## Marc B Parlange

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

71
papers

4,123
citations

34
p-index

74
ext. papers

4,619
ext. citations

4.7
avg, IF

5.33
L-index

#	Paper	IF	Citations
71	A scale-dependent dynamic model for large-eddy simulation: application to a neutral atmospheric boundary layer. <i>Journal of Fluid Mechanics</i> , <b>2000</b> , 415, 261-284	3.7	430
7°	A scale-dependent Lagrangian dynamic model for large eddy simulation of complex turbulent flows. <i>Physics of Fluids</i> , <b>2005</b> , 17, 025105	4.4	410
69	Distributed fiber-optic temperature sensing for hydrologic systems. <i>Water Resources Research</i> , <b>2006</b> , 42,	5.4	384
68	Evapotranspiration: A process driving mass transport and energy exchange in the soil-plant-atmosphere-climate system. <i>Reviews of Geophysics</i> , <b>2012</b> , 50,	23.1	247
67	Fiber optics opens window on stream dynamics. <i>Geophysical Research Letters</i> , <b>2006</b> , 33,	4.9	198
66	Surface length scales and shear stress: Implications for land-atmosphere interaction over complex terrain. <i>Water Resources Research</i> , <b>1999</b> , 35, 2121-2132	5.4	177
65	On Monin Dbukhov Similarity In The Stable Atmospheric Boundary Layer. <i>Boundary-Layer Meteorology</i> , <b>2001</b> , 99, 225-248	3.4	168
64	Modeling flow around bluff bodies and predicting urban dispersion using large eddy simulation. <i>Environmental Science &amp; Environmental </i>	10.3	140
63	Large eddy simulation study of scalar transport in fully developed wind-turbine array boundary layers. <i>Physics of Fluids</i> , <b>2011</b> , 23, 126603	4.4	124
62	Modeling turbulent flow over fractal trees with renormalized numerical simulation. <i>Journal of Computational Physics</i> , <b>2007</b> , 225, 427-448	4.1	99
61	Spatial Characteristics of Roughness Sublayer Mean Flow and Turbulence Over a Realistic Urban Surface. <i>Boundary-Layer Meteorology</i> , <b>2016</b> , 160, 425-452	3.4	70
60	Albedo effect on radiative errors in air temperature measurements. <i>Water Resources Research</i> , <b>2009</b> , 45,	5.4	67
59	Regional scale evaporation and the atmospheric boundary layer. <i>Reviews of Geophysics</i> , <b>1995</b> , 33, 99	23.1	65
58	The Effects of Building Representation and Clustering in Large-Eddy Simulations of Flows in Urban Canopies. <i>Boundary-Layer Meteorology</i> , <b>2009</b> , 132, 415-436	3.4	61
57	Flow during the evening transition over steep Alpine slopes. <i>Quarterly Journal of the Royal Meteorological Society</i> , <b>2013</b> , 139, 607-624	6.4	60
56	Heated Optical Fiber for Distributed Soil-Moisture Measurements: A Lysimeter Experiment. <i>Vadose Zone Journal</i> , <b>2012</b> , 11, vzj2011.0199	2.7	59
55	Large-eddy simulation of plant canopy flows using plant-scale representation. <i>Boundary-Layer Meteorology</i> , <b>2007</b> , 124, 183-203	3.4	59

