

Description of additional supplementary files

Supplementary Movie 1 : FEA for the standalone device under stretching, bending, and twisting deformations

Supplementary Movie 2 : Deformationability and wearability of the fabricated device

Supplementary Movie 3 : Real-time robustness tests for the platform under uniaxial 25% stretching

Supplementary Movie 4 : Monitoring for subtle physiological activities at the throat

Supplementary Movie 5 : Monitoring for body motions

Supplementary Movie 6 : Wireless monitoring of overall integrated device

Supplementary Movie 7 : Clinical tests and comparisons