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### 2021

#### **Generalized Acoustic Analogy Modeling of Hot Jet Noise.**

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#### **Broad Band Shock Associated Noise Modelling for High-Area-Ratio Under-Expanded Jets.**

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### 2019

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### 2018

#### **CABARET solutions on graphics processing units for NASA jets: Grid sensitivity and unsteady inflow condition effect.**

Markesteijn AP and Karabasov SA. *Comptes Rendus - Mecanique*.

### 2015

#### **Multiscale molecular dynamics/hydrodynamics implementation of two dimensional "Mercedes Benz" water model.**

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Markesteyn AP and Karabasov SA. *International Journal of Aeroacoustics* vol. 13, (1-2) 183-206.

**New two-level leapfrog scheme for modeling the stochastic Landau-Lifshitz equations.**

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**Time asynchronous relative dimension in space method for multi-scale problems in fluid dynamics.**

Markesteyn AP and Karabasov SA. *Journal of Computational Physics* vol. 258, 137-164.

**Visualising and controlling the flow in biomolecular systems at and between multiple scales: From atoms to hydrodynamics at different locations in time and space.**

Pavlov E, Taiji M, Scukins A, Markesteyn A, Karabasov S and Nerukh D. *Faraday Discussions* vol. 169, 285-302.

## 2012

**Acoustic wave focusing by non-uniform mean flow in a rectangular duct with viscous walls.**

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## 2010

**Tunable hydrodynamic chromatography of microparticles localized in short microchannels.**

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## 2009

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**Size-dependent trajectories of DNA macromolecules due to insulative dielectrophoresis in submicrometer-deep fluidic channels.**

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