



State-of-the-Art Ultra-Low Field Techniques and Magnetic Nanoprobe for the Application in Biochemistry

Guest Editors:

Prof. Dr. Li Yao

Institute of Chemistry Chinese
Academy of Sciences,
Zhongguancun North First Street
2, Beijing 100190, China

Prof. Dr. Jianfeng Zeng

School of Radiation Medicine
and Protection, Suzhou Medical
College of Soochow University,
Suzhou, China

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Message from the Guest Editors

Magnetic nanoprobe has great potential in biochemical applications, because of their biocompatibility, magnetism responsiveness, and favorable biomolecule-comparable sizes. The development of ultra-low field (ULF) techniques allows for the direct detection of in situ magnetic nanoprobe because of the low magnetic background of biological samples, which enables highly sensitive sensing and imaging. Recent developments of ULF techniques include giant magnetoresistance sensors, superconducting quantum interference devices, atomic magnetometers and magnetic particle imaging, among others. The precise determination of the position and quantity of the magnetic nanoprobe is critical for their chemical and biological applications.

This Special Issue aims to provide a broad overview of the most recent developments in ULF techniques and magnetic nanoprobe for their application in biochemistry. Contributions (including full papers, communications and reviews) concerning reports or overviews on new methodologies, techniques, or materials in the biochemical applications of ULF techniques or magnetic nanoprobe are welcome.





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Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical
Biology and Phytochemistry,
University of Münster,
Corrensstrasse 48, D-48149
Münster, Germany

Message from the Editor-in-Chief

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Molecules Editorial Office
MDPI, Grosspeteranlage 5
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