Brian Launder

List of Publications by Year in Descending Order

84 papers	8,304 citations	34 h-index	91 g-index
95 ext. papers	9,114 ext. citations	3.1 avg, IF	5.54 L-index

#	Paper	IF	Citations
84	Reassessment of modeling turbulence via Reynolds averaging: A review of second-moment transport strategy. *Physics of Fluids*, **2021**, 33, 091302	4.4	1
83	Eddy-Viscosity Transport Modelling: A Historical Review **2020**, 295-316		0
82	Hurricanes: An Engineering View of their Structure and Strategies for their Extinction. *Flow, Turbulence and Combustion*, **2017**, 98, 969-985	2.5	
81	Horace Lamb and how he found his way back to Manchester. *Comptes Rendus - Mecanique*, **2017**, 345, 477-487	2.1	2
80	First steps in modelling turbulence and its origins: a commentary on Reynolds (1895) 'On the dynamical theory of incompressible viscous fluids and the determination of the criterion'. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2015**, 373,	3	8
79	A comparison and assessment of approaches for modelling flow over in-line tube banks. *International Journal of Heat and Fluid Flow*, **2014**, 49, 69-79	2.4	24
78	Climate engineering: exploring nuances and consequences of deliberately altering the Earth's energy budget. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2014**, 372,	3	2
77	Horace Lamb & Osborne Reynolds: Remarkable Mancunians ... and their Interactions. *Journal of Physics: Conference Series*, **2014**, 530, 012001	0.3	2
76	Back to the Future? A Re-examination of the Aerodynamics of Flettner-Thom Rotors for Maritime Propulsion. *Flow, Turbulence and Combustion*, **2014**, 92, 413-427	2.5	5
75	Horace Lamb and the circumstances of his appointment at Owens College. *Notes and Records of the Royal Society*, **2013**, 67, 139-158	0.4	2
74	Marine cloud brightening. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2012**, 370, 4217-62	3	97
73	Modelling Turbulence in Engineering and the Environment: Second-Moment Routes to Closure **2011**,		73
72	Laminar, Transitional, and Turbulent Flows in Rotor-Stator Cavities. *Annual Review of Fluid Mechanics*, **2010**, 42, 229-248	22	73
71	A tribute to D.B. Spalding and his contributions in science and engineering. *International Journal of Heat and Mass Transfer*, **2009**, 52, 3884-3905	4.9	25
70	Preface. Geoscale engineering to avert dangerous climate change. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2008**, 366, 3841-2	3	11
69	Some Swirling-flow Challenges for Turbulent CFD. *Flow, Turbulence and Combustion*, **2008**, 80, 419-434	2.5	21
68	Osborne Reynolds and the Publication of His Papers on Turbulent Flow. *Annual Review of Fluid Mechanics*, **2007**, 39, 19-35	22	44

67	Internal blade cooling: The Cinderella of computational and experimental fluid dynamics research in gas turbines. *Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy*, **2007**, 221, 265-290	1.6	24
66	Development and application of wall-function treatments for turbulent forced and mixed convection flows. *Fluid Dynamics Research*, **2006**, 38, 127-144	1.2	28
65	A computational study of the near-field generation and decay of wingtip vortices. *International Journal of Heat and Fluid Flow*, **2006**, 27, 684-695	2.4	38
64	Developments in the understanding and modelling of turbulence **2005**, 5-49		
63	RANS modelling of turbulent flows affected by buoyancy or stratification **2005**, 50-127		
62	Transitional turbulent flow with heat transfer in a closed rotor stator cavity. *Journal of Turbulence*, **2004**, 5,	2.1	6
61	A NEW WALL FUNCTION STRATEGY FOR COMPLEX TURBULENT FLOWS. *Numerical Heat Transfer, Part B: Fundamentals*, **2004**, 45, 301-318	1.3	73
60	oulement en eau peu profonde autour d'un mod e d' e conique. *Revue Europeenne Des Elements*, **2003**, 12, 361-371		
59	Linear and Nonlinear Eddy Viscosity Models **2001**, 9-46		20
58	Closure Modelling Near the Two-Component Limit **2001**, 102-126		4
57	Simulation of Coherent Eddy Structure in Buoyancy-Driven Flows with Single-Point Turbulence Closure Models **2001**, 659-684		4
56	Developments in turbulence research: a review based on the 1999 Programme of the Isaac Newton Institute, Cambridge. *Journal of Fluid Mechanics*, **2001**, 436, 353-391	3.7	31
55	On the spreading mechanism of the three-dimensional turbulent wall jet. *Journal of Fluid Mechanics* , **2001**, 435, 305-326	3.7	75
54	LDA Study of the Flow Development Through an Orthogonally Rotating U-Bend of Strong Curvature and Rib-Roughened Walls. *Journal of Turbomachinery*, **1998**, 120, 386-391	1.8	39
53	LDA Study of the Flow Development Through an Orthogonally Rotating U-Bend of Strong Curvature and Rib Roughened Walls **1996**,		5
52	LDA Investigation of the Flow Development Through Rotating U-Ducts. *Journal of Turbomachinery*, **1996**, 118, 590-596	1.8	69
51	Developing Buoyancy-Modified Turbulent Flow in Ducts Rotating in Orthogonal Mode. *Journal of Turbomachinery*, **1995**, 117, 474-484	1.8	46
50	Spirally fluted tubing: prediction and measurement. *Houille Blanche*, **1995**, 81, 86-92	0.3	

