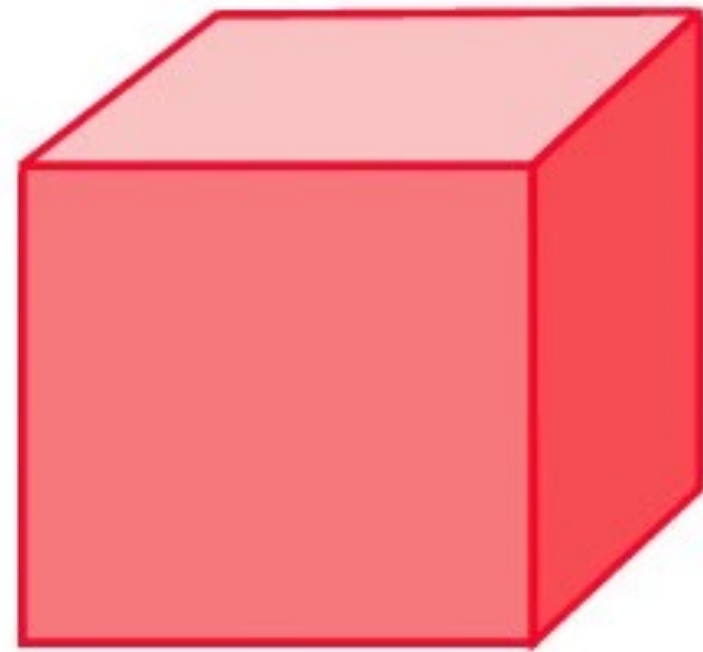
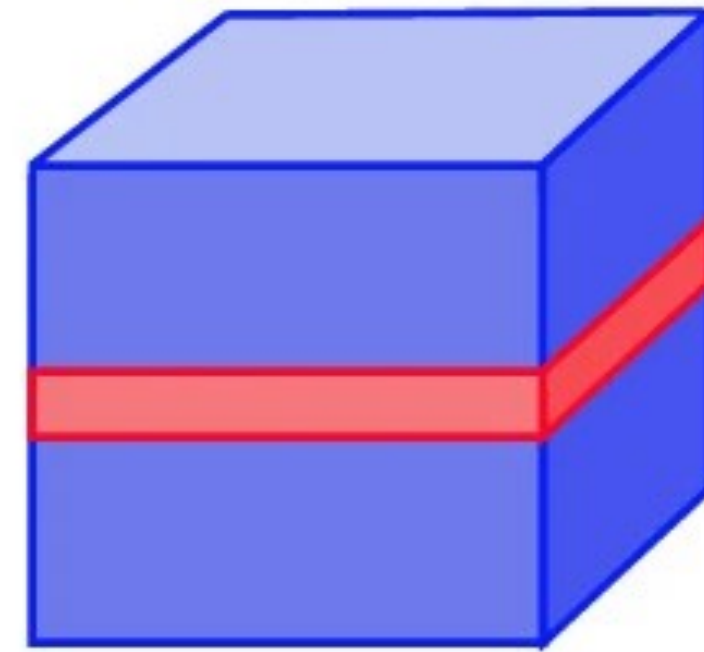


