

Figure 1. WVTR value ratio of TFE layer consisted of Al<sub>2</sub>O<sub>3</sub> and (with or without) additional layer before and after applying bending stress (bending radius of 5mm and 2.5mm).

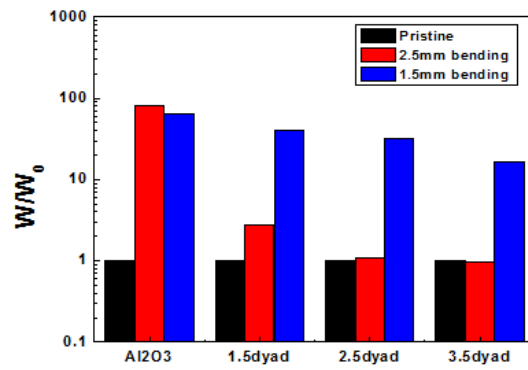
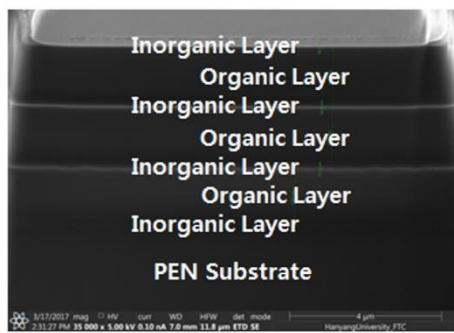


Figure 2. FE-SEM image of 3 dyad ex-situ organic/inorganic hybrid layer (left) and its WVTR value ratio before and after applying bending stress (right).