Arne V Johansson

List of Publications by Citations

50 papers	2,616 citations	23 h-index	50 g-index
50 ext. papers	2,889 ext. citations	3.6 avg, IF	4.85 L-index

#	Paper	IF	Citations
50	An explicit algebraic Reynolds stress model for incompressible and compressible turbulent flows. *Journal of Fluid Mechanics*, **2000**, 403, 89-132	3.7	524
49	On the structure of turbulent channel flow. *Journal of Fluid Mechanics*, **1982**, 122, 295	3.7	208
48	Direct Numerical Simulation of Turbulent Pipe Flow at Moderately High Reynolds Numbers. *Flow, Turbulence and Combustion*, **2013**, 91, 475-495	2.5	169
47	A mechanism for bypass transition from localized disturbances in wall-bounded shear flows. *Journal of Fluid Mechanics*, **1993**, 250, 169-207	3.7	167
46	Direct simulation of turbulent spots in plane Couette flow. *Journal of Fluid Mechanics*, **1991**, 229, 499	3.7	163
45	Very large structures in plane turbulent Couette flow. *Journal of Fluid Mechanics*, **1996**, 320, 259	3.7	151
44	Turbulence reduction by screens. *Journal of Fluid Mechanics*, **1988**, 197, 139-155	3.7	131
43	Effects of imperfect spatial resolution on measurements of wall-bounded turbulentbx shear flows. *Journal of Fluid Mechanics*, **1983**, 137, 409-421	3.7	116
42	Evolution and dynamics of shear-layer structures in near-wall turbulence. *Journal of Fluid Mechanics* , **1991**, 224, 579-599	3.7	115
41	On the generation of high-amplitude wall-pressure peaks in turbulent boundary layers and spots. *Journal of Fluid Mechanics*, **1987**, 175, 119	3.7	81
40	On the detection of turbulence-generating events. *Journal of Fluid Mechanics*, **1984**, 139, 325-345	3.7	68
39	Warm summers during the Younger Dryas cold reversal. *Nature Communications*, **2018**, 9, 1634	17.4	57
38	An algebraic model for nonisotropic turbulent dissipation rate in Reynolds stress closures. *Physics of Fluids A, Fluid Dynamics*, **1990**, 2, 1859-1866		54
37	Derivation and investigation of a new explicit algebraic model for the passive scalar flux. *Physics of Fluids*, **2000**, 12, 688-702	4.4	53
36	Modelling of rapid pressure□train in Reynolds-stress closures. *Journal of Fluid Mechanics*, **1994**, 269, 143-168	3.7	52
35	Development and calibration of algebraic nonlinear models for terms in the Reynolds stress transport equations. *Physics of Fluids*, **2000**, 12, 1554-1572	4.4	46
34	Direct numerical simulation of a plane turbulent wall-jet including scalar mixing. *Physics of Fluids*, **2007**, 19, 065102	4.4	43

