Mikael Mortensen

List of Publications by Year
in descending order

35 papers	715 citations	686830 13 h-index	580395 25 g-index
36 all docs	36 docs citations	36 times ranked	707 citing authors

#	Article	IF	Citations
1	More efficient time integration for Fourier pseudospectral DNS of incompressible turbulence. International Journal for Numerical Methods in Fluids, 2020, 92, 79-93.	0.9	4
2	Slope limiting the velocity field in a discontinuous Galerkin divergence-free two-phase flow solver. Computers and Fluids, 2020, 196, 104322.	1.3	4
3	A Novel Method for Circuits of Perfect Electric Conductors in Unstructured Particle-in-Cell Plasmaâ€“Object Interaction Simulations. IEEE Transactions on Plasma Science, 2020, 48, 2856-2872.	0.6	0
4	Two-phase flow simulations at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si10.svg"><mml:mrow><mml:mn>0</mml:mn><mml:mo linebreak="goodbreak">â^’</mml:mo><mml:msup><mml:mn>4</mml:mn><mml:mi>o</mml:mi></mml:msup></mml:mrow></mml:mat inclination in an eccentric annulus. International Journal of Heat and Fluid Flow, 2020, 83, 108586.	1.1	7
5	Impact of Miniaturized Fixed-Bias Multineedle Langmuir Probes on CubeSats. IEEE Transactions on Plasma Science, 2019, 47, 3658-3666.	0.6	7
6	Gasâ€“liquid slug flow in a horizontal concentric annulus, a comparison of numerical simulations and experimental data. International Journal of Heat and Fluid Flow, 2019, 78, 108437.	1.1	14
7	Fast parallel multidimensional FFT using advanced MPI. Journal of Parallel and Distributed Computing, 2019, 128, 137-150.	2.7	37
8	Preconditioning trace coupled 3<i>d</i>â€‘1<i>d</i> systems using fractional Laplacian. Numerical Methods for Partial Differential Equations, 2019, 35, 375-393.	2.0	12
9	On the singular Neumann problem in linear elasticity. Numerical Linear Algebra With Applications, 2019, 26, e2212.	0.9	12
10	The FDA nozzle benchmark: â€œIn theory there is no difference between theory and practice, but in practice there isâ€. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3150.	1.0	29
11	mpi4py-fft: Parallel Fast Fourier Transforms with MPI for Python. Journal of Open Source Software, 2019, 4, 1340.	2.0	3
12	Shenfun: High performance spectral Galerkin computing platform. Journal of Open Source Software, 2018, 3, 1071.	2.0	10
13	Numerical simulations of a sounding rocket in ionospheric plasma: Effects of magnetic field on the wake formation and rocket potential. Journal of Geophysical Research: Space Physics, 2017, 122, 9603-9621.	0.8	11
14	Wake potential of a dust particle in magnetised plasmas. Physica Scripta, 2017, 92, 114006.	1.2	15
15	A numerical investigation of intrathecal isobaric drug dispersion within the cervical subarachnoid space. PLoS ONE, 2017, 12, e0173680.	1.1	19
16	High performance Python for direct numerical simulations of turbulent flows. Computer Physics Communications, 2016, 203, 53-65.	3.0	36
17	Preconditioners for Saddle Point Systems with Trace Constraints Coupling 2D and 1D Domains. SIAM Journal of Scientific Computing, 2016, 38, B962-B987.	1.3	24
18	Oasis: A high-level/high-performance open source Navierâ€“Stokes solver. Computer Physics Communications, 2015, 188, 177-188.	3.0	71

#	Article	IF	Citations
19	Assessment of the presumed mapping function approach for the stationary laminar flamelet modelling of reacting double scalar mixing layers. Combustion Theory and Modelling, 2014, 18, 552-581.	1.0	2
20	A FEniCS-based programming framework for modeling turbulent flow by the Reynolds-averaged Navierâ€"Stokes equations. Advances in Water Resources, 2011, 34, 1082-1101.	1.7	29
21	Direct numerical simulation of transitional flow in a patient-specific intracranial aneurysm. Journal of Biomechanics, 2011, 44, 2826-2832.	0.9	107
22	Direct Numerical Simulation of Transitional Flow in a Patient-Specific MCA Aneurysm. , 2011, , .		0
23	A Nonlinear Eddy-Viscosity Model forÂNear-Wall Turbulence. ERCOFTAC Series, 2011, , 269-276.	0.1	1
24	Assessment of the finite volume method applied to thev2â^'fmodel. International Journal for Numerical Methods in Fluids, 2009, 63, n/a-n/a.	0.9	0
25	Towards Sensitizing the Nonlinear v 2â€‰â^'â€‰f Model to Turbulence Structures. Flow, Turbulence and Combustion, 2009, 83, 185-203.	1.4	4
26	Derivation of the conditional moment closure equations for spray combustion. Combustion and Flame, 2009, 156, 62-72.	2.8	66
27	â€œDerivation of the conditional moment closure equations for spray combustionâ€•[Combust. Flame Vol. 155, Issue 3]. Combustion and Flame, 2008, 155, 369.	2.8	3
28	Conditional velocity statistics in the double scalar mixing layer â€" A mapping closure approach. Combustion Theory and Modelling, 2008, 12, 929-941.	1.0	5
29	Direct numerical simulations of the double scalar mixing layerPart II: Reactive scalars. Combustion and Flame, 2007, 149, 392-408.	2.8	10
30	Presumed Mapping Functions for Eulerian Modelling of Turbulent Mixing. Flow, Turbulence and Combustion, 2006, 76, 199-219.	1.4	12
31	Direct numerical simulations of the double scalar mixing layer. Part I: Passive scalar mixing and dissipation. Physics of Fluids, 2006, 18, 067106.	1.6	12
32	Conditional mixing statistics in a self-similar scalar mixing layer. Physics of Fluids, 2005, 17, 095107.	1.6	20
33	Consistent modeling of scalar mixing for presumed, multiple parameter probability density functions. Physics of Fluids, 2005, 17, 018106.	1.6	31
34	Mixing of a Jet in a Pipe. Chemical Engineering Research and Design, 2004, 82, 357-363.	2.7	13
35	Implementation of a conditional moment closure for mixing sensitive reactions. Chemical Engineering Science, 2004, 59, 5709-5723.	1.9	9