

Paper-Based ZnS:Cu Alternating Current Electroluminescent Devices for Current Humidity Sensors with High-Linearity and Flexibility

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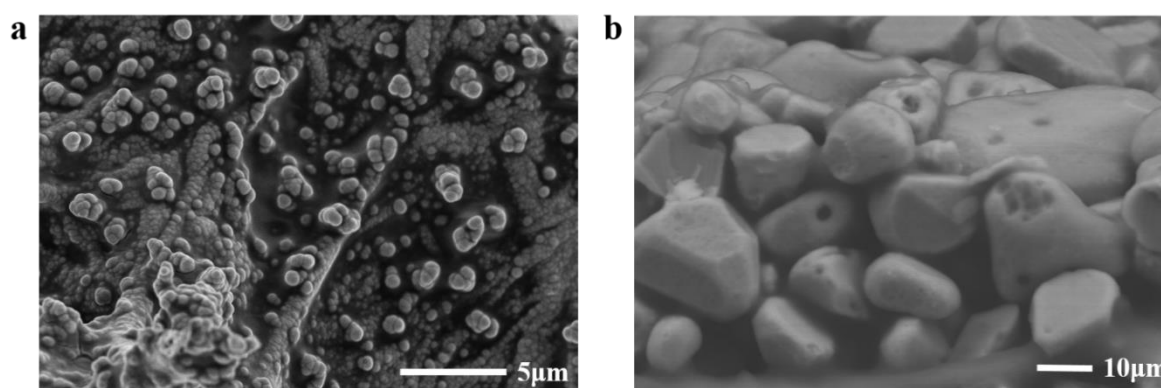


Figure S1. The SEM images of (a) Ni layer (b) ZnS:Cu.

Figure S1a shows the surface of Ni-P layer via electroless plating which can be found that lots of homogeneously dispersed Ni nanoclusters were grown on filter paper successfully. And from Figure S1b, it can be seen that ZnS:Cu particles wrapped by PB glue were tightly packed together.

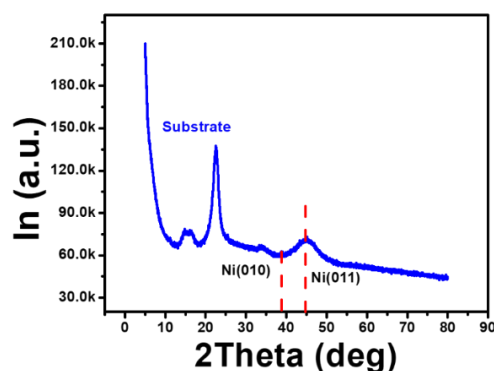


Figure S2. XRD spectrum of the Ni layer.

Figure S2 shows the XRD results. The characteristic peak of Ni $\sim 44.8^\circ$ and $\sim 38.8^\circ$ are visible, indicating that the Ni layer was successfully deposited.

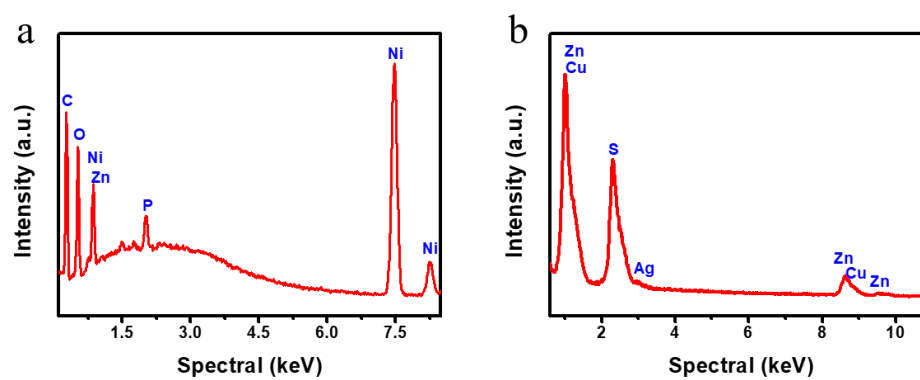


Figure S3. The EDS spectrum of (a) paper-based ACEL device and (b) phosphor layer.