Journals of the Atmospheric Sciences, 1998, 55, 3042-3064.	1.7	305
9	Evaluation of Turbulent Transport and Dissipation Closures in Second-Order Modeling. Journals of the Atmospheric Sciences, 1989, 46, 2311-2330.	1.7	289
10	Spectral Analysis of Large-Eddy Simulations of the Convective Boundary Layer. Journals of the Atmospheric Sciences, 1988, 45, 3573-3587.	1.7	270
11	Large-Eddy Simulations of Strongly Precipitating, Shallow, Stratocumulus-Topped Boundary Layers. Journals of the Atmospheric Sciences, 1998, 55, 3616-3638.	1.7	229
12	Simulation of turbulent flow over idealized water waves. Journal of Fluid Mechanics, 2000, 404, 47-85.	3.4	217
13	The Influence of Idealized Heterogeneity on Wet and Dry Planetary Boundary Layers Coupled to the Land Surface. Journals of the Atmospheric Sciences, 2005, 62, 2078-2097.	1.7	216
14	Large-Eddy Simulations of a Drizzling, Stratocumulus-Topped Marine Boundary Layer. Monthly Weather Review, 2009, 137, 1083-1110.	1.4	208
15	Statistics of Conservative Scalars in the Convective Boundary Layer. Journals of the Atmospheric Sciences, 1984, 41, 3161-3169.	1.7	189
16	A grid nesting method for large-eddy simulation of planetary boundary-layer flows. Boundary-Layer Meteorology, 1996, 80, 167-202.	2.3	161
17	Large-Eddy Simulation Of The Stably Stratified Planetary Boundary Layer. Boundary-Layer Meteorology, 2000, 95, 1-30.	2.3	156
18	Large-Eddy Simulations of Radiatively Driven Convection: Sensitivities to the Representation of Small Scales. Journals of the Atmospheric Sciences, 1999, 56, 3963-3984.	1.7	155

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19	Vertical-Velocity Skewness in the Buoyancy-Driven Boundary Layer. Journals of the Atmospheric Sciences, 1990, 47, 1149-1162.	1.7	154
20	Turbulent Statistics of Neutrally Stratified Flow Within and Above a Sparse Forest from Large-Eddy Simulation and Field Observations. Boundary-Layer Meteorology, 1998, 88, 363-397.	2.3	138
21	The Use of Large-Eddy Simulations in Lagrangian Particle Dispersion Models. Journals of the Atmospheric Sciences, 2004, 61, 2877-2887.	1.7	128
22	A Second-Order Bulk Boundary-Layer Model. Journals of the Atmospheric Sciences, 1992, 49, 1903-1923.	1.7	121
23	Structure of subfilter-scale fluxes in the atmospheric surface layer with application to large-eddy simulation modelling. Journal of Fluid Mechanics, 2003, 482, 101-139.	3.4	117
24	An evaluation of neutral and convective planetary boundary-layer parameterizations relative to large eddy simulations. Boundary-Layer Meteorology, 1996, 79, 131-175.	2.3	115
25	Observations and numerical simulations of the diurnal cycle of the EUROCS stratocumulus case. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 3269-3296.	2.7	113
26	Large-Eddy Simulation of a Stratus-Topped Boundary Layer. Part I: Structure and Budgets. Journals of the Atmospheric Sciences, 1986, 43, 2886-2900.	1.7	109
27	Parameterizing turbulent diffusion through the joint probability density. Boundary-Layer Meteorology, 1992, 60, 1-13.	2.3	99
28	Largeâ€Eddy Simulation of Maritime Deep Tropical Convection. Journal of Advances in Modeling Earth Systems, 2009, 1, .	3.8	95
29	An Analysis of Closures for Pressure-Scalar Covariances in the Convective Boundary Layer. Journals of the Atmospheric Sciences, 1986, 43, 2499-2513.	1.7	93
30	Entrainment Rate, Cloud Fraction, and Liquid Water Path of PBL Stratocumulus Clouds. Journals of the Atmospheric Sciences, 2000, 57, 3627-3643.	1.7	83
31	The Effects of Nonhomogeneous Surface Fluxes on the Convective Boundary Layer: A Case Study Using Large-Eddy Simulation. Journals of the Atmospheric Sciences, 1990, 47, 1721-1741.	1.7	67
32	Direct numerical simulation of wind-wave generation processes. Journal of Fluid Mechanics, 2008, 616, 1-30.	3.4	66
33	An Extension of the Mellorâ€“Yamada Model to the Terra Incognita Zone for Dry Convective Mixed Layers in the Free Convection Regime. Boundary-Layer Meteorology, 2015, 157, 23-43.	2.3	65
34	Large-Eddy Simulation of the Daytime Boundary Layer in an Idealized Valley Using the Weather Research and Forecasting Numerical Model. Boundary-Layer Meteorology, 2010, 137, 49-75.	2.3	61
35	Entrainment Processes in the Convective Boundary Layer with Varying Wind Shear. Boundary-Layer Meteorology, 2003, 108, 221-245.	2.3	57
36	Including Radiative Effects in an Entrainment Rate Formula for Buoyancy-Driven PBLs. Journals of the Atmospheric Sciences, 1999, 56, 1031-1049.	1.7	55

