

## Electronic Supplementary Information

# A novel self-powered strain sensor based on ZnO /PEDOT:PSS hybrid structure

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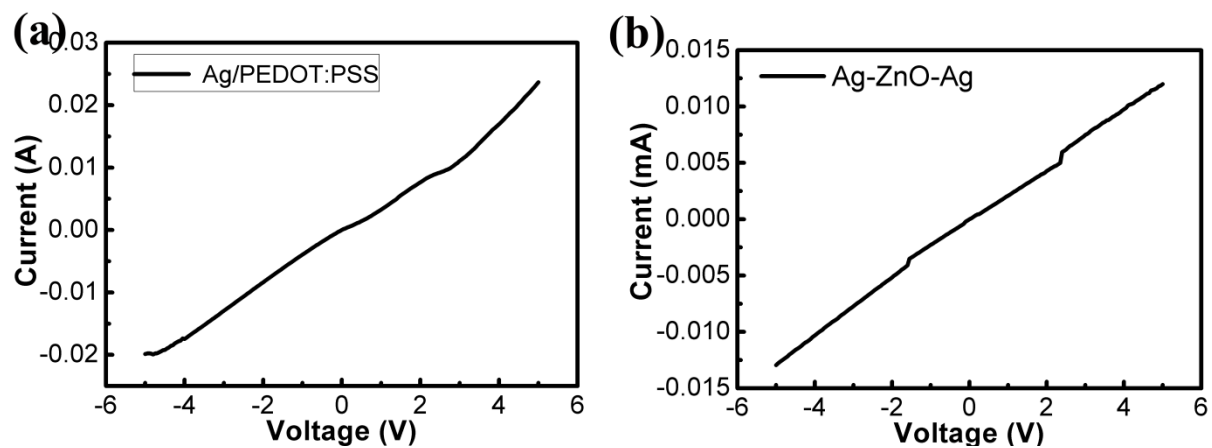


FIG. S1. (a) I-V characteristic between Ag and PEDOT:PSS, (b) I-V characteristic of Ag-ZnO-Ag structure.

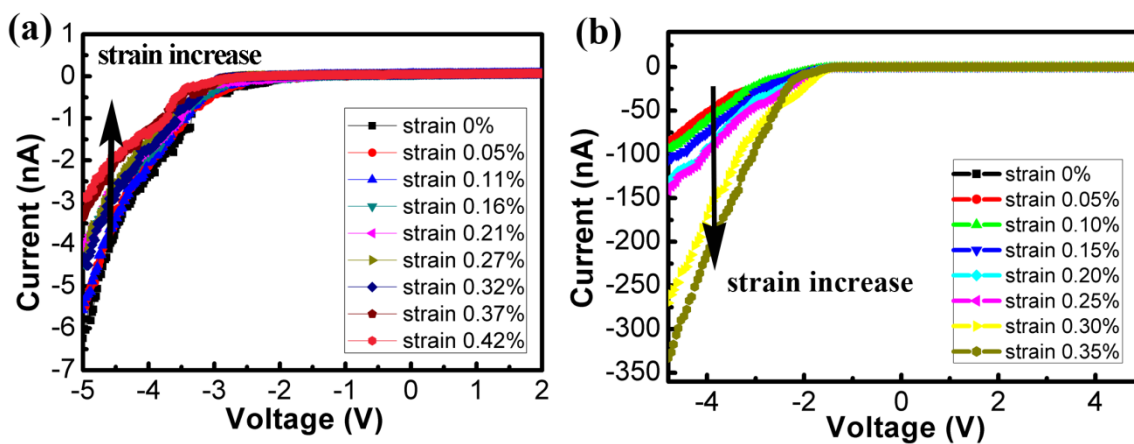


FIG. S2. I-V characteristics of other two devices under stretched strain when the direction of ZnO wire is opposite.

