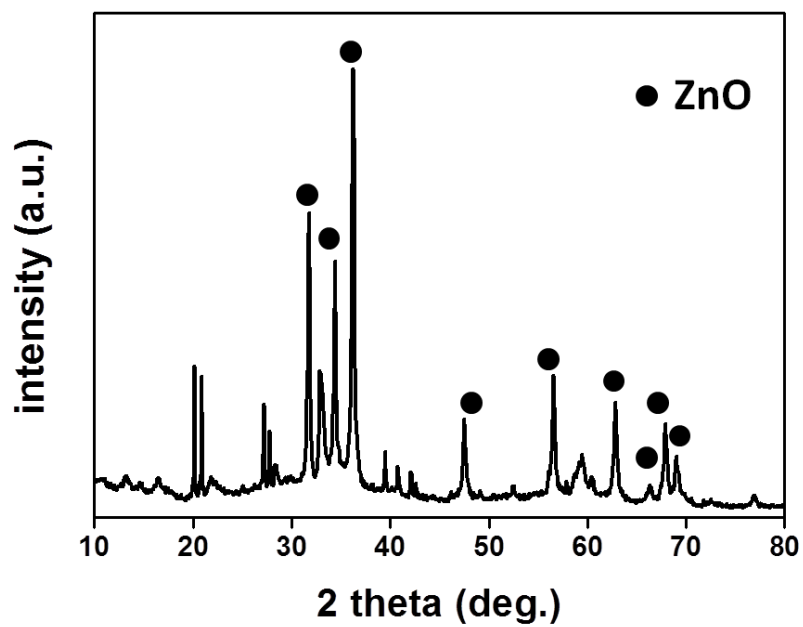
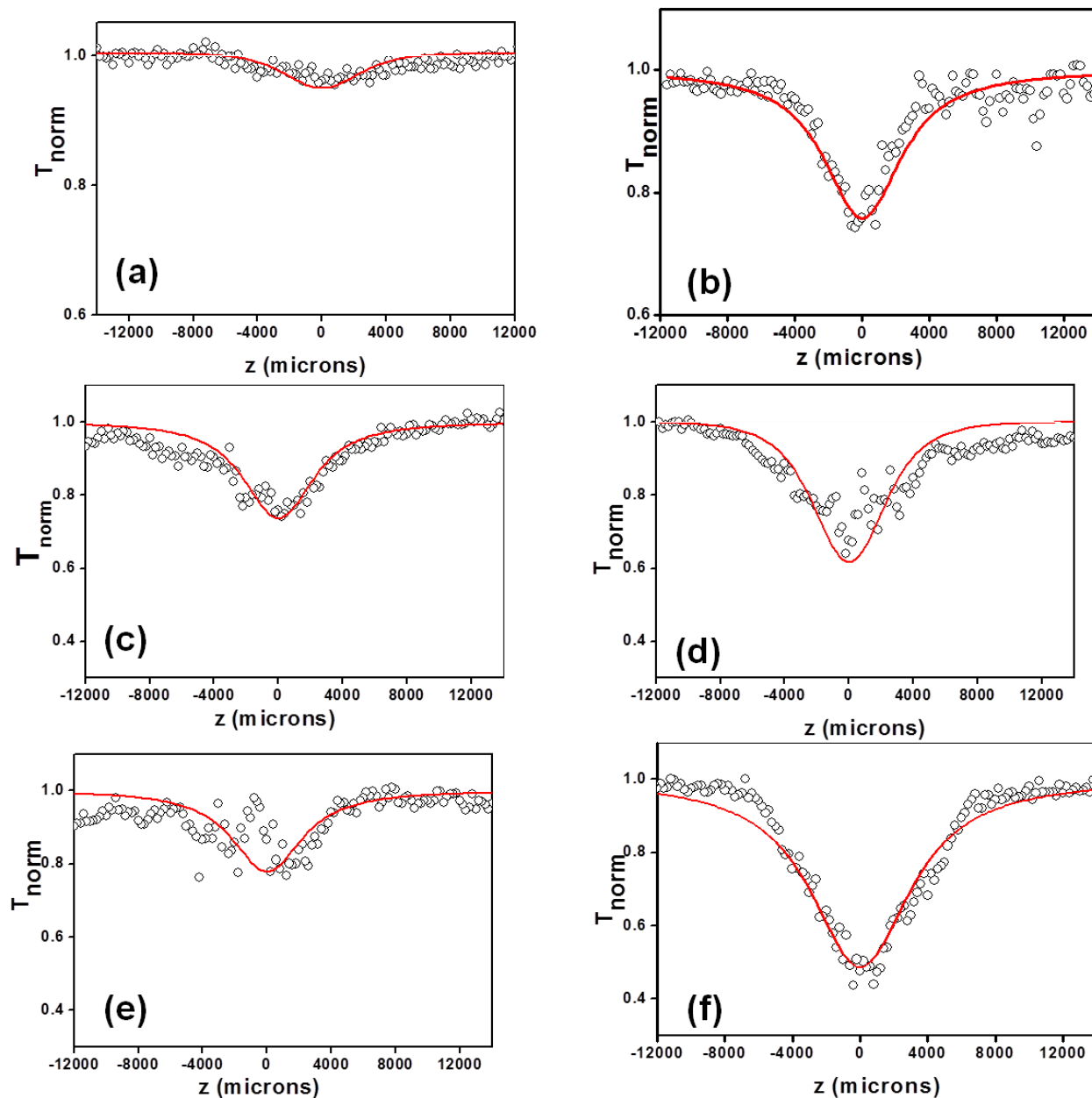


Supplementary Information



S1: XRD pattern of ZnO synthesized without using PVP



S2. The open aperture Z-scan curves of (a) pure ZnO by hydrothermal synthesis, (b) GO, (c) S-rGO-ZnO-10, (d) S-rGO-ZnO-30, (e) H-rGO-ZnO-10, and (f) H-rGO-ZnO-30. The circles denote the experimental results. The solid lines indicate the theoretical fitting curves