# Semiconductor Laser Figures

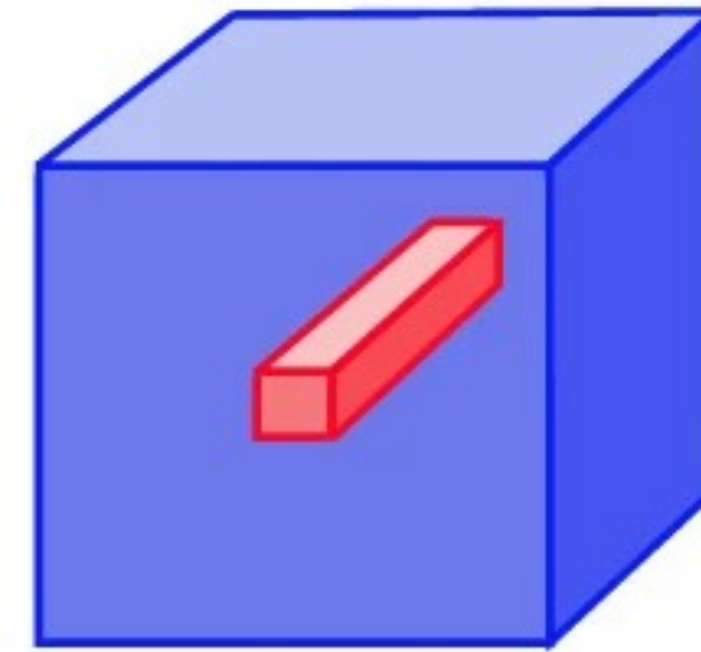
# Density of States



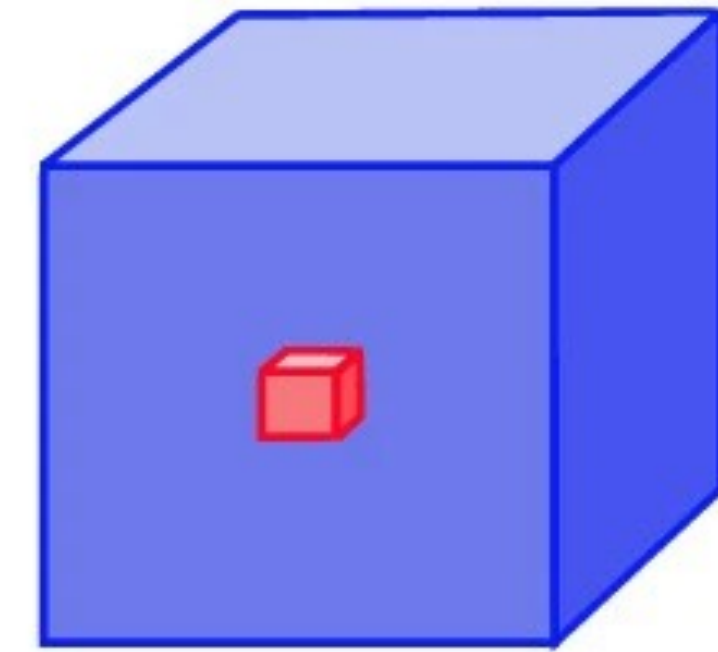
3D



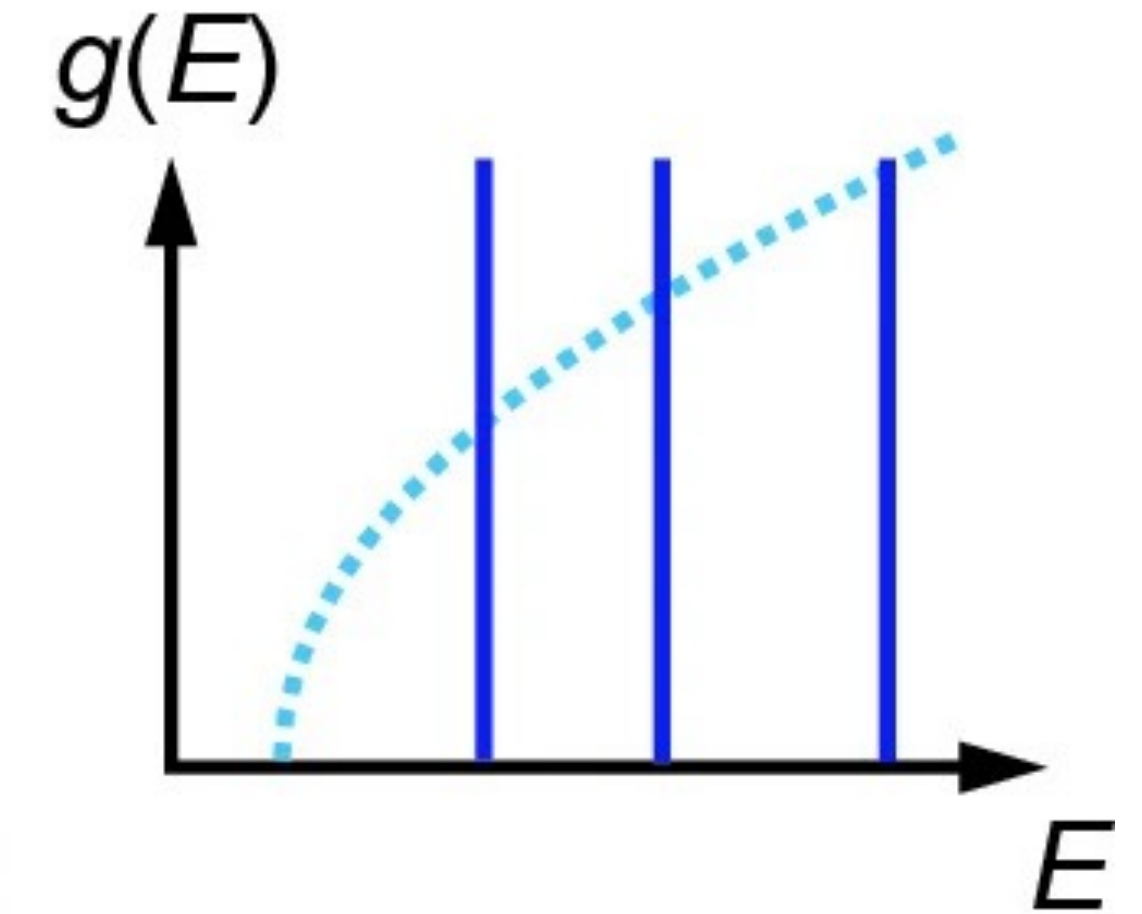
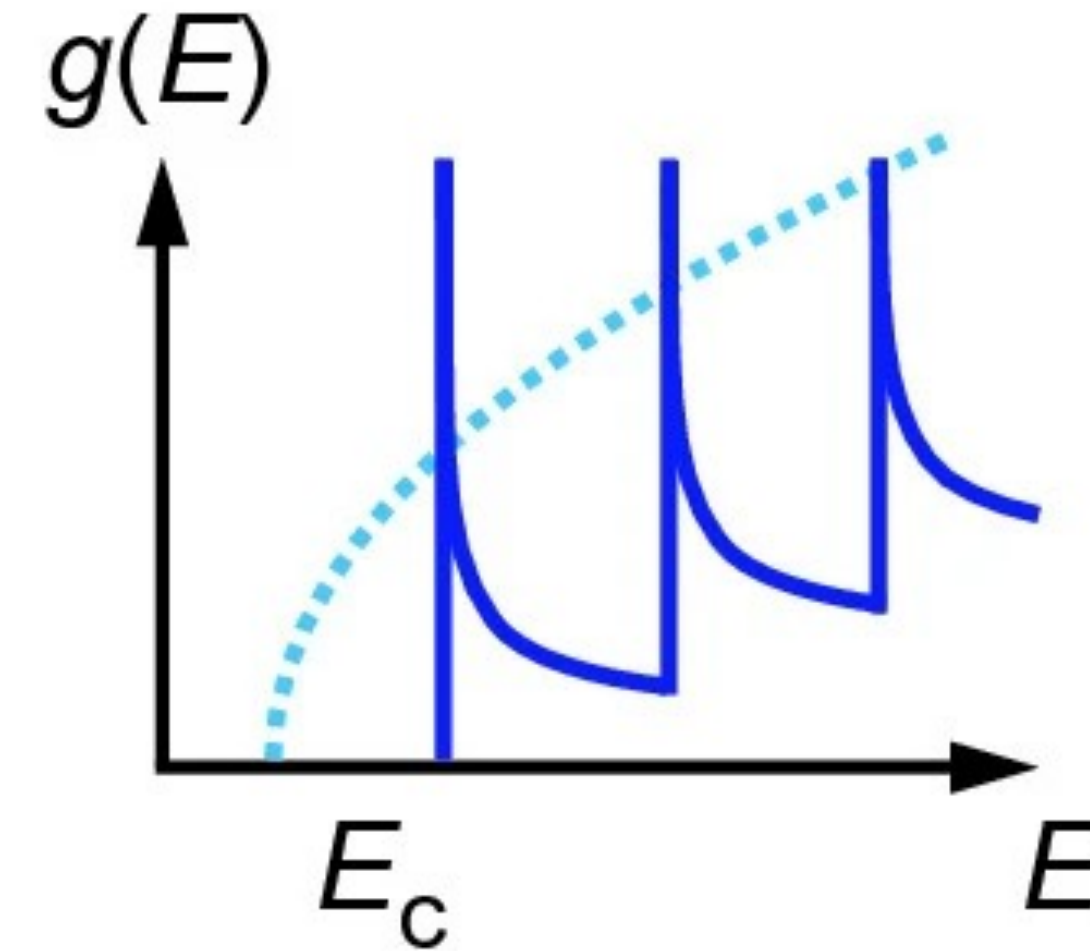
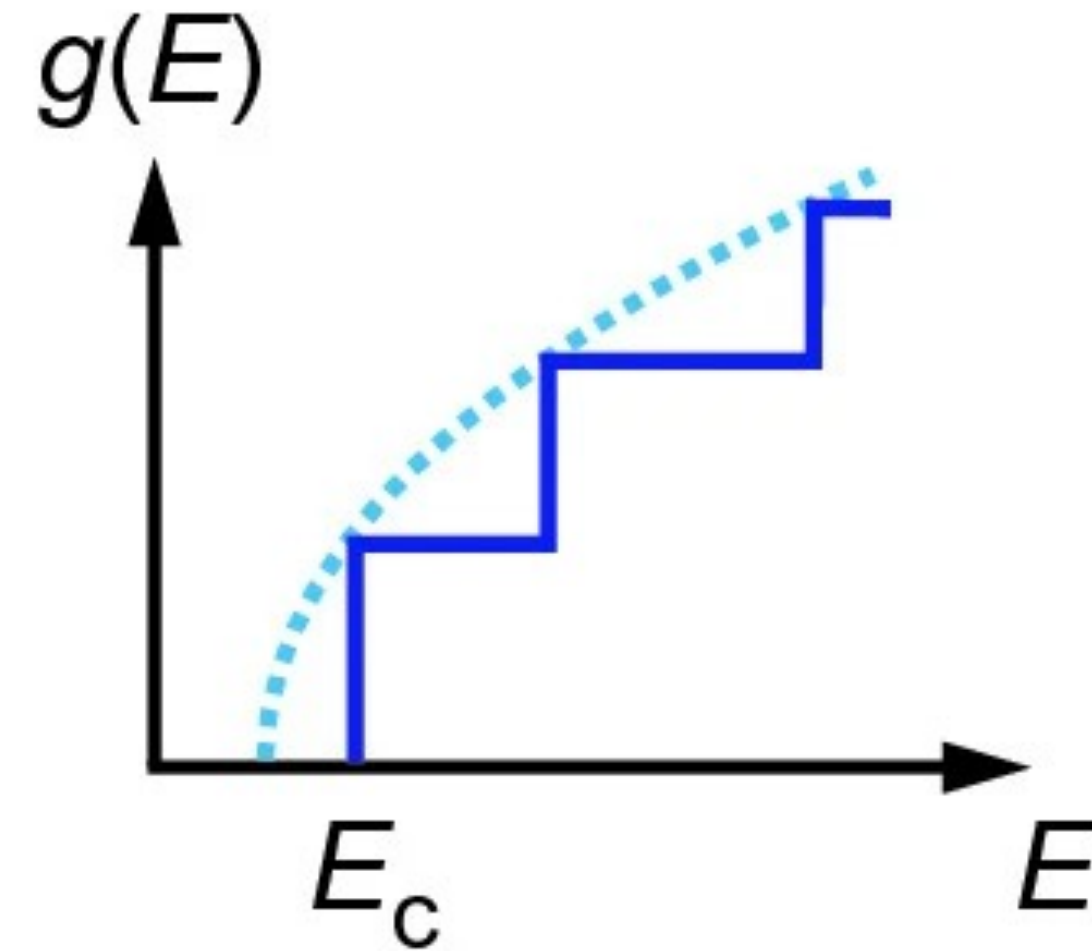
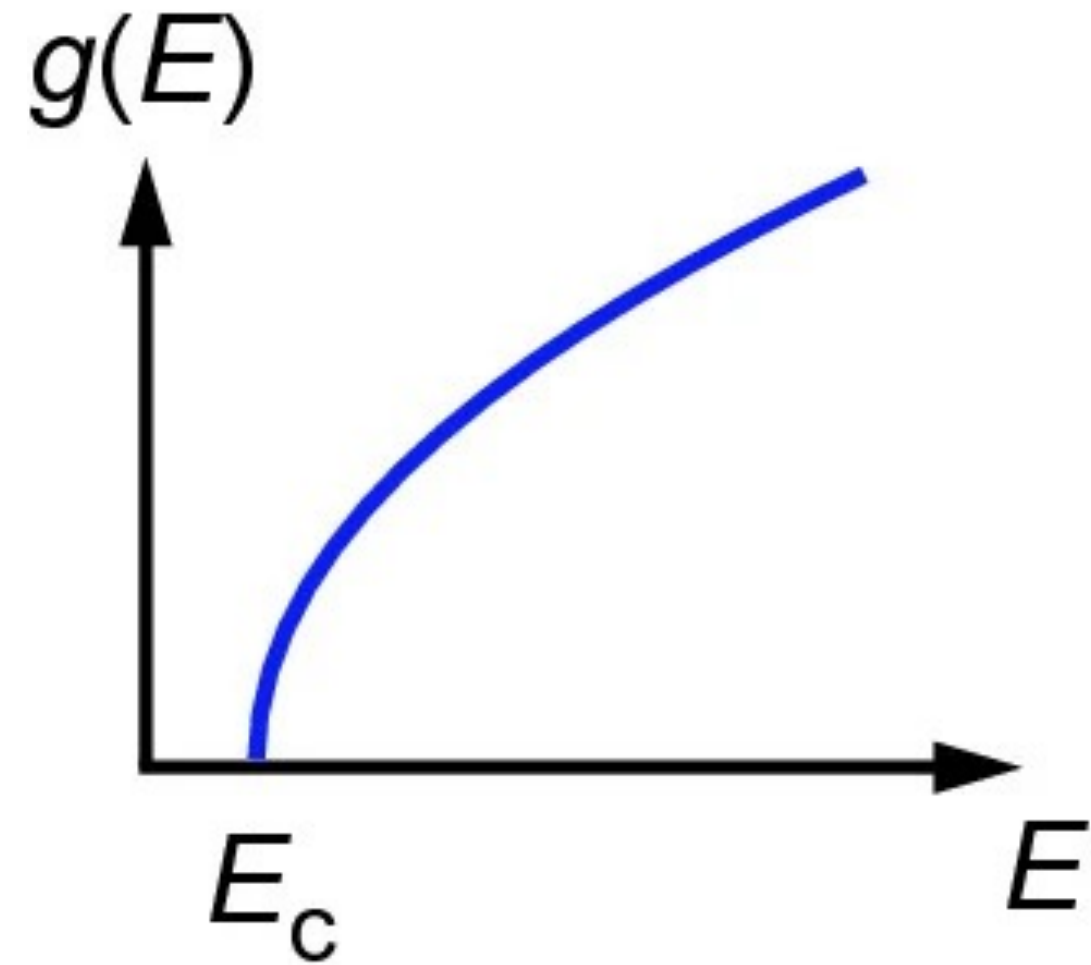
2D



