

Supplementary Information
Hydrodynamic Performance of Oscillating Elastic
Propulsors With Tapered Thickness

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Movie 1. Bending profile of propulsors at resonance $r = 1$ with (a) uniform attachment and (b) exponential attachment. Bending profile of propulsors off-resonance $r = 2$ with (c) uniform attachment and (d) exponential attachment.

Movie 2. Snapshots of normalized Q -criterion contours ($Q\tau^2 = 5$) colored by y -component of the vorticity for the propulsors with the uniform attachment (a) at resonance $r = 1$ and (b) off-resonance $r = 2$.

Movie 3. Snapshots of normalized Q -criterion contours ($Q\tau^2 = 10$) colored by y -component of the vorticity for the propulsors with the exponential attachment (a) at resonance $r = 1$ and (b) off-resonance $r = 2$.

Movie 4. Snapshots of normalized Q -criterion contours ($Q\tau^2 = 10$) colored by y -component of the vorticity for the propulsors with the the parabolic convex attachment (a) at $r = 1.2$ and (b) at $r = 2.4$.

Movie 5. Snapshots of normalized vorticity field at (a) $r = 1.2$ and (b) $r = 2.4$ for the parabolic convex attachment.