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## **【842】 Operational Sweet Spot of Hole Spin Qubit**

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We demonstrate an operational sweet spot for a Ge/Si core/shell nanowire hole spin qubit, for which both Rabi frequency and spin echo coherence times show a maximum. It is related to the optimal operation point theoretically predicted for hole spins in the group IV crystals. Fitting measured data to a simple model we were able to extract the intrinsic g-factor and estimate the spin-orbit length. We also found a charge configuration of the double dot for which both spins can be individually addressed by two different microwave frequencies. Tuning the interdot tunnel barrier allowed us to control the exchange coupling, paving the way to perform exchange-based two-qubit operations.

### **Theoretical Work**

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