1D



0D

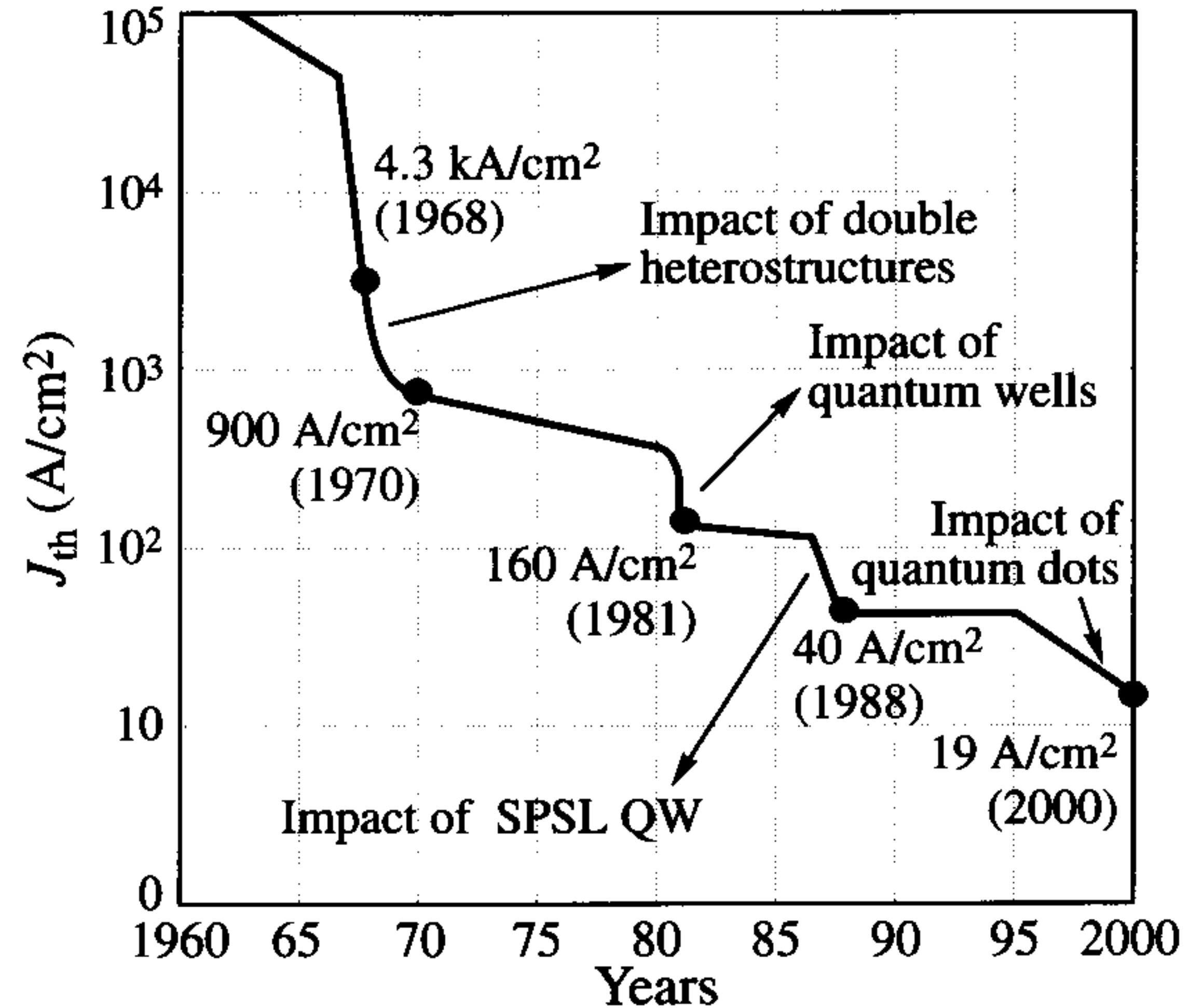


# Threshold current of semiconductor lasers

Nobel Prize in Physics

Alferov, Kroemer, Kilby

2000



# Double heterojunction laser

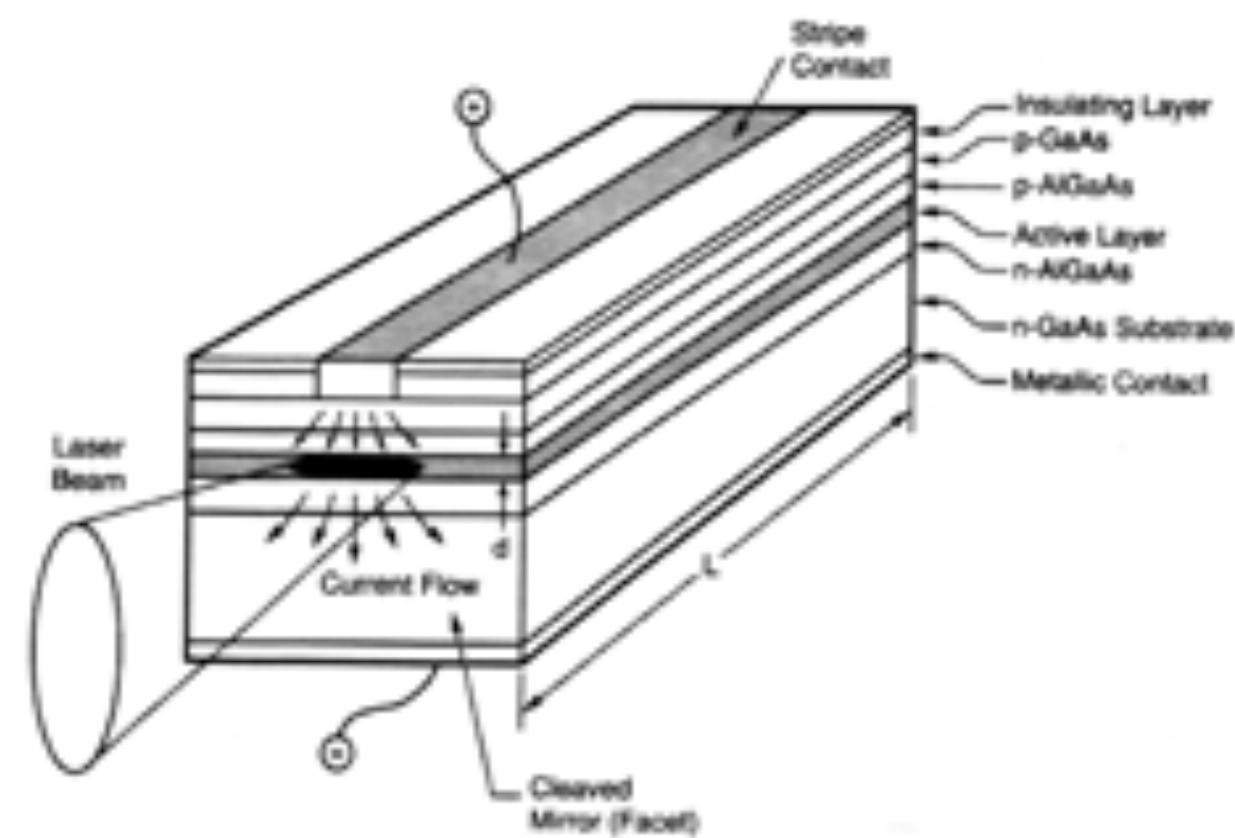


Figure 12: Gain-guided laser [10]