33	Explicit algebraic subgrid stress models with application to rotating channel flow. *Journal of Fluid Mechanics*, **2009**, 639, 403-432	3.7	40
32	DNS and Modelling of Passive Scalar Transport in Turbulent Channel Flow with a Focus on Scalar Dissipation Rate Modelling. *Flow, Turbulence and Combustion*, **2000**, 63, 223-245	2.5	37
31	Simulation of finite-size fibers in turbulent channel flows. *Physical Review E*, **2014**, 89, 013006	2.4	34
30	Shear-free turbulence near a wall. *Journal of Fluid Mechanics*, **1997**, 338, 363-385	3.7	30
29	Evaluation of scaling laws derived from Lie group symmetry methods in zero-pressure-gradient turbulent boundary layers. *Journal of Fluid Mechanics*, **2004**, 502, 127-152	3.7	30
28	An explicit algebraic Reynolds-stress and scalar-flux model for stably stratified flows. *Journal of Fluid Mechanics*, **2013**, 723, 91-125	3.7	23
27	Measurement and modelling of homogeneous axisymmetric turbulence. *Journal of Fluid Mechanics*, **1998**, 374, 59-90	3.7	22
26	High Order Accurate Solution of Flow Past a Circular Cylinder. *Journal of Scientific Computing*, **2006**, 27, 431-441	2.3	20
25	An explicit algebraic model for the subgrid-scale passive scalar flux. *Journal of Fluid Mechanics*, **2013**, 721, 541-577	3.7	18
24	Direct drag measurements for a flat plate with passive boundary layer manipulators. *Physics of Fluids*, **1986**, 29, 696		18
23	Evaluation of a new wind tunnel with expanding corners. *Experiments in Fluids*, **2004**, 36, 197-203	2.5	16
22	Large eddy simulation of channel flow with and without periodic constrictions using the explicit algebraic subgrid-scale model. *Journal of Turbulence*, **2014**, 15, 752-775	2.1	15
21	Direct numerical simulation of an isothermal reacting turbulent wall-jet. *Physics of Fluids*, **2011**, 23, 085104	4.4	14
20	Design of guide vanes for minimizing the pressure loss in sharp bends. *Physics of Fluids A, Fluid Dynamics*, **1991**, 3, 1934-1940		11
19	Study of Transitions in the Atmospheric Boundary Layer Using Explicit Algebraic Turbulence Models. *Boundary-Layer Meteorology*, **2016**, 161, 19-47	3.4	9
18	A stochastic extension of the explicit algebraic subgrid-scale models. *Physics of Fluids*, **2014**, 26, 055113	4.4	8
17	LES computations and comparison with Kolmogorov theory for two-point pressure–velocity correlations and structure functions for globally anisotropic turbulence. *Journal of Fluid Mechanics*, **2000**, 403, 23-36	3.7	8
16	DNS Analysis of Wall Heat Transfer and Combustion Regimes in a Turbulent Non-premixed Wall-jet Flame. *Flow, Turbulence and Combustion*, **2016**, 97, 951-969	2.5	8

15	Heat release effects on mixing scales of non-premixed turbulent wall-jets: A direct numerical simulation study. *International Journal of Heat and Fluid Flow*, **2013**, 40, 65-80	2.4	7
14	Taking large-eddy simulation of wall-bounded flows to higher Reynolds numbers by use of anisotropy-resolving subgrid models. *Physical Review Fluids*, **2017**, 2,	2.8	7
13	Improving LES with OpenFOAM by minimising numerical dissipation and use of explicit algebraic SGS stress model. *Journal of Turbulence*, **2019**, 20, 697-722	2.1	7
12	Design of the centrifugal fan of a belt-driven starter generator with reduced flow noise. *International Journal of Heat and Fluid Flow*, **2019**, 76, 72-84	2.4	6
11	Consistent Boundary-Condition Treatment for Computation of the Atmospheric Boundary Layer Using the Explicit Algebraic Reynolds-Stress Model. *Boundary-Layer Meteorology*, **2019**, 171, 53-77	3.4	5
10	Sixth International Symposium on Turbulence and Shear Flow Phenomena. *Journal of Turbulence*, **2011**, 12, N14	2.1	5
9	A realizable explicit algebraic Reynolds stress model for compressible turbulent flow with significant mean dilatation. *Physics of Fluids*, **2013**, 25, 105112	4.4	4
8	A novel method to determine the natural course of unruptured brain arteriovenous malformations without the need for follow-up information. *Journal of Neurosurgery*, **2018**, 129, 10-16	3.2	4
7	Capturing turbulent density flux effects in variable density flow by an explicit algebraic model. *Physics of Fluids*, **2015**, 27, 045108	4.4	3
6	Modelling of rapid pressure-strain in Reynolds stress closures Difficulties associated with rotational mean flows. *Flow, Turbulence and Combustion*, **1994**, 53, 119-137		3
5	Algebraic Reynolds stress modeling of turbulence subject to rapid homogeneous and non-homogeneous compression or expansion. *Physics of Fluids*, **2016**, 28, 026101	4.4	3
4	Improving separated-flow predictions using an anisotropy-capturing subgrid-scale model. *International Journal of Heat and Fluid Flow*, **2017**, 65, 246-251	2.4	2
3	Modelling of Stably Stratified Atmospheric Boundary Layers with Varying Stratifications. *Boundary-Layer Meteorology*, **2020**, 176, 229-249	3.4	1
2	Explicit Algebraic Reynolds-stress Modelling of a Convective Atmospheric Boundary Layer Including Counter-Gradient Fluxes. *Boundary-Layer Meteorology*, **2021**, 178, 487-497	3.4	0
1	Investigations of shear free turbulent diffusion in a rotating frame. *Proceedings in Applied Mathematics and Mechanics*, **2004**, 4, 458-459	0.2	