**Supplementary Materials**



**Figure S1: TGA profiles of a) VO2.0.5 H2O / ZrV2O7 , b) Ga doped VO2.0.5 H2O / ZrV2O7, ), c) Cr doped VO2.0.5 H2O / ZrV2O7  and , d) Cs doped VO2.0.5 H2O / ZrV2O7**



**Figure S2: DSC profiles of a) VO2.0.5 H2O / ZrV2O7 , b) Ga doped VO2.0.5 H2O / ZrV2O7, ), c) Cr doped VO2.0.5 H2O / ZrV2O7  and , d) Cs doped VO2.0.5 H2O / ZrV2O7.**