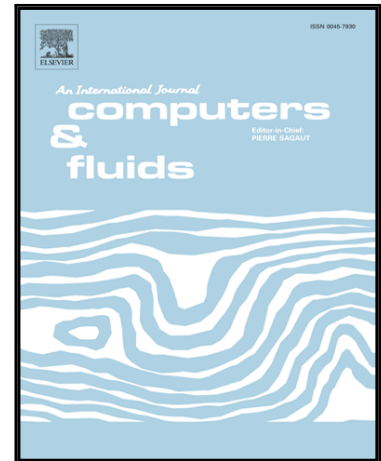


## Accepted Manuscript

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

Asimina Kazakidi, Dimitris P. Tsakiris, John A. Ekaterinaris

PII: S0045-7930(18)30100-2  
DOI: [10.1016/j.compfluid.2018.03.002](https://doi.org/10.1016/j.compfluid.2018.03.002)  
Reference: CAF 3763



To appear in: *Computers and Fluids*

Received date: 10 February 2017  
Revised date: 2 November 2017  
Accepted date: 1 March 2018

Please cite this article as: Asimina Kazakidi, Dimitris P. Tsakiris, John A. Ekaterinaris, Propulsive efficiency in drag-based locomotion of a reduced-size swimmer with various types of appendages, *Computers and Fluids* (2018), doi: [10.1016/j.compfluid.2018.03.002](https://doi.org/10.1016/j.compfluid.2018.03.002)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**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.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/7156244>

Download Persian Version:

<https://daneshyari.com/article/7156244>

[Daneshyari.com](https://daneshyari.com)