

## Supplementary information

### Flexible unipolar thermoelectric devices based on patterned poly[K<sub>x</sub>(Ni-ethylenetetrahiolate)] thin films

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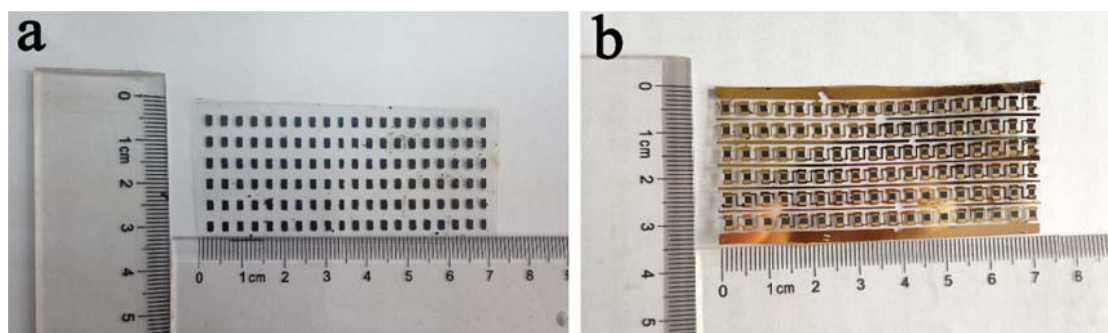


Figure S1. (a) Photograph of poly[K<sub>x</sub>(Ni-ett)] films contacting directly to the PET substrate. (b) Photograph of a unipolar poly[K<sub>x</sub>(Ni-ett)] TE device.

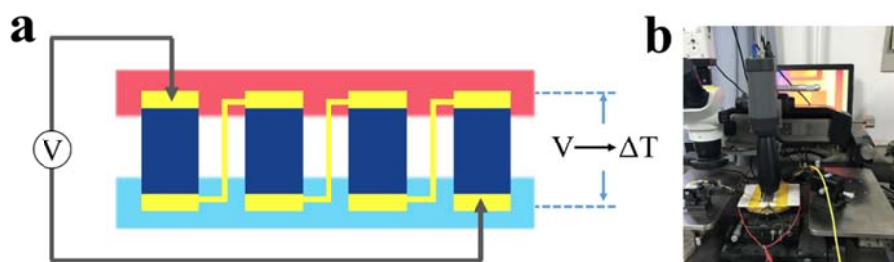


Figure S2. (a) Schematic (b) photograph of the experimental setup for testing Seebeck, conductivity, I-V curve and stability. Temperature difference was generated by voltmeter and measured by infrared thermometer between a hot and a cold Peltier elements. The thermoelectric performance was obtained by semiconductor parameter analyser.