Supporting information for "A study of drop-coated and chemical bath- deposited buffer layers for vapour phase deposition of large area, aligned, zinc oxide nanorod arrays" by D. Byrne *et al*.



**Figure S1:** SEM images of VPT growth on two-stage buffer layers. (a,c,e,g,h) Plan view (b,d,f,h,j) 90° view of regions highlighted on the photograph of sample after deposition.



Figure S2: (a) Low temperature (18 K) PL spectrum of ZnO nanorods deposited by CBD on acetate-derived seed layer using hexamethyltetramine (b) Low temperature (18 K) PL spectrum of ZnO nanorods deposited by VPT on a two-stage buffer layer. The instrumental gain setting was the same for both PL spectra and thus the intensity scales in (a) and (b) are comparable.



**Figure S3:** SEM images of VPT growth on two-stage buffer layer using a smaller alumina boat and compressed source powder during CTR step. (a) Plan view (b) 45° view (c)90° view or nanorod array deposited



**Figure S4:** AFM image of (a) unannealed HMT-derived two-stage buffer layer (b) HMT-derived two-stage buffer layer annealed at 925°C



**Figure S5:** SEM image of (a) plan view (b) 45° view of unannealed HMT-derived two-stage buffer layer (c) plan view (d) 45° view of HMT-derived two-stage buffer layer annealed at 925°C