

Figure 1. Schematic image of the bottom tunnel junction laser diode.

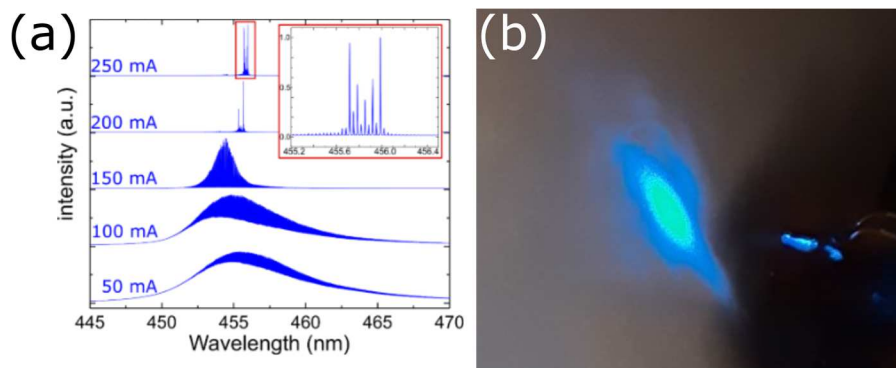


Figure 2. (a) Emission spectra for different driving currents with inset showing zoomed-in spectra at 250 mA. (b) Real-color picture of the farfield of the bottom tunnel junction laser diode directed onto sheet of paper.

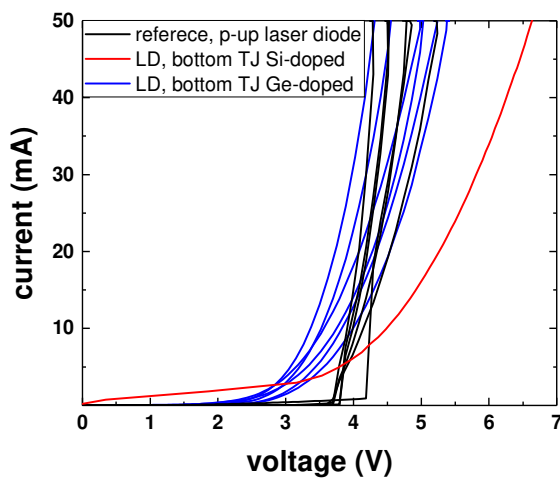


Figure 3. Comparison of current-voltage characteristics for the reference p-up laser diode with Si- and Ge-doped bottom tunnel junction laser diode.