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## **Supplementary Material**

## Low-Cost Screen Printed Glass Electrode with Silver Nano-Ink for

## **Electrochemical Detection of H<sub>2</sub>O<sub>2</sub>**

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**Fig. S1**(a) Prepared screen-printed frame showing the image of electrode and (b) enlarged view of electrode



Fig. S2. TGA curve of AgNP/PVA performed with a Perkin Elmer STA 6000 simultaneous thermal analyzer with a scan rate of  $10^{\circ}$ /min



**Fig. S3.** (a) The effect of sintering temperatures (25, 60, 80, 100, 120 and140 °C) on the resistance of AgNP-PVA on different substrates (glass, PET and PVC) at sintering time of 30 min. (b) effect of different sintering time (10, 20, 30, 40 and 60 min) on the resistance of AgNP-PVA on different substrates at constant sintering temperature of 100 °C

S.No.	Reduction Current, A	Reduction Potential, V
1.	-2.9448 x10 <sup>-05</sup>	-0.46539
2.	-3.1737 x10 <sup>-05</sup>	-0.44342
3.	-3.2659 x10 <sup>-05</sup>	-0.43121
	$SD=\pm 1.65 \times 10^{-06}$	$SD=\pm 0.17321$
	Mean= $-3.13 \times 10^{-05}$	Mean=-0.446673
	RSD= <u>+</u> 1.76%	$RSD=\pm 1.30\%$