

Indexed in: PubMed



an Open Access Journal by MDPI

Magnetic Manipulation of Micro/Nano Objects

Guest Editors:

Prof. Dr. Xiaotao Han

Wuhan National High Magnetic Field Center, Huazhong University of Science and Technology, Wuhan, China

Prof. Dr. Quanliang Cao

Wuhan National High Magnetic Field Center & State Key Laboratory of Advanced Electromagnetic Engineering and Technology, Huazhong University of Science and Technology, Wuhan 430074, China

Deadline for manuscript submissions:

closed (30 August 2022)

Message from the Guest Editors

Dear Colleagues,

Manipulation of micro/nano objects has numerous potential applications in various fields, including (but not limited to) engineering, medicine, physics, chemistry, and biology, which can be achieved using several types of external fields, such as the electric, magnetic, optical, and acoustic fields. Among them, magnetic field-based manipulation has attracted widespread attention over the past few decades due to its advantageous features, such as wireless remote actuation, high degree of controllability, programmability, and versatility. There is still a long way to go in terms of the development of high-performance magnetic tools, multifunctional actuation strategies, and deep understanding of the mechanism of magnetically driven micro/nano objects.

In this Special Issue, we welcome original research papers and review papers related to the applications (such as magnetic micro/nanorobots, colloidal assembly, separation, trapping, and mixing), fundamentals, design, and underlying mechanisms of magnetic manipulation of micro/nano objects, including analytical, numerical, and experimental analysis. We look forward to receiving your submissions

Guest Editors













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China 2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

 $\textbf{High Visibility:} \ \text{indexed within Scopus, SCIE (Web of Science), PubMed,} \\$

PMC, Ei Compendex, dblp, and other databases.

Journal Rank: JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Mechanical Engineering)

Contact Us