Fernando F Grinstein

List of Publications by Year
in descending order

49 papers	3,395 citations	304368 22 h-index	243296 44 g-index
54 all docs	54 docs citations	54 times ranked	1353 citing authors

#	Article	IF	Citations
1	Verification and Validation: The Path to Predictive Scale-Resolving Simulations of Turbulence. Journal of Verification, Validation and Uncertainty Quantification, 2022, 7, .	0.3	2
2	Molecular viscosity and diffusivity effects in transitional and shock-driven mixing flows. Physical Review E, 2021, 103, 013106.	0.8	9
3	Impact of numerical hydrodynamics in turbulent mixing transition simulations. Physics of Fluids, 2021, 33, .	1.6	12
4	Coarse grained simulations of shock-driven turbulent material mixing. Physics of Fluids, 2021, 33, .	1.6	14
5	Modeling and simulation of transitional Taylor-Green vortex flow with partially averaged Navier-Stokes equations. Physical Review Fluids, 2021, 6, .	1.0	10
6	Partially averaged Navier-Stokes closure modeling for variable-density turbulent flow. Physical Review Fluids, 2021, 6, .	1.0	6
7	Dynamic Bridging for Coarse Grained Simulations of Turbulent Material Mixing. Springer Proceedings in Physics, 2021, , 79-84.	0.1	0
8	Modeling and simulation of transitional Rayleighâ€“Taylor flow with partially averaged Navierâ€“Stokes equations. Physics of Fluids, 2021, 33, .	1.6	7
9	Dynamic bridging modeling for coarse grained simulations of shock driven turbulent mixing. Computers and Fluids, 2020, 199, 104430.	1.3	9
10	Effect of the numerical discretization scheme in Shock-Driven turbulent mixing simulations. Computers and Fluids, 2020, 201, 104487.	1.3	12
11	Coarse grained simulation of convectively driven turbulent mixing, transition, and turbulence decay. Physica D: Nonlinear Phenomena, 2020, 407, 132419.	1.3	10
12	Effects of operator splitting and low Mach-number correction in turbulent mixing transition simulations. Computers and Mathematics With Applications, 2019, 78, 437-458.	1.4	15
13	Initial conditions and modeling for simulations of shock driven turbulent material mixing. Computers and Fluids, 2017, 151, 58-72.	1.3	18
14	Coarse Grained Simulation and Turbulent Material Mixing. , 2017, , 401-420.		1
15	Effects of initial condition spectral content on shock-driven turbulent mixing. Physical Review E, 2015, 92, 013014.	0.8	9
16	Three-dimensional simulation strategy to determine the effects of turbulent mixing on inertial-confinement-fusion capsule performance. Physical Review E, 2014, 89, 053302.	0.8	40
17	Estimating the effective Reynolds number in implicit large-eddy simulation. Physical Review E, 2014, 89, 013303.	0.8	68
18	Reynolds-averaged Navierâ€“Stokes initialization and benchmarking inÂshock-driven turbulent mixing. Journal of Turbulence, 2013, 14, 46-70.	0.5	40

#	Article	IF	Citations
19	Two classes of Richtmyer-Meshkov instabilities: A detailed statistical look. Physics of Fluids, 2013, 25, .	1.6	23
20	Implicit large-eddy simulation of passive scalar mixing in statistically stationary isotropic turbulence. Physics of Fluids, 2013, 25, .	1.6	39
21	Implicit large eddy simulation of shock-driven material mixing. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120217.	1.6	9
22	On coarse-grained simulations of turbulent material mixing. Physica Scripta, 2012, 86, 058203.	1.2	7
23	RANS Initialization and Validation in Shock-Driven Turbulent Mixing. , 2012, , .		0
24	On Monotonically Integrated Large Eddy Simulation of Turbulent Flows Based on FCT Algorithms. Scientific Computation, 2012, , 67-90.	0.2	1
25	Numerical simulation of Richtmyerâ€"Meshkov instabilities in shocked gas curtains. Journal of Turbulence, 2011, 12, N43.	0.5	32
26	Simulations of Richtmyerâ€"Meshkov instabilities in planar shock-tube experiments. Physics of Fluids, 2011, 23, .	1.6	79
27	Analysis of Computational and Laboratory Shocked Gas-Curtain Experiments. , 2011, , .		2
28	Simulating vortex dynamics and transition in high-Reynolds number flows. Physica Scripta, 2010, T142, 014013.	1.2	0
29	On integrating large eddy simulation and laboratory turbulent flow experiments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2009, 367, 2931-2945.	1.6	21
30	On Flux-Limiting-Based Implicit Large Eddy Simulation. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 1483-1492.	0.8	41
31	Large Scale Urban Contaminant Transport Simulations With Miles. Journal of Fluids Engineering, Transactions of the ASME, 2007, 129, 1524-1532.	0.8	37
32	Simulation of transition and turbulence decay in the Taylorâ€"Green vortex. Journal of Turbulence, 2007, 8, N20.	0.5	109
33	An experimental and computational study of a multi-swirl gas turbine combustor. Proceedings of the Combustion Institute, 2007, 31, 3107-3114.	2.4	63
34	Linear Stochastic Estimation of a Swirling Jet. AIAA Journal, 2006, 44, 457-468.	1.5	22
35	LES studies of the flow in a swirl gas combustor. Proceedings of the Combustion Institute, 2005, 30, 1791-1798.	2.4	73
36	On the computation of instabilities and symmetry-breaking in fluid mechanics. Progress in Aerospace Sciences, 2005, 41, 609-641.	6.3	25

#	ARTICLE	IF	CITATIONS
37	Flow dynamics in a swirl combustor. Journal of Turbulence, 2002, 3, N30.	0.5	32
38	Global instabilities in countercurrent jets. Physics of Fluids, 2002, 14, 1095-1100.	1.6	12
39	Large Eddy Simulation of High-Reynolds-Number Free and Wall-Bounded Flows. Journal of Computational Physics, 2002, 181, 68-97.	1.9	257
40	Vortex dynamics and entrainment in rectangular free jets. Journal of Fluid Mechanics, 2001, 437, 69-101.	1.4	160
41	FLOW CONTROL WITH NONCIRCULAR JETS. Annual Review of Fluid Mechanics, 1999, 31, 239-272.	10.8	509
42	Monotonically Integrated Large Eddy Simulation of Free Shear Flows. AIAA Journal, 1999, 37, 544-556.	1.5	332
43	Dynamics of coherent structures and transition to turbulence in free square jets. Physics of Fluids, 1996, 8, 1237-1251.	1.6	159
44	Exothermicity and Relaminarization Effects in Unsteady Reactive Square Jets. Combustion Science and Technology, 1996, 113, 291-312.	1.2	12
45	Selfâ€induced vortex ring dynamics in subsonic rectangular jets. Physics of Fluids, 1995, 7, 2519-2521.	1.6	88
46	Open Boundary Conditions in the Simulation of Subsonic Turbulent Shear Flows. Journal of Computational Physics, 1994, 115, 43-55.	1.9	52
47	Chemical energy release and dynamics of transitional, reactive shear flows. Physics of Fluids A, Fluid Dynamics, 1992, 4, 2207-2221.	1.6	37
48	New insights into large eddy simulation. Fluid Dynamics Research, 1992, 10, 199-228.	0.6	844
49	Pressure field, feedback, and global instabilities of subsonic spatially developing mixing layers. Physics of Fluids A, Fluid Dynamics, 1991, 3, 2401-2409.	1.6	34