Electronic Supplementary Information (ESI) for Lab on a Chip.

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Electronic Supplementary Information (ESI)

Highly Efficient Sample Stacking by Enhanced Field Amplification on a Simple Paper Device

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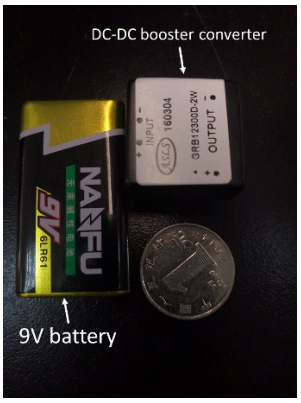

Figure S1 Picture of the battery driven power supply. The power supply is comprised of a DC-DC booster converter (output voltage is 300 V) and a 9 V battery. The booster converter is low cost ($ 23), which is also applicable to other handheld power sources.

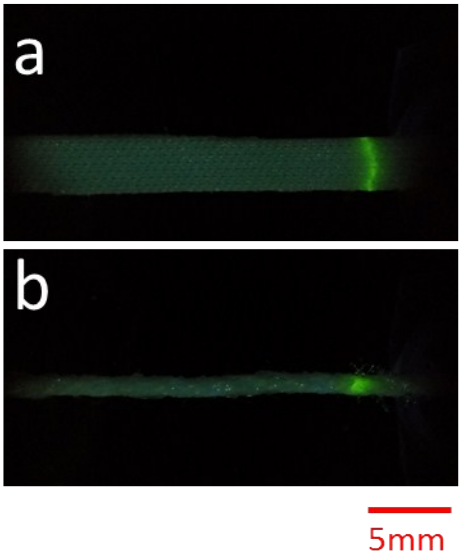

Figure S2 Demonstration of eFASS on different fiber substrates: (a) a piece of polyester cleaning cloth (30 mm×3 mm), (b) a cotton thread (30 mm long, 1 mm in diameter). Both the thread and cloth were purchased from local textile market without any pre-treatments. Sample solution was 1 µM fluorescein sodium prepared with 2 mM Tris-HCl and the BGE was consist of 200 mM Tris-HCl and 1 % PVP. The voltage was 300V from the battery driven power supply.