**P33: Semiconductor Nanowire antennas**

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We demonstrate experimentally and describe theoretically the strong directional emission and absorption of light by III-V semiconductor nanowires mediated by the resonant coupling to guided and leaky modes in the cylindrical structure. The coupling to these eigenmodes of the nanowires depends strongly on their diameter and length, which opens a rich spectrum of possibilities for the control of the direction, efficiency and polarization of the emission and absorption of light.