The first question one might raise is why are semiconductor materials important in electrical engineering?

- how semiconductor devices are instrumental in many applications?
  - Devices to computing and
  - telecommunications systems
- primary device used in integrated circuits for digital systems, MOSFET.
- Computing hardware will continue to improve, providing faster and more powerful computers.

- 2nd devices for telecommunications applications.
  - devices of use in lightwave communications as well as wireless communications networks. Among these devices are emitters, detectors, amplifiers, and repeaters.

- The development of blue and blue-green light emitting diodes (LEDs) and lasers foments the evolution of new, highly efficient, rugged, ultra-long-life illumination elements. White light emitters using LEDs are now becoming commercially available.

contents

9 FIeld-effect transistors