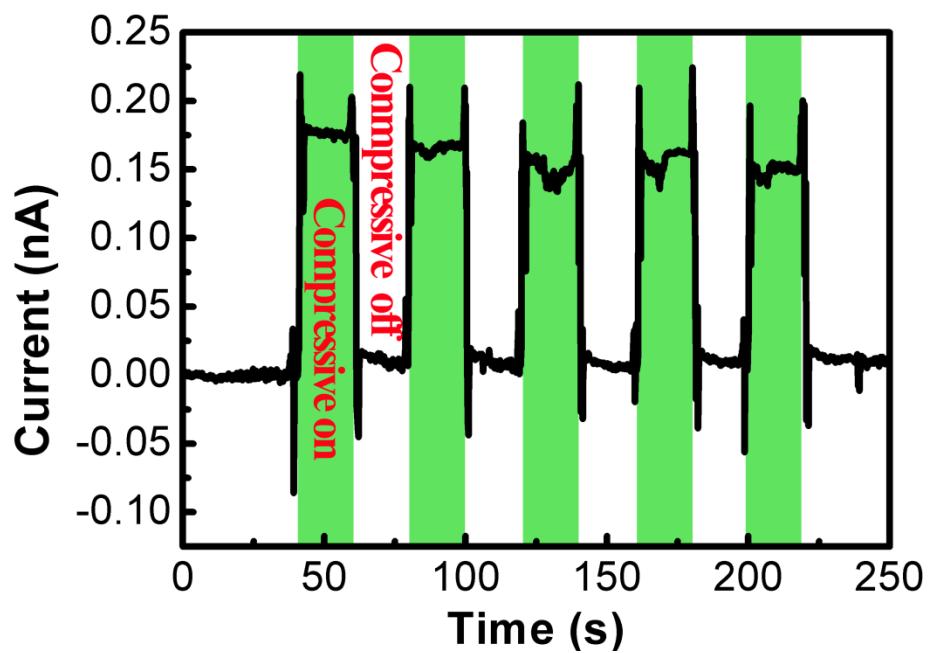


FIG. S3. Current responses of the device under repeated compressive strains and solar light without bias.

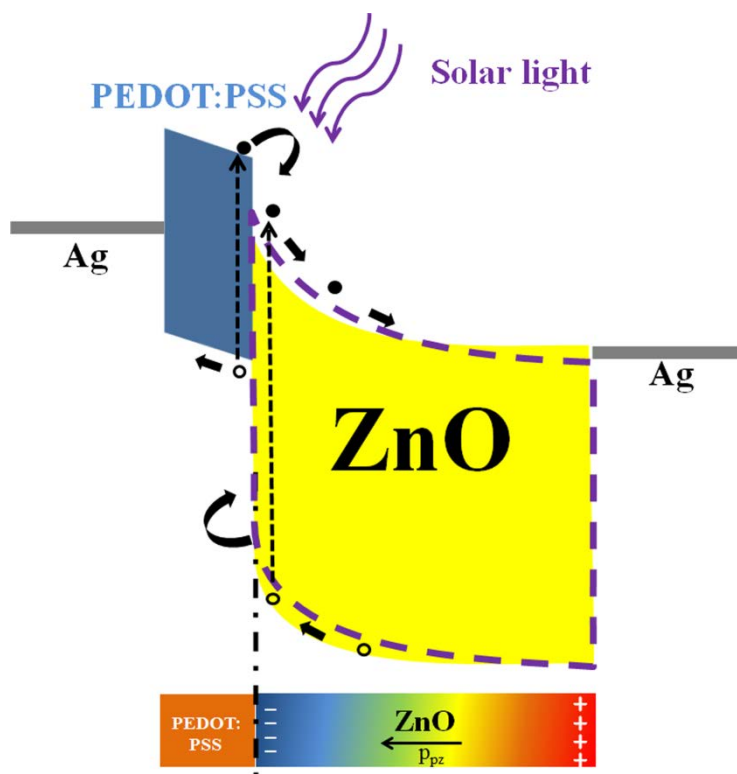


FIG. S4. Energy band diagram of the hybrid structure under solar light. The purple dish lines represent the modified energy band diagram of ZnO under compressed strain.