The Role of Cation on the Crystal Packing of the Molecular Conductors based on Ni(dcdmp)₂

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Square planar dithiolates have for long been appealing candidates as building blocks for molecular based conductors. Such transitions metal complexes can be used as simple counter-anions in charge transfer with other widely known planar species as TTF, BET-TTF, TMTSF or ET 1,2,3 . Here we report the crystal structures as well as the role of cationic spacers on the crystal packing of the charge transfer salts. Using electrocrystallisation techniques was possible to obtain crystals of several charge transfer salts combining the [Ni(dcdmp)₂] anion with different π donors: TMTSF, ET and DT-TTF.

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