

Electrochemical performance of novel NGCO-LSCF composite cathode for intermediate temperature solid oxide fuel cells	
Authors	Aysha Samreen, Maria Galvez-Sanchez, Robert Steinberger-Wilckens, Nor Anisa Arifin, Saim Saher, Shahid Ali, Affaq Qamar
Publication Year	2020
Grant Number	IMSIU-RG23022
DOI link	<a href="https://doi.org/10.1016/j.ijhydene.2020.04.122">10.1016/j.ijhydene.2020.04.122</a>
<b>Abstract:</b> Solid oxide fuel cells (SOFCs) have attracted a lot of interest since they convert chemical energy of hydrogen or hydrocarbon based fuels to electrical energy directly at high efficiency and with no emission of atmospheric pollutants, apart from water and carbon dioxide. The electrical energy produced can be used for powering vehicles or driving electrical machinery or appliances. This technology has an important drawback, though: the high operating temperature implies higher degradation of the electrode materials over time, thus hindering commercialization of this technology at a large scale. Therefore, continuous research is being carried out to improve the electrode material for lowering the polarization resistance at intermediate temperature range that improve the overall cell efficiency [1,2].	