

A highly conducting mixed-valence nickel bis(dithiolene) salt [Et₄N][Ni(Me-thiazSe-dt)₂]₂ with selone substitution

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SUPPLEMENTARY INFORMATION

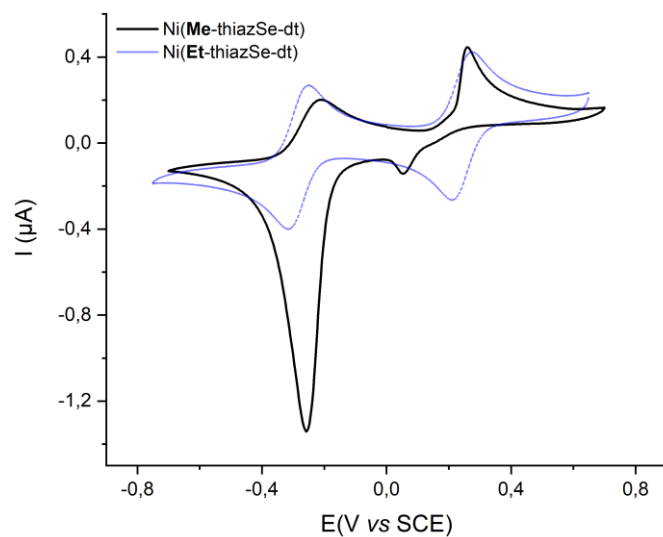


Fig. S1 Cyclic voltammety of the anionic complex $[\text{NBu}_4][\text{Ni}(\text{Me-thiazSe-dt})_2]$ (black line), and the more soluble $[\text{NBu}_4][\text{Ni}(\text{Et-thiazSe-dt})_2]$ in blue as reference (Taken from ref S1).

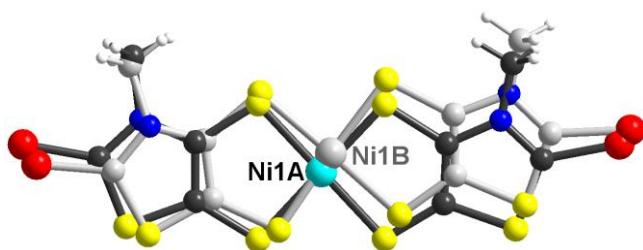


Fig. S2 Detail of the disorder model refined for $[\text{Ni}(\text{Me-thiazSe-dt})_2]^{2-}$ in its Bu_4N^+ salt. The major component (85% occupation) is highlighted with black bonds, the minor one (15%) with light grey bonds.

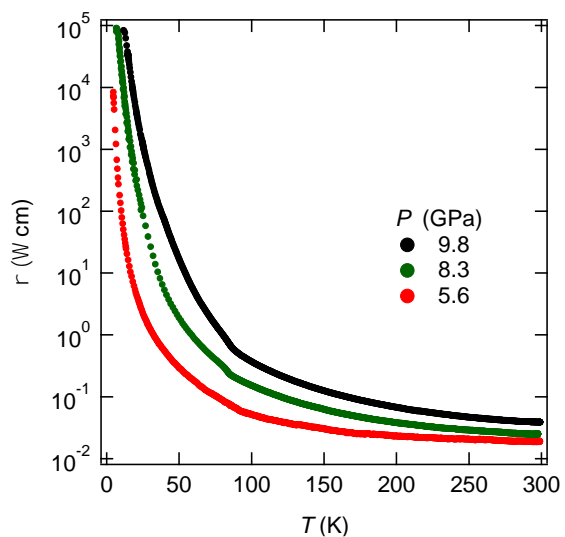


Fig. S3 Temperature and pressure dependence of the resistivity of the mixed-valence salt $[\text{NEt}_4][\text{Ni}(\text{Me-thiazSe-dt})_2]_2$ in the high pressure range

Reference

- 1 H. Hachem, H.-B. Cui, R. Kato, O. Jeannin, F. Barrière, M. Fourmigué and D. Lorcy, *Inorg. Chem.*, 2021, **60**, 7876–7886