

Crystallization and structural properties of piezoelectric-magnetostrictive hybrid nanowires for nano magneto-electro-mechanical systems (NMEMS)

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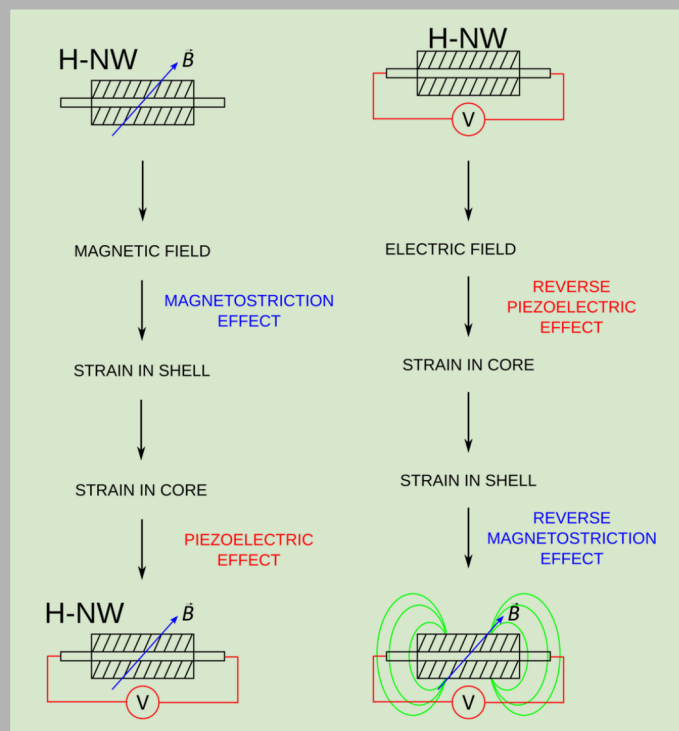


Fig. 1 The idea of the in-situ TEM examination.

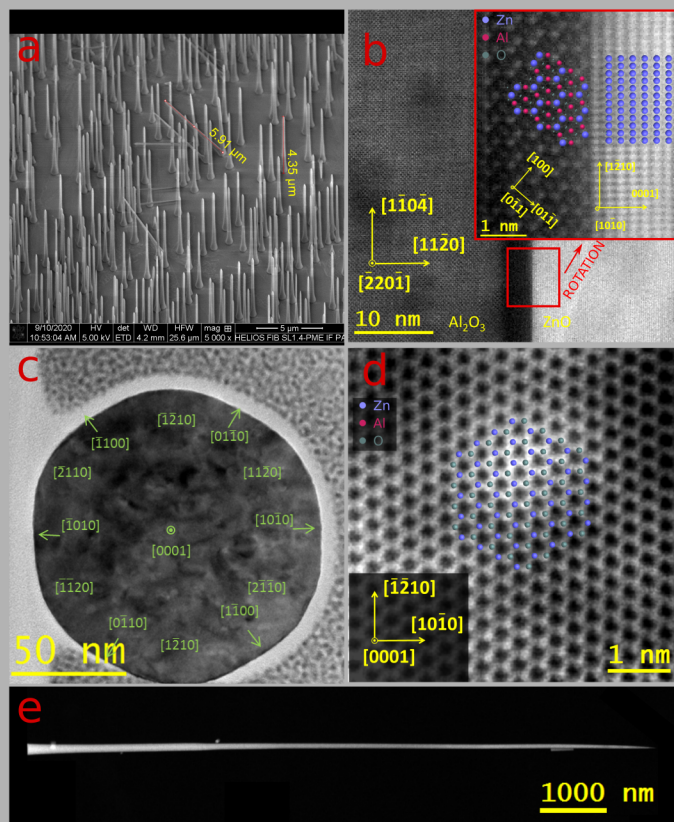


Fig 2. SEM image of NWs ZnO on a sapphire substrate (11-20) (a), section of sapphire substrate//ZnAl₂O₄ buffer//ZnO NW interface (b), TEM image of NW cross section (c) high magnification STEM cross section image with visible ZnO structure (d). Example of TEM NW low magnification image (e).

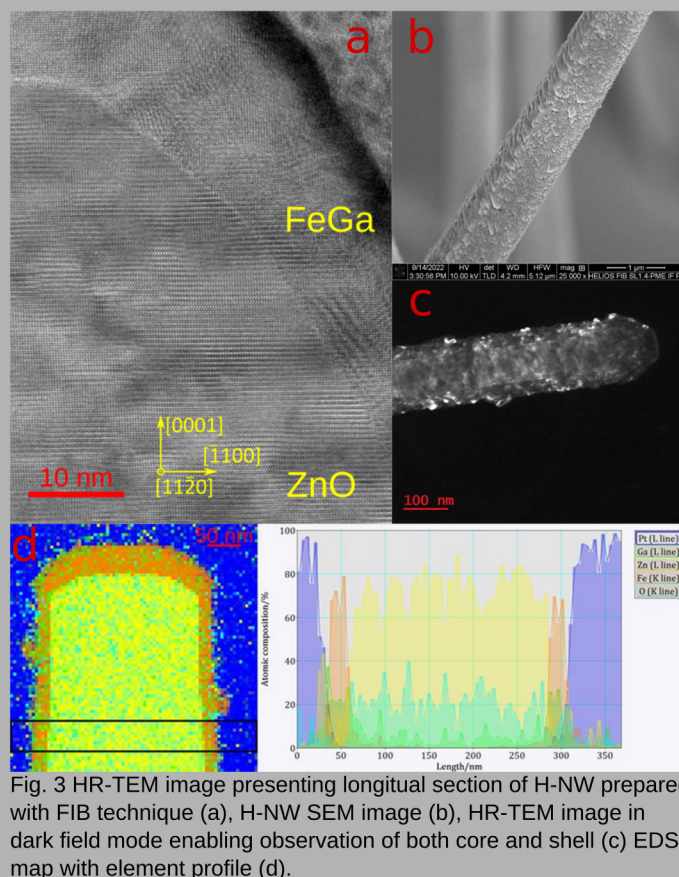


Fig. 3 HR-TEM image presenting longitudinal section of H-NW prepared with FIB technique (a), H-NW SEM image (b), HR-TEM image in dark field mode enabling observation of both core and shell (c) EDS map with element profile (d).

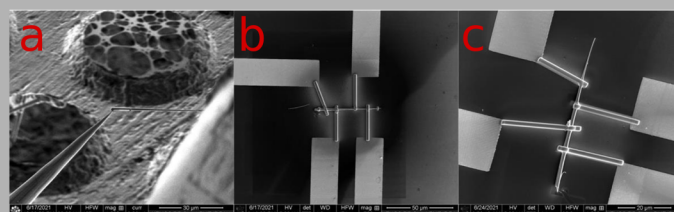


Fig. 4 NW contacting process: transferring NW with Omniprobe (a), ionic Pt paths (b), electronic Pt path (c).

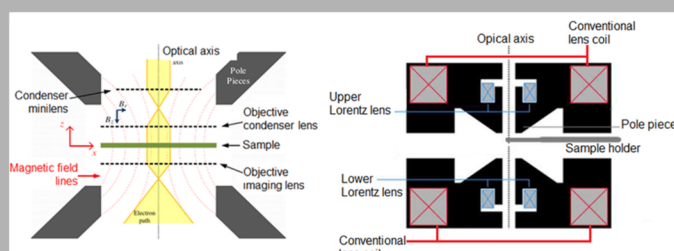


Fig. 5 The schematic image of TEM experiment setup.

