# Kenneth E Jansen

## List of Publications by Citations

| 33 papers | 1,937 citations | 16 h-index | 36 g-index |
|---|---|---|---|
| 36 ext. papers | 2,164 ext. citations | 3 avg, IF | 4.63 L-index |

| # | Paper | IF | Citations |
|---|-------|-----|-----------|
| 33 | A generalized-α method for integrating the filtered Navier–Stokes equations with a stabilized finite element method. *Computer Methods in Applied Mechanics and Engineering*, **2000**, 190, 305-319 | 5.7 | 502 |
| 32 | Large Eddy Simulation and the variational multiscale method. *Computing and Visualization in Science*, **2000**, 3, 47-59 | 1 | 434 |
| 31 | A stabilized finite element method for the incompressible Navier–Stokes equations using a hierarchical basis. *International Journal for Numerical Methods in Fluids*, **2001**, 35, 93-116 | 1.9 | 210 |
| 30 | Outflow boundary conditions for 3D simulations of non-periodic blood flow and pressure fields in deformable arteries. *Computer Methods in Biomechanics and Biomedical Engineering*, **2010**, 13, 625-40 | 2.1 | 198 |
| 29 | Computation of incompressible bubble dynamics with a stabilized finite element level set method. *Computer Methods in Applied Mechanics and Engineering*, **2005**, 194, 4565-4587 | 5.7 | 84 |
| 28 | Three-dimensional interactions between a finite-span synthetic jet and a crossflow. *Journal of Fluid Mechanics*, **2011**, 671, 254-287 | 3.7 | 64 |
| 27 | Detached direct numerical simulations of turbulent two-phase bubbly channel flow. *International Journal of Multiphase Flow*, **2011**, 37, 647-659 | 3.6 | 63 |
| 26 | Hydrodynamic simulation of air bubble implosion using a level set approach. *Journal of Computational Physics*, **2006**, 215, 98-132 | 4.1 | 54 |
| 25 | A dynamic multi-scale approach for turbulent inflow boundary conditions in spatially developing flows. *Journal of Fluid Mechanics*, **2011**, 670, 581-605 | 3.7 | 49 |
| 24 | . *Computing in Science and Engineering*, **2014**, 16, 13-21 | 1.5 | 41 |
| 23 | Cardiovascular flow simulation at extreme scale. *Computational Mechanics*, **2010**, 46, 71-82 | 4 | 36 |
| 22 | A parallel adaptive mesh method for the numerical simulation of multiphase flows. *Computers and Fluids*, **2013**, 87, 115-131 | 2.8 | 28 |
| 21 | Direct numerical simulation of turbulent channel flows using a stabilized finite element method. *Computers and Fluids*, **2009**, 38, 924-938 | 2.8 | 28 |
| 20 | A dynamic Smagorinsky model with dynamic determination of the filter width ratio. *Physics of Fluids* , **2004**, 16, 2514-2528 | 4.4 | 20 |
| 19 | SIMULATION OF THREE-DIMENSIONAL INCOMPRESSIBLE TURBULENT FLOW INSIDE TUBES WITH HELICAL FINS. *Numerical Heat Transfer, Part B: Fundamentals*, **2004**, 46, 195-221 | 1.3 | 20 |
| 18 | Unstructured mesh partition improvement for implicit finite element at extreme scale. *Journal of Supercomputing*, **2012**, 59, 1218-1228 | 2.5 | 16 |
| 17 | Spatial test filters for dynamic model large-eddy simulation with finite elements. *Communications in Numerical Methods in Engineering*, **2002**, 19, 205-213 | | 13 |

# List of Publications

| | | | |
|---|---|---|---|
| 16 | Inlet condition generation for spatially developing turbulent boundary layers via multiscale similarity. *Journal of Turbulence*, **2009**, 10, N36 | 2.1 | 12 |
| 15 | Interface Tracking Investigation of Geometric Effects on the Bubbly Flow in PWR Subchannels. *Nuclear Science and Engineering*, **2019**, 193, 46-62 | 1.2 | 10 |
| 14 | Improving Unstructured Mesh Partitions for Multiple Criteria Using Mesh Adjacencies. *SIAM Journal of Scientific Computing*, **2018**, 40, C47-C75 | 2.6 | 9 |
| 13 | Adjacency-Based Data Reordering Algorithm for Acceleration of Finite Element Computations. *Scientific Programming*, **2010**, 18, 107-123 | 1.4 | 9 |
| 12 | Effect of small roughness elements on thermal statistics of a turbulent boundary layer at moderate Reynolds number. *Journal of Fluid Mechanics*, **2016**, 787, 84-115 | 3.7 | 8 |
| 11 | Tools to support mesh adaptation on massively parallel computers. *Engineering With Computers*, **2012**, 28, 287-301 | 4.5 | 7 |
| 10 | Anisotropic Adaptation for Transonic Flows with Turbulent Boundary Layers. *AIAA Journal*, **2015**, 53, 367-378 | 2.1 | 4 |
| 9 | Direct numerical simulation of a turbulent boundary layer over a bump with strong pressure gradients. *Journal of Fluid Mechanics*, **2021**, 918, | 3.7 | 4 |
| 8 | In-memory integration of existing software components for parallel adaptive unstructured mesh workflows. *Concurrency Computation Practice and Experience*, **2018**, 30, e4510 | 1.4 | 4 |
| 7 | Wall-Modeled LES of Flow over a Gaussian Bump with Strong Pressure Gradients and Separation **2020**, | | 3 |
| 6 | Assessing and improving the accuracy of synthetic turbulence generation. *Journal of Fluid Mechanics*, **2021**, 906, | 3.7 | 2 |
| 5 | S-frame discrepancy correction models for data-informed Reynolds stress closure. *Journal of Computational Physics*, **2022**, 448, 110717 | 4.1 | 2 |
| 4 | Annular Flow Simulation Supported by Iterative In-Memory Mesh Adaptation. *Nuclear Science and Engineering*, **2020**, 194, 676-689 | 1.2 | 1 |
| 3 | Unstructured LES_DNS of a Turbulent Boundary Layer over a Gaussian Bump **2021**, | | 1 |
| 2 | A stabilized finite element method for the incompressible Navier Stokes equations using a hierarchical basis **2001**, 35, 93 | | 1 |
| 1 | Bi-fidelity reduced polynomial chaos expansion for uncertainty quantification. *Computational Mechanics*, 1 | 4 | 0 |