Supplementary information

**Electron-doping induced half-metallicity in one-dimensional Co-dithiolene molecular wires**

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Figure S1. Comparison of the energy difference between FM and AFM (\(E_{\text{FM}}-E_{\text{AFM}}\)) versus the number of electrons doped into the wire as obtained from DFT+U and DFT calculations, respectively.
Figure S2. Band structure of electron-doped Co-dithiolene molecular wire with a concentration of 0.3e per unit cell obtained from DFT+U calculations.