

Semiconductor Nanowire Arrays for Photonic Integration

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Abstract (50 words max): III-V compound semiconductor nanowire arrays have drawn much attention as nanoscale building blocks for integrated photonics, owing to their nanoscale size and unique one-dimensional geometry related material properties. In this talk, we present the study of nanowire array based materials and devices for optoelectronic and photonic integration.

Biography (100 words max): Lan Fu is a Professor and Head of the Department of the Electronic Materials Engineering at the Research School of Physics, the Australian National University (ANU). Lan Fu's main research interests include design, fabrication and integration of optoelectronic devices (LEDs, lasers, photodetectors and solar cells) based on low-dimensional III-V compound semiconductor structures including quantum wells, self-assembled quantum dots and nanowires grown by metal-organic chemical vapour deposition (MOCVD). She has published ~200 publications (including 150 journal papers), 3 book chapters, co-edited 5 conference proceedings/journal special issue, and holds 2 US patents.

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