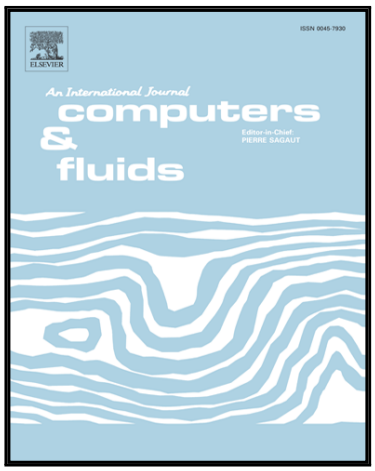

Wake Effect on a Semi-Active Flapping Foil based Energy Harvester by a Rotating Foil

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Highlights

- Wake effect on power extraction of a flapping foil is studied.
- The flapping foil executes a forced pitch, and a plunge is induced.
- An auxiliary foil is placed in the upstream of the flapping foil.
- The wake both increases the lift force and decreases the torque of flapping foil.
- The efficiency is improved under specific combined distance and phase difference.