Paul F Linden

List of Publications by Year in Descending Order

141 papers	6,029 citations	39 h-index	75 g-index
151 ext. papers	6,960 ext. citations	4.6 avg, IF	6.06 L-index

#	Paper	IF	Citations
141	Experimental properties of continuously forced, shear-driven, stratified turbulence. Part 1. Mean flows, self-organisation, turbulent fractions. *Journal of Fluid Mechanics*, **2022**, 937,	3.7	1
140	Vertically distributed wall sources of buoyancy. Part 1. Unconfined. *Journal of Fluid Mechanics*, **2021** , 907,	3.7	2
139	The ventilation of buildings and other mitigating measures for COVID-19: a focus on wintertime.. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2021**, 477, 20200855	2.4	26
138	Seasonal variation in airborne infection risk in schools due to changes in ventilation inferred from monitored carbon dioxide. *Indoor Air*, **2021**, 31, 1154-1163	5.4	18
137	Effects of background rotation on the dynamics of multiphase plumes. *Journal of Fluid Mechanics*, **2021**, 915,	3.7	1
136	A metamorphosis of three-dimensional wave structure in transitional and turbulent boundary layers. *Journal of Fluid Mechanics*, **2021**, 914,	3.7	4
135	Numerical study of COVID-19 spatial-temporal spreading in London. *Physics of Fluids*, **2021**, 33, 046605	4.4	9
134	Contaminant transport by human passage through an air curtain separating two sections of a corridor: Part I Uniform ambient temperature. *Energy and Buildings*, **2021**, 236, 110818	7	2
133	Assessment and mitigation of personal exposure to particulate air pollution in cities: An exploratory study. *Sustainable Cities and Society*, **2021**, 72, 103052	10.1	5
132	Natural ventilation in London: Towards energy-efficient and healthy buildings. *Building and Environment*, **2021**, 195, 107722	6.5	9
131	A full-scale field study for evaluation of simple analytical models of cross ventilation and single-sided ventilation. *Building and Environment*, **2021**, 187, 107386	6.5	6
130	Identifying Efficient Transport Pathways in Early-Wood Timber: Insights from 3D X-ray CT Imaging of Softwood in the Presence of Flow. *Transport in Porous Media*, **2021**, 136, 813-830	3.1	
129	Data Assimilation in the Latent Space of a Convolutional Autoencoder. *Lecture Notes in Computer Science*, **2021**, 373-386	0.9	3
128	Confronting Grand Challenges in environmental fluid mechanics. *Physical Review Fluids*, **2021**, 6,	2.8	8
127	Transpiration through hydrogels. *Journal of Fluid Mechanics*, **2021**, 925,	3.7	1
126	Plumes in rotating fluid and their transformation into tornados. *Journal of Fluid Mechanics*, **2021**, 924,	3.7	1
125	Air Flow Experiments on a Train Carriage Towards Understanding the Risk of Airborne Transmission. *Atmosphere*, **2021**, 12, 1267	2.7	4

