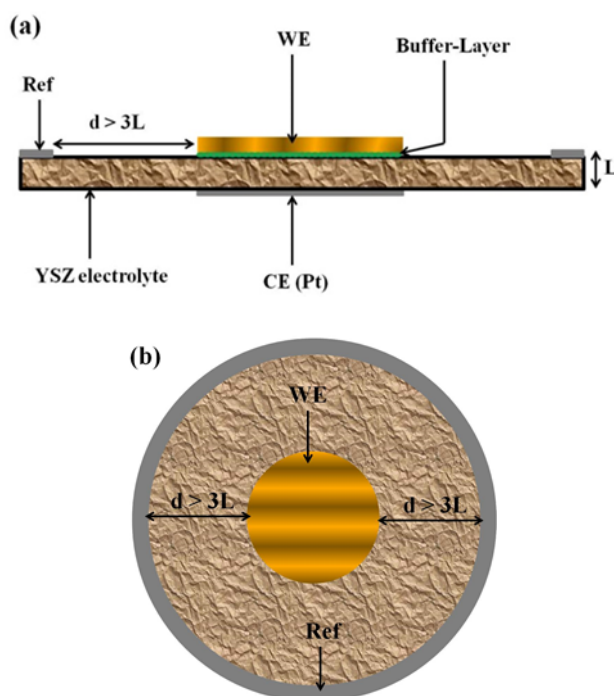


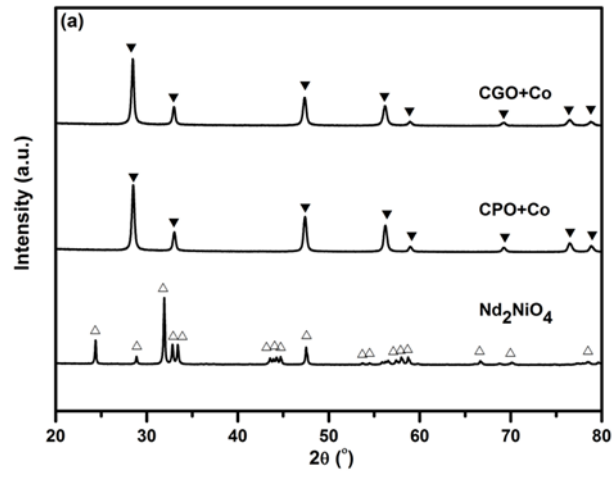
## Electronic Supplementary Information

# Enhancing electrochemical performance by control of the transport properties in buffer layers – Solid oxide fuel/electrolyser cells

Devaraj Ramasamy<sup>a</sup>, Narendar Nasani<sup>a</sup>, Ana Brandão<sup>a</sup>, Domingo Pérez Coll<sup>b</sup> and Duncan P. Fagg<sup>a\*</sup>



**Fig. S1** Experimental set-up employed for the electrochemical characterization. Working electrode was placed with the counter electrode in symmetrical configuration with an external Pt ring reference electrode to complete the 3-probe configuration. (a) cross-sectional view and (b) top view.



**Fig. S2** XRD patterns of prepared phases of CGO+Co, CPO+Co and  $\text{Nd}_2\text{NiO}_{4+\delta}$