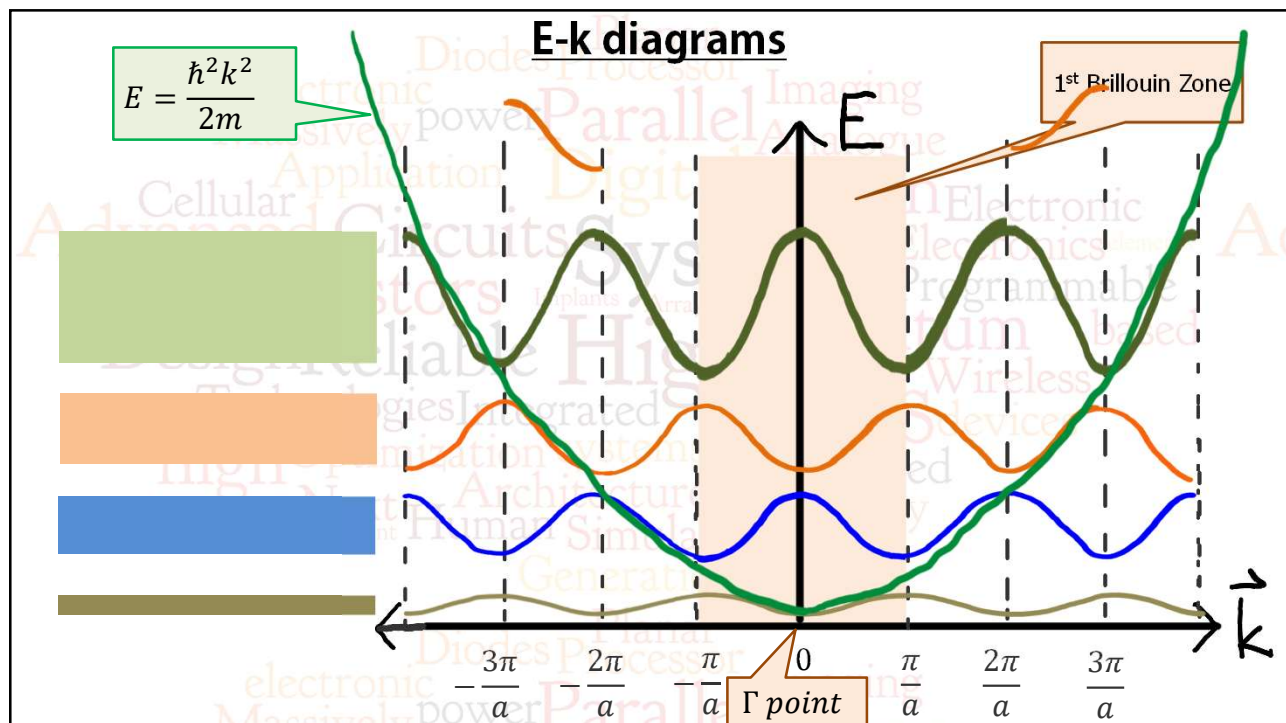
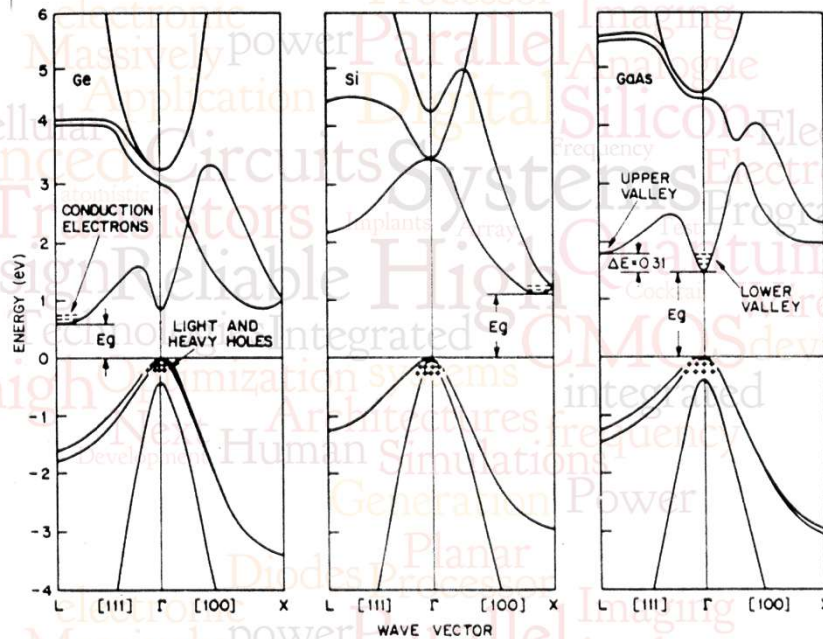


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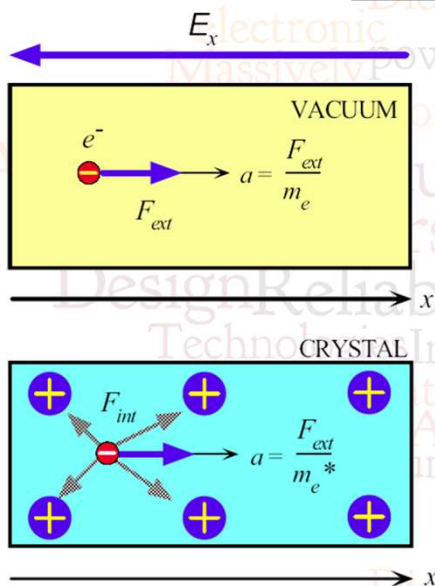
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## Example Band Diagrams



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## Effective Mass of electrons



- If the same magnitude of electric field is applied to both electrons in vacuum and inside the crystal, the electrons will accelerate at a different rate from each other due to the existence of different potentials inside the crystal.
- The electron inside the crystal has to try to make its own way.
- So the electrons inside the crystal will have a different mass than that of the electron in vacuum.
- This altered mass is called as an **effective-mass**.

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