Electronic Supplementary Material (ESI) for Nanoscale Advances. This journal is © The Royal Society of Chemistry 2020

Supporting Information

Title: Inkjet Printing of Silver nanowire on flexible surfaces and methodologies to improve conductivity and stability of the printed patterns

1. Details of the cartridge used for printing

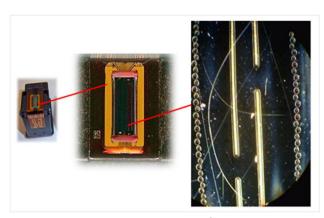


Figure 1 - A high resolution image of a cartridge nozzle plate (Ref : https://inkjet411.com/?page_id=8990)

Table 1. Parameters of cartridge

| Page yield (black and white) | ~600 pages |
|----------------------------------|------------------------|
| Print head nozzles | 336 |
| Printhead swath (inch) | 1.42 cm (0.56) |
| Nozzle diameter | ~10 μm |
| Cartridge color | Black |
| Technology | Ink |
| Print cartridge volume delivered | 4 ml |
| Operating temperature range | 15 to 32° C |
| Non-Operating Humidity Range | 20 to 80% RH |
| Operating humidity range | 20 to 80% RH |
| Weight | 29.84 g |
| Print technology | HP Thermal Inkjet |
| Max Printing Speed | 0.0983 m/s (98.3 mm/s) |

 $(Ref: \underline{https://store.hp.com/in-en/default/hp-703-black-original-ink-advantage-cartridge-\underline{cd887aa.html})\\$

2. Spin coating

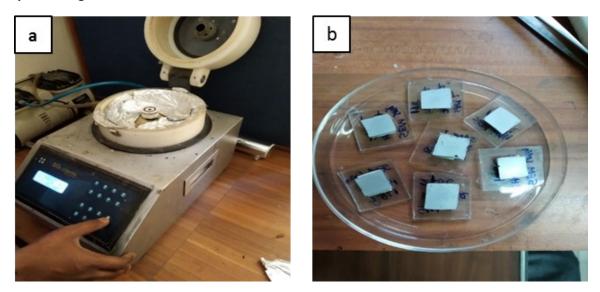


Figure 2: (a) Spin coating set up and (b) Spin coated silver nanowires ink formulation on glass slide.

3. Diameter of the Nanowire

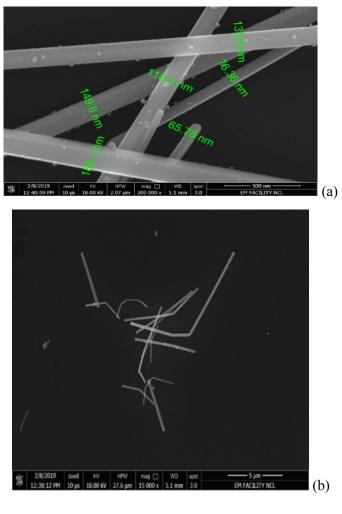


Figure 3: FE-SEM images of: (a) nanowires having average diameter of 121 nm and (b) nanowires after 6 hours of sonication