## (2011-2013)

54	Geomorphic signatures on Brutsaert base flow recession analysis. <i>Water Resources Research</i> , <b>2013</b> , 49, 5462-5472	5.4	54
53	A comparative quadrant analysis of turbulence in a plant canopy. <i>Water Resources Research</i> , <b>2007</b> , 43,	5.4	54
52	Field study of the dynamics and modelling of subgrid-scale turbulence in a stable atmospheric surface layer over a glacier. <i>Journal of Fluid Mechanics</i> , <b>2010</b> , 665, 480-515	3.7	53
51	A Simple Model for the Afternoon and Early Evening Decay of Convective Turbulence Over Different Land Surfaces. <i>Boundary-Layer Meteorology</i> , <b>2011</b> , 141, 301-324	3.4	52
50	Flow over Hills: A Large-Eddy Simulation of the Bolund Case. <i>Boundary-Layer Meteorology</i> , <b>2013</b> , 148, 177-194	3.4	51
49	Similarity Scaling Over a Steep Alpine Slope. <i>Boundary-Layer Meteorology</i> , <b>2013</b> , 147, 401-419	3.4	50
48	Numerical study of dynamic Smagorinsky models in large-eddy simulation of the atmospheric boundary layer: Validation in stable and unstable conditions. <i>Water Resources Research</i> , <b>2006</b> , 42,	5.4	49
47	The Effect of Scale on the Applicability of Taylor Frozen Turbulence Hypothesis in the Atmospheric Boundary Layer. <i>Boundary-Layer Meteorology</i> , <b>2012</b> , 143, 379-391	3.4	47
46	Estimation of urban sensible heat flux using a dense wireless network of observations. <i>Environmental Fluid Mechanics</i> , <b>2009</b> , 9, 635-653	2.2	43
45	Evaporation from a shallow water table: Diurnal dynamics of water and heat at the surface of drying sand. <i>Water Resources Research</i> , <b>2013</b> , 49, 4022-4034	5.4	40
44	Subgrid-Scale Dynamics of Water Vapour, Heat, and Momentum over a Lake. <i>Boundary-Layer Meteorology</i> , <b>2008</b> , 128, 205-228	3.4	39
43	Pathology of Monin-Obukhov similarity in the stable boundary layer. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110, n/a-n/a		38
42	Scale dependence of subgrid-scale model coefficients: An a priori study. <i>Physics of Fluids</i> , <b>2008</b> , 20, 1151	1964	37
41	Hydrologic response of an alpine watershed: Application of a meteorological wireless sensor network to understand streamflow generation. <i>Water Resources Research</i> , <b>2011</b> , 47,	5.4	36
40	A Hybrid Spectral/Finite-Volume Algorithm for Large-Eddy Simulation of Scalars in the Atmospheric Boundary Layer. <i>Boundary-Layer Meteorology</i> , <b>2008</b> , 128, 473-484	3.4	36
39	Turbulent kinetic energy budgets in a model canopy: comparisons between LES and wind-tunnel experiments. <i>Environmental Fluid Mechanics</i> , <b>2008</b> , 8, 73-95	2.2	36
38	NDVI relationship to monthly evaporation. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 1753-1756	4.9	34
37	Evolution of superficial lake water temperature profile under diurnal radiative forcing. <i>Water Resources Research</i> , <b>2011</b> , 47,	5.4	33

36	Adapting Tilt Corrections and the Governing Flow Equations for Steep, Fully Three-Dimensional, Mountainous Terrain. <i>Boundary-Layer Meteorology</i> , <b>2016</b> , 159, 539-565	3.4	32
35	Modelling Small-Scale Drifting Snow with a Lagrangian Stochastic Model Based on Large-Eddy Simulations. <i>Boundary-Layer Meteorology</i> , <b>2014</b> , 153, 117-139	3.4	31
34	Influence of sediment settling velocity on mechanistic soil erosion modeling. <i>Water Resources Research</i> , <b>2008</b> , 44,	5.4	31
33	On the variability of the Priestley-Taylor coefficient over water bodies. <i>Water Resources Research</i> , <b>2016</b> , 52, 150-163	5.4	29
32	Controls on the diurnal streamflow cycles in two subbasins of an alpine headwater catchment. Water Resources Research, <b>2015</b> , 51, 3403-3418	5.4	28
31	Limitation of the transport capacity approach in sediment transport modeling. <i>Water Resources Research</i> , <b>2007</b> , 43,	5.4	27
30	Buoyant Turbulent Kinetic Energy Production in Steep-Slope Katabatic Flow. <i>Boundary-Layer Meteorology</i> , <b>2016</b> , 161, 405-416	3.4	25
29	Coherent structures and the kaspectral behaviour. <i>Physics of Fluids</i> , <b>2013</b> , 25, 125107	4.4	25
28	Perturbations to the Spatial and Temporal Characteristics of the Diurnally-Varying Atmospheric Boundary Layer Due to an Extensive Wind Farm. <i>Boundary-Layer Meteorology</i> , <b>2017</b> , 162, 255-282	3.4	24
27	Estimation of wet surface evaporation from sensible heat flux measurements. <i>Water Resources Research</i> , <b>2009</b> , 45,	5.4	24
26	Momentum balance of katabatic flow on steep slopes covered with short vegetation. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 4761-4768	4.9	23
25	Towards oscillation-free implementation of the immersed boundary method with spectral-like methods. <i>Journal of Computational Physics</i> , <b>2011</b> , 230, 8179-8191	4.1	22
24	Effects of the water retention curve on evaporation from arid soils. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 3110-3116	4.9	19
23	Could electrical conductivity replace water level in rating curves for alpine streams?. <i>Water Resources Research</i> , <b>2013</b> , 49, 343-351	5.4	18
22	Concentration profiles of particles settling in the neutral and stratified atmospheric boundary layer. <i>Boundary-Layer Meteorology</i> , <b>2007</b> , 125, 25-38	3.4	17
21	The Local Structure of Atmospheric Turbulence and Its Effect on the Smagorinsky Model for Large Eddy Simulation. <i>Journals of the Atmospheric Sciences</i> , <b>2007</b> , 64, 1941-1958	2.1	16
20	Signatures of Air Wave Interactions Over a Large Lake. Boundary-Layer Meteorology, 2018, 167, 445-468	3.4	15
19	Large Wind Farms and the Scalar Flux over an Heterogeneously Rough Land Surface.  Boundary-Layer Meteorology, <b>2014</b> , 153, 471-495	3.4	14