124	The effect of double diffusion on the dynamics of horizontal turbulent thermohaline jets. *Journal of Fluid Mechanics*, **2020**, 905,	3.7	3
123	The circular capillary jump. *Journal of Fluid Mechanics*, **2020**, 896,	3.7	3
122	Structure evolution at early stage of boundary-layer transition: simulation and experiment. *Journal of Fluid Mechanics*, **2020**, 890,	3.7	14
121	A comparison of entrainment in turbulent line plumes adjacent to and distant from a vertical wall. *Journal of Fluid Mechanics*, **2020**, 882,	3.7	6
120	The effect of double diffusion on entrainment in turbulent plumes. *Journal of Fluid Mechanics*, **2020** , 884,	3.7	6
119	Effects of ventilation on the indoor spread of COVID-19. *Journal of Fluid Mechanics*, **2020**, 903, F1	3.7	127
118	Displacement ventilation: a viable ventilation strategy for makeshift hospitals and public buildings to contain COVID-19 and other airborne diseases. *Royal Society Open Science*, **2020**, 7, 200680	3.3	15
117	Experimental study on low-speed streaks in a turbulent boundary layer at low Reynolds number. *Journal of Fluid Mechanics*, **2020**, 903,	3.7	9
116	The effect of an indoor-outdoor temperature difference on transient cross-ventilation. *Building and Environment*, **2020**, 168, 106447	6.5	8
115	Buoyancy-driven exchange flows in inclined ducts. *Journal of Fluid Mechanics*, **2020**, 893,	3.7	3
114	Testing the Assumptions Underlying Ocean Mixing Methodologies Using Direct Numerical Simulations. *Journal of Physical Oceanography*, **2019**, 49, 2761-2779	2.4	9
113	Regime transitions and energetics of sustained stratified shear flows. *Journal of Fluid Mechanics*, **2019**, 875, 657-698	3.7	4
112	The transport of liquids in softwood: timber as a model porous medium. *Scientific Reports*, **2019**, 9, 20282	4.9	3
111	Experimental exploration of fluid-driven cracks in brittle hydrogels. *Journal of Fluid Mechanics*, **2018**, 844, 435-458	3.7	8
110	Detrainment of plumes from vertically distributed sources. *Environmental Fluid Mechanics*, **2018**, 18, 3-25	2.2	7
109	On the origin of the circular hydraulic jump in a thin liquid film. *Journal of Fluid Mechanics*, **2018**, 851,	3.7	30
108	Flow of buoyant granular materials along a free surface. *Journal of Fluid Mechanics*, **2018**, 848, 312-339	3.7	2
107	The structure and origin of confined Holmboe waves. *Journal of Fluid Mechanics*, **2018**, 848, 508-544	3.7	16

106	Symmetric coalescence of two hydraulic fractures. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 10228-10232	11.5	1
105	Cell geometry across the ring structure of Sitka spruce. *Journal of the Royal Society Interface*, **2018**, 15,	4.1	7
104	Natural ventilation in cities: the implications of fluid mechanics. *Building Research and Information*, **2018**, 46, 809-828	4.3	22
103	Characteristics of colliding sea breeze gravity current fronts: a laboratory study. *Quarterly Journal of the Royal Meteorological Society*, **2017**, 143, 1434-1441	6.4	10
102	Diapycnal mixing in layered stratified plane Couette flow quantified in a tracer-based coordinate. *Journal of Fluid Mechanics*, **2017**, 823, 198-229	3.7	17
101	Conditional sampling of a high Péclet number turbulent plume and the implications for entrainment. *Journal of Fluid Mechanics*, **2017**, 823, 26-56	3.7	11
100	Hydrogel as a Medium for Fluid-Driven Fracture Study. *Experimental Mechanics*, **2017**, 57, 1483-1493	2.6	3
99	Anticyclonic precession of a plume in a rotating environment. *Geophysical Research Letters*, **2017**, 44, 9400-9407	4.9	9
98	Predicting the pore-filling ratio in lumen-impregnated wood. *Wood Science and Technology*, **2017**, 51, 1277-1290	2.5	14
97	The wood from the trees: The use of timber in construction. *Renewable and Sustainable Energy Reviews*, **2017**, 68, 333-359	16.2	424
96	Impact of aperture separation on wind-driven single-sided natural ventilation. *Building and Environment*, **2016**, 108, 122-134	6.5	28
95	The Fluxes and Behaviour of Plumes Inferred from Measurements of Coherent Structures within Images of the Bulk Flow. *Atmosphere - Ocean*, **2016**, 54, 403-417	1.5	8
94	The Modular Aerial Sensing System. *Journal of Atmospheric and Oceanic Technology*, **2016**, 33, 1169-1184	2	25
93	Questioning the Mpemba effect: hot water does not cool more quickly than cold. *Scientific Reports*, **2016**, 6, 37665	4.9	26
92	Mixing efficiency in run-down gravity currents. *Journal of Fluid Mechanics*, **2016**, 809, 691-704	3.7	9
91	The effects of an opposing buoyancy force on the performance of an air curtain in the doorway of a building. *Energy and Buildings*, **2015**, 96, 20-29	7	19
90	Gravity current propagation up a valley. *Journal of Fluid Mechanics*, **2015**, 762, 417-434	3.7	14
89	Intrusion-generated waves in a linearly stratified fluid. *Journal of Fluid Mechanics*, **2014**, 752, 282-295	3.7	7

