## Piezoelectric performance enhancement of ZnO flexible nanogenerator by a CuO-ZnO p-n junction formation

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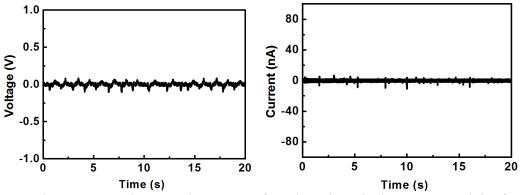


Fig S1. The output voltage and current of Au/PET/Cu device, measured in forward connection. No obvious out signal can be observed. (applied force 0.6 kgf)

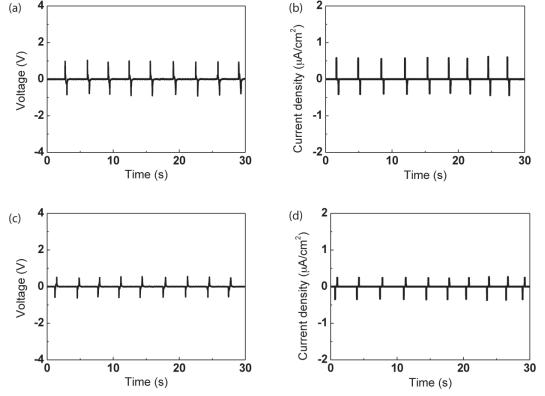


Fig S2. The output voltage and current of Au/ZnO(60nm)/PET/Cu device, measured under forward connection (a, b) and reverse connection (c, d).

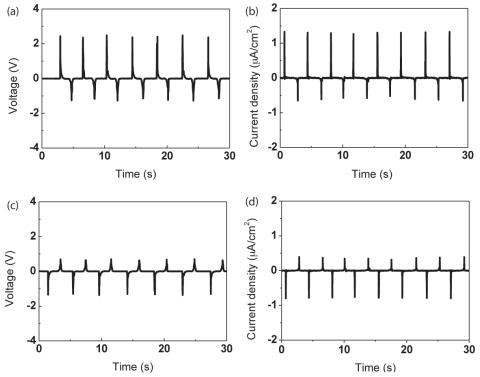


Fig S3. The output voltage and current of Au/ZnO(100nm)/CuO(100nm)/PET/Cu device, measured under forward connection (a, b) and reverse connection (c, d).

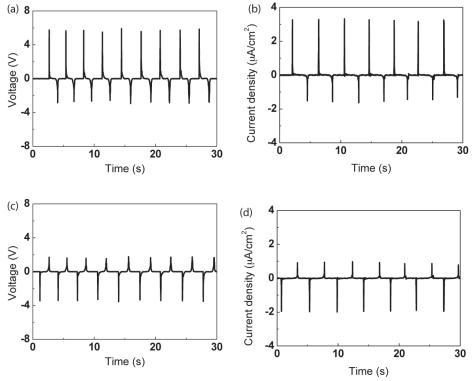


Fig S4. The output voltage and current of Au/ZnO(60nm)/CuO(100nm)/PET/Cu device, measured under forward connection (a, b) and reverse connection (c, d).

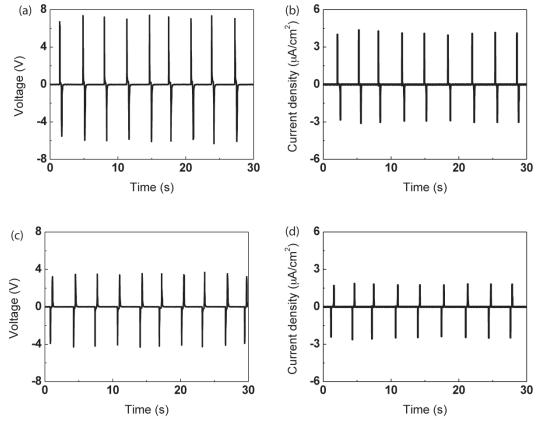


Fig S5. The output voltage and current of Au/ZnO(60nm)/CuO(300nm)/PET/Cu device, measured under forward connection (a, b) and reverse connection (c, d).

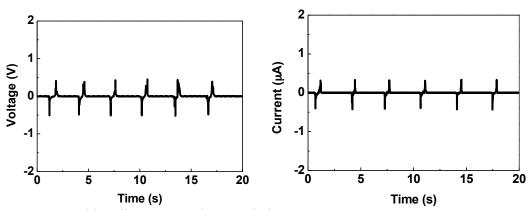


Fig S6. Downward bending output characteristics.