

Supporting Information

Biomimetic Ant Silk Fiber Mat-based Robust Triboelectric Nanogenerator for Advanced Tactile Sensing Applications

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Table S1. Parameters used to perform the COMSOL simulation of PVC-TENG

Parameters	Values
The dielectric constant of the air (ϵ_0)	$8.854 \times 10^{-12} \text{ Fm}^{-1}$
The dielectric constant of the SFM (ϵ_r)	1.73
The thickness of the air gap (x_{\max})	10 mm
The thickness of the PU film (x_{PU})	0.12 mm
The thickness of the SFM film (x_{SFM})	0.08 mm
Area of the device (A)	$40 \times 40 \text{ mm}^2$
Surface charge density	$5 \mu\text{C/cm}^2$

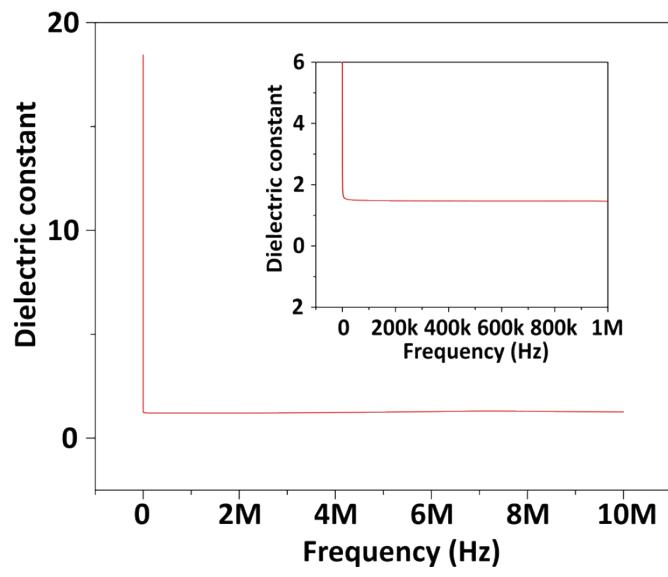


Figure S1. Dielectric measurement of SFM film.