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37	Single-Point Closures in a Neutrally Stratified Boundary Layer. Journals of the Atmospheric Sciences, 1993, 50, 3366-3379.	1.7	54
38	Plume Fluxes in Clear and Cloudy Convective Boundary Layers. Journals of the Atmospheric Sciences, 1991, 48, 1746-1757.	1.7	45
39	The effect of surface roughness on flow structures in a neutrally stratified planetary boundary layer flow. Physics of Fluids, 1997, 9, 3235-3249.	4.0	45
40	Plume Budgets in Clear and Cloudy Convective Boundary Layers. Journals of the Atmospheric Sciences, 1991, 48, 1758-1770.	1.7	43
41	Physical Processes within the Nocturnal Stratus-topped Boundary Layer. Journals of the Atmospheric Sciences, 1992, 49, 2384-2401.	1.7	43
42	A Numerical Study of a Marine Subtropical Stratus Cloud Layer and its Stability. Journals of the Atmospheric Sciences, 1980, 37, 2661-2676.	1.7	33
43	Composite Structure of Plumes in Stratus-topped Boundary Layers. Journals of the Atmospheric Sciences, 1991, 48, 2280-2291.	1.7	33
44	Problems in Simulating the Stratocumulus-Topped Boundary Layer with a Third-Order Closure Model. Journals of the Atmospheric Sciences, 1984, 41, 1588-1600.	1.7	32
45	Waves in the Overlying inversion of the Convective Boundary Layer. Journals of the Atmospheric Sciences, 1987, 44, 1801-1808.	1.7	31
46	A numerical study on the evolution and structure of a stress-driven free-surface turbulent shear flow. Journal of Fluid Mechanics, 2005, 545, 163.	3.4	31
47	Numerical Investigations of the Roles of Radiative and Evaporative Feedbacks in Stratocumulus Entrainment and Breakup. Journals of the Atmospheric Sciences, 1995, 52, 2869-2883.	1.7	27
48	Statistical Variability of Dispersion in the Convective Boundary Layer: Ensembles of Simulations and Observations. Boundary-Layer Meteorology, 2012, 145, 185-210.	2.3	25
49	Lagrangian Particle Dispersion Modeling of the Fumigation Process Using Large-Eddy Simulation. Journals of the Atmospheric Sciences, 2005, 62, 1932-1946.	1.7	23
50	An Observational Study of Wind Profiles in the Baroclinic Convective Mixed Layer. Boundary-Layer Meteorology, 1999, 90, 47-82.	2.3	21
51	The Tropical Marine Boundary Layer Under a Deep Convection System: a Largeâ€Eddy Simulation Study. Journal of Advances in Modeling Earth Systems, 2009, 1, .	3.8	20
52	A Closure for Updraftâ€“Downdraft Representation of Subgrid-Scale Fluxes in Cloud-Resolving Models. Monthly Weather Review, 2014, 142, 703-715.	1.4	18
53	Wind-Tunnel Experiment on Logarithmic-Layer Turbulence under the Influence of Overlying Detached Eddies. Boundary-Layer Meteorology, 2010, 134, 269-283.	2.3	14
54	A method to determine the amounts of cloudâ€top radiative and evaporative cooling in a stratocumulusâ€topped boundary layer. Quarterly Journal of the Royal Meteorological Society, 1997, 123, 2187-2213.	2.7	11

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55	Representation of Boundary Layer Moisture Transport in Cloud-Resolving Models. Monthly Weather Review, 2012, 140, 3682-3698.	1.4	10
56	Turbulent Fluxes and Coherent Structures in Marine Boundary Layers: Investigations by Large-Eddy Simulation. Atmospheric and Oceanographic Sciences Library, 1999, , 507-538.	0.1	10
57	Large-eddy simulations of cloud-topped mixed layers. , 2004, , 95-114.		5
58	Atmospheric planetary boundary-layer research in the U.S.: 1991-1994. Reviews of Geophysics, 1995, 33, 923-931.	23.0	3
59	Representing the Stratocumulus-Topped Boundary Layer in GCMs. International Geophysics, 2000, , 577-604.	0.6	3
60	Numerical Simulation of Atmospheric Turbulence for Assessment of Wind Turbine. Journal of Fluid Science and Technology, 2011, 6, 342-356.	0.6	3
61	Turbulence Interaction with Atmospheric Physical Processes. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2010, , 15-24.	0.3	2
62	Comparison of a computer-simulated stratus-topped boundary layer with aircraft observations. Boundary-Layer Meteorology, 1993, 65, 29-53.	2.3	1
63	Comment on â€œFumigation of pollutants in and above the entrainment zone into a growing convective boundary layer: A large-eddy simulationâ€• Atmospheric Environment, 2007, 41, 7679-7682.	4.1	1
64	A Large Eddy Simulation Model for the Stratus-Topped Boundary Layer. , 1986, , 291-303.		0