

Neil D Sandham

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.

82

papers

3,407

citations

32

h-index

57

g-index

84

ext. papers

4,094

ext. citations

3

avg, IF

5.79

L-index

#	Paper	IF	Citations
82	Large-eddy simulation of low-frequency unsteadiness in a turbulent shock-induced separation bubble. <i>Theoretical and Computational Fluid Dynamics</i> , 2009 , 23, 79-107	2.3	297
81	Direct numerical simulations of forced and unforced separation bubbles on an airfoil at incidence. <i>Journal of Fluid Mechanics</i> , 2008 , 602, 175-207	3.7	255
80	Direct numerical simulation of short-laminar separation bubbles with turbulent reattachment. <i>Journal of Fluid Mechanics</i> , 2000 , 410, 1-28	3.7	250
79	Compressible mixing layer growth rate and turbulence characteristics. <i>Journal of Fluid Mechanics</i> , 1996 , 320, 235	3.7	231
78	Wall Pressure and Shear Stress Spectra from Direct Simulations of Channel Flow. <i>AIAA Journal</i> , 2006 , 44, 1541-1549	2.1	152
77	Low-order stochastic modelling of low-frequency motions in reflected shock-wave/boundary-layer interactions. <i>Journal of Fluid Mechanics</i> , 2011 , 671, 417-465	3.7	126
76	Stability and receptivity characteristics of a laminar separation bubble on an aerofoil. <i>Journal of Fluid Mechanics</i> , 2010 , 648, 257-296	3.7	117
75	Nonreflecting Zonal Characteristic Boundary Condition for Direct Numerical Simulation of Aerodynamic Sound. <i>AIAA Journal</i> , 2006 , 44, 402-405	2.1	113
74	Direct numerical simulation of short-laminar separation bubbles with turbulent reattachment. <i>Journal of Fluid Mechanics</i> , 2000 , 403, 223-250	3.7	113
73	Laminar-turbulent transition induced by a discrete roughness element in a supersonic boundary layer. <i>Journal of Fluid Mechanics</i> , 2013 , 735, 613-646	3.7	105
72	The late stages of transition to turbulence in channel flow. <i>Journal of Fluid Mechanics</i> , 1992 , 245, 319	3.7	96
71	Direct numerical simulation of turbulent flow past a trailing edge and the associated noise generation. <i>Journal of Fluid Mechanics</i> , 2008 , 596, 353-385	3.7	75
70	Change in drag, apparent slip and optimum air layer thickness for laminar flow over an idealised superhydrophobic surface. <i>Journal of Fluid Mechanics</i> , 2013 , 727, 488-508	3.7	73
69	Transitional shock-wave/boundary-layer interactions in hypersonic flow. <i>Journal of Fluid Mechanics</i> , 2014 , 752, 349-382	3.7	70
68	Numerical study of oblique shock-wave/boundary-layer interaction considering sidewall effects. <i>Journal of Fluid Mechanics</i> , 2015 , 767, 526-561	3.7	64
67	Influence of an anisotropic slip-length boundary condition on turbulent channel flow. <i>Physics of Fluids</i> , 2012 , 24, 055111	4.4	61
66	Linear and nonlinear mechanisms of sound radiation by instability waves in subsonic jets. <i>Journal of Fluid Mechanics</i> , 2010 , 658, 509-538	3.7	57

