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Absence of Even-Odd Effect in Kondo Resonance in Single-Molecule Transistors DONG-HUN CHAE, ZHEN YAO, Department of Physics, The University of Texas at Austin, Austin, TX 78712, JEONG T. LEE, JONATHAN L. SESSLER, Department of Chemistry and Biochemistry, The University of Texas at Austin, Austin, TX78712 — We have observed the Kondo effect in single-electron transistors incorporating individual cyclo[n]pyrrole molecules. In contrast to the usual spin-1/2 Kondo effect, the zero-bias Kondo resonance in these devices appears for both even and odd number of electrons. We suggest a model in which instead of alternate spin filling, two successive electrons are added to the molecule with parallel spins due to strong exchange interaction within the molecule.

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