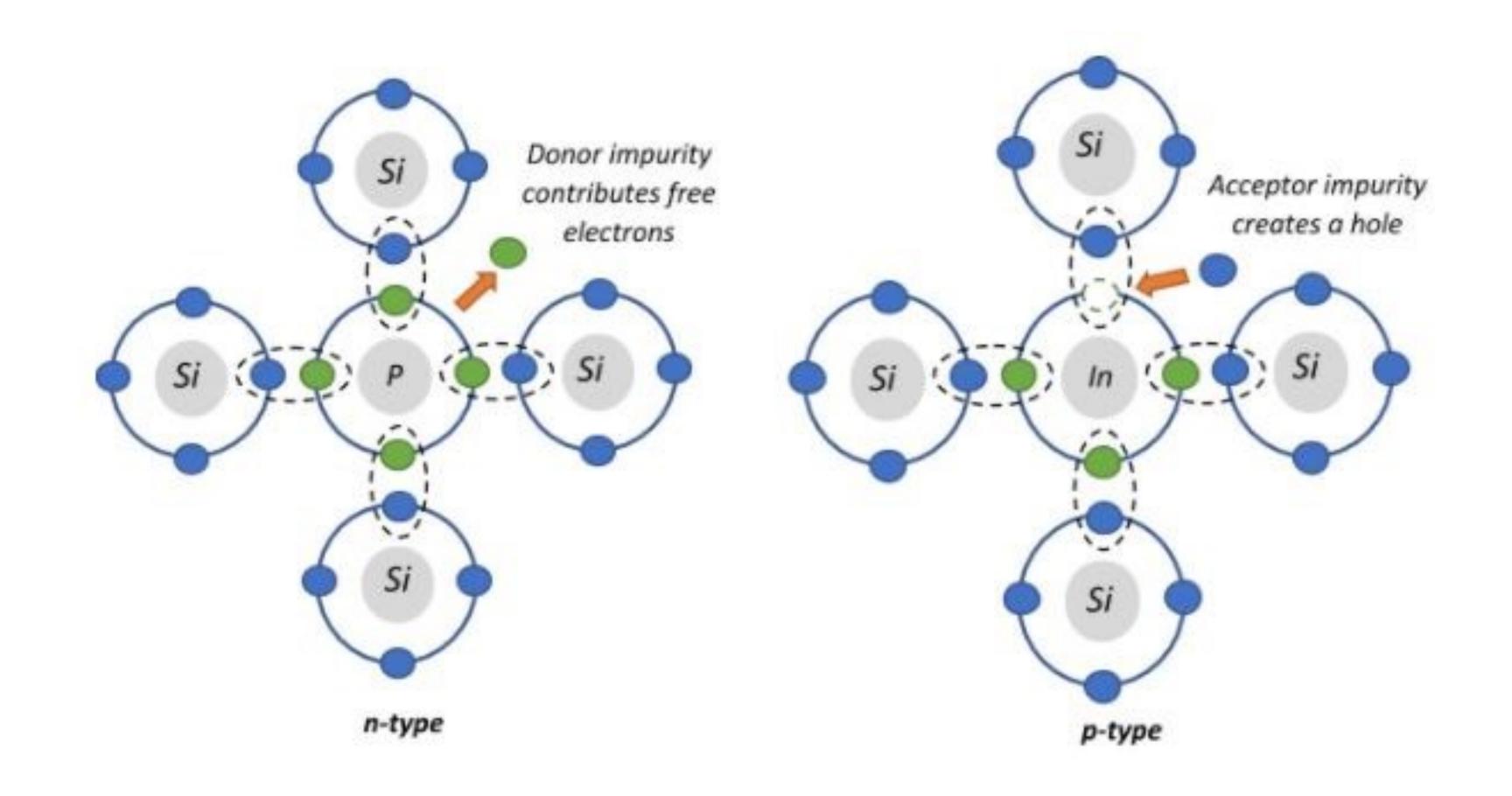
## N-type and P-type semiconductors (cont.)

Doped semiconductors with Phosphorus (n-type) and Indium (p-type)



## MOSFETs (N-channel)

- Have two N-type regions within a larger P-type region
- Current can only flow through when there is a connection between the Ntype regions
- Applying voltage to the gate (metal oxide layer) causes some of the P-type region between the N-type regions to become N-type, by filling holes with electrons due to field change

