HNF | HOWARD NANOSCALE SCIENCE & ENGINEERING FACILITY

PROJECT FINDINGS (Abriged)

Howard University | National Nanotechnology Infrastructure Network (NNIN)

Multifunctional ZnO Nanostructures

SIGNIFICANT FINDINGS:

1. Choose materials with functional characteristics ranging from electrical, optical, mechanical, thermal and biochemical sensing, such as:
   - ZnO nanowires/ nanorods 800-900ºC
   - Carbon nanotubes (CNTs)
   - GaN, AlN, AlaGaN nanowires metallic nanowires (e.g. Ag, Au, Pt)
2. Enable sequential growth of disparate structures

AUTHOR(S):

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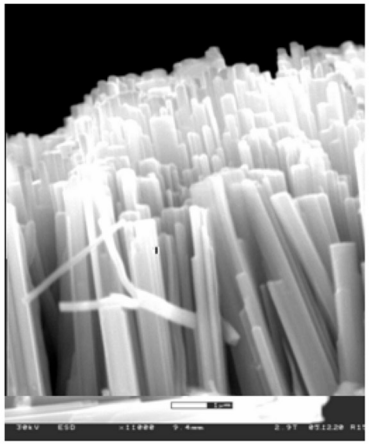
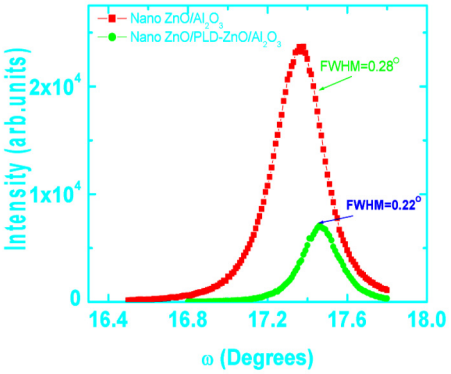
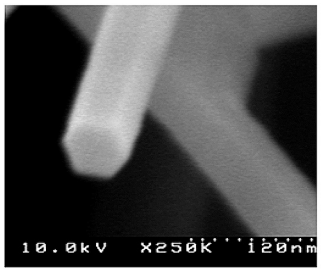
Blue Wave Semiconductors

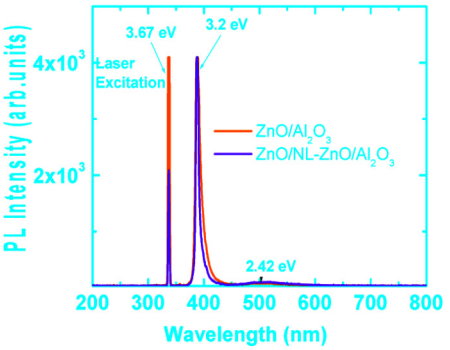




X-RAY DIFFRACTION CHARACTERIZATION



32 NM ~100 UNIT CELLS



ZNO FORMATION PHOTOLUMINESCENCE