65	Numerical Simulation of Flow over a Rough Bed. <i>Journal of Hydraulic Engineering</i> , 2007 , 133, 386-398	1.8	53
64	Effect of Mach number on the structure of turbulent spots. <i>Journal of Fluid Mechanics</i> , 2006 , 566, 225	3.7	51
63	Direct numerical simulation of turbulent flow over a rough surface based on a surface scan. <i>Computers and Fluids</i> , 2015 , 116, 129-147	2.8	50
62	Direct Numerical Simulations of a High-Pressure Turbine Vane. <i>Journal of Turbomachinery</i> , 2016 , 138,	1.8	50
61	Simulations of laminar flow past a superhydrophobic sphere with drag reduction and separation delay. <i>Physics of Fluids</i> , 2013 , 25, 043601	4.4	47
60	Nonlinear mechanisms of sound generation in a perturbed parallel jet flow. <i>Journal of Fluid Mechanics</i> , 2006 , 565, 1	3.7	46
59	Sound radiation in turbulent channel flows. <i>Journal of Fluid Mechanics</i> , 2003 , 475, 269-302	3.7	46
58	Direct numerical simulation of the early development of a turbulent mixing layer downstream of a splitter plate. <i>Journal of Turbulence</i> , 2009 , 10, N1	2.1	43
57	Nonlinear interaction model of subsonic jet noise. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008 , 366, 2745-60	3	42
56	Compressibility Effects on Boundary-Layer Transition Induced by an Isolated Roughness Element. <i>AIAA Journal</i> , 2010 , 48, 2818-2830	2.1	40
55	Parametric forcing approach to rough-wall turbulent channel flow. <i>Journal of Fluid Mechanics</i> , 2012 , 712, 169-202	3.7	39
54	Transitional separation bubbles and unsteady aspects of aerofoil stall. <i>Aeronautical Journal</i> , 2008 , 112, 395-404	0.9	39
53	Reynolds-number dependence of the near-wall flow over irregular rough surfaces. <i>Journal of Fluid Mechanics</i> , 2017 , 810, 196-224	3.7	36
52	Forced response of a laminar shock-induced separation bubble. <i>Physics of Fluids</i> , 2014 , 26, 093601	4.4	34
51	Surface correlations of hydrodynamic drag for transitionally rough engineering surfaces. <i>Journal of Turbulence</i> , 2017 , 18, 138-169	2.1	32
50	The effect of Mach number on unstable disturbances in shock/boundary-layer interactions. <i>Physics of Fluids</i> , 2007 , 19, 054104	4.4	32
49	Developments in turbulence research: a review based on the 1999 Programme of the Isaac Newton Institute, Cambridge. <i>Journal of Fluid Mechanics</i> , 2001 , 436, 353-391	3.7	31
48	Direct numerical simulation of turbulent channel flow over a surrogate for Nikuradse-type roughness. <i>Journal of Fluid Mechanics</i> , 2018 , 837,	3.7	30

47	Instability and low-frequency unsteadiness in a shock-induced laminar separation bubble. <i>Journal of Fluid Mechanics</i> , 2016 , 798, 5-26	3.7	25
46	Turbulence structures and statistics of a supersonic turbulent boundary layer subjected to concave surface curvature. <i>Journal of Fluid Mechanics</i> , 2019 , 865, 60-99	3.7	25
45	OpenSBLI: A framework for the automated derivation and parallel execution of finite difference solvers on a range of computer architectures. <i>Journal of Computational Science</i> , 2017 , 18, 12-23	3.4	24
44	Direct numerical simulation of breakdown to turbulence in a Mach 6 boundary layer over a porous surface. <i>Physics of Fluids</i> , 2010 , 22, 094105	4.4	23
43	Instability of vortical and acoustic modes in supersonic round jets. <i>Physics of Fluids</i> , 1997 , 9, 1003-1013	4.4	22
42	Influence of boundary-layer disturbances on the instability of a roughness wake in a high-speed boundary layer. <i>Journal of Fluid Mechanics</i> , 2015 , 763, 136-165	3.7	21
41	Effects of Compressibility and Shock-Wave Interactions on Turbulent Shear Flows. <i>Flow, Turbulence and Combustion</i> , 2016 , 97, 1-25	2.5	21
40	Recovery of a supersonic turbulent boundary layer after an expansion corner. <i>Physics of Fluids</i> , 2017 , 29, 076103	4.4	18
39	The effect of compressibility on vortex pairing. <i>Physics of Fluids</i> , 1994 , 6, 1063-1072	4.4	16
38	Sound radiation from a turbulent boundary layer. <i>Physics of Fluids</i> , 2006 , 18, 098101	4.4	14
37	Numerical Simulations of Transition due to Isolated Roughness Elements at Mach 6. <i>AIAA Journal</i> , 2016 , 54, 53-65	2.1	13
36	Fluid-structure coupling mechanism and its aerodynamic effect on membrane aerofoils. <i>Journal of Fluid Mechanics</i> , 2018 , 848, 1127-1156	3.7	13
35	Shock-wave/boundary-layer interactions in the automatic source-code generation framework OpenSBLI. <i>Computers and Fluids</i> , 2018 , 173, 17-21	2.8	12
34	Acoustic Leading-Edge Receptivity for Supersonic/Hypersonic Flows over a Blunt Wedge. <i>AIAA Journal</i> , 2017 , 55, 4234-4244	2.1	12
33	Direct Numerical Simulations of Transonic Flow Around an Airfoil at Moderate Reynolds Numbers. <i>AIAA Journal</i> , 2019 , 57, 597-607	2.1	12
32	Combined free-stream disturbance measurements and receptivity studies in hypersonic wind tunnels by means of a slender wedge probe and direct numerical simulation. <i>Journal of Fluid Mechanics</i> , 2018 , 842, 495-531	3.7	10
31	The Influence of Different Wake Profiles on Losses in a Low Pressure Turbine Cascade. <i>International Journal of Turbomachinery, Propulsion and Power</i> , 2018 , 3, 10	1	10
30	Block-structured compressible Navier-Stokes solution using the OPS high-level abstraction. <i>International Journal of Computational Fluid Dynamics</i> , 2016 , 30, 450-454	1.2	9

