

## Journal Papers

- Zudrop, Jens, Kannan Masilamani, Sabine Roller, and Pietro Asinari. “A robust lattice Boltzmann method for parallel simulations of multicomponent flows in complex geometries”. In: *Computers and Fluids* 153 (2017), pp. 20–33. ISSN: 0045-7930. DOI: 10.1016/j.compfluid.2017.04.021. URL: <http://www.sciencedirect.com/science/article/pii/S0045793017301482>.
- Klimach, Harald G., Jens Zudrop, and Sabine P. Roller. “Generation of high order geometry representations in Octree meshes”. In: *PeerJ Computer Science* 1 (Nov. 2015), e35. DOI: 10.7717/peerj-cs.35.
- Zudrop, Jens, Sabine Roller, and Pietro Asinari. “Lattice Boltzmann scheme for electrolytes by an extended Maxwell-Stefan approach”. In: *Phys. Rev. E* 89 (5 May 2014), p. 053310. DOI: 10.1103/PhysRevE.89.053310.

## Other Peer Reviewed Papers

- Masilamani, Kannan, Jens Zudrop, and Sabine Roller. “Towards simulation of electro-dialytic sea water desalination”. In: *Sustained Simulation Performance 2013*. Ed. by Michael Resch, Yevgeniya Kovalenko, Eric Focht, Wolfgang Bez, and Hiroaki Kobayashi. Springer International Publishing, 2013, pp. 137–146. ISBN: 978-3-319-01439-5. DOI: 10.1007/978-3-319-01439-5\_10.
- Klimach, Harald G., Manuel Hasert, Jens Zudrop, and Sabine P. Roller. “Distributed octree mesh infrastructure for flow simulations”. In: *ECCOMAS 2012 - European Congress on Computational Methods in Applied Sciences and Engineering, e-Book Full Papers* (Vienna, Austria, Sept. 10–14, 2012). Ed. by Josef Eberhardsteiner, Helmut J. Böhm, and Franz G. Rammerstorfer. Vienna, Austria, Oct. 2012.
- Masilamani, Kannan, Jens Zudrop, Khaled Ibrahim, Matthias Johannink, Harald Klimach, Jörg Bernsdorf, Adel Mhamdi, E. M. Fernandez Sanchis, A. Hauser, Wolfgang Marquardt, and Sabine Roller. “Large scale flow simulation with complex spacer geometry in electro-dialysis for sea water desalination”. In: *Proceedings of the European Congress on Computational Methods in Applied Sciences and Engineering ECCOMAS 2012* (Vienna, Austria, Sept. 10–14, 2012). Oct. 2012.
- Roller, Sabine, Jörg Bernsdorf, Harald Klimach, Manuel Hasert, Daniel Harlacher, Metin Cakircali, Simon Zimny, Kannan Masilamani, Laura Didingler, and Jens Zudrop. “An Adaptable Simulation Framework Based on a Linearized Octree”. In: *High Performance Computing on Vector Systems 2011*. Ed. by Michael Resch, Xin Wang, Wolfgang Bez, Erich Focht, Hiroaki Kobayashi, and Sabine Roller. Springer Berlin Heidelberg, 2012, pp. 93–105. ISBN: 978-3-642-22244-3. DOI: 10.1007/978-3-642-22244-3\_7.

## Other Papers

- Zudrop, Jens, Harald Klimach, Manuel Hasert, Kannan Masilamani, and Sabine Roller. “A fully distributed CFD framework for massively parallel systems”. In: *Cray User Group 2012*. Stuttgart, Germany, Apr. 2012.