

Brian Launder

List of Publications by Year in descending order

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Version: 2024-02-01

84
papers

10,354
citations

94269

37
h-index

85405

71
g-index

95
all docs

95
docs citations

95
times ranked

3252
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Progress in the development of a Reynolds-stress turbulence closure. Journal of Fluid Mechanics, 1975, 68, 537-566. | 1.4 | 3,450 |
| 2 | Ground effects on pressure fluctuations in the atmospheric boundary layer. Journal of Fluid Mechanics, 1978, 86, 491-511. | 1.4 | 1,402 |
| 3 | A Reynolds stress model of turbulence and its application to thin shear flows. Journal of Fluid Mechanics, 1972, 52, 609-638. | 1.4 | 921 |
| 4 | Contribution towards a Reynolds-stress closure for low-Reynolds-number turbulence. Journal of Fluid Mechanics, 1976, 74, 593-610. | 1.4 | 393 |
| 5 | On the effects of a gravitational field on the turbulent transport of heat and momentum. Journal of Fluid Mechanics, 1975, 67, 569-581. | 1.4 | 327 |
| 6 | On the Computation of Convective Heat Transfer in Complex Turbulent Flows. Journal of Heat Transfer, 1988, 110, 1112-1128. | 1.2 | 268 |
| 7 | Fully developed asymmetric flow in a plane channel. Journal of Fluid Mechanics, 1972, 51, 301-335. | 1.4 | 239 |
| 8 | ON THE CALCULATION OF TURBULENT HEAT TRANSPORT DOWNSTREAM FROM AN ABRUPT PIPE EXPANSION. Numerical Heat Transfer, 1980, 3, 189-207. | 0.5 | 202 |
| 9 | The Calculation of Turbulent Boundary Layers on Spinning and Curved Surfaces. Journal of Fluids Engineering, Transactions of the ASME, 1977, 99, 231-239. | 0.8 | 185 |
| 10 | A second-moment closure study of rotating channel flow. Journal of Fluid Mechanics, 1987, 183, 63-75. | 1.4 | 162 |
| 11 | Sensitizing the Dissipation Equation to Irrotational Strains. Journal of Fluids Engineering, Transactions of the ASME, 1980, 102, 34-40. | 0.8 | 161 |
| 12 | On the Calculation of Horizontal, Turbulent, Free Shear Flows Under Gravitational Influence. Journal of Heat Transfer, 1976, 98, 81-87. | 1.2 | 155 |
| 13 | Secondary flows in ducts of square cross-section. Journal of Fluid Mechanics, 1972, 54, 289-295. | 1.4 | 134 |
| 14 | Some properties of sink-flow turbulent boundary layers. Journal of Fluid Mechanics, 1972, 56, 337-351. | 1.4 | 126 |
| 15 | Marine cloud brightening. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 4217-4262. | 1.6 | 125 |
| 16 | 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. | 1.2 | 98 |
| 17 | On the elimination of wall-topography parameters from second-moment closure. Physics of Fluids, 1994, 6, 999-1006. | 1.6 | 95 |
| 18 | On the spreading mechanism of the three-dimensional turbulent wall jet. Journal of Fluid Mechanics, 2001, 435, 305-326. | 1.4 | 95 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | A NEW WALL FUNCTION STRATEGY FOR COMPLEX TURBULENT FLOWS. Numerical Heat Transfer, Part B: Fundamentals, 2004, 45, 301-318. | 0.6 | 88 |
| 20 | Laminar, Transitional, and Turbulent Flows in Rotor-Stator Cavities. Annual Review of Fluid Mechanics, 2010, 42, 229-248. | 10.8 | 88 |
| 21 | 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. | 0.8 | 87 |
| 22 | LDA Investigation of the Flow Development Through Rotating U-Ducts. Journal of Turbomachinery, 1996, 118, 590-596. | 0.9 | 84 |
| 23 | Flow in Finite-Width, Thrust Bearings Including Inertial Effects: "Laminar Flow. Journal of Lubrication Technology, 1978, 100, 330-338. | 0.1 | 79 |
| 24 | Numerical Computation of Turbulent Flow in a Square-Sectioned 180 Deg Bend. Journal of Fluids Engineering, Transactions of the ASME, 1989, 111, 59-68. | 0.8 | 76 |
| 25 | 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. | 0.8 | 62 |
| 26 | Developing Buoyancy-Modified Turbulent Flow in Ducts Rotating in Orthogonal Mode. Journal of Turbomachinery, 1995, 117, 474-484. | 0.9 | 59 |
| 27 | Osborne Reynolds and the Publication of His Papers on Turbulent Flow. Annual Review of Fluid Mechanics, 2007, 39, 19-35. | 10.8 | 56 |
| 28 | Prediction of Momentum, Heat and Mass Transfer in Swirling, Turbulent Boundary Layers. Journal of Heat Transfer, 1974, 96, 204-209. | 1.2 | 49 |
| 29 | Current capabilities for modelling turbulence in industrial flows. Flow, Turbulence and Combustion, 1991, 48, 247-269. | 0.2 | 49 |
| 30 | 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. | 0.9 | 48 |
| 31 | Sink flow turbulent boundary layers. Journal of Fluid Mechanics, 1969, 38, 817-831. | 1.4 | 44 |
| 32 | 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. | 1.4 | 44 |
| 33 | A computational study of the near-field generation and decay of wingtip vortices. International Journal of Heat and Fluid Flow, 2006, 27, 684-695. | 1.1 | 44 |
| 34 | The Near-Field Character of a Jet Discharged Normal to a Main Stream. Journal of Heat Transfer, 1976, 98, 373-378. | 1.2 | 42 |
| 35 | Development and application of wall-function treatments for turbulent forced and mixed convection flows. Fluid Dynamics Research, 2006, 38, 127-144. | 0.6 | 41 |
| 36 | The Prediction of Three-Dimensional Discrete-Hole Cooling Processes"Part 1: Laminar Flow. Journal of Heat Transfer, 1976, 98, 379-386. | 1.2 | 40 |

