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Population oscillations of two orthogonal states in a single quantum dot Q.Q. WANG[1], Department of Physics, Wuhan University, Wuhan 430072, P. R. China, A. MULLER, Department of Physics, The University of Texas at Austin, Austin, Texas, 78712, H.J. ZHOU, M.T. CHENG, Department of Physics, Wuhan University, Wuhan 430072, P. R. China, Q.K. XUE, International Center for Quantum Structure, Institute of Physics, The Chinese Academy of Sciences, Beijing 100080, P. R. China, P. BIANUCCI, C.K. SHIH, Department of Physics, The University of Texas at Austin, Austin, Texas, 78712 — We investigated the exciton dynamics in a single self-assembled quantum dot with a V-type three-level structure. Using tailored pulse pairs we generated population oscillations between two orthogonal excitonic states without a direct transition. We found good agreement between measured data and theoretical calculations.

[1]Department of Physics, The University of Texas at Austin, Austin, Texas, 78712

Pablo Bianucci
Department of Physics, The University of Texas at Austin
Austin, Texas, 78712

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