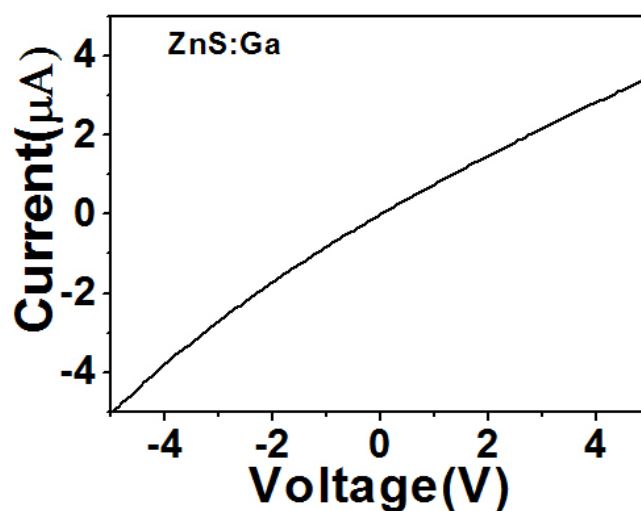
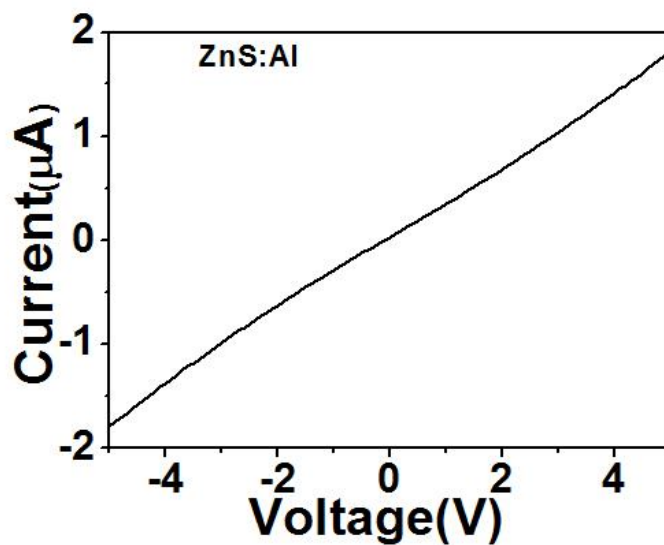


## Supporting Information

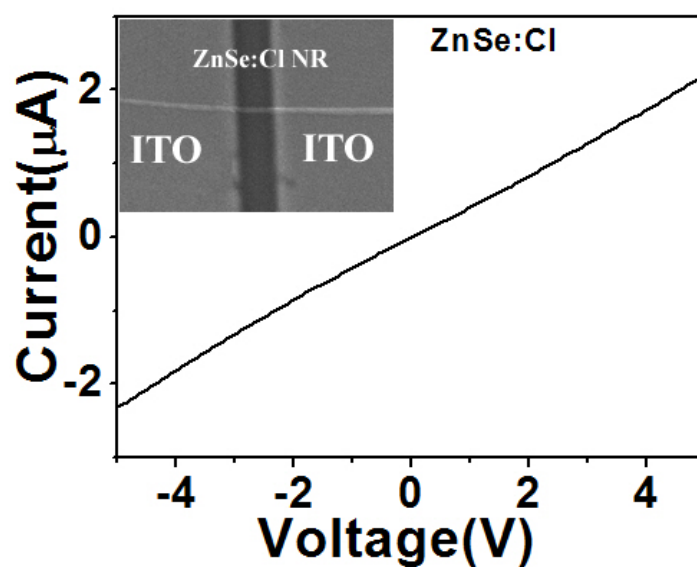
**Ohmic contact of ITO with other kinds of n-type II-VI nanostructures:** Besides n-ZnS:Cl NRs, ITO also exhibits ideal Ohmic contact with a variety of n-type wide band-gap II-VI nanostructures such as ZnS:Ga, ZnS:Al, and ZnSe:Cl NRs, as shown in the following figures. Our results demonstrate that ITO could be an excellent electrode for nano-devices based on n-ZnS and n-ZnSe nanostructures.



**Figure S1.** Typical I-V curve of an individual n-type ZnS:Ga NR. ITO was used as the source and drain electrodes.



**Figure S2.** Typical I-V curve of an individual n-type ZnS:Al NR. ITO was used as the source and drain electrodes.



**Figure S3.** Typical I-V curve of an individual n-type ZnSe:Cl NR. ITO was used as the source and drain electrodes. Inset shows the SEM image of the device.