

SCI Publications

- B Parent. "Positivity-Preserving Dual Time Stepping Schemes for Gas Dynamics", *Journal of Computational Physics*, Vol. 361, Pages 391-411, 2018.
- B Parent. "Multidimensional High-Resolution Schemes for Viscous Hypersonic Flows", *AIAA Journal*, Vol. 55 (1), Pages 141-152, 2017.
- B Parent, MN Shneider, SO Macheret. "Detailed Modeling of Plasmas for Computational Aerodynamics", *AIAA Journal*, Vol. 54 (3), Pages 898-911, 2016.
- B Parent, SO Macheret, MN Shneider. Modeling Weakly-Ionized Plasmas in Magnetic Field: A New Computationally-Efficient Approach, *Journal of Computational Physics*, 300, Pages 779-799, 2015.
- B Parent. Multidimensional Flux Difference Splitting Schemes, *AIAA Journal*, 53(7), Pages 1936-1948, 2015.
- B Parent, SO Macheret, MN Shneider. Electron and Ion Transport Equations in Computational Weakly-Ionized Plasmadynamics, *Journal of Computational Physics*, 259, Pages 51-69, 2014.
- B Parent. Positivity-preserving Flux Difference Splitting Schemes, *Journal of Computational Physics*, 243, Pages 194-209, 2013.
- B Parent, MN Shneider, SO Macheret. Sheath Governing Equations in Computational Weakly-Ionized Plasmadynamics, *Journal of Computational Physics*, 232 (1), Pages 234-251, 2013.
- B Parent. Positivity-preserving High-resolution Schemes for Systems of Conservation Laws, *Journal of Computational Physics*, 231 (1), Pages 173-189, 2012.
- B Parent, SO Macheret, MN Shneider. Ambipolar diffusion and drift in computational weakly-ionized plasmadynamics, *Journal of Computational Physics*, 230 (22), Pages 8010-8027, 2011.
- B Parent. Positivity-preserving flux-limited method for compressible fluid flow, *Computers and Fluids*, 44 (1), Pages 238-247, 2011.
- B Parent, MN Shneider, SO Macheret. Generalized Ohm's law and potential equation in computational weakly-ionized plasmadynamics, *Journal of Computational Physics*, 230 (4), Pages 1439-1453, 2011.