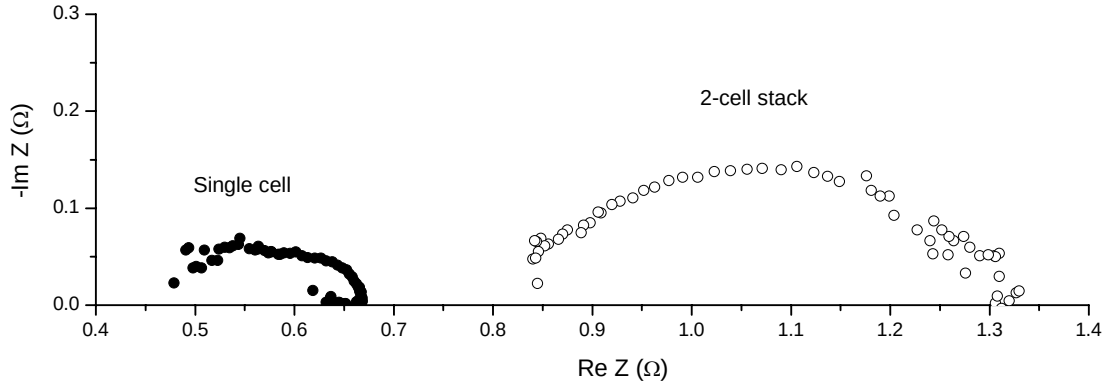
Impedance spectroscopy of the thermally self-sustained fuel cells.



Supplementary Figure. 1 The impedance spectroscopy of the single cell and 2-cell stack under temperature self-sustained condition at a feed composition of 40 ml.min^{-1} C_3H_8+90 ml.min^{-1} O_2+360 ml.min^{-1} He (all at STP). The temperature of the fuel cell is corresponding to ~580 ^{o}C for single cell and ~575 ^{o}C for the two-cell stack. Impedance measurement was conducted under OCV condition using combined Solartron 1260A frequency response analyzer and PAR EG&G 273A Potentiostat/Galvonostat. The electrolyte resistance was responsible for ~65% of the total fuel cell resistance.