

## Tentative Outline (Preliminary Proposal of Thematic Issue)

### Special/Thematic Issue for the journal *Current Chinese Science* – Field: Biophotonics

#### Title of the Thematic Issue: Optical Tweezers and Bio-Micromotors for Biophotonic Applications

*Guest Editor's Name: Hongbao Xin*

- **Scope of the Thematic Issue (Brief introduction / abstract explaining the Thematic Issue):**

Single cell manipulation and actuation is of great importance for single cell analysis at the single-cell or even subcellular level. And optical tweezers have served as a versatile tool for single cell manipulation. Meanwhile, micromotors and robots also serve as a flexible tool that can be used for cell manipulation and actuation. Optical tweezers and micromotors hold great promises for single cell manipulation and actuation with higher precisions. This thematic issue publishes both original research paper and review articles related to optical tweezers and bio-micromotors and their applications in biophotonics.

**Keywords:** Optical tweezers, bio-micromotors, cell trapping, cell manipulation, micromotor actuation, drug delivery, cell regulation

#### Sub-topics:

- Numerical simulation and experimental design on optical trapping and optical tweezers
- Novel optical manipulation techniques
- Design of bio-micromotor for cell manipulation
- Optical tweezers and bio-micromotors for biophotonics manipulation and cell regulation.

#### Schedule:

- ✧ Thematic issue submission deadline: 31 January 2023

#### Details of Guest Editor:

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