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|----|--|-----|-----------|
| 37 | 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. | 1.1 | 38 |
| 38 | A tribute to D.B. Spalding and his contributions in science and engineering. International Journal of Heat and Mass Transfer, 2009, 52, 3884-3905. | 2.5 | 33 |
| 39 | DISCUSSION OF "ON THE CALCULATION OF TURBULENT HEAT TRANSPORT DOWNSTREAM FROM AN ABRUPT PIPE EXPANSION". Numerical Heat Transfer, 1982, 5, 493-496. | 0.5 | 32 |
| 40 | 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. | 1.2 | 31 |
| 41 | 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. | 0.8 | 27 |
| 42 | 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. | 0.8 | 26 |
| 43 | 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. | 0.8 | 24 |
| 44 | Some Swirling-flow Challenges for Turbulent CFD. Flow, Turbulence and Combustion, 2008, 80, 419-434. | 1.4 | 23 |
| 45 | A numerical study of riblet effects on laminar flow through a plane channel. Flow, Turbulence and Combustion, 1989, 46, 271-279. | 0.2 | 18 |
| 46 | On the prediction of riblet performance with engineering turbulence models. Flow, Turbulence and Combustion, 1993, 50, 283-298. | 0.2 | 18 |
| 47 | Flow in Finite-Width Thrust Bearings Including Inertial Effects: "Turbulent Flow. Journal of Lubrication Technology, 1978, 100, 339-345. | 0.1 | 16 |
| 48 | Preface. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 3841-3842. | 1.6 | 14 |
| 49 | An Aspect of Heat Transfer in Accelerating Turbulent Boundary Layers. Journal of Heat Transfer, 1969, 91, 229-234. | 1.2 | 13 |
| 50 | Double-Row Discrete-Hole Cooling: an Experimental and Numerical Study. Journal of Engineering for Power, 1980, 102, 498-503. | 0.2 | 13 |
| 51 | TURBULENT MOMENTUM AND HEAT TRANSPORT IN SQUARE-SECTIONED DUCTS ROTATING IN ORTHOGONAL MODE. Numerical Heat Transfer, 1987, 12, 475-491. | 0.5 | 12 |
| 52 | 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, 20140231. | 1.6 | 12 |
| 53 | The Prediction of Force Field Effects on Turbulent Shear Flows via Second-Moment Closure. , 1989, , 338-358. | | 12 |
| 54 | LDA Investigation of the Flow Development Through Rotating U-DUCTS. , 1994, , . | | 11 |