<https://www.laserdiodesource.com/laser-diode-technical-overview-three>

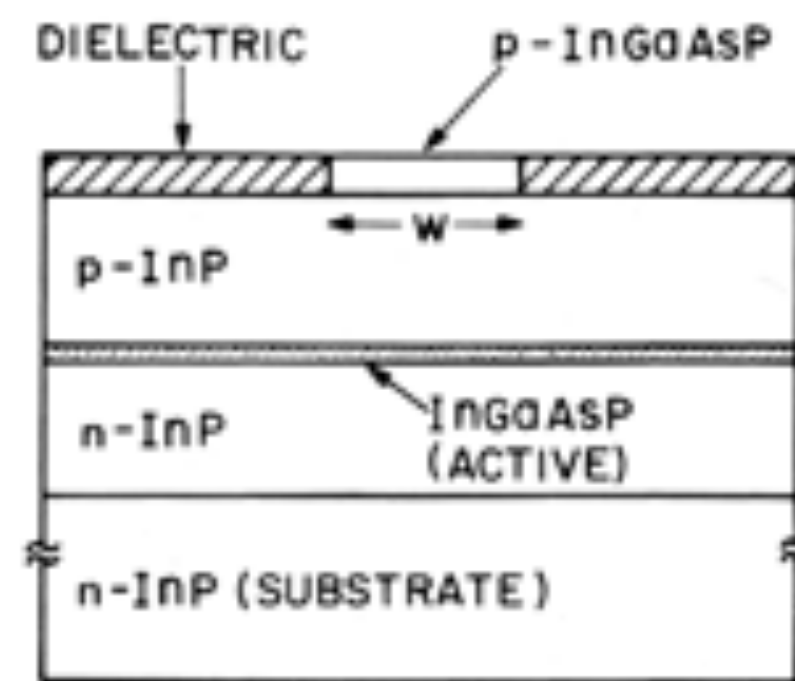
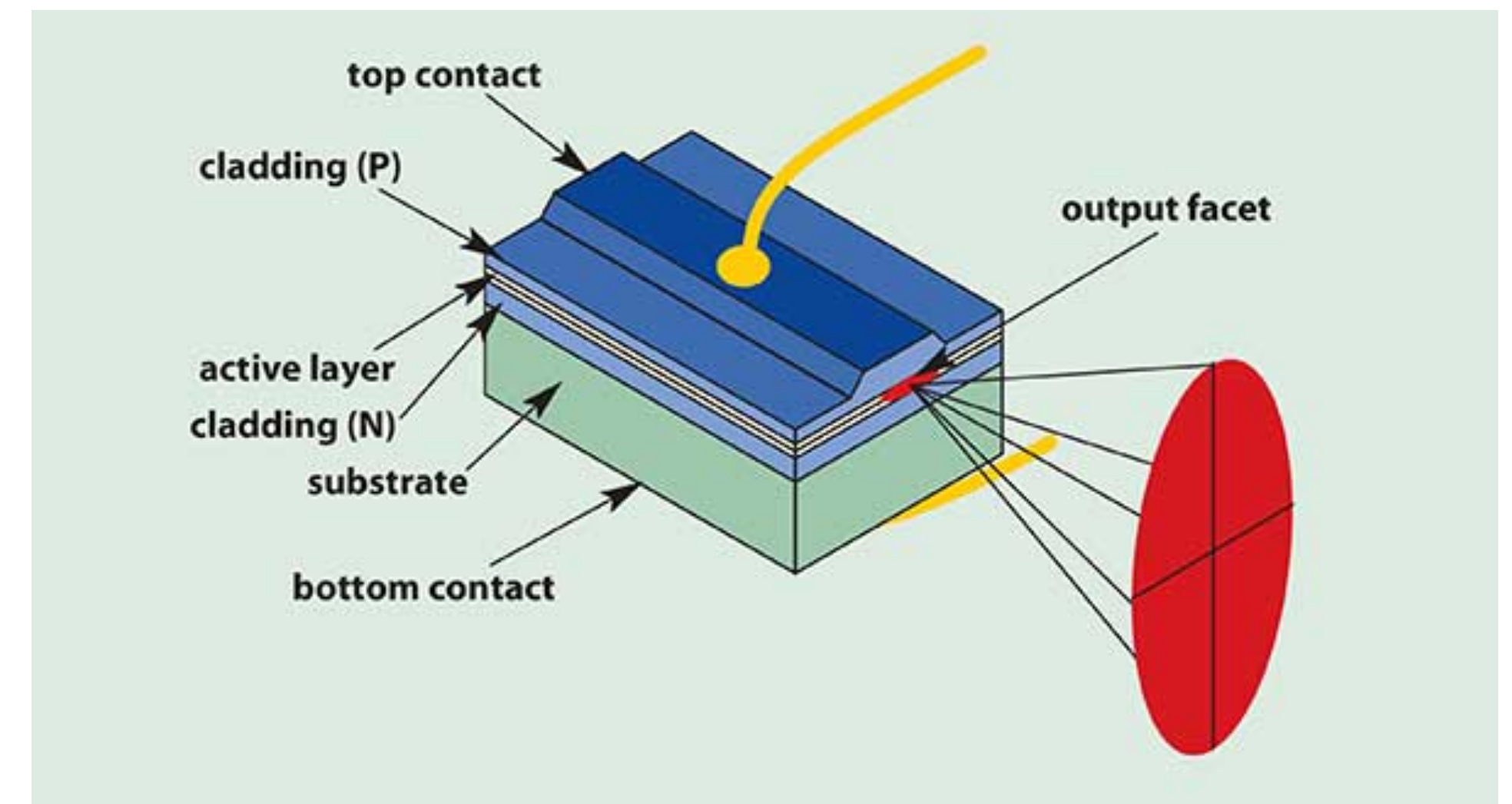