49	On the elimination of wall-topography parameters from second-moment closure. *Physics of Fluids*, **1994**, 6, 999-1006	4.4	81
48	LDA Investigation of the Flow Development Through Rotating U-DUCTS **1994**,		6
47	On the prediction of riblet performance with engineering turbulence models. *Flow, Turbulence and Combustion*, **1993**, 50, 283-298		13
46	Current capabilities for modelling turbulence in industrial flows. *Flow, Turbulence and Combustion*, **1991**, 48, 247-269		40
45	Turbulent Boundary-Layer Development Around a Square-Sectioned U-Bend: Measurements and Computation. *Journal of Fluids Engineering, Transactions of the ASME*, **1990**, 112, 409-415	2.1	26
44	Heat Transfer, Temperature, and Velocity Measurements Downstream of an Abrupt Expansion in a Circular Tube at a Uniform Wall Temperature. *Journal of Heat Transfer*, **1989**, 111, 870-876	1.8	23
43	Numerical Computation of Turbulent Flow in a Square-Sectioned 180 Deg Bend. *Journal of Fluids Engineering, Transactions of the ASME*, **1989**, 111, 59-68	2.1	64
42	A numerical study of riblet effects on laminar flow through a plane channel. *Flow, Turbulence and Combustion*, **1989**, 46, 271-279		13
41	The Prediction of Force Field Effects on Turbulent Shear Flows via Second-Moment Closure **1989**, 338-358		10
40	On the Computation of Convective Heat Transfer in Complex Turbulent Flows. *Journal of Heat Transfer*, **1988**, 110, 1112-1128	1.8	223
39	A Comparison of Algebraic and Differential Second-Moment Closures for Axisymmetric Turbulent Shear Flows With and Without Swirl. *Journal of Fluids Engineering, Transactions of the ASME*, **1988**, 110, 216-221	2.1	55
38	TURBULENT MOMENTUM AND HEAT TRANSPORT IN SQUARE-SECTIONED DUCTS ROTATING IN ORTHOGONAL MODE. *Numerical Heat Transfer*, **1987**, 12, 475-491		10
37	A second-moment closure study of rotating channel flow. *Journal of Fluid Mechanics*, **1987**, 183, 63-75	3.7	136
36	Developing Turbulent Flow in a U-Bend of Circular Cross-Section: Measurement and Computation. *Journal of Fluids Engineering, Transactions of the ASME*, **1986**, 108, 214-221	2.1	63
35	Local Heat Transfer Downstream of an Abrupt Expansion in a Circular Channel With Constant Wall Heat Flux. *Journal of Heat Transfer*, **1984**, 106, 789-796	1.8	82
34	PSL An Economical Approach to the Numerical Analysis of Near-Wall, Elliptic Flow. *Journal of Fluids Engineering, Transactions of the ASME*, **1984**, 106, 241-242	2.1	23
33	DISCUSSION OF ON THE CALCULATION OF TURBULENT HEAT TRANSPORT DOWNSTREAM FROM AN ABRUPT PIPE EXPANSION *Numerical Heat Transfer*, **1982**, 5, 493-496		26
32	Double-Row Discrete-Hole Cooling: an Experimental and Numerical Study. *Journal of Engineering for Power*, **1980**, 102, 498-503		10

