

Special Issue

Recent Advances in Electrodes for Proton-Conducting Solid Oxide Fuel Cells

Message from the Guest Editors

Proton Ceramic Fuel Cells enjoy several advantages when compared to classical oxide-ion-conducting fuel cells, such as an improved efficiency at lower operating temperature and the absence of steam-dilution of the fuel at the anode side of the cell. However, working at the intermediate-temperature range decreases the overall performance of the cell. Development of different strategies with the capability of optimizing the electrical and electrochemical behaviour in the appropriate temperature range is currently required. In this regard, the design of new electrode materials with suitable ionic-electronic conducting properties or optimized microstructural features as well as innovative electrode architectures have emerged recently. The aim of this special issue is to present recent advances in the electrochemical performance of Proton Conducting Fuel Cells through optimisation of the electrode behaviour, encompassing structural, microstructural or architectural approaches. The special issue is now open for submission of original research manuscripts and review works.

Guest Editors

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Prof. Dr. David Marrero-López

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Deadline for manuscript submissions

closed (28 February 2022)



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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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