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| 55 | Numerical Solutions of Flow between Rotating Cylinders. Journal of Mechanical Engineering Science, 1972, 14, 400-403. | 0.3 | 10 |
| 56 | Computation of Annular, Turbulent Flow With Rotating Core Tube. Journal of Fluids Engineering, Transactions of the ASME, 1976, 98, 753-758. | 0.8 | 9 |
| 57 | Reassessment of modeling turbulence via Reynolds averaging: A review of second-moment transport strategy. Physics of Fluids, 2021, 33, . | 1.6 | 9 |
| 58 | Closure Modelling Near the Two-Component Limit. , 2001, , 102-126. | | 8 |
| 59 | Transitional-turbulent flow with heat transfer in a closed rotor-stator cavity. Journal of Turbulence, 2004, 5, . | 0.5 | 8 |
| 60 | 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. | 1.4 | 8 |
| 61 | 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. | 0.6 | 7 |
| 62 | Osborne Reynolds: a turbulent life. , 0, , 1-39. | | 6 |
| 63 | The Prandtl-Kolmogorov Model of Turbulence With the Inclusion of Second-Order Terms. Journal of Basic Engineering, 1969, 91, 855-856. | 0.1 | 6 |
| 64 | Laminar Heat Transfer in Rotating Eccentric Annuli. Journal of Mechanical Engineering Science, 1974, 16, 306-309. | 0.3 | 6 |
| 65 | ON THE CALCULATION OF TURBULENT TRANSPORT IN FLOW THROUGH AN ASYMMETRICALLY HEATED PIPE. Numerical Heat Transfer, 1979, 2, 359-371. | 0.5 | 6 |
| 66 | LDA Study of the Flow Development Through an Orthogonally Rotating U-Bend of Strong Curvature and Rib Roughened Walls. , 1996, , . | | 5 |
| 67 | Simulation of Coherent Eddy Structure in Buoyancy-Driven Flows with Single-Point Turbulence Closure Models. , 2001, , 659-684. | | 5 |
| 68 | Eddy-Viscosity Transport Modelling: A Historical Review. , 2020, , 295-316. | | 5 |
| 69 | Comments on "Improved form of the low Reynolds number $k-\epsilon$ turbulence model". Physics of Fluids, 1976, 19, 765. | 1.4 | 2 |
| 70 | Horace Lamb and the circumstances of his appointment at Owens College. Notes and Records of the Royal Society, 2013, 67, 139-158. | 0.1 | 2 |
| 71 | Horace Lamb & Osborne Reynolds: Remarkable Mancunians ... and their Interactions. Journal of Physics: Conference Series, 2014, 530, 012001. | 0.3 | 2 |
| 72 | 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, 20140050. | 1.6 | 2 |

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|----|---|-----|-----------|
| 73 | Horace Lamb and how he found his way back to Manchester. <i>Comptes Rendus - Mecanique</i> , 2017, 345, 477-487. | 2.1 | 2 |
| 74 | Discussion: "A Reynolds Stress Model for Turbulent Corner Flows" Parts I and II (Gessner, F. B.,) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Transactions of the ASME</i> , 1976, 98, 276-277. | 0.8 | 1 |
| 75 | Large Eddy Simulation of Transitional Rotor-Stator Flows using a Spectral Vanishing Viscosity Technique. , 2006, , 217-224. | | 1 |
| 76 | Numerical Modeling of Heat Transfer in Wall-Adjacent Turbulent Flows. , 0, , 369-388. | | 1 |
| 77 | 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). <i>Journal of Heat Transfer</i> , 1970, 92, 141-141. | 1.2 | 0 |
| 78 | Discussion: "Application of Energy Model of Turbulence to Calculation of Lubricant Flows" (Ho,) <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf</i> 1974, 96, 102-102. | 0.1 | 0 |
| 79 | Ã%coulement en eau peu profonde autour d'un modÃ"le d'Ã"le conique. <i>Revue Europeenne Des Elements</i> , 2003, 12, 361-371. | 0.1 | 0 |
| 80 | Developments in the understanding and modelling of turbulence. , 2005, , 5-49. | | 0 |
| 81 | RANS modelling of turbulent flows affected by buoyancy or stratification. , 2005, , 50-127. | | 0 |
| 82 | CMFF06 Special Issue of IJHFF. <i>International Journal of Heat and Fluid Flow</i> , 2007, 28, 541. | 1.1 | 0 |
| 83 | Hurricanes: An Engineering View of their Structure and Strategies for their Extinction. <i>Flow, Turbulence and Combustion</i> , 2017, 98, 969-985. | 1.4 | 0 |
| 84 | Spirally fluted tubing: prediction and measurement. <i>Houille Blanche</i> , 1995, 81, 86-92. | 0.3 | 0 |