88	Stratified shear flow: experiments in an inclined duct. *Journal of Fluid Mechanics*, **2014**, 753, 242-253	3.7	14
87	Entrainment in two coalescing axisymmetric turbulent plumes. *Journal of Fluid Mechanics*, **2014**, 752,	3.7	20
86	The effectiveness of an air curtain in the doorway of a ventilated building. *Journal of Fluid Mechanics*, **2014**, 756, 130-164	3.7	14
85	Validity of thermally-driven small-scale ventilated filling box models. *Experiments in Fluids*, **2013**, 54, 1	2.5	9
84	The efficiency of pulsed-jet propulsion. *Journal of Fluid Mechanics*, **2011**, 668, 1-4	3.7	7
83	Geophysical and Environmental Fluid Dynamics. *Lecture Notes Series, Institute for Mathematical Sciences*, **2011**, 29-62	0.1	
82	Intrusive gravity currents between two stably stratified fluids. *Journal of Fluid Mechanics*, **2010**, 647, 53-69	3.7	17
81	Laboratory modelling of the effects of temporal changes of estuarine-fresh-water discharge rates on the propagation speed of oceanographic coastal currents. *Journal of Fluid Mechanics*, **2010**, 664, 337-347	3.7	0
80	Particle transport in low-energy ventilation systems. Part 1: theory of steady states. *Indoor Air*, **2009**, 19, 122-9	5.4	11
79	The front speed of intrusions into a continuously stratified medium. *Journal of Fluid Mechanics*, **2008**, 594, 369-377	3.7	25
78	Buoyancy-driven flow between two rooms coupled by two openings at different levels. *Journal of Fluid Mechanics*, **2008**, 594, 425-443	3.7	5
77	Contaminants in ventilated filling boxes. *Journal of Fluid Mechanics*, **2007**, 591, 97-116	3.7	29
76	Rotating gravity currents: small-scale and large-scale laboratory experiments and a geostrophic model. *Journal of Fluid Mechanics*, **2007**, 578, 35-65	3.7	19
75	Lock-exchange flows in sloping channels. *Journal of Fluid Mechanics*, **2007**, 577, 53-77	3.7	53
74	Local implications for self-similar turbulent plume models. *Journal of Fluid Mechanics*, **2007**, 575, 257-265	3.7	10
73	Intrusive gravity currents. *Journal of Fluid Mechanics*, **2006**, 568, 193	3.7	30
72	Axisymmetric gravity currents on a cone. *Journal of Fluid Mechanics*, **2006**, 565, 227	3.7	17
71	The fluid dynamics of an underfloor air distribution system. *Journal of Fluid Mechanics*, **2006**, 554, 323	3.7	34

70	The front speed of intrusive gravity currents. *Journal of Fluid Mechanics*, **2006**, 552, 1	3.7	31
69	Colliding turbulent plumes. *Journal of Fluid Mechanics*, **2006**, 550, 85	3.7	6
68	Interacting Turbulent Plumes in a Naturally Ventilated Enclosure. *International Journal of Ventilation*, **2006**, 4, 301-310	1.1	13
67	The entrainment due to a turbulent fountain at a density interface. *Journal of Fluid Mechanics*, **2005**, 542, 25	3.7	37
66	The non-Boussinesq lock-exchange problem. Part 1. Theory and experiments. *Journal of Fluid Mechanics*, **2005**, 537, 101	3.7	85
65	The front condition for gravity currents. *Journal of Fluid Mechanics*, **2005**, 536, 49-78	3.7	106
64	Displacement and mixing ventilation driven by opposing wind and buoyancy. *Journal of Fluid Mechanics*, **2005**, 527, 27-55	3.7	52
63	'Optimal' vortex rings and aquatic propulsion mechanisms. *Proceedings of the Royal Society B: Biological Sciences*, **2004**, 271, 647-53	4.4	69
62	Gravity currents produced by lock exchange. *Journal of Fluid Mechanics*, **2004**, 521, 1-34	3.7	275
61	Lock-release inertial gravity currents over a thick porous layer. *Journal of Fluid Mechanics*, **2004**, 503, 299-319	3.7	20
60	Coalescing axisymmetric turbulent plumes. *Journal of Fluid Mechanics*, **2004**, 502, 41-63	3.7	71
59	The drag on a vertically moving grid of bars in a linearly stratified fluid. *Experiments in Fluids*, **2003**, 34, 678-686	2.5	12
58	Buoyancy-driven ventilation between two chambers. *Journal of Fluid Mechanics*, **2002**, 463, 293-312	3.7	34
57	Eigenmode resonance in a two-layer stratification. *Journal of Fluid Mechanics*, **2002**, 460, 223-240	3.7	1
56	Gravity currents in rotating channels. Part 1. Steady-state theory. *Journal of Fluid Mechanics*, **2002**, 457, 295-324	3.7	12
55	A laboratory study of the velocity structure in an intrusive gravity current. *Journal of Fluid Mechanics*, **2002**, 456, 33-48	3.7	52
54	A study of three-dimensional gravity currents on a uniform slope. *Journal of Fluid Mechanics*, **2002**, 453, 239-261	3.7	43
53	Stability of a buoyancy-driven coastal current at the shelf break. *Journal of Fluid Mechanics*, **2002**, 452, 97-121	3.7	21

