A Simple Iterative Model for Oxide-Confined VCSELs

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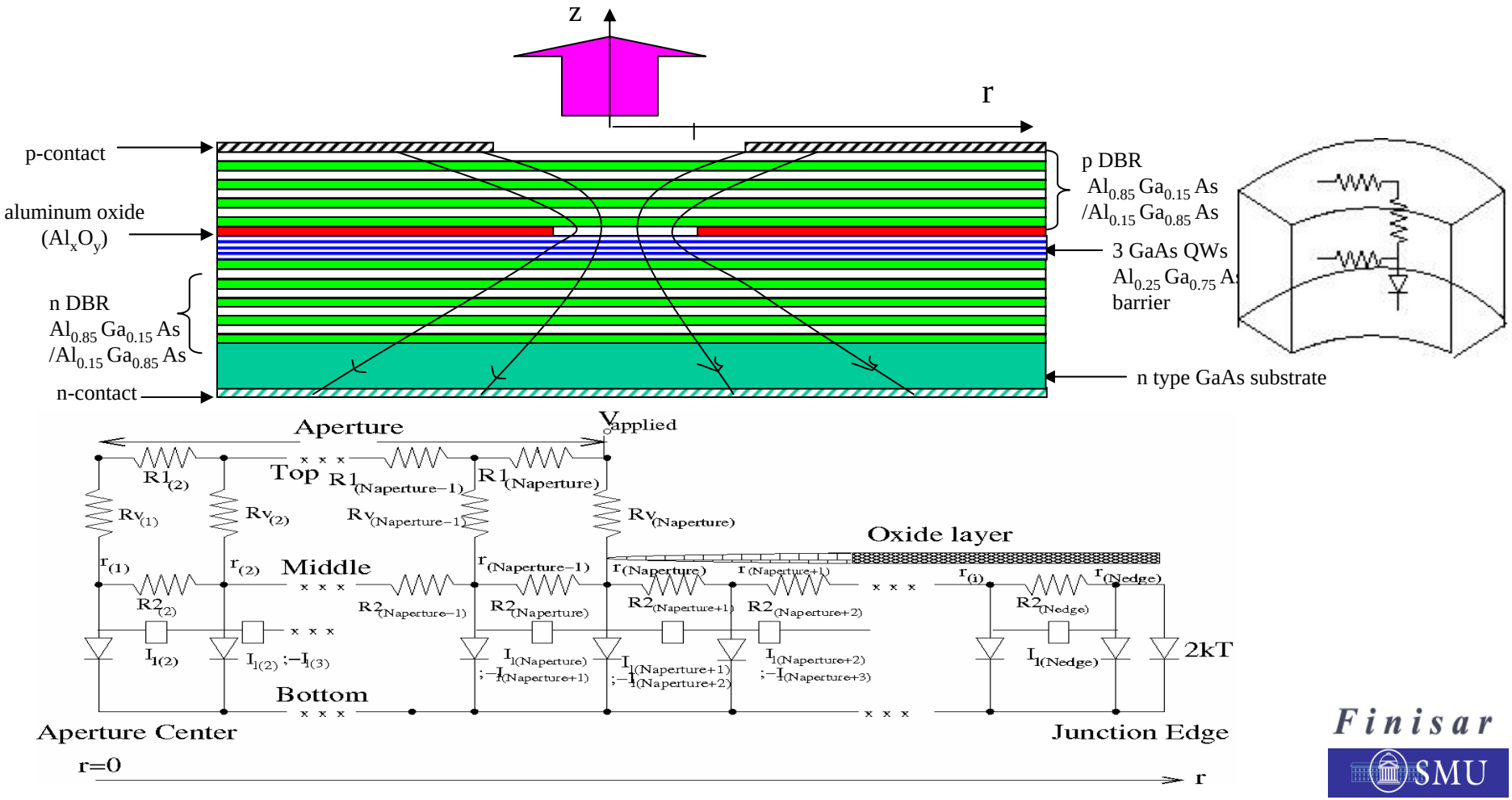
- Empirical model for detailed current and voltage distributions.
- Circuit network to represent the VCSEL.



