Conference Paper

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The Dark Exciton in a Quantum Dot- A Novel Bright Qubit with Very Long Coherence Time

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 - OCIS Codes:
 - (270.0270) Quantum optics : Quantum optics
 - (300.0300) Spectroscopy : Spectroscopy
 - (300.6470) Spectroscopy : Spectroscopy, semiconductors
 - (270.5585) Quantum optics : Quantum information and processing

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http://www.opticsinfobase.org/abstract.cfm?URI=QELS-2010-QPDA9

- Abstract
- References (0)

Abstract

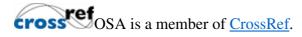
We demonstrate for the first time that the quantum dot confined dark exciton is a natural, coherent and long-lived qubit. We optically "write" its spin state and successfully "read" its subsequent coherent evolution.

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