

Electronic supporting Information

**Interfacial Anion Vacancies Engineered Graphitic Carbon Nitride Photoelectrode
for Promoting Charge Separation**

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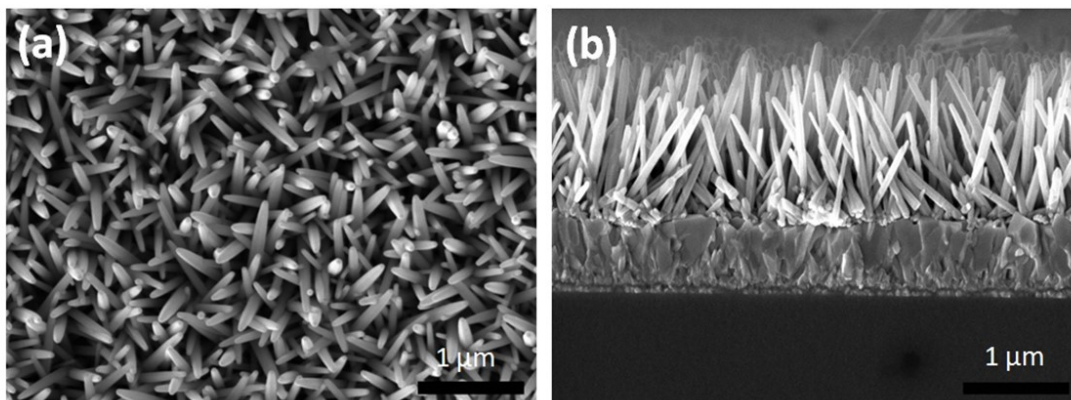


Figure S1. Top viewed (a) and cross-sectional SEM images (b) of ZnO nanorod.

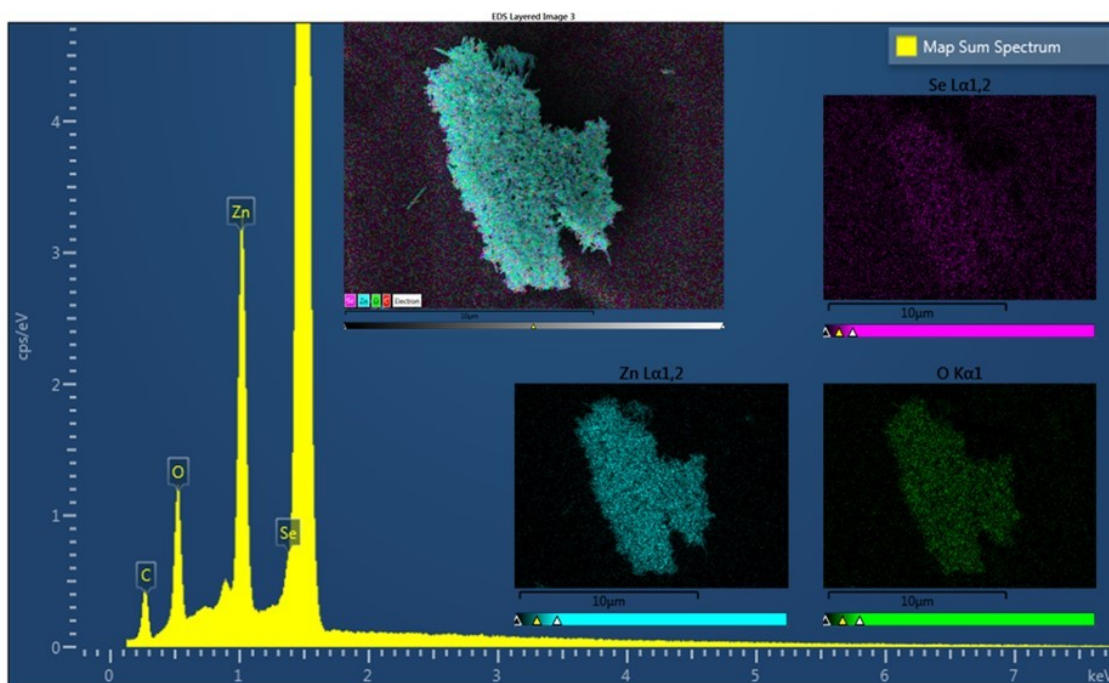


Figure S2. EDS results of ZnO@ZnSe in Figure 2(a). The EDS images recorded on a scale of 10 μm.

