**Supporting information** 

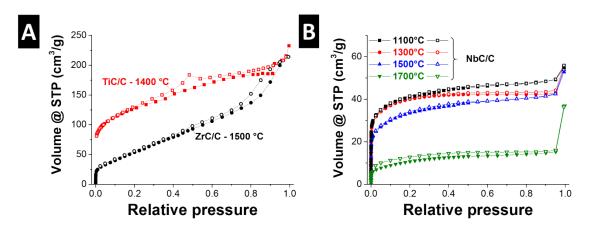


Fig. S1 Isotherms measured using nitrogen gas sorption analysis of (A) TiC/C synthesized at 1400 °C and ZrC/C synthesized at 1500 °C. (B) Isotherms for NbC/C annealed at different temperatures. STP = standard temperature and pressure. Filled symbols = adsorption; open symbols = desorption.