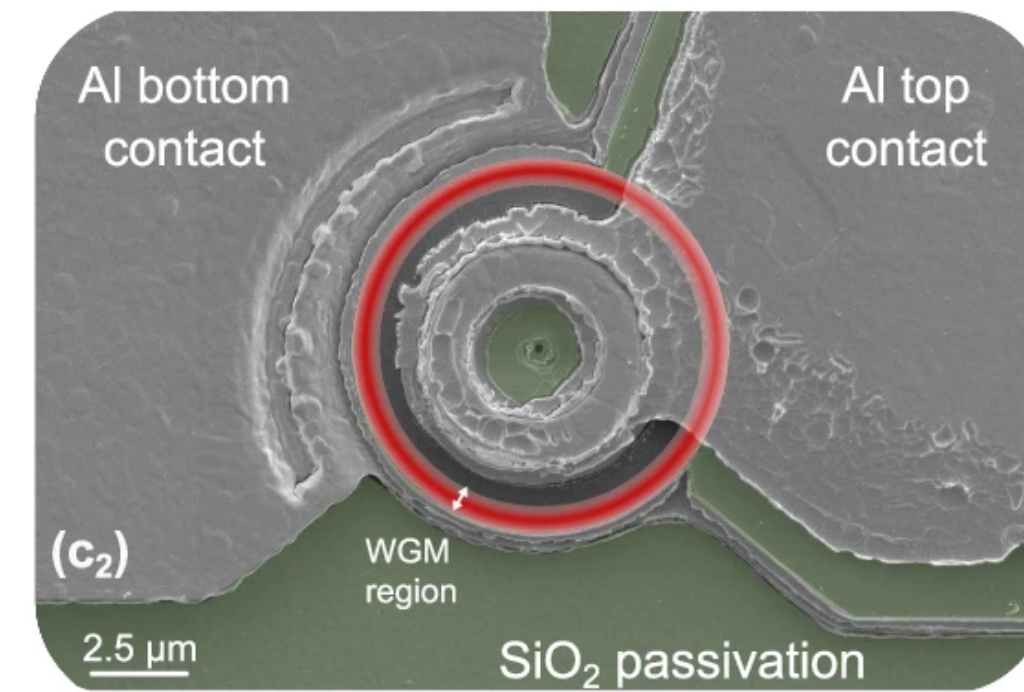
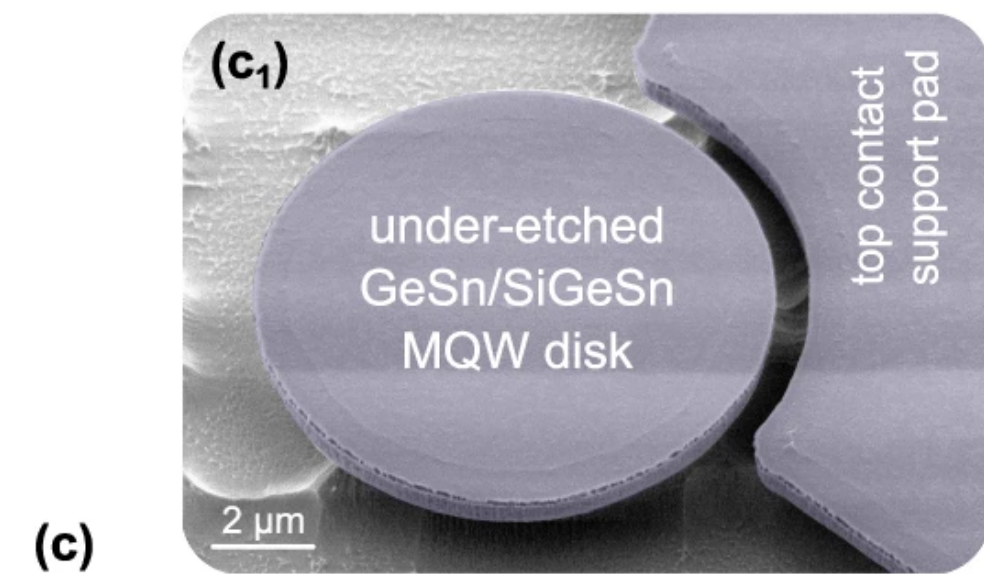
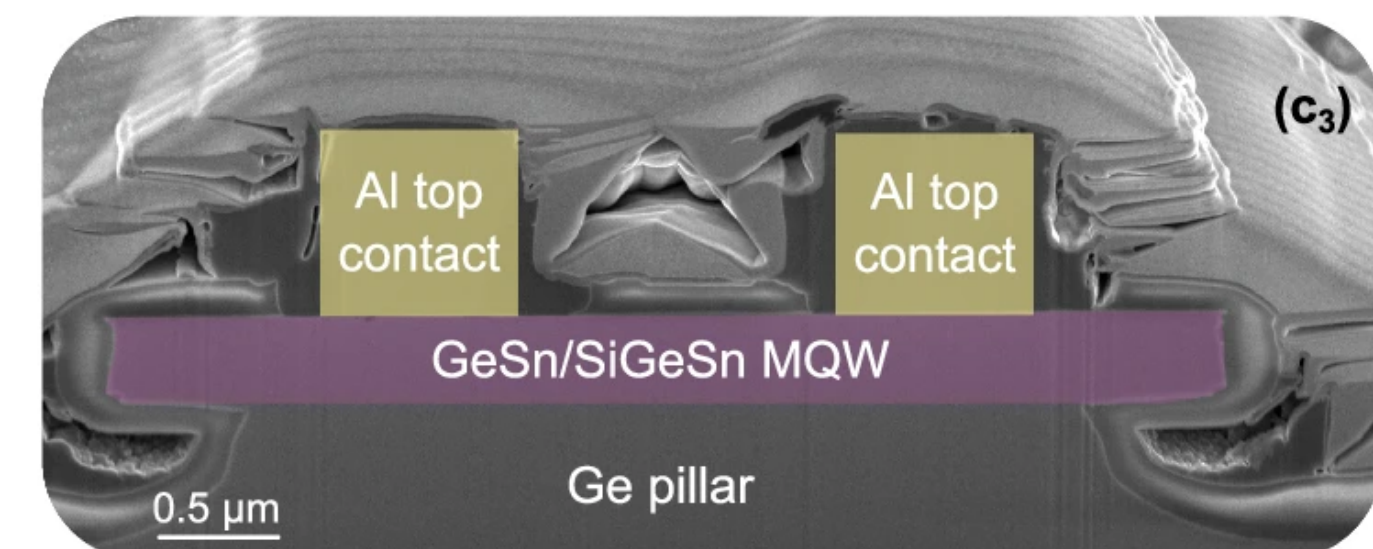