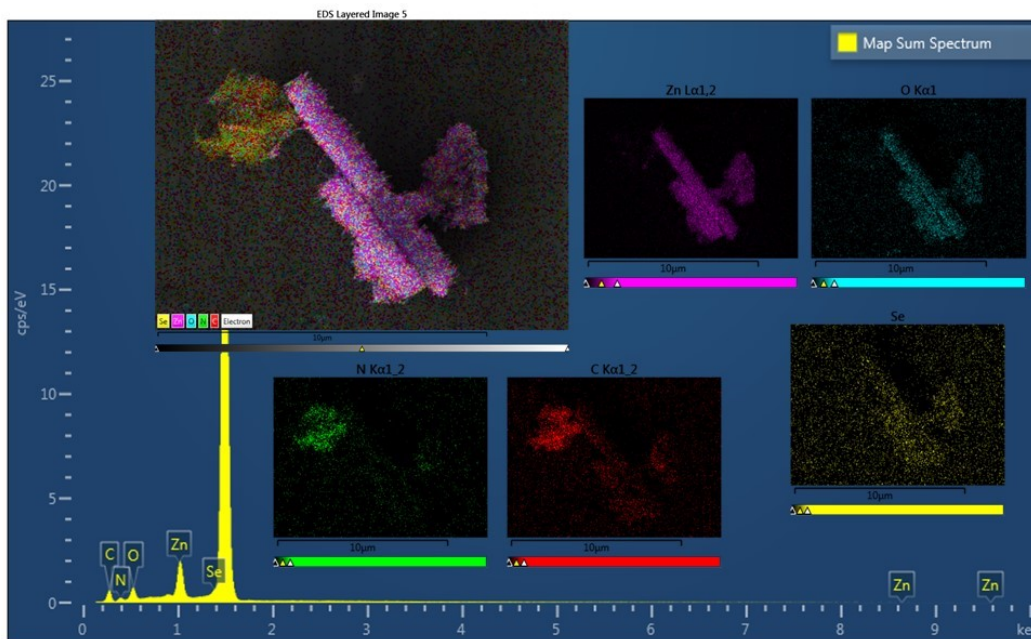


Figure S3. EDS of ZnO@ZnSe@g-C₃N₄ in Figure 2(b). The EDS images recorded on a scale of 10 μm.

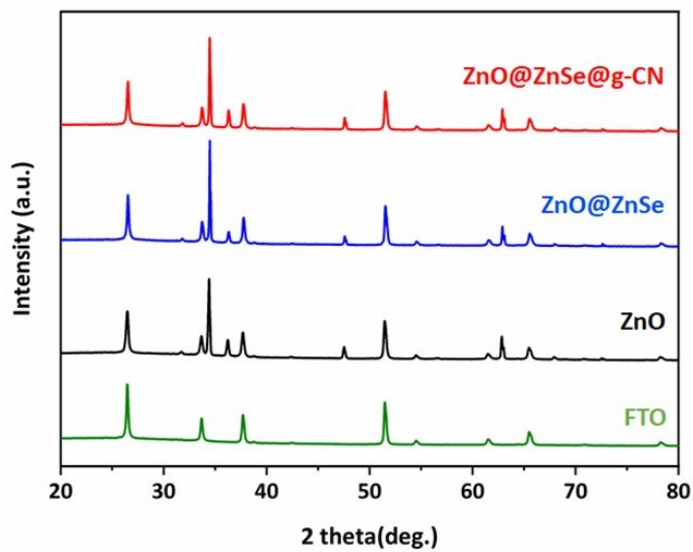


Figure S4. XRD result of FTO (green), ZnO (black), ZnO@ZnSe (blue) and ZnO@ZnSe@g-C₃N₄ (red).