31	Sensitizing the Dissipation Equation to Irrotational Strains. *Journal of Fluids Engineering, Transactions of the ASME*, **1980**, 102, 34-40	2.1	135
30	ON THE CALCULATION OF TURBULENT HEAT TRANSPORT DOWNSTREAM FROM AN ABRUPT PIPE EXPANSION. *Numerical Heat Transfer*, **1980**, 3, 189-207		179
29	ON THE CALCULATION OF TURBULENT TRANSPORT IN FLOW THROUGH AN ASYMMETRICALLY HEATED PIPE. *Numerical Heat Transfer*, **1979**, 2, 359-371		5
28	Flow in Finite-Width Thrust Bearings Including Inertial Effects: II Turbulent Flow. *Journal of Lubrication Technology*, **1978**, 100, 339-345		10
27	Ground effects on pressure fluctuations in the atmospheric boundary layer. *Journal of Fluid Mechanics*, **1978**, 86, 491-511	3.7	1131
26	Flow in Finite-Width, Thrust Bearings Including Inertial Effects: I Laminar Flow. *Journal of Lubrication Technology*, **1978**, 100, 330-338		71
25	The Turbulent Jet in a Cross Stream at Low Injection Rates: A Three-Dimensional Numerical Treatment. *Numerical Heat Transfer, Part B: Fundamentals*, **1978**, 1, 217-242	1.3	6
24	The Calculation of Turbulent Boundary Layers on Spinning and Curved Surfaces. *Journal of Fluids Engineering, Transactions of the ASME*, **1977**, 99, 231-239	2.1	149
23	Contribution towards a Reynolds-stress closure for low-Reynolds-number turbulence. *Journal of Fluid Mechanics*, **1976**, 74, 593-610	3.7	299
22	Comments on Improved form of the low Reynolds number k turbulence model *Physics of Fluids* , **1976**, 19, 765		2
21	The Near-Field Character of a Jet Discharged Normal to a Main Stream. *Journal of Heat Transfer*, **1976**, 98, 373-378	1.8	34
20	Computation of Annular, Turbulent Flow With Rotating Core Tube. *Journal of Fluids Engineering, Transactions of the ASME*, **1976**, 98, 753-758	2.1	7
19	Discussion: A Reynolds Stress Model for Turbulent Corner Flows Parts I and II (Gessner, F. B., Emery, A. F., and Po, J. K., 1976, ASME J. Fluids Eng., 98, pp. 261 276). *Journal of Fluids Engineering, Transactions of the ASME*, **1976**, 98, 276-277	2.1	1
18	On the Calculation of Horizontal, Turbulent, Free Shear Flows Under Gravitational Influence. *Journal of Heat Transfer*, **1976**, 98, 81-87	1.8	137
17	The Prediction of Three-Dimensional Discrete-Hole Cooling Processes Part 1: Laminar Flow. *Journal of Heat Transfer*, **1976**, 98, 379-386	1.8	36
16	On the effects of a gravitational field on the turbulent transport of heat and momentum. *Journal of Fluid Mechanics*, **1975**, 67, 569-581	3.7	255
15	Progress in the development of a Reynolds-stress turbulence closure. *Journal of Fluid Mechanics*, **1975**, 68, 537-566	3.7	2775
14	Laminar Heat Transfer in Rotating Eccentric Annuli. *Journal of Mechanical Engineering Science*, **1974**, 16, 306-309		6

13	Discussion: "Application of Energy Model of Turbulence to Calculation of Lubricant Flows" (Ho, Mein-Kai, and Vohr, J. H., 1974, ASME J. Lubr. Technol., 96, pp. 95–102). *Journal of Lubrication Technology*, **1974**, 96, 102-102		
12	Prediction of Momentum, Heat and Mass Transfer in Swirling, Turbulent Boundary Layers. *Journal of Heat Transfer*, **1974**, 96, 204-209	1.8	45
11	Numerical Solutions of Flow between Rotating Cylinders. *Journal of Mechanical Engineering Science*, **1972**, 14, 400-403		10
10	Some properties of sink-flow turbulent boundary layers. *Journal of Fluid Mechanics*, **1972**, 56, 337-351	3.7	95
9	Secondary flows in ducts of square cross-section. *Journal of Fluid Mechanics*, **1972**, 54, 289-295	3.7	99
8	Fully developed asymmetric flow in a plane channel. *Journal of Fluid Mechanics*, **1972**, 51, 301-335	3.7	173
7	A Reynolds stress model of turbulence and its application to thin shear flows. *Journal of Fluid Mechanics*, **1972**, 52, 609-638	3.7	758
6	Discussion: "Solution of the Incompressible Turbulent Boundary-Layer Equations With Heat Transfer" (Cebeci, T., Smith, A. M. O., and Mosinskis, G., 1970, ASME J. Heat Transfer, 92, pp. 133–141). *Journal of Heat Transfer*, **1970**, 92, 141-141	1.8	
5	The Prandtl-Kolmogorov Model of Turbulence With the Inclusion of Second-Order Terms. *Journal of Basic Engineering*, **1969**, 91, 855-856		4
4	Sink flow turbulent boundary layers. *Journal of Fluid Mechanics*, **1969**, 38, 817-831	3.7	33
3	An Aspect of Heat Transfer in Accelerating Turbulent Boundary Layers. *Journal of Heat Transfer*, **1969**, 91, 229-234	1.8	12
2	Numerical Modeling of Heat Transfer in Wall-Adjacent Turbulent Flows369-388		1
1	Osborne Reynolds: a turbulent life1-39		5