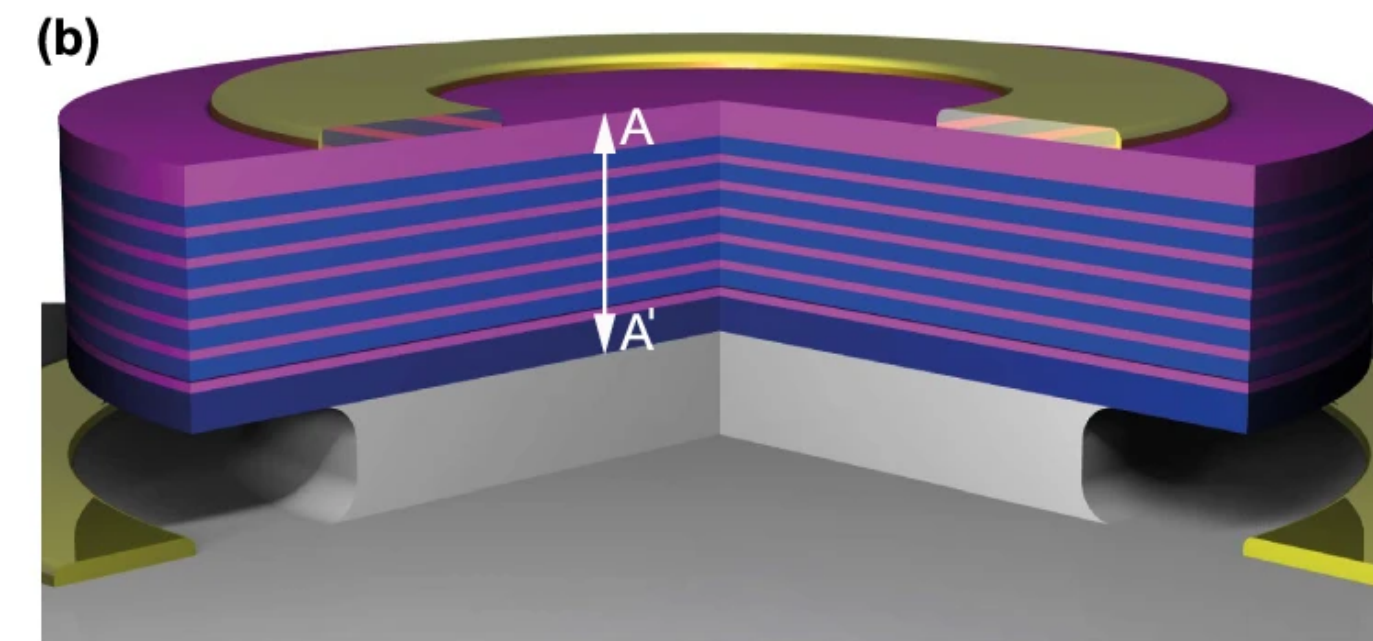
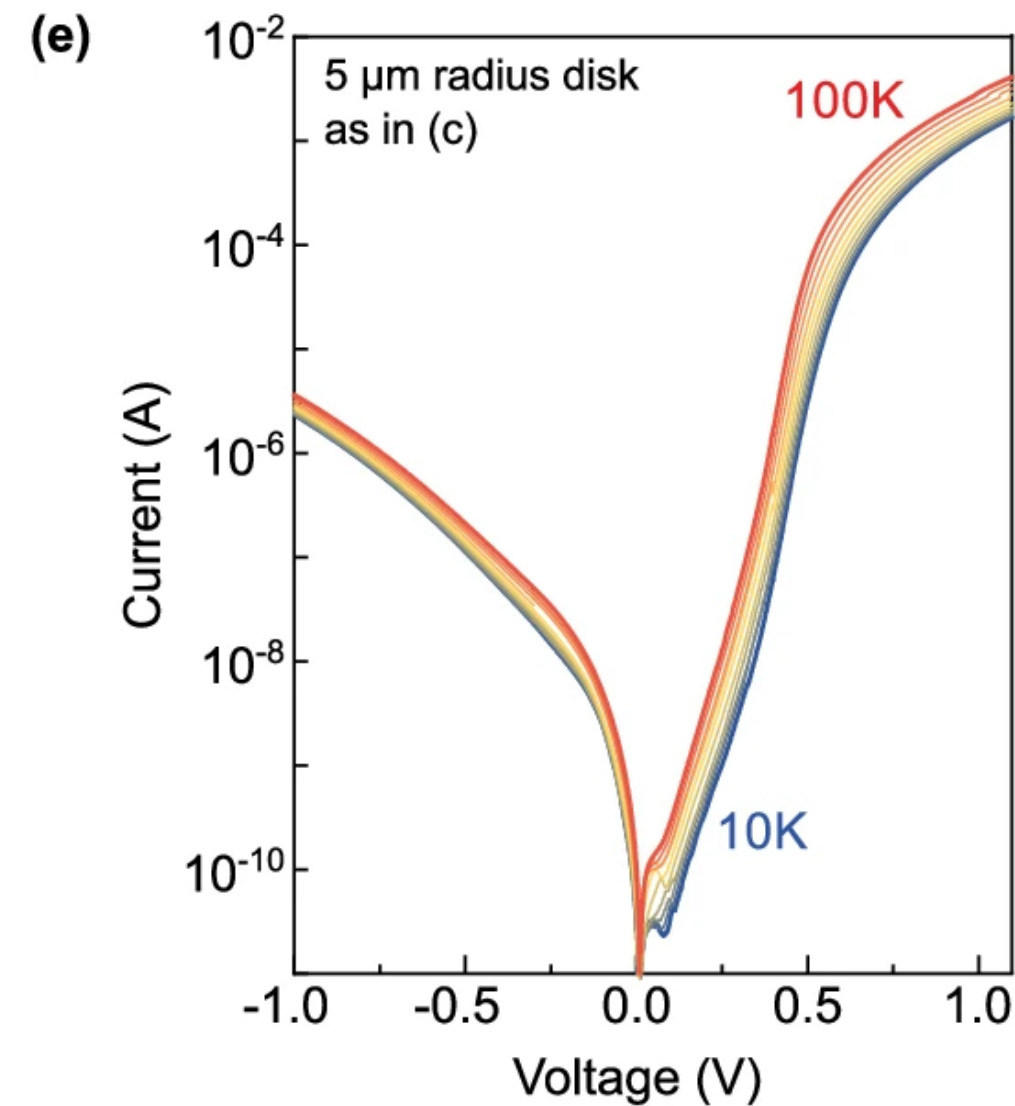
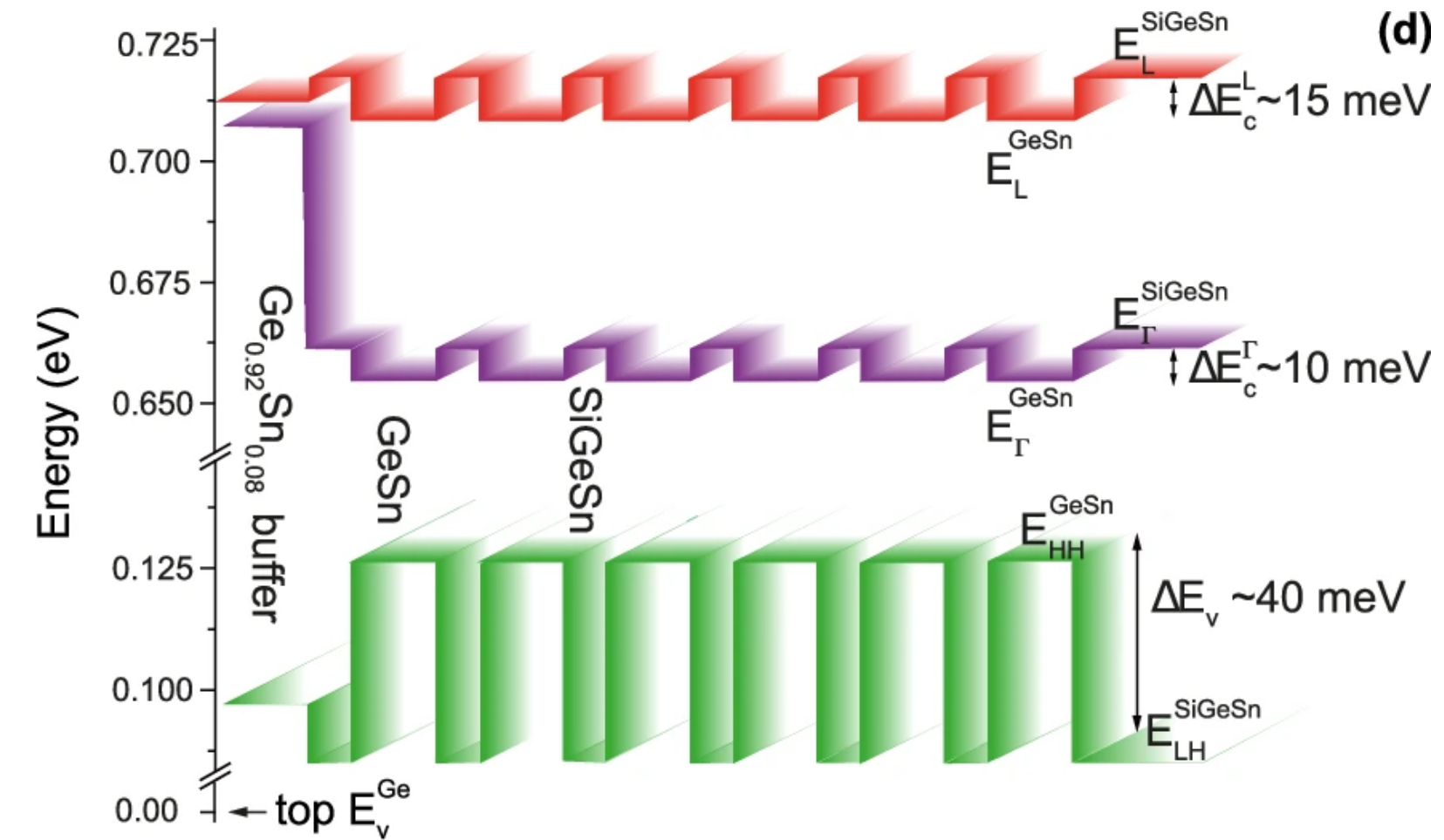
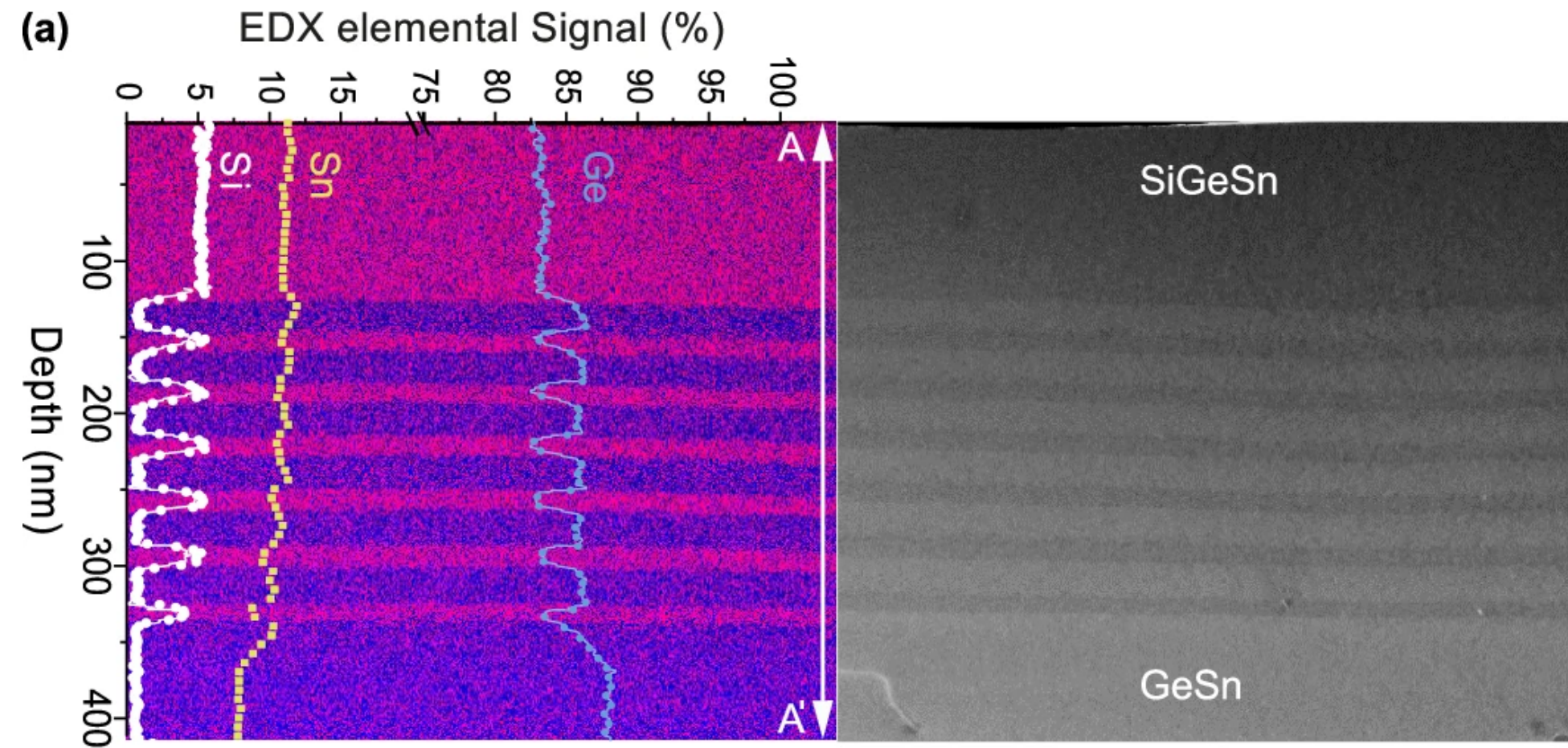


