# Stefan Turek

List of Publications by Year
in descending order

| 26 papers | 695 citations | 1163117<br>8 h-index | 610901<br>24 g-index |
|-----------|---------------|---------------------|----------------------|
| 27 all docs | 27 docs citations | 27 times ranked | 954 citing authors |

| # | Article | IF | Citations |
|---|---------|-----|-----------|
| 1 | Swimming by reciprocal motion at low Reynolds number. Nature Communications, 2014, 5, 5119. | 12.8 | 349 |
| 2 | Direct numerical simulation of particulate flow via multigrid FEM techniques and the fictitious boundary method. International Journal for Numerical Methods in Fluids, 2006, 51, 531-566. | 1.6 | 147 |
| 3 | Analysis of Crystal Size Dispersion Effects in a Continuous Coiled Tubular Crystallizer: Experiments and Modeling. Crystal Growth and Design, 2018, 18, 1459-1473. | 3.0 | 49 |
| 4 | Numerical Study of a Modified Time-Stepping θ-Scheme for Incompressible Flow Simulations. Journal of Scientific Computing, 2006, 28, 533-547. | 2.3 | 34 |
| 5 | Implicit finite element schemes for the stationary compressible Euler equations. International Journal for Numerical Methods in Fluids, 2012, 69, 1-28. | 1.6 | 24 |
| 6 | Arduino–based slider setup for gas–liquid mass transfer investigations: Experiments and CFD simulations. AICHE Journal, 2020, 66, e16953. | 3.6 | 15 |
| 7 | A flux-corrected RBF-FD method for convection dominated problems in domains and on manifolds. Journal of Numerical Mathematics, 2019, 27, 253-269. | 3.5 | 9 |
| 8 | Simulation of Intra-Aneurysmal Blood Flow by Different Numerical Methods. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-10. | 1.3 | 8 |
| 9 | Efficient computations for high density ratio rising bubble flows using a diffused interface, coupled lattice Boltzmann-level set scheme. Computers and Mathematics With Applications, 2015, 70, 1290-1305. | 2.7 | 8 |
| 10 | Reactive Liquid–Flow Simulation of Micromixers Based on Grid Deformation Techniques. Chemical Engineering and Technology, 2017, 40, 1408-1417. | 1.5 | 8 |
| 11 | Performance aspects of a mixed s-v LSFEM for the incompressible Navier-Stokes equations with improved mass conservation. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 513-514. | 0.2 | 6 |
| 12 | An Alternative Strategy for the Solution of Heat and Incompressible Fluid Flow Problems via the Finite Volume Method. Numerical Heat Transfer; Part A: Applications, 2012, 62, 393-411. | 2.1 | 5 |
| 13 | Numerical Solutions of Population Balance Equations within Liquid/Gas–Liquid Flow Simulations. Chemie-Ingenieur-Technik, 2013, 85, 1137-1145. | 0.8 | 5 |
| 14 | Rising bubble simulations using lattice Boltzmann method coupled with level set interface capturing. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 675-676. | 0.2 | 5 |
| 15 | Error Analysis of a Projection Method for the Navier–Stokes Equations With Coriolis Force. Journal of Mathematical Fluid Mechanics, 2010, 12, 485-502. | 1.0 | 4 |
| 16 | Energy efficiency of the simulation of three-dimensional coastal ocean circulation on modern commodity and mobile processors. Computer Science - Research and Development, 2016, 31, 225-234. | 2.7 | 3 |
| 17 | The Tensor Diffusion approach for simulating viscoelastic fluids. Journal of Non-Newtonian Fluid Mechanics, 2020, 286, 104431. | 2.4 | 3 |
| 18 | Flow Map for Hydrodynamics and Suspension Behavior in a Continuous Archimedes Tube Crystallizer. Crystals, 2021, 11, 1466. | 2.2 | 3 |

| # | ARTICLE | IF | CITATIONS |
|---|---------|-----|-----------|
| 19 | Influence of higher interpolation orders in mixed LSFEM for the incompressible Navier-Stokes equations. Proceedings in Applied Mathematics and Mechanics, 2013, 13, 301-302. | 0.2 | 2 |
| 20 | Monolithic Newtonâ€multigrid FEM for the simulation of thixotropic flow problems. Proceedings in Applied Mathematics and Mechanics, 2021, 21, . | 0.2 | 2 |
| 21 | Very fast finite element Poisson solvers on lower precision accelerator hardware: A proof of concept study for Nvidia Tesla V100. International Journal of High Performance Computing Applications, 2022, 36, 459-474. | 3.7 | 2 |
| 22 | Numerical Methods and CFD Techniques for Drug Application in Brain Tumor Treatment. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10195-10196. | 0.2 | 1 |
| 23 | Least-squares finite element methods for the Navier-Stokes equations for generalized Newtonian fluids. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 623-624. | 0.2 | 1 |
| 24 | Monolithic Finite Element Method for the simulation of thixo-viscoplastic flows. , 0, , . |  | 1 |
| 25 | Modeling of liquid-solid flows with large number of moving particles by multigrid fictitious boundary method. Journal of Hydrodynamics, 2006, 18, 93-100. | 3.2 | 0 |
| 26 | A Proof of Concept for Very Fast Finite Element Poisson Solvers on Accelerator Hardware. Proceedings in Applied Mathematics and Mechanics, 2021, 21, . | 0.2 | 0 |