Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: TI-TENG-based power source. Demonstration of lighting up hundreds of LEDs by a TITENG power source

File Name: Supplementary Movie 2

Description: Storage of electricity and charging of a commercial thermohygrometer. Demonstration of electricity storage process on a bridge circuit and driving of portable electronics like thermohygrometer by self-powered TI-TENG.

File Name: Supplementary Movie 3

Description: Storage of electricity and charging of a portable currency detector. Demonstration of electricity storage process on a bridge circuit driving of portable electronics like UV-light detector by self-powered TI-TENG.

File Name: Supplementary Movie 4

Description: Self-powered game controller. Demonstration of an integrated TI-TENG sensory arraybased game controller.

File Name: Supplementary Movie 5

Description: Self-powered wireless smart glasses. Demonstration of real-time signal sensing ability to serve as a self-powered music controller via a TI-TENG sensory array.