Julian Andrzej Domaradzki

List of Publications by Year
in descending order

42 papers	2,378 citations	201674 27 h-index	265206 42 g-index
42 all docs	42 docs citations	42 times ranked	1012 citing authors

#	Article	IF	Citations
1	Local energy transfer and nonlocal interactions in homogeneous, isotropic turbulence. Physics of Fluids A, Fluid Dynamics, 1990, 2, 413-426.	1.6	255
2	An adaptive local deconvolution method for implicit LES. Journal of Computational Physics, 2006, 213, 413-436.	3.8	220
3	A subgrid-scale model based on the estimation of unresolved scales of turbulence. Physics of Fluids, 1997, 9, 2148-2164.	4.0	165
4	An analysis of subgridâ€scale interactions in numerically simulated isotropic turbulence. Physics of Fluids A, Fluid Dynamics, 1993, 5, 1747-1759.	1.6	142
5	Effective eddy viscosities in implicit large eddy simulations of turbulent flows. Physics of Fluids, 2003, 15, 3890-3893.	4.0	133
6	Energy transfer in numerically simulated wallâ€bounded turbulent flows. Physics of Fluids, 1994, 6, 1583-1599.	4.0	129
7	Direct numerical simulations of passive scalars with Pr>1 advected by turbulent flow. Journal of Fluid Mechanics, 1997, 343, 111-130.	3.4	98
8	The subgrid-scale estimation model in the physical space representation. Physics of Fluids, 1999, 11, 2330-2342.	4.0	87
9	Analysis of subgrid-scale eddy viscosity with use of results from direct numerical simulations. Physical Review Letters, 1987, 58, 547-550.	7.8	84
10	Nonlocal triad interactions and the dissipation range of isotropic turbulence. Physics of Fluids A, Fluid Dynamics, 1992, 4, 2037-2045.	1.6	75
11	Similarity scaling and vorticity structure in high-Reynolds-number stably stratified turbulent wakes. Journal of Fluid Mechanics, 2011, 671, 52-95.	3.4	71
12	A spectral multidomain penalty method model for the simulation of high Reynolds number localized incompressible stratified turbulence. Journal of Computational Physics, 2005, 202, 298-322.	3.8	68
13	Smallâ€scale properties of nonlinear interactions and subgridâ€scale energy transfer in isotropic turbulence. Physics of Fluids, 1996, 8, 197-208.	4.0	62
14	Locality properties of the energy flux in turbulence. Physics of Fluids, 2009, 21, .	4.0	62
15	Direct numerical simulations of the effects of shear on turbulent Rayleigh-BÃ©nard convection. Journal of Fluid Mechanics, 1988, 193, 499.	3.4	57
16	Direct numerical simulation of transition to turbulence in GÃ¶rtler flow. Journal of Fluid Mechanics, 1993, 246, 267-299.	3.4	53
17	Large Eddy Simulations Using the Subgrid-Scale Estimation Model and Truncated Navier-Stokes Dynamics. Theoretical and Computational Fluid Dynamics, 2002, 15, 421-450.	2.2	49
18	Large eddy simulations of decaying rotating turbulence. Physics of Fluids, 2004, 16, 4088-4104.	4.0	45

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19	An analysis of the energy transfer and the locality of nonlinear interactions in turbulence. Physics of Fluids, 2007, 19, .	4.0	45
20	Large eddy simulations of Rayleighâ€“BÃ©nard convection using subgrid scale estimation model. Physics of Fluids, 2000, 12, 169-184.	4.0	43
21	Assessing the numerical dissipation rate and viscosity in numerical simulations of fluid flows. Computers and Fluids, 2015, 114, 84-97.	2.5	41
22	Analysis of energy transfer in direct numerical simulations of isotropic turbulence. Physics of Fluids, 1988, 31, 2747.	1.4	39
23	Numerical simulations of the near wake of a sphere moving in a steady, horizontal motion through a linearly stratified fluid at Re = 1000. Physics of Fluids, 2015, 27, .	4.0	39
24	Effective eddy viscosities in implicit modeling of decaying high Reynolds number turbulence with and without rotation. Fluid Dynamics Research, 2005, 36, 385-406.	1.3	38
25	A subgrid-scale model for large-eddy simulation based on the physics of interscale energy transfer in turbulence. Physics of Fluids, 2012, 24, 065104.	4.0	36
26	Numerical evidence for nonuniversality of the soft/hard turbulence classification for thermal convection. Physics of Fluids A, Fluid Dynamics, 1993, 5, 412-421.	1.6	30
27	A comparison of spectral sharp and smooth filters in the analysis of nonlinear interactions and energy transfer in turbulence. Physics of Fluids, 2007, 19, 085111.	4.0	29
28	The subgrid-scale estimation model on nonuniform grids. Physics of Fluids, 1999, 11, 3786-3792.	4.0	24
29	Effects of numerical dissipation on the interpretation of simulation results in computational fluid dynamics. Computers and Fluids, 2017, 154, 256-272.	2.5	21
30	Large eddy simulations without explicit eddy viscosity models. International Journal of Computational Fluid Dynamics, 2010, 24, 435-447.	1.2	19
31	Direct Numerical Simulation and Large Eddy Simulation of Laminar Separation Bubbles at Moderate Reynolds Numbers. Journal of Fluids Engineering, Transactions of the ASME, 2014, 136, .	1.5	18
32	Implicit LES using adaptive filtering. Journal of Computational Physics, 2018, 359, 380-408.	3.8	18
33	Locality properties of the energy flux in magnetohydrodynamic turbulence. Physics of Fluids, 2010, 22, .	4.0	15
34	On the locality of magnetohydrodynamic turbulence scale fluxes. Physics of Plasmas, 2011, 18, .	1.9	15
35	Approximation of subgridâ€scale energy transfer based on the dynamics of resolved scales of turbulence. Physics of Fluids, 1995, 7, 2025-2035.	4.0	13
36	Scale dependence of the statistical character of turbulent fluctuations in thermal convection. Physics of Fluids, 1994, 6, 1848-1855.	4.0	11

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37	Performance of subgrid-scale models in coarse large eddy simulations of a laminar separation bubble. Physics of Fluids, 2015, 27, 045112.	4.0	7
38	On the estimation of artificial dissipation and dispersion errors in a generic partial differential equation. Journal of Computational Physics, 2019, 397, 108843.	3.8	7
39	Large eddy simulations of high Reynolds number turbulence based on interscale energy transfer among resolved scales. Physical Review Fluids, 2021, 6, .	2.5	6
40	On the Nature of the Turbulent Energy Dissipation Beneath Nonbreaking Waves. Geophysical Research Letters, 2020, 47, e2020GL090138.	4.0	4
41	Toward autonomous large eddy simulations of turbulence based on interscale energy transfer among resolved scales. Physical Review Fluids, 2021, 6, .	2.5	3
42	Temperature gradient spectra and temperature dissipation rate in a turbulent convective flow. Journal of Turbulence, 2015, 16, 1179-1198.	1.4	2