Philippe R Spalart

List of Publications by Year
in descending order

28 papers	5,406 citations	516710 16 h-index	552781 26 g-index
29 all docs	29 docs citations	29 times ranked	2152 citing authors

#	Article	IF	Citations
1	On the Application of Incomplete Ffowcs Williams and Hawkings Surfaces for Aeroacoustic Predictions. AIAA Journal, 2022, 60, 1971-1977.	2.6	6
2	Empirical scaling laws for wall-bounded turbulence deduced from direct numerical simulations. Physical Review Fluids, 2021, 6, .	2.5	8
3	Direct numerical simulation of the two-dimensional speed bump flow at increasing Reynolds numbers. International Journal of Heat and Fluid Flow, 2021, 90, 108840.	2.4	6
4	Analysis and extension of the quadratic constitutive relation for RANS methods. Aeronautical Journal, 2021, 125, 1746-1767.	1.6	1
5	Wall-Modeled LES of Flow over a Gaussian Bump with Strong Pressure Gradients and Separation. , 2020, , .		11
6	Improvements to the Quadratic Constitutive Relation Based on NASA Juncture Flow Data. AIAA Journal, 2020, 58, 4374-4384.	2.6	37
7	Correction to the Spalartâ€“Allmaras Turbulence Model, Providing More Accurate Skin Friction. AIAA Journal, 2020, 58, 1903-1905.	2.6	30
8	Numerical study of a turbulent separation bubble with sweep. Journal of Fluid Mechanics, 2019, 880, 684-706.	3.4	6
9	On the differences in noise predictions based on solid and permeable surface Ffowcs Williamsâ€“Hawkings integral solutions. International Journal of Aeroacoustics, 2019, 18, 621-646.	1.3	21
10	On the skin friction due to turbulence in ducts of various shapes. Journal of Fluid Mechanics, 2018, 838, 369-378.	3.4	15
11	Numerical study of turbulent separation bubbles with varying pressure gradient and ReynoldsÂnumber. Journal of Fluid Mechanics, 2018, 847, 28-70.	3.4	60
12	Direct Numerical Simulation and Theory of a Wall-Bounded Flow with Zero Skin Friction. Flow, Turbulence and Combustion, 2017, 99, 553-564.	2.6	12
13	Direct Simulation and RANS Modelling of a Vortex Generator Flow. Flow, Turbulence and Combustion, 2015, 95, 335-350.	2.6	32
14	Direct Numerical Simulation, Theories and Modelling of Wall Turbulence with a Range of Pressure Gradients. Flow, Turbulence and Combustion, 2015, 95, 261-276.	2.6	12
15	RANS Solutions in Couette flow with streamwise vortices. International Journal of Heat and Fluid Flow, 2014, 49, 128-134.	2.4	11
16	On the precise implications of acoustic analogies for aerodynamic noise at low Mach numbers. Journal of Sound and Vibration, 2013, 332, 2808-2815.	3.9	24
17	Predictions of a Supersonic Turbulent Flow in a Square Duct. , 2013, , .		78
18	The resilience of the logarithmic law to pressure gradients: evidence from direct numerical simulation. Journal of Fluid Mechanics, 2010, 643, 163-175.	3.4	24

#	Article	IF	Citations
19	Noise Prediction for Increasingly Complex Jets. Part I: Methods and Tests. International Journal of Aeroacoustics, 2005, 4, 213-245.	1.3	305
20	Direct numerical simulation of a decelerated wall-bounded turbulent shear flow. Journal of Fluid Mechanics, 2003, 495, 1-18.	3.4	27
21	Strategies for turbulence modelling and simulations. International Journal of Heat and Fluid Flow, 2000, 21, 252-263.	2.4	1,173
22	Mechanisms of transition and heat transfer in a separation bubble. Journal of Fluid Mechanics, 2000, 403, 329-349.	3.4	268
23	Trends in turbulence treatments. , 2000, , .		175
24	Turbulence Modeling in Rotating and Curved Channels: Assessing the Spalart-Shur Correction. AIAA Journal, 2000, 38, 784-792.	2.6	477
25	A note on constraints in turbulence modelling. Journal of Fluid Mechanics, 1999, 391, 373-376.	3.4	14
26	Experimental and numerical study of a turbulent boundary layer with pressure gradients. Journal of Fluid Mechanics, 1993, 249, 337.	3.4	345
27	Spectral methods for the Navier-Stokes equations with one infinite and two periodic directions. Journal of Computational Physics, 1991, 96, 297-324.	3.8	549
28	Direct simulation of a turbulent boundary layer up to RÎ¸ = 1410. Journal of Fluid Mechanics, 1988, 187, 61-98.	3.4	1,654