Electronic Supplementary Information for:

Functionalization on Dithiocarbamate and Xanthate Units Resulting in Unusual C–H···Ni Anagostic Intermolecular Interactions in their Homoleptic Ni(II) Complexes: Syntheses, Crystal Structures and Conducting Properties

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1. Electronic absorption spectra of the Ni(II) Metal Complexes (1-6)



Fig. S1. Absorption spectra of the complexes (1-6) in 10^{-4} M dichloromethane solution.



Fig. S2. Absorption spectra of the complexes (1-6) showing weak d-d transitions.

2. ORTEP Diagram for Ni(II) Metal Complexes 2, 3, 5 and 6



Fig. S3. The centrosymmetric structure of 2 with thermal ellipsoid at 30% probability level



Fig. S4. The centrosymmetric structure of 3 with thermal ellipsoid at 30% probability level



Fig. S5. The centrosymmetric structure of 5 with thermal ellipsoid at 30% probability level



Fig. S6. The centrosymmetric structure of 6 with thermal ellipsoid at 30% probability level

3. Packing diagram for complexes 1 and 2



Fig. S7. Packing diagram for complex 1 showing supramolecular framework through intermolecular S...S interactions.



Fig. S8. Packing diagram for complex **2** along axis 'c', depicting favourable orientation of methylene protons in crystal packing for Ni…H–C intermolecular anagostic interactions.

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