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Ellipsometric characterization of MoSe₂ thin layers obtained by thermal treatment of molybdenum in selenium vapor.

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Highlights

- MoSe₂ layers are obtained by thermal treatment of molybdenum in selenium vapor.
- Spectroscopic ellipsometry is applied to the obtained layers and MoSe₂ target.
- Electronic band structure of MoSe₂ is calculated and dielectric function is derived.
- Calculated and ellipsometry-based data on dielectric function agree fairly well.
- Excitonic transitions are assumed to form the dielectric function at around 1 eV.

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