Lecture 10: Doping and the Creation of Semiconductors

Doping 掺杂

Effective Mass有效质量Intrinsic Semiconductor本征半导体Carriers载流子

Centripetal Force向心力Cyclotron Frequency回旋频率Hole空穴

Electron-Hole Pair 电子空穴对

Effective Density of States 有效态密度

Boron 硼 Arsenic 砷

Acceptor Impurity受体杂质Donor Impurity供体杂志Majority Carriers多数载流子Minority Carriers少数载流子

Fermi-Dirac Distribution 费米-狄拉克分布

Impurity Compensation杂质补偿Drift Current漂移电流

Diffusion Current 扩散电流 扩散电流 扩散系数 Diffusion Length 扩散长度

Carrier Recombination载流子复合Carrier Lifetime载流子寿命