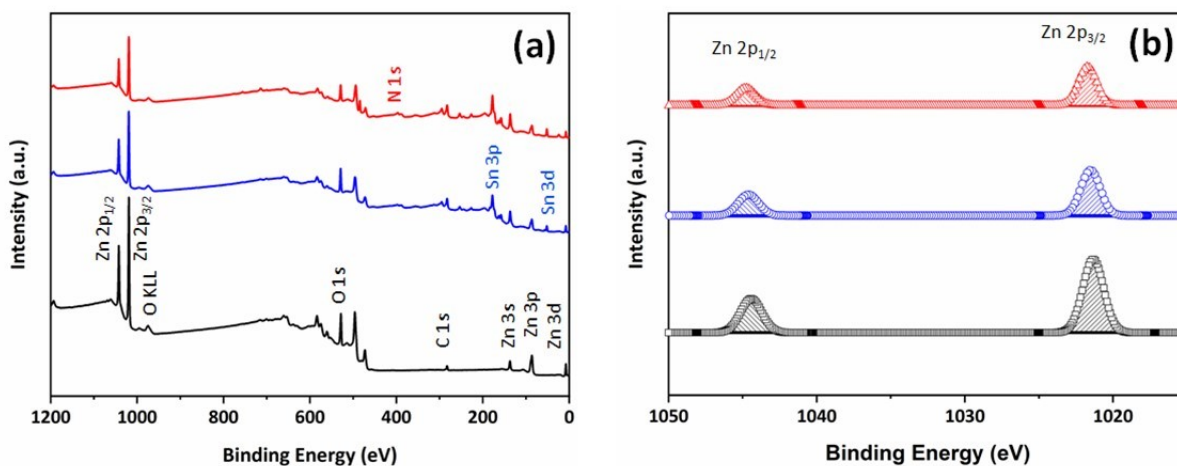


Figure S5. XPS spectra of wide range (a) and binding energy of Zn (b) in ZnO (black), ZnO@ZnSe (blue) and ZnO@ZnSe@g-C₃N₄ (red).

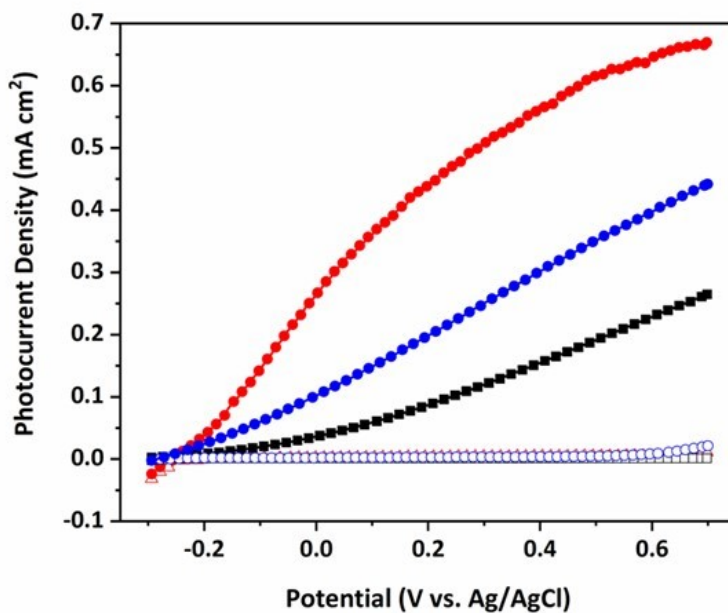


Figure S6. LSV of ZnO (black), ZnO@ZnSe (blue) and ZnO@ZnSe@g-C₃N₄ (red) under dark (empty mark) and under illumination (filled mark).

