


Characterization and Application of Nanomaterials

1. Section Collection: **Micro-nano scale**

2. Deadline for Manuscript Submission: **2024-03-31**

3. Section Editors' Information:

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Research Interest:	MEMS, Nanofabrication, Ultrasound, PMUT
Profile Photo(for web-page)	

4. Summary: **Micro-nano scale (300-500 words)**

Dear Colleagues,

In the realm of scientific innovation, the micro-nano scale emerges as a frontier of immense potential and intricate challenges. This realm, characterized by its minute scale, opens doors to a world where conventional laws of physics blend with quantum mechanics, leading to groundbreaking discoveries and applications. The field of micro-nano science is not just about scaling down materials but also about exploring and harnessing novel phenomena that manifest uniquely at this scale. It encompasses the study and manipulation of materials, phenomena, and techniques that exist or operate at the micro and nano scale, typically within the submicron ranges.

The primary aim of this section is to spotlight the cutting-edge developments in micro-nano science, particularly focusing on novel micro/nano materials, phenomena, and fabrication techniques. This includes exploring the synthesis of new materials at the micro-nano scale, which exhibit unprecedented properties and applications in various fields such as electronics, medicine, and energy. Additionally, this section delves into the novel phenomena that occur at this scale, providing insights that challenge and

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advance our understanding of material science, physics, and chemistry. The innovative micro/nano fabrication techniques, which are pivotal in realizing practical applications of these materials and phenomena, are also a key focus. The goal is to shed light on how these techniques are revolutionizing industries by enabling the creation of more efficient, smaller, and smarter products and systems.

In this section, we also aim to foster a multidisciplinary dialogue among scientists and researchers from diverse fields, such as physics, chemistry, engineering, and biotechnology, who are contributing to the rapid advancements in micro-nano science. We believe that this collaborative approach is crucial in addressing the complex challenges and leveraging the full potential of micro-nano scale technologies.

We encourage submissions that not only present innovative research in micro/nano materials, phenomena, and fabrication techniques but also explore the novel applications arising from these advancements. The convergence of these micro and nano innovations is expected to be a cornerstone for future technological breakthroughs.

We eagerly anticipate your valuable contributions to this exciting and evolving field.

Dr. Kaustav Roy

Section Editor

5. Keywords: Micro/Nano materials, Micro/Nano fabrication, Micro/nano phenomena, applications of micro/nano technology