



- For the sunlight, which part of the spectrum will be absorbed by silicon? (Note: a 1 eV photon has a free space wavelength 1.24 micron.)
- Is Si a direct-bandgap semiconductor, or an indirect bandgap semiconductor?
- What is the difference in terms of optical properties, between these two classes of semiconductors? Why?
- What material systems are typically used to create a semiconductor laser?
- Any idea that you have that can make a silicon-based semiconductor laser?