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Nano-particle drag prediction at low Reynolds number using a direct Boltzmann–BGK solution approach

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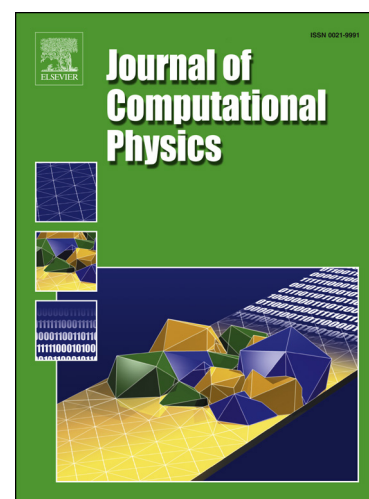
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Highlights

- A novel finite element approach for solution of the Boltzmann-BGK equation.
- Nano-particle drag prediction.
- Drag predictions are aligned well with alternative numerical approaches.
- Significance of molecular wall absorption assumptions demonstrated.
- Applications in a range of fields, including medical, is outlined.

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