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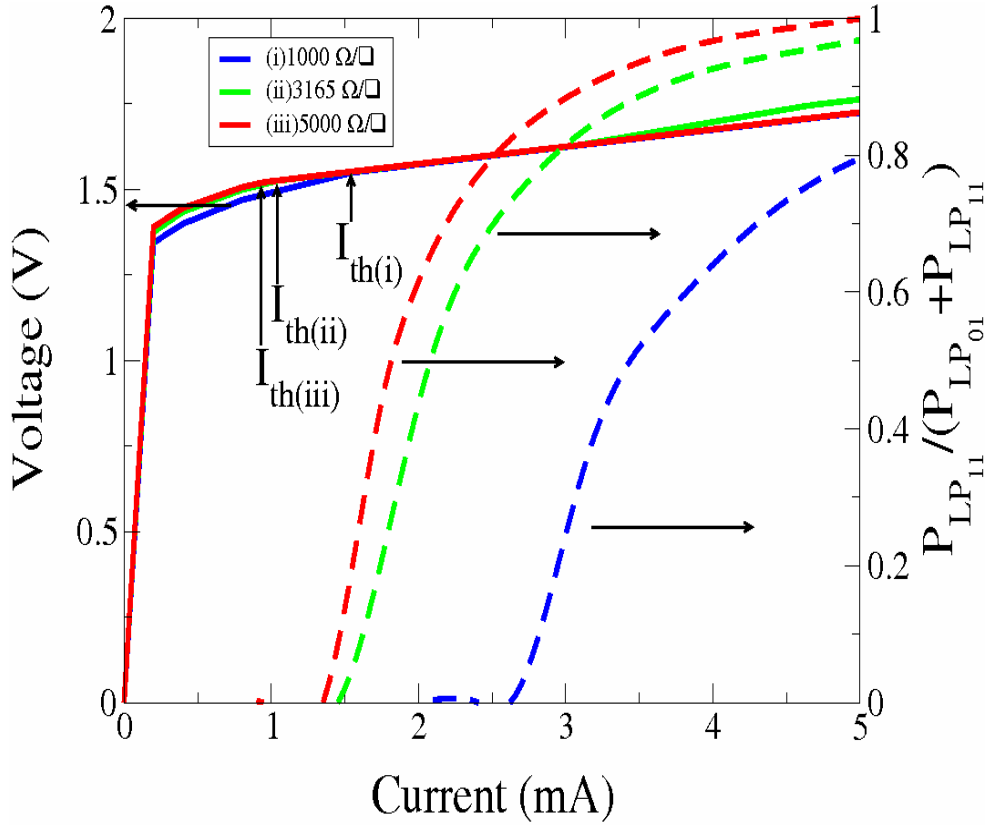
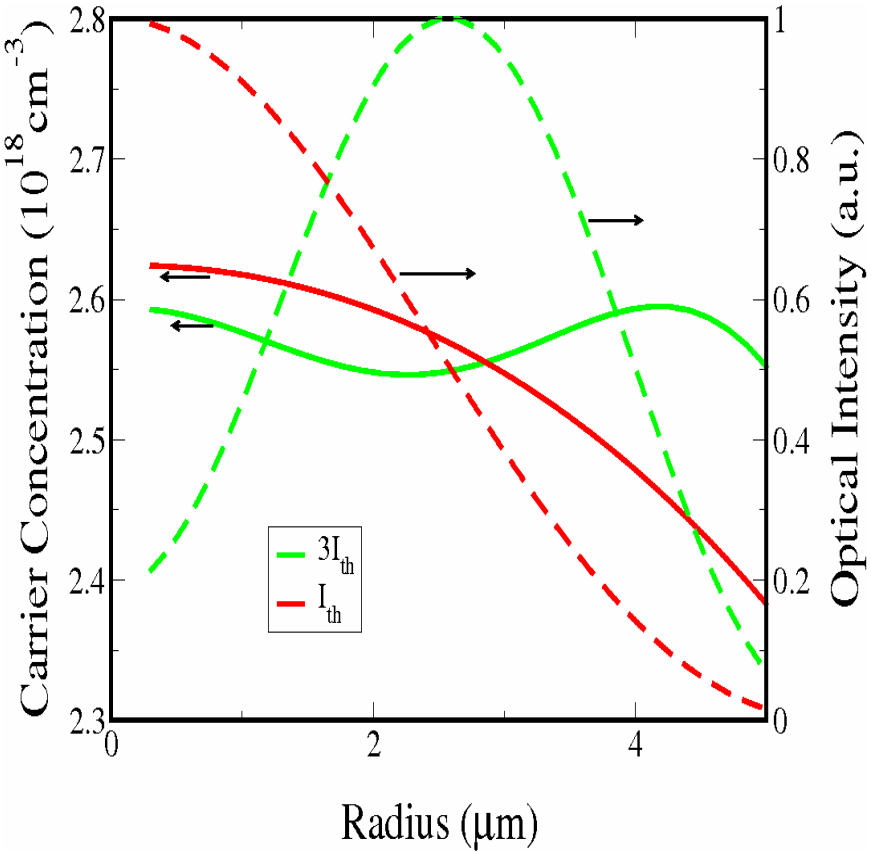
Results



- Higher sheet resistance under the oxide layer reduces the threshold – at the expense of allowing a higher order mode at a lower current

- Spatial hole burning (SHB) is primarily related to the p-DBR mirror of VCSELs



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