Supporting Information

Novel interfacial bulk heterojunction technique for enhanced response in ZnO nanogenerator

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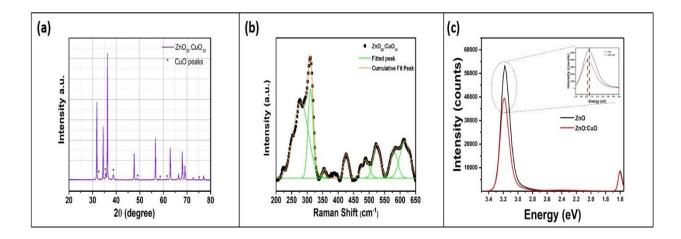


Figure S1. X-Ray diffraction of $ZnO:C_{10}$ sample (a) Raman of ZnO and CuO (b) Raman spectra of ZnO:C₁₀ sample (c) Photoluminescence of ZnO and of ZnO:C₁₀ sample

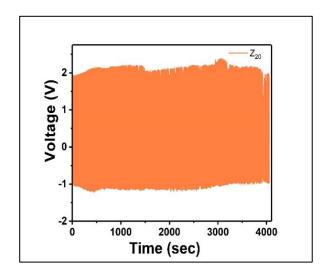


Figure S2. Reliability studies of ZnO – Z₂₀ Sample

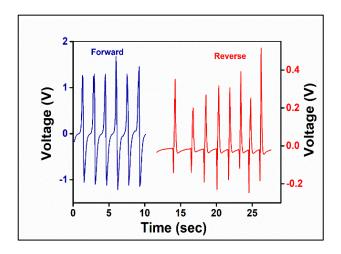


Figure S3. Piezoelectric output in forwards and reverse connection

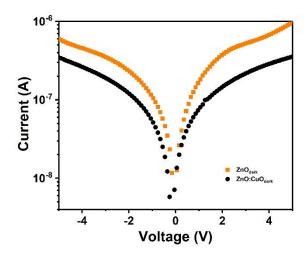


Figure S4. IV_{dark} plot for ZnO and ZnO:C₁₀

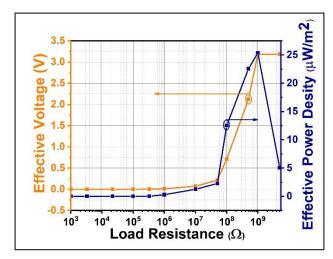


Figure S5. Effective power density calculation

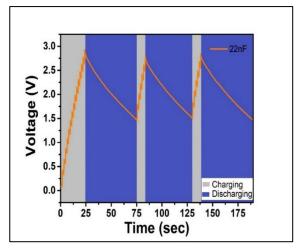


Figure S6. Charging and discharging 22nF capacitor

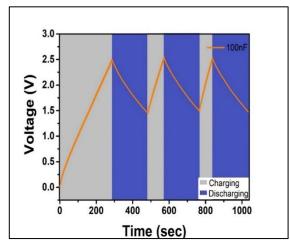


Figure S7. Charging and discharging 100nF capacitor

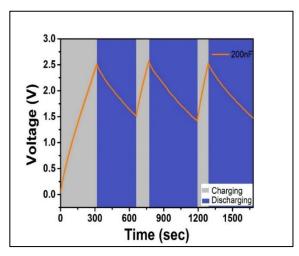


Figure S8. Charging and discharging 200nF capacitor

Table S1. Supplementary data for simulation

	ZnO	CuO	Air
Relative permittivity	{8.5, 8.5, 10.2}	100	1
potential	1 V	0	0
radius	1µm	100nm	-

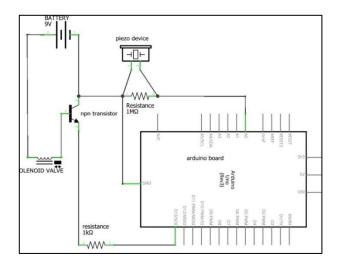


Figure S9: circuit diagram for PSU