Supporting Information

Fast-Response Humidity Sensor based on Laser Printing for

Respiration Monitoring

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Fig. S1 Schematic illustration of the femtosecond laser printing system.



Fig. S2 Laser scanning confocal microscope image of the PEDOT: PSS micron line fabricated by laser printing.



Fig. S3 Atomic force microscopy images of the PEDOT: PSS micron line fabricated

by laser printing.



Fig. S4 The Raman spectrum of the PEDOT: PSS micron line fabricated by laser printing.



Fig. S5 The typical one cycle breathing with exhale and inhale process. (a) Slow, (b)

Normal, (c) Fast..



Fig. S6 The response of PEDOT: PSS humidity sensor to finger slipping over.



Fig. S7 Respiratory monitoring curves of anesthetized rat.