## 3.46 PHOTONIC MATERIALS AND DEVICES

**Quiz 2—February 21, 2006** 

-	ΑI	Si	Р	S
Zn	Ga	Ge	As	Se

Answer the questions below and give a brief explanation to support each answer.

- 1. List the following compounds in order of increasing bandgap: AIP and GaAs.
- 2. List the following compounds in order of increasing bandgap: GaAs, ZnSe.
- 3. List the following materials in order of increasing dielectric constant: Si, Ge.
- 4. Which binary compound mentioned in Q1 and Q2 above should exhibit the highest electron mobility?

Name:\_\_\_\_\_