
Controlled quantum states of isolated and interacting defects in silicon

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Abstract

We describe the control and observation of coherent superpositions of defect orbitals in silicon using both scanning tunneling microscopy and pulsed THz radiation generated by the Dutch-UK free electron laser FELIX. The results are contrasted with those for control of defect spins, where we can produce entangled mixtures of nuclear and electronic degrees of freedom.

References:

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