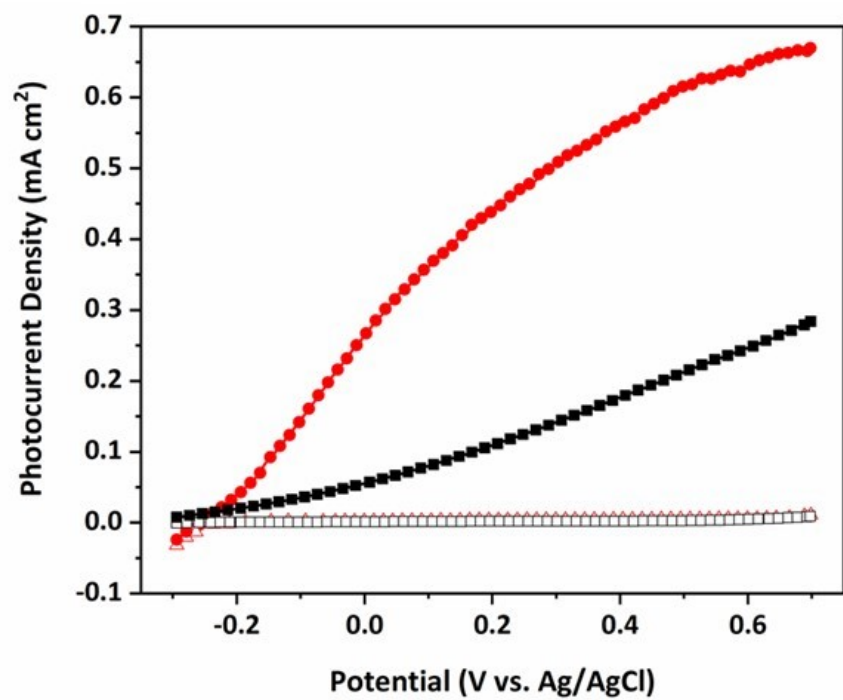


Figure S7. LSV of ZnO@ZnSe@g-C₃N₄ in N₂ treatment (red) and in air treatment (black).

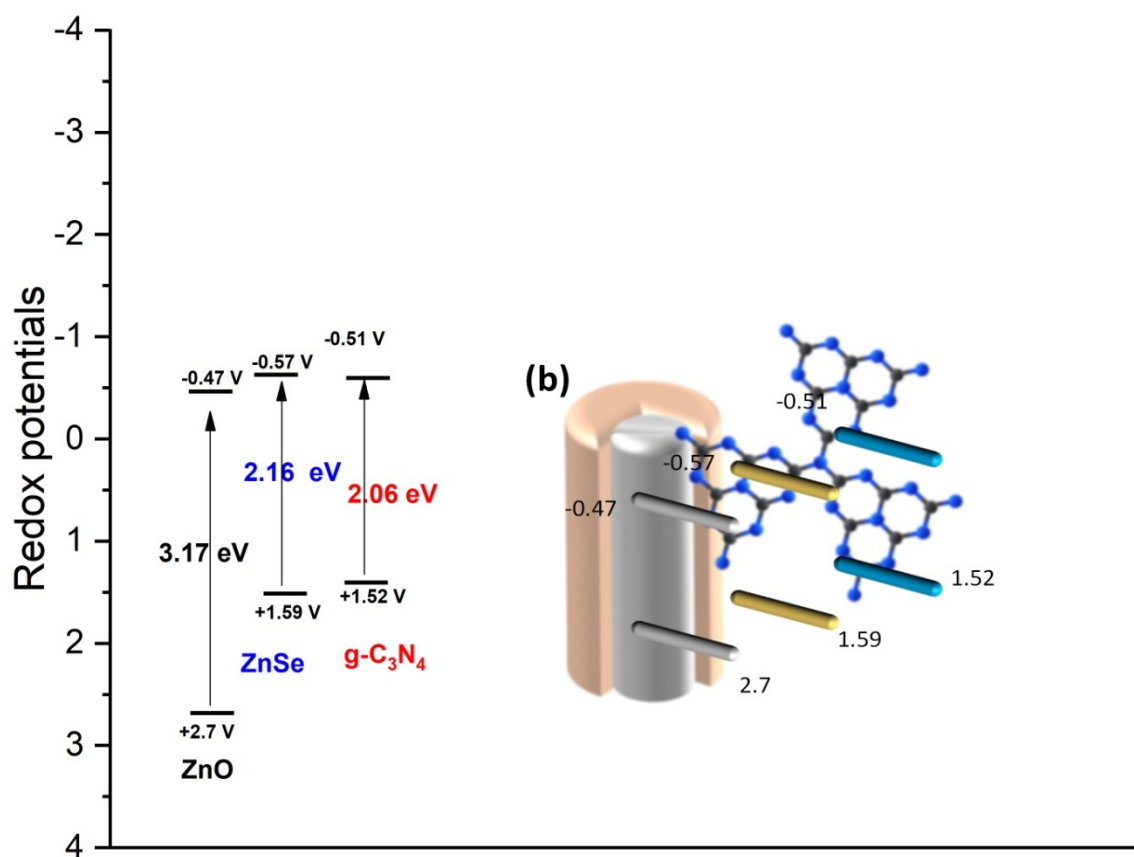


Figure S8. Band diagram of ZnO, ZnSe and g-C₃N₄ of Figure 8(b).