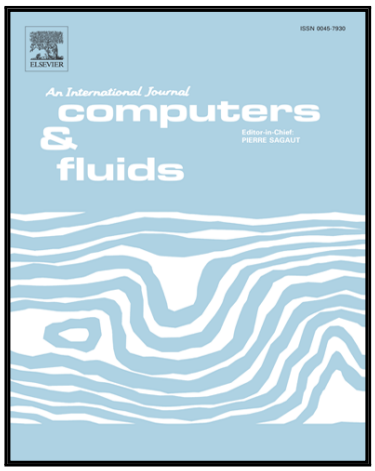

Propulsive efficiency in drag-based locomotion of a reduced-size swimmer with various types of appendages

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Highlights

- The propulsive efficiency of drag-based swimmers with appendages is investigated.
- The effect of appendage morphology on hydrodynamic performance is explored.
- Flow simulations are performed via a parallelized immersed boundary approach.
- Efficiency may not be linearly correlated with thrust and flow perturbations.
- Swimmer design needs to consider energetic efficiency, as well as produced thrust.