## (2012-1995)

18	The random sweeping decorrelation hypothesis in stratified turbulent flows. <i>Fluid Dynamics Research</i> , <b>1995</b> , 16, 275-295	1.2	13	
17	Carbon monoxide as a tracer of gas transport in snow and other natural porous media. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	11	
16	Katabatic Flow: A Closed-Form Solution with Spatially-Varying Eddy Diffusivities. <i>Boundary-Layer Meteorology</i> , <b>2017</b> , 162, 307-317	3.4	10	
15	Volume Averaging for Urban Canopies. <i>Boundary-Layer Meteorology</i> , <b>2019</b> , 173, 349-372	3.4	9	
14	Modulation of Mean Wind and Turbulence in the Atmospheric Boundary Layer by Baroclinicity. <i>Journals of the Atmospheric Sciences</i> , <b>2018</b> , 75, 3797-3821	2.1	9	
13	Geometric Alignments of the Subgrid-Scale Force in the Atmospheric Boundary Layer.  Boundary-Layer Meteorology, <b>2009</b> , 132, 1-9	3.4	9	
12	Direct numerical simulation of turbulent slope flows up to Grashof number. <i>Journal of Fluid Mechanics</i> , <b>2017</b> , 829, 589-620	3.7	8	
11	Field study on drainage densities and rescaled width functions in a high-altitude alpine catchment. <i>Hydrological Processes</i> , <b>2016</b> , 30, 2138-2152	3.3	7	
10	Suppressed convective rainfall by agricultural expansion in southeastern Burkina Faso. <i>Water Resources Research</i> , <b>2015</b> , 51, 5521-5530	5.4	7	
9	Are atmospheric surface layer flows ergodic?. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 3342-3346	4.9	6	
8	Preferential Deposition of Snow and Dust Over Hills: Governing Processes and Relevant Scales. Journal of Geophysical Research D: Atmospheres, <b>2019</b> , 124, 7951-7974	4.4	4	
7	On the use of spatially discrete data to compute energy and mass balance. <i>Water Resources Research</i> , <b>2012</b> , 48,	5.4	3	
6	Wind turbines and water in irrigated areas. Agricultural Water Management, 2015, 152, 299-300	5.9	2	
5	A comparison of near-surface potential temperature variance budgets for unstable atmospheric flows with contrasting vegetation cover flat surfaces and a gentle slope. <i>Environmental Fluid Mechanics</i> , <b>2020</b> , 20, 1251-1279	2.2	2	
4	Sweeping Effects Modify Taylor Frozen Turbulence Hypothesis for Scalars in the Roughness Sublayer. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL093746	4.9	1	
3	A Local Similarity Function for Katabatic Flows Derived From Field Observations Over Steep- and Shallow-Angled Slopes. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL095479	4.9	O	
2	Scrambling and Reorientation of Classical Atmospheric Boundary Layer Turbulence in Hurricane Winds. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2020GL091695	4.9	О	
1	Ecohydrology: a fast moving field. <i>Ecohydrology</i> , <b>2012</b> , 5, 519-519	2.5		