

Soshi Kawai

List of Publications by Year in descending order

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Version: 2024-02-01

25
papers

1,549
citations

516681

16
h-index

642715

23
g-index

25
all docs

25
docs citations

25
times ranked

728
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Wall-modeling in large eddy simulation: Length scales, grid resolution, and accuracy. <i>Physics of Fluids</i> , 2012, 24, . | 4.0 | 360 |
| 2 | Large eddy simulation with modeled wall-stress: recent progress and future directions. <i>Mechanical Engineering Reviews</i> , 2016, 3, 15-00418-15-00418. | 4.7 | 290 |
| 3 | Large-Eddy Simulation of Jet Mixing in Supersonic Crossflows. <i>AIAA Journal</i> , 2010, 48, 2063-2083. | 2.6 | 211 |
| 4 | Dynamic non-equilibrium wall-modeling for large eddy simulation at high Reynolds numbers. <i>Physics of Fluids</i> , 2013, 25, . | 4.0 | 117 |
| 5 | Wall-Modeled Large-Eddy Simulation of Transonic Airfoil Buffet at High Reynolds Number. <i>AIAA Journal</i> , 2018, 56, 2372-2388. | 2.6 | 81 |
| 6 | Compact Scheme with Filtering for Large-Eddy Simulation of Transitional Boundary Layer. <i>AIAA Journal</i> , 2008, 46, 690-700. | 2.6 | 75 |
| 7 | Kinetic energy and entropy preserving schemes for compressible flows by split convective forms. <i>Journal of Computational Physics</i> , 2018, 375, 823-853. | 3.8 | 60 |
| 8 | Large-eddy simulation of airfoil flow near stall condition at Reynolds number 2.1×10^6 . <i>Physics of Fluids</i> , 2018, 30, . | 4.0 | 57 |
| 9 | Heated transcritical and unheated non-transcritical turbulent boundary layers at supercritical pressures. <i>Journal of Fluid Mechanics</i> , 2019, 865, 563-601. | 3.4 | 47 |
| 10 | A robust and accurate numerical method for transcritical turbulent flows at supercritical pressure with an arbitrary equation of state. <i>Journal of Computational Physics</i> , 2015, 300, 116-135. | 3.8 | 46 |
| 11 | Wall-modeled large-eddy simulation of high Reynolds number flow around an airfoil near stall condition. <i>Computers and Fluids</i> , 2013, 85, 105-113. | 2.5 | 38 |
| 12 | Consistent numerical diffusion terms for simulating compressible multicomponent flows. <i>Computers and Fluids</i> , 2013, 88, 484-495. | 2.5 | 31 |
| 13 | Preventing spurious pressure oscillations in split convective form discretization for compressible flows. <i>Journal of Computational Physics</i> , 2021, 427, 110060. | 3.8 | 22 |
| 14 | High-order accurate kinetic-energy and entropy preserving (KEEP) schemes on curvilinear grids. <i>Journal of Computational Physics</i> , 2021, 442, 110482. | 3.8 | 21 |
| 15 | A stable and non-dissipative kinetic energy and entropy preserving (KEEP) scheme for non-conforming block boundaries on Cartesian grids. <i>Computers and Fluids</i> , 2020, 200, 104427. | 2.5 | 20 |
| 16 | Physics and modeling of trailing-edge stall phenomena for wall-modeled large-eddy simulation. <i>Physical Review Fluids</i> , 2020, 5, . | 2.5 | 20 |
| 17 | Wall modeling for large-eddy simulation on non-body-conforming Cartesian grids. <i>Physical Review Fluids</i> , 2021, 6, . | 2.5 | 15 |
| 18 | Effects of the semi-local Reynolds number in scaling turbulent statistics for wall heated/cooled supersonic turbulent boundary layers. <i>Physical Review Fluids</i> , 2021, 6, . | 2.5 | 9 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 19 | Modified wavenumber and aliasing errors of split convective forms for compressible flows. Journal of Computational Physics, 2022, 464, 111336. | 3.8 | 9 |
| 20 | Wall-modeled LES around the CRM-HL using Fully-automated Cartesian-grid-based Flow Solver FFVHC-ACE. , 2022, , . | | 6 |
| 21 | A Kriging-Based Dynamic Adaptive Sampling Method for Uncertainty Quantification. Transactions of the Japan Society for Aeronautical and Space Sciences, 2019, 62, 137-150. | 0.7 | 5 |
| 22 | Turbulence Modeling for Turbulent Boundary Layers at Supercritical Pressure: A Model for Turbulent Mass Flux. Flow, Turbulence and Combustion, 2020, 104, 625-641. | 2.6 | 4 |
| 23 | A localized thickened flame model for simulations of flame propagation and autoignition under elevated pressure conditions. Proceedings of the Combustion Institute, 2021, 38, 2119-2126. | 3.9 | 3 |
| 24 | A Simple Cellwise High-order Implicit Discontinuous Galerkin Scheme for Unsteady Turbulent Flows. Transactions of the Japan Society for Aeronautical and Space Sciences, 2019, 62, 93-107. | 0.7 | 1 |
| 25 | Wall-resolved LES of near-stall airfoil flow at $Re_c = 10^7$ using the supercomputer Fugaku. , 2022, , . | | 1 |