



Contribution ID: 485

Type: **Poster**

Multi-scale modelling of STM devices with in-plane degenerately doped contacts

Tuesday 13 December 2022 18:45 (15 minutes)

We demonstrate a hybrid quantum-semiclassical multi-scale modeling approach to characterize degenerately phosphorus-doped in-plane contacts and their impact on the energy states of the precision placed donor quantum dots under different bias conditions in silicon STM devices.

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Session Classification: Poster session

Track Classification: COMMAD: COMMAD: Semiconductor materials, devices, and technologies