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Doping in ZnO Thin Films and Heterostructures[1]

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As a direct bandgap material with emission in the ultraviolet, ZnO is of significant interest for ultraviolet light emitting diodes and laser diodes. The critical issues in developing such optoelectronic devices include p-type doping, minority carrier injection, and heterostructure formation. In this talk, the doping and transport of ZnO films and heterostructures will be reviewed and discussed. Of particular interest is the current understanding of minority carrier injection and electroluminescence behavior in heterojunction structures.

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