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## The caption of Movie. S1:

Movie. S1. Movement of micro particle actuated by a bio-syncretic tweezer with Pandorina morum cells in light-spot induced mode.

#### The caption of Movie. S2:

Movie. S2. Movement of micro half-cylinder actuated by a bio-syncretic tweezer with Chlamydomonas reinhardtii cells in geometric shape-induced mode.

## The caption of Movie. S3:

Movie. S3. Movement of micro half-cylinder actuated by a bio-syncretic tweezer with Pandorina morum cells in geometric shape-induced mode.

### The caption of Movie. S4:

Movie. S4. Rotation of micro gear with wide teeth actuated by a bio-syncretic tweezer with Pandorina morum cells in geometric shape-induced mode.

# The caption of Movie. S5:

Movie. S5. Rotation of micro gear with narrow teeth actuated by a bio-syncretic tweezer with Pandorina morum cells in geometric shape-induced mode.