Special Issue

Technology and Application of Electrochemical Impedance Spectroscopy

Message from the Guest Editors

This Special Issue is devoted to the application of the electrical impedance spectroscopy technique for the characterization of a wide range of materials. The characterization of such electrochemical devices as well as high and intermediate temperature gas sensors, biosensors, fuel cells, resistive, capacitive, and impedance sensors via impedance spectroscopy opens a bright prospective to significantly increase their performance.At the same time, EIS data are collected through a potentiostat/galvanostat apparatus in the form of Nyquist or Bode plots. The following topics are encouraged : Current advances and challenges in electrochemical device development and characterization by EIS; Properties tailoring and characterization of magnetic materials and of advanced materials for gas sensors, biosensors, resistive, capacitive, and impedance sensors/devices; Determination of mechanisms that control the kinetics of prevailing processes in oxide, non-oxide, polymeric, and composite materials bulk or over the interfaces; Investigation of corrosion processes and wearable devices by EIS; Electrical spectroscopy apparatus development.

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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