29	Simulation and Modelling of a Skewed Turbulent Channel Flow. <i>Flow, Turbulence and Combustion</i> , 2000 , 65, 83-109	2.5	9
28	Linear Stability Prediction of Vortex Structures on High Pressure Turbine Blades. <i>International Journal of Turbomachinery, Propulsion and Power</i> , 2017 , 2, 8	1	8
27	Surface-sampled simulations of turbulent flow at high Reynolds number. <i>International Journal for Numerical Methods in Fluids</i> , 2017 , 85, 525-537	1.9	7
26	An error indicator for finite difference methods using spectral techniques with application to aerofoil simulation. <i>Computers and Fluids</i> , 2018 , 168, 67-72	2.8	7
25	Direct Numerical Simulation of Supersonic Jet Flow. <i>Journal of Engineering Mathematics</i> , 1997 , 32, 121-142	1.4	7
24	ON THE RESPONSE OF SHOCK-INDUCED SEPARATION BUBBLE TO SMALL AMPLITUDE DISTURBANCES. <i>Modern Physics Letters B</i> , 2005 , 19, 1495-1498	1.6	7
23	Two-dimensional unsteadiness map of oblique shock wave/boundary layer interaction with sidewalls. <i>Journal of Fluid Mechanics</i> , 2019 , 871,	3.7	6
22	The effect of flow confinement on laminar shock-wave/boundary-layer interactions. <i>Journal of Fluid Mechanics</i> , 2020 , 897,	3.7	6
21	Assessment of low-dissipative shock-capturing schemes for transitional and turbulent shock interactions 2019 ,		5
20	Shock-Wave/Boundary-Layer Interactions in Transitional Rectangular Duct Flows. <i>Flow, Turbulence and Combustion</i> , 2020 , 105, 649-670	2.5	5
19	On the performance of WENO/TENO schemes to resolve turbulence in DNS/LES of high-speed compressible flows. <i>International Journal for Numerical Methods in Fluids</i> , 2021 , 93, 176-196	1.9	5
18	Large Eddy simulation of a heaving wing on the Cusp of transition to turbulence. <i>Computers and Fluids</i> , 2019 , 184, 64-77	2.8	4
17	A vorticity stretching diagnostic for turbulent and transitional flows. <i>Theoretical and Computational Fluid Dynamics</i> , 2012 , 26, 485-499	2.3	4
16	Modal Analysis of a Laminar-Flow Airfoil under Buffet Conditions at Re = 500,000. <i>Flow, Turbulence and Combustion</i> , 2020 , 104, 509-532	2.5	4
15	Assessment of Low-Dissipative Shock-Capturing Schemes for the Compressible Taylor-Green Vortex. <i>AIAA Journal</i> , 2021 , 59, 533-545	2.1	4
14	Stability and Unsteadiness in a 2D Laminar Shock-Induced Separation Bubble 2013 ,		3
13	Performance evaluation of explicit finite difference algorithms with varying amounts of computational and memory intensity. <i>Journal of Computational Science</i> , 2019 , 36, 100565	3.4	3
12	OpenSBL: Automated code-generation for heterogeneous computing architectures applied to compressible fluid dynamics on structured grids. <i>Computer Physics Communications</i> , 2021 , 267, 108063	4.2	3

11	Embedded direct numerical simulation for aeronautical CFD. <i>Aeronautical Journal</i> , 2001 , 105, 193-198	0.9	2
10	Receptivity to Freestream Acoustic Noise in Hypersonic Flow over a Generic Forebody. <i>Journal of Spacecraft and Rockets</i> , 2019 , 56, 447-457	1.5	2
9	Unsteady behaviour in direct numerical solutions of transonic flow around an airfoil. 2018 ,		2
8	Direct numerical simulation of compressible turbulence in a counter-flow channel configuration. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	2
7	Transition mechanisms in cross-flow-dominated hypersonic flows with free-stream acoustic noise. <i>Journal of Fluid Mechanics</i> , 2020 , 896,	3.7	1
6	Shockwave/Boundary-Layer Interactions in Transitional Rectangular Duct Flows. <i>ERCRAFT Series</i> , 2020 , 271-276	0.1	1
5	Wide domain simulations of flow over an unswept laminar wing section undergoing transonic buffet. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	1
4	LES Study of the Three-Dimensional Behaviour of Unswept Wing Sections at Buffet Conditions. <i>ERCRAFT Series</i> , 2020 , 329-334	0.1	1
3	Enhanced instability of supersonic boundary layer using passive acoustic feedback. <i>Physics of Fluids</i> , 2016 , 28, 024103	4.4	1
2	DNS Study of Roughness-Induced Transition at Mach 6 2019 ,		1
1	Shock Train Response to High-Frequency Backpressure Forcing. <i>AIAA Journal</i> , 1-12	2.1	0