Figure 13: Cross section

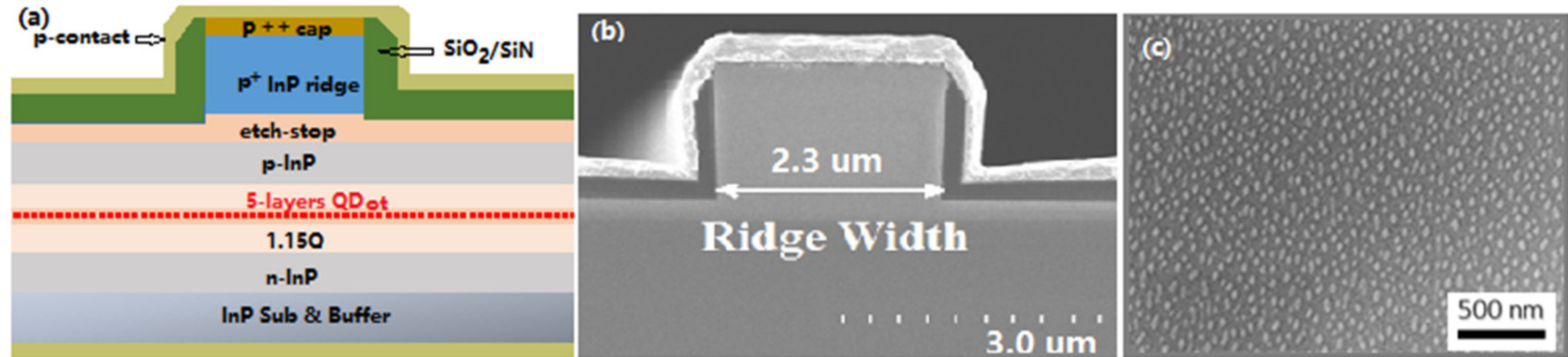


<https://www.rpmclasers.com/blog/laser-diode-fundamentals-beam-properties/>

# Quantum well laser

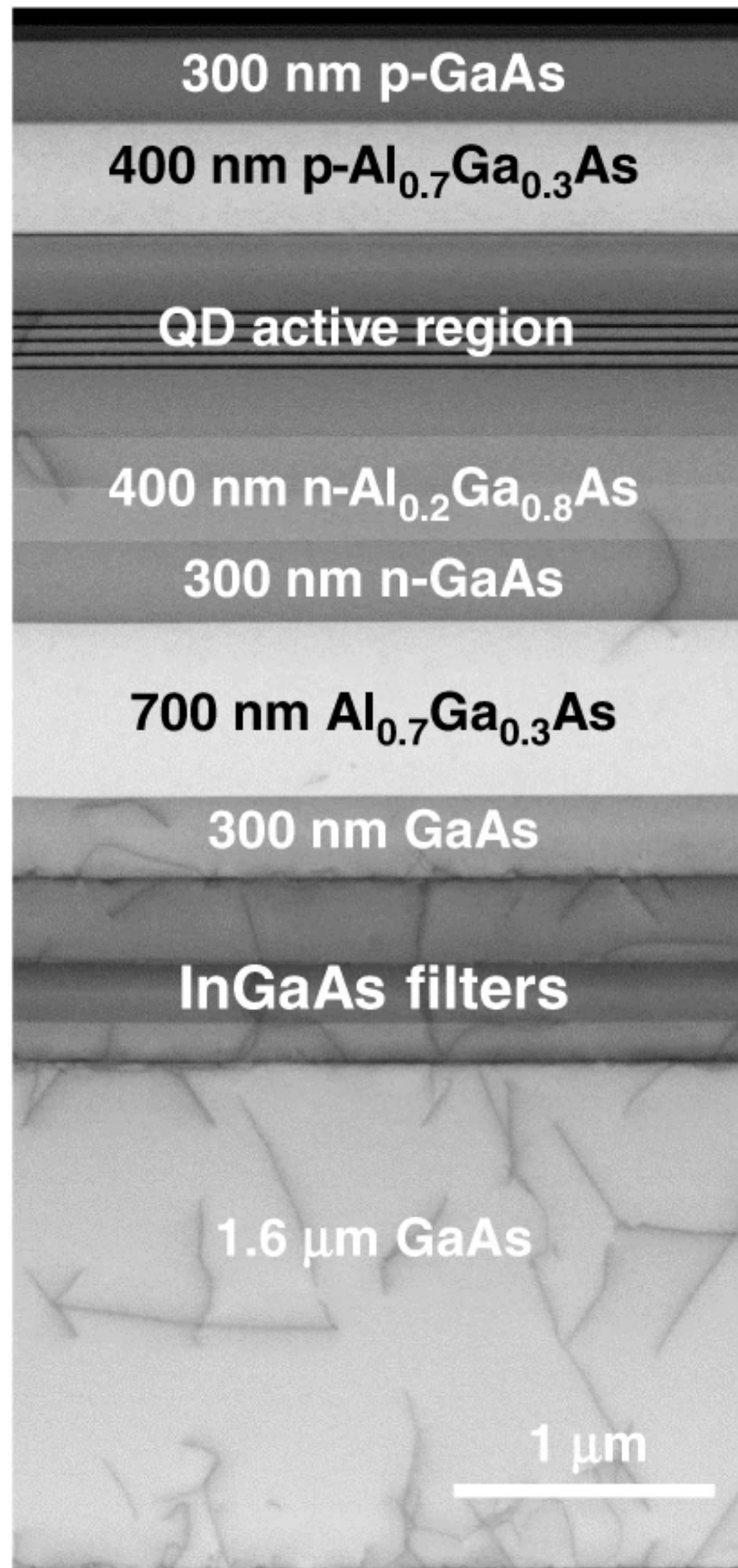


