SI materials for Paper:

**Cu(II) and Ni(II) dioxotetraamine complexes integrated with tetrathiafulvalene moiety, structures and solution chemistry**

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**SI-Fig. 1.** ESR spectra of 1 measured using powder sample at 110 K.
**SI-Fig.2.** Crystal structure of 2 and 3 with labeling schemes, hydrogen atoms are omitted for clarity except the hydrogen atoms of N–H and O–H. (a) [CuL·(CH₃OH)]·0.5H₂O (2), (b) [CuL·(DMF)]·H₂O (3).
SI-Fig. 3. Similar to Figure 2, the band structure is also found in compounds 2-4 (2, a; 3, b; 4, c), that is the fundamental character of molecular arrangement for these type of compounds.
SI-Fig. 4. Cooperating with the N1–H1A⋯O2 and N2–H2B⋯O2 hydrogen bonds, hydrogen bonds that involve the imido oxygen atoms and the OH groups of methanol molecules (a) link the molecules of 1 into a 2-D aggregate (b).
SI-Fig. 5. Proposed structure of the TTF oxidized Cu(II) complex.

SI-Fig. 6. Irreversible CV curve of the free ligand.