

Special Issue

Liquid-Phase Electron Microscopy in Biological Applications and Material Sciences

Message from the Guest Editor

This Special Issue will include results from bio-related fields and material sciences and consider the future direction of the electron microscopy of specimens in liquid. The observation of biological samples, the nano-structures of materials and their dynamics, are of high interest for this Special Issue. We also aim to address experimental and technical challenges that have to be met in order to use an instrument that requires a vacuum environment to image a specimen in liquid. We envisage reports of novel specimen preparation methods and adapted instrumentation, e.g., the development of new specimen holders that include a micro-fluidics chamber and of electro-chemical holders that allow phenomena to be clarified at a molecular level and, of course, the modification of scanning, transmission and scanning transmission electron microscopes (TEM, STEM, and SEM) for their use. The study of metal sedimentation and electrochemical reactions are also of high interest for this Special Issue. Contributions relevant to basic biology, applied biology, and diagnostic research (because they exploit the speed of liquid-phase electron microscopy) are encouraged.

Guest Editor

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Deadline for manuscript submissions

closed (31 March 2021)



International Journal of Molecular Sciences

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.0
Indexed in PubMed



mdpi.com/si/44124

*International Journal of
Molecular Sciences*
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Message from the Editor-in-Chief

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