

Peer Review

Review of: "Impedance of a Hydrogen–Fed SOFC Anode: Analytical and Numerical Models Based on the Dusty Gas Transport Model"

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The article presents an interesting study on the analytical and numerical models to provide a tool to help in the analysis of EIS spectra on SOFC anodes. The topic is relevant and very interesting. However, the model was only tested with one spectrum, and the parameters obtained from the fit are very important. I would like them to demonstrate this model by fitting more experimental results. For instance, a comparison of spectra obtained at varying hydrogen pressures (p_{H_2}), temperatures, and with different anode materials could provide valuable insights. The composition and microstructure of the anodes significantly affect the electrochemical response, which in turn influences the spectra obtained by EIS. To validate and demonstrate the model, it is essential to fit additional experimental spectra.

Declarations

Potential competing interests: No potential competing interests to declare.