Special Issue

Correlative Microscopy: Workflows and Applications in Materials Science

Message from the Guest Editors

Almost 40 years have passed since the first paper was published by M. Osborn, R.E. Webster and K. Weber describing the possibility of combining light and electron microscopy to observe the same region of interest. Later, this particular approach to microscopy became known as correlative microscopy, and the combination of these two techniques is called CLEM—Correlative Light to Electron Microscopy. For a long time, this technique was strictly limited to the life sciences, but the need for specific and different information from a particular region of interest has extended this approach to materials science, including other characterization techniques such as RAMAN, AFM or XRM.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

Application of different combinations of correlative microscopy in material science.
Development of innovative workflows for fast and accurate correlative microscopy.
Methods of data analysis for correlative microscopy, including the employment of IA systems.

Guest Editors

Dr. Francesco Mura
Prof. Dr. Marco Rossi
Dr. Daniele Passeri

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Journal of Experimental and Theoretical Analyses
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jeta@mdpi.com

mdpi.com/journal/jeta

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The intricate relationship between theory and experiment is the cornerstone of engineering progress. At the Journal of Experimental and Theoretical Analyses (JETA), we are committed to exploring these connections through rigorous and innovative research. The journal is a dedicated platform for presenting pioneering analyses that push the boundaries of what is possible in engineering.

Our journal serves as a crucial nexus where theoretical insights meet experimental validation, advancing the understanding of complex engineering phenomena. The comprehensive exploration of these topics not only contributes to academic knowledge, but also leads to practical applications that address real-world engineering challenges.

Editor-in-Chief

Prof. Dr. Marco Rossi
Department of Basic and Applied Sciences for Engineering, Sapienza University of Rome, Via A. Scarpa 16, 00185 Rome, Italy

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