# Quantum dot

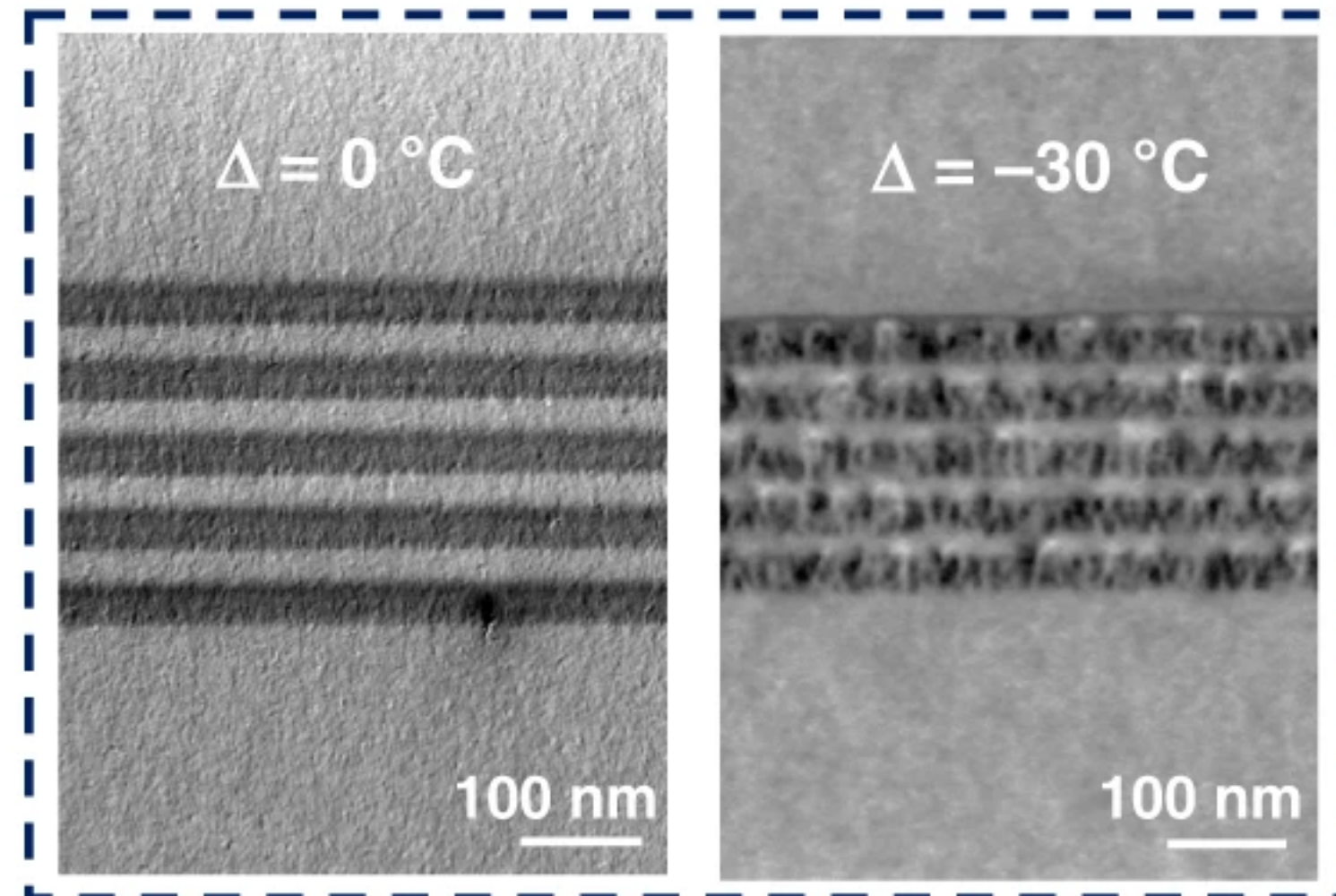


# Quantum dot

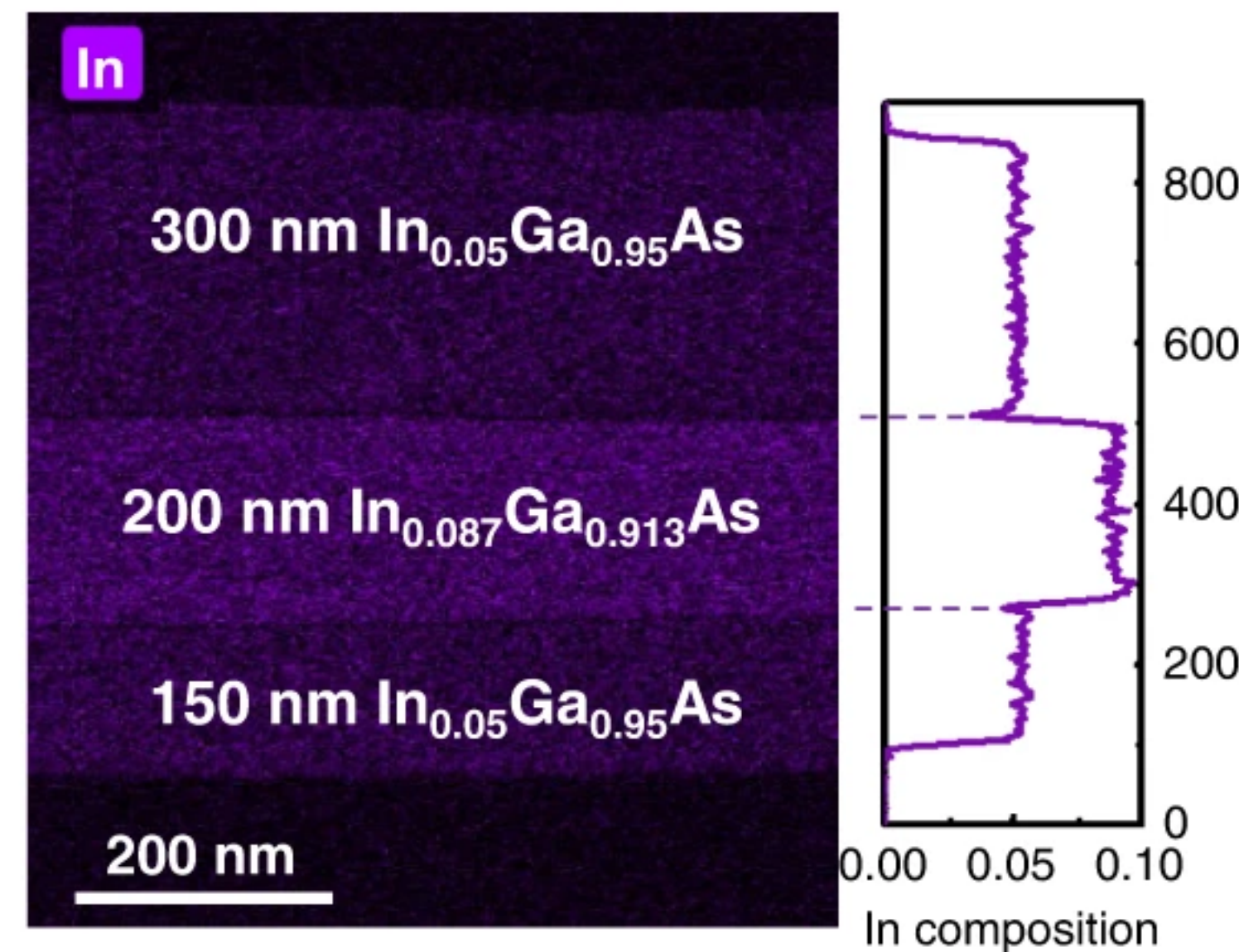
a



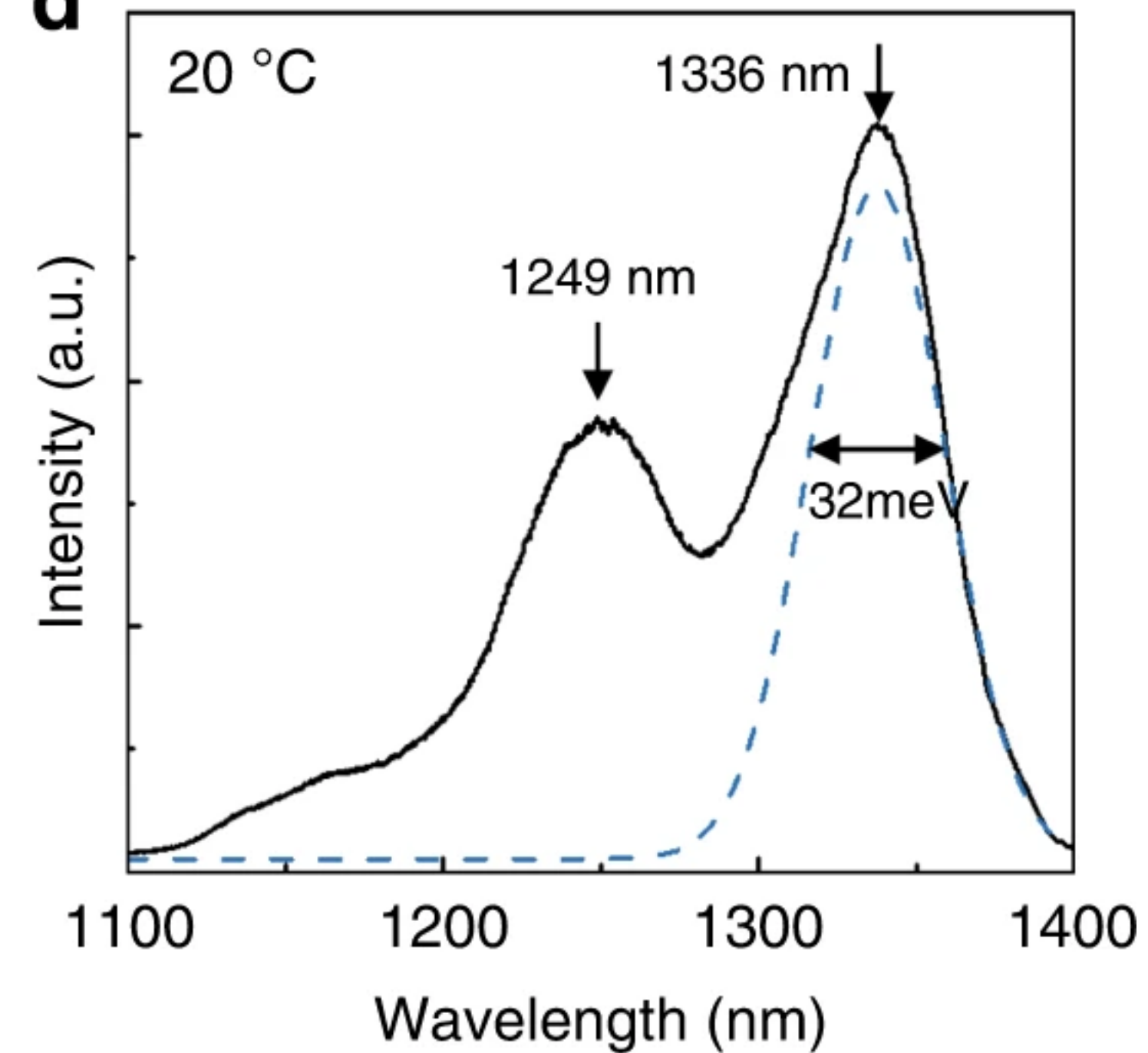
b



c



d



e