52	Internal wave excitation by a vertically oscillating elliptical cylinder. *Physics of Fluids*, **2002**, 14, 721-731	4.4	41
51	Sensitivity of horizontal flows to forcing geometry. *Journal of Fluid Mechanics*, **2001**, 432, 419-441	3.7	1
50	The formation of optimal vortex rings, and the efficiency of propulsion devices. *Journal of Fluid Mechanics*, **2001**, 427, 61-72	3.7	112
49	Steady-state flows in an enclosure ventilated by buoyancy forces assisted by wind. *Journal of Fluid Mechanics*, **2001**, 426, 355-386	3.7	86
48	Self-similarity and internal structure of turbulence induced by Rayleigh Taylor instability. *Journal of Fluid Mechanics*, **1999**, 399, 1-48	3.7	180
47	Saline and particle-driven interfacial intrusions. *Journal of Fluid Mechanics*, **1999**, 389, 303-334	3.7	31
46	Visualization and measurement of internal waves by synthetic schlieren Part 1. Vertically oscillating cylinder. *Journal of Fluid Mechanics*, **1999**, 390, 93-126	3.7	127
45	THE FLUID MECHANICS OF NATURAL VENTILATION. *Annual Review of Fluid Mechanics*, **1999**, 31, 201-238	22	444
44	Experimental investigations of quasi-two-dimensional vortices in a stratified fluid with source sink forcing. *Journal of Fluid Mechanics*, **1999**, 383, 249-283	3.7	9
43	Internal wave excitation from stratified flow over a thin barrier. *Journal of Fluid Mechanics*, **1998**, 377, 223-252	3.7	59
42	Gravity currents over porous substrates. *Journal of Fluid Mechanics*, **1998**, 366, 239-258	3.7	25
41	Mixing processes in a highly stratified river. *Coastal and Estuarine Studies*, **1998**, 389-400		18
40	Report on Turbulence and Mixing in Geophysical Flows II. *Flow, Turbulence and Combustion*, **1997**, 59, 89-110		
39	Similarity considerations for non-Boussinesq plumes in an unstratified environment. *Journal of Fluid Mechanics*, **1996**, 318, 237	3.7	80
38	Natural ventilation of an enclosure containing two buoyancy sources. *Journal of Fluid Mechanics*, **1996**, 311, 153	3.7	59
37	Multiple sources of buoyancy in a naturally ventilated enclosure. *Journal of Fluid Mechanics*, **1996**, 311, 177	3.7	61
36	A laboratory simulation of mixing across tidal fronts. *Journal of Fluid Mechanics*, **1996**, 309, 321-344	3.7	8
35	Source sink turbulence in a rotating stratified fluid. *Journal of Fluid Mechanics*, **1995**, 298, 81-112	3.7	27

