

Supporting information for:

Droplet Manipulation and Horizontal Growth of High-Quality Self-Catalysed GaAsP Nanowires

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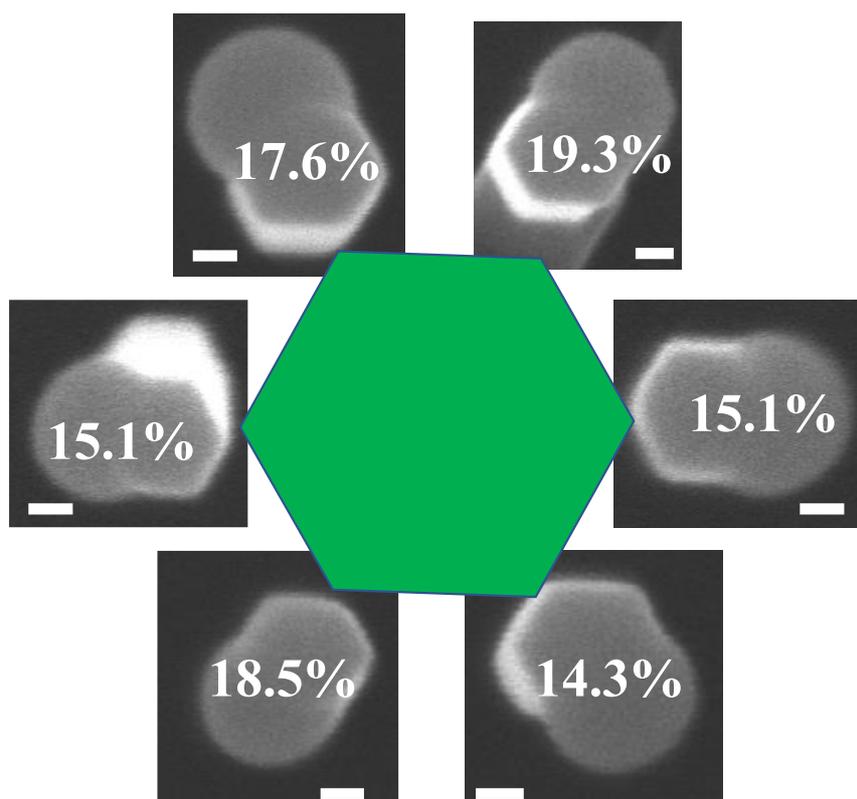


Fig. S1. Statistics of the droplet location on six sidewall corners of the NW tip.

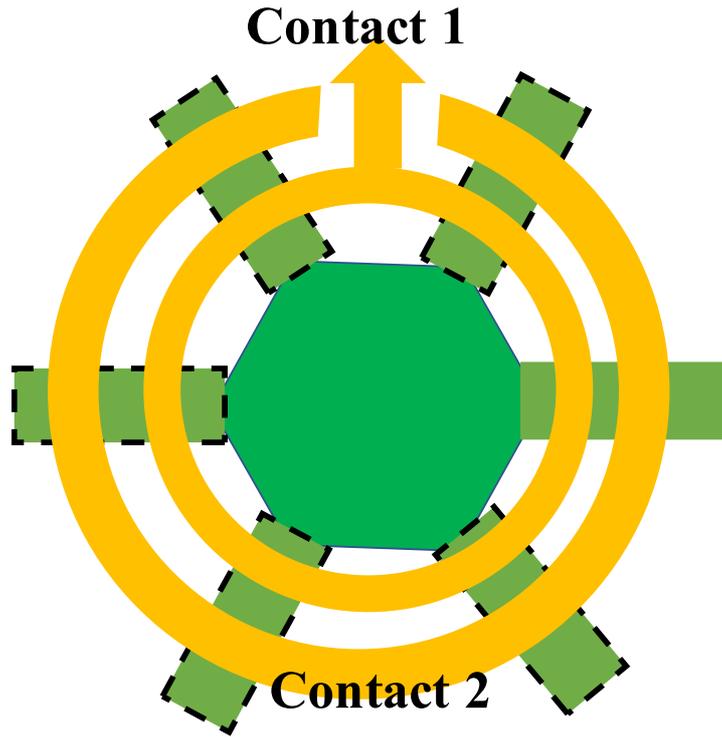


Fig. S2. Illustration of a device with two ring shaped contacts.

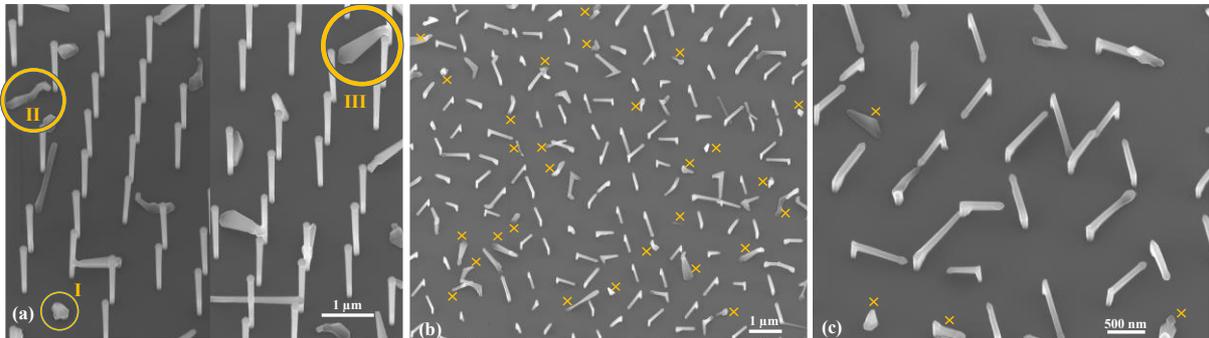


Fig. S3. SEM images of GaAs_{0.8}P_{0.2} NWs grown on patterned Si substrates. (a) Be-free growth. (b) and (c) are L-shaped NWs.

On the patterned substrates, the successfully-grown NWs should have a very uniform diameter and smooth sidewalls despite some small tapering (Fig.S3a). The failed growth will result in clusters (type-I), twisted shape (type-II) or an enlarged base (type-III). If we take out all these three types of NWs (yellow “X”), the rest of NW in Fig.S3b and S3c are all L-shaped.