

Supplementary information

Article

The valence band structure of the [Ni(Salen)] complex: an ultra-violet, soft X-ray and resonant photoemission spectroscopy study

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As can be seen from Figure S1, all presented survey spectra of H₂Salen and the [Ni(Salen)] complex do not show any peaks from substrate elements or contaminant inclusions. Therefore, it can be stated that the monomer layers thus prepared are of high purity.

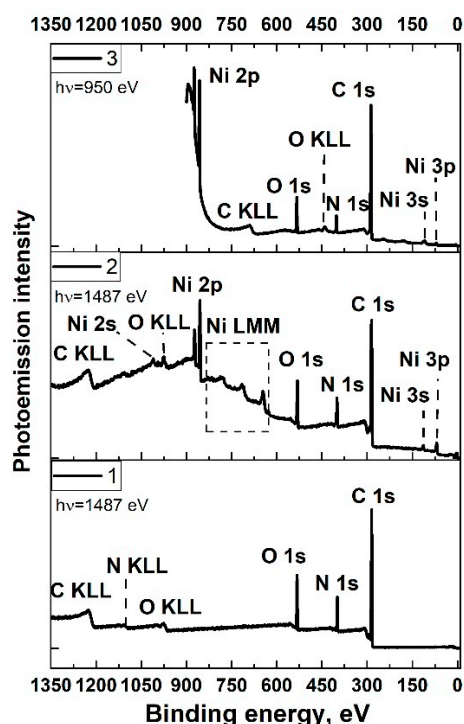


Figure S1. Survey PE spectra from the metal-free H₂Salen (1) and [Ni(Salen)] complex deposited onto different substrate: (2) – Ti foil (ESCALAB 250 Xi); (3) – Pt plate (BESSY II electron storage ring, Russian-German beamline (RGLB))

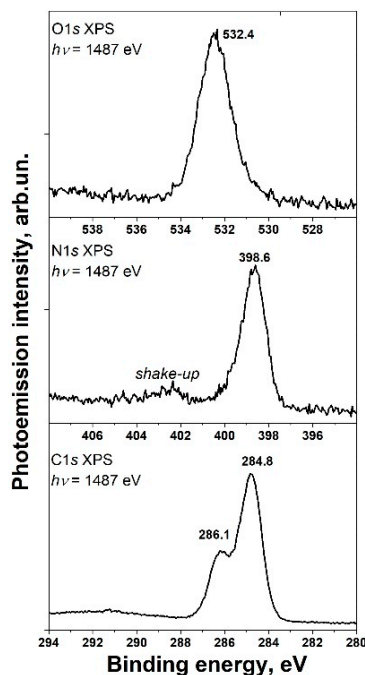


Figure S2. O 1s, N 1s and C 1s PE spectra of the H₂Salen deposited onto Ti foil (ESCALAB 250 Xi)

It can be seen from Fig. S3 that the Ni 2p_{3/2,1/2}, O 1s, N 1s and C 1s PE spectra measured from [Ni(Salen)] deposited onto the Pt and Ti substrates practically do not differ in shape, but differ in the position of the peak maxima. This shift is |0.3| eV and is the result of differences in the calibration of the spectrometers.

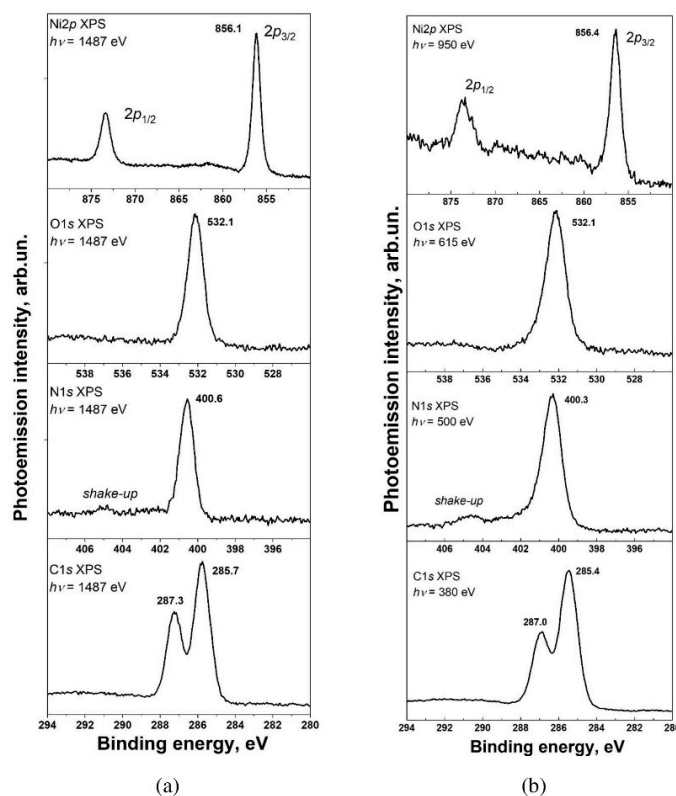


Figure S3. Ni 2p_{3/2,1/2}, O 1s, N 1s and C 1s PE spectra of the [Ni(Salen)] complex deposited onto different substrate: (a) – Ti foil (ESCALAB 250 Xi); (b) – Pt plate (BESSY II electron storage ring, Russian-German beamline (RGLB))