34	Molecular mixing in Rayleigh–Taylor instability. *Journal of Fluid Mechanics*, **1994**, 265, 97-124	3.7	112
33	Source-sink turbulence in a stratified fluid. *Journal of Fluid Mechanics*, **1994**, 261, 273-303	3.7	19
32	Forced, angled plumes. *Journal of Hazardous Materials*, **1993**, 33, 75-99	12.8	43
31	Spin-up of a two-layer fluid in a rotating cylinder. *Geophysical and Astrophysical Fluid Dynamics*, **1992**, 66, 47-66	1.4	1
30	Molecular mixing in Rayleigh–Taylor instability. Part I: Global mixing. *Physics of Fluids A, Fluid Dynamics*, **1991**, 3, 1269-1277		53
29	Free-surface effects on the spin-up of fluid in a rotating cylinder. *Journal of Fluid Mechanics*, **1991**, 232, 439	3.7	8
28	Emptying filling boxes: the fluid mechanics of natural ventilation. *Journal of Fluid Mechanics*, **1990**, 212, 309	3.7	303
27	The effect of background rotation on fluid motions: a report on Euromech 245. *Journal of Fluid Mechanics*, **1990**, 211, 417-435	3.7	25
26	Frontogenesis in a fluid with horizontal density gradients. *Journal of Fluid Mechanics*, **1989**, 202, 1-16	3.7	65
25	Gravity-driven flows in a turbulent fluid. *Journal of Fluid Mechanics*, **1986**, 172, 481	3.7	100
24	Intermittent baroclinic instability and fluctuations in geophysical circulations. *Nature*, **1985**, 316, 801-803	50.4	11
23	Microbursts: a hazard for aircraft. *Nature*, **1985**, 317, 601-602	50.4	15
22	Two-layer spin-up and frontogenesis. *Journal of Fluid Mechanics*, **1984**, 143, 69-94	3.7	33
21	The final stage of decay of turbulence in stably stratified fluid. *Journal of Fluid Mechanics*, **1983**, 134, 195	3.7	35
20	Topographic instability and multiple equilibria on an f-plane. *Geophysical and Astrophysical Fluid Dynamics*, **1983**, 27, 163-182	1.4	1
19	Benthic fronts and global excess radon distribution. *Geophysical and Astrophysical Fluid Dynamics*, **1983**, 25, 309-315	1.4	4
18	Laboratory experiments on fronts. *Geophysical and Astrophysical Fluid Dynamics*, **1982**, 19, 159-187	1.4	107
17	Formation of thermoclines in zero-mean-shear turbulence subjected to a stabilizing buoyancy flux. *Journal of Fluid Mechanics*, **1982**, 114, 157	3.7	39

16	Laboratory experiments on fronts. *Geophysical and Astrophysical Fluid Dynamics*, **1982**, 19, 189-206	1.4	33
15	The stability of vortices in a rotating, stratified fluid. *Journal of Fluid Mechanics*, **1981**, 105, 283	3.7	150
14	Physical oceanography of the European shelf-seas: A report on the geophysical fluid mechanics symposium of the E.G.S. (1980). *Geophysical and Astrophysical Fluid Dynamics*, **1981**, 17, 319-329	1.4	
13	The motion of the front of a gravity current travelling down an incline. *Journal of Fluid Mechanics*, **1980**, 99, 531-543	3.7	226
12	Mixing in stratified fluids. *Geophysical and Astrophysical Fluid Dynamics*, **1979**, 13, 3-23	1.4	169
11	On heating a stable salinity gradient from below. *Journal of Fluid Mechanics*, **1979**, 95, 431	3.7	133
10	The diffusive interface in double-diffusive convection. *Journal of Fluid Mechanics*, **1978**, 87, 417	3.7	117
9	The formation of layers in a double-diffusive system with a sloping boundary. *Journal of Fluid Mechanics*, **1977**, 81, 757-773	3.7	48
8	The flow of a stratified fluid in a rotating annulus. *Journal of Fluid Mechanics*, **1977**, 79, 435-447	3.7	11
7	The deepening of a mixed layer in a stratified fluid. *Journal of Fluid Mechanics*, **1975**, 71, 385-405	3.7	137
6	Small-scale mixing in stably stratified fluids: a report on Euromech 51. *Journal of Fluid Mechanics*, **1975**, 67, 1-16	3.7	6
5	The structure of turbulent density interfaces. *Journal of Fluid Mechanics*, **1974**, 65, 45-63	3.7	80
4	Salt fingers in a steady shear flow. *Geophysical Fluid Dynamics*, **1974**, 6, 1-27		102
3	The interaction of a vortex ring with a sharp density interface: a model for turbulent entrainment. *Journal of Fluid Mechanics*, **1973**, 60, 467	3.7	137
2	Salt fingers in the presence of grid-generated turbulence. *Journal of Fluid Mechanics*, **1971**, 49, 611	3.7	44
1	Predictive and retrospective modelling of airborne infection risk using monitored carbon dioxide. *Indoor and Built Environment*,1420326X2110435	1.8	11