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Supplementary Information

Intercalation and Electrical Behavior of $Ta_xMo_{1-x}S_2$ ($x > 0.5$) Layered Mixed Disulfides

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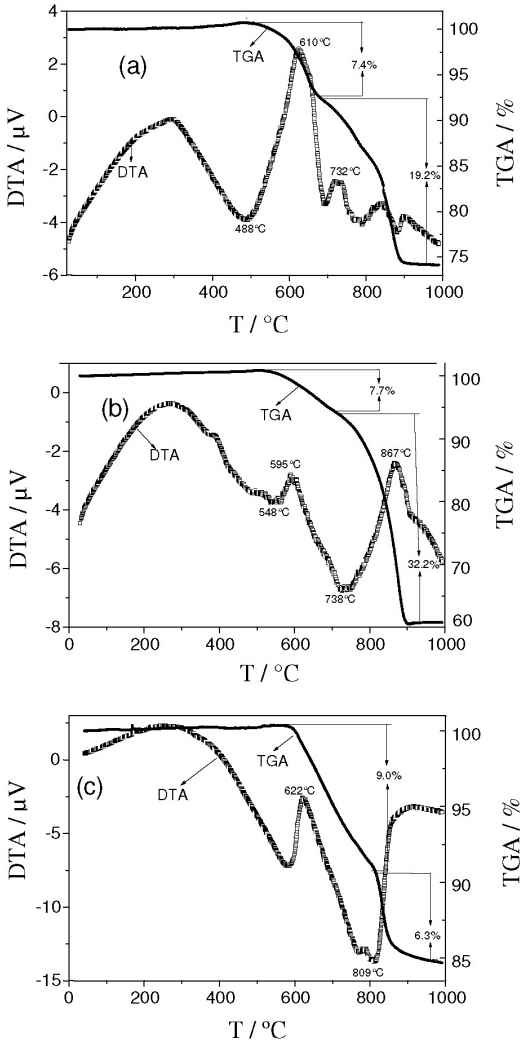

Figure S1. TGA-DTA curves obtained under N_2 flow for (a) $Ta_{0.55}Mo_{0.45}S_2$, (b) $Ta_{0.75}Mo_{0.25}S_2$ and (c) $Ta_{0.90}Mo_{0.10}S_2$.

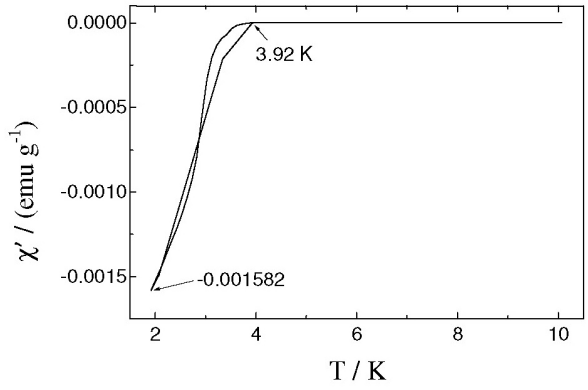

Figure S2. Variation of the real component of the ac magnetic susceptibility with temperature for $Ta_{0.90}Mo_{0.10}S_2$.

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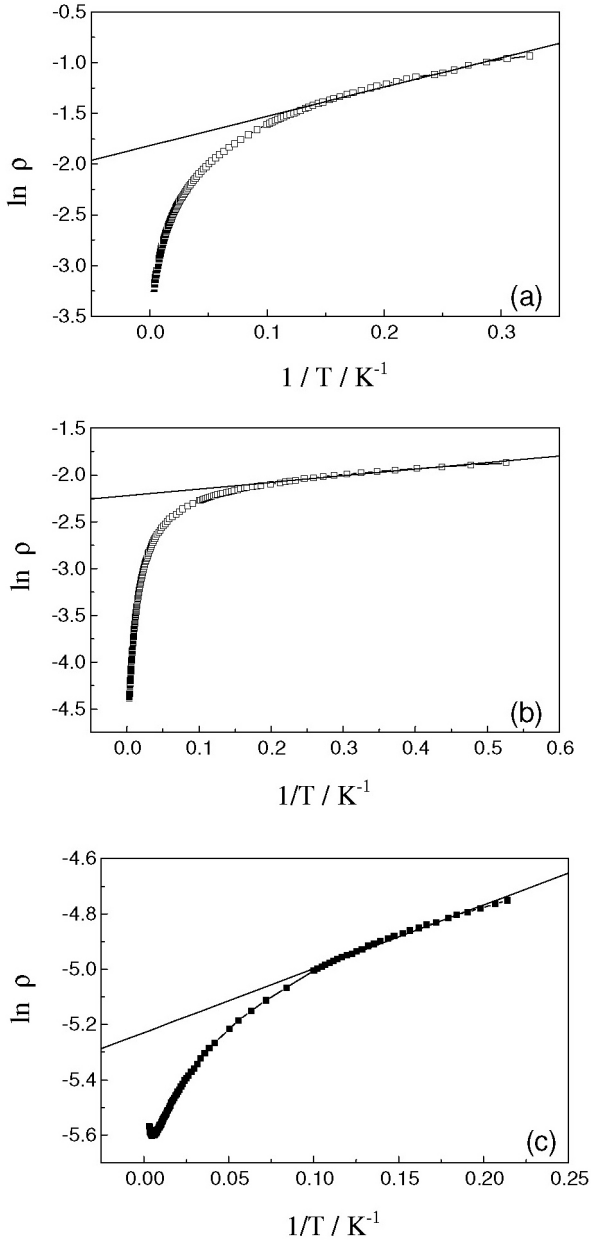

Figure S3. Resistivity (ρ) *vs*. 1/T for the pyridine intercalation compounds: (a) $Ta_{0.55}Mo_{0.45}S_2$·0.32Py, (b) $Ta_{0.75}Mo_{0.25}S_2$·0.41Py and (c) $Ta_{0.55}Mo_{0.45}S_2$·0.46Py.

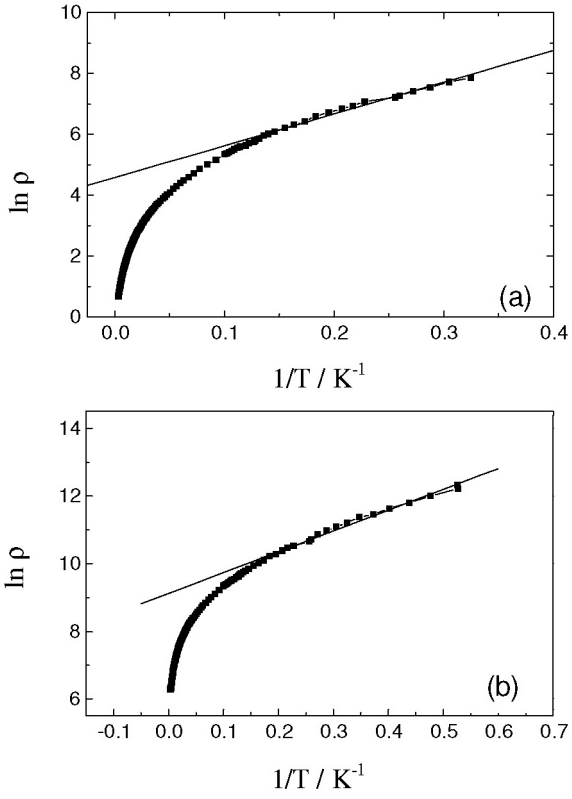

Figure S4. Resistivity (ρ) *vs*. 1/T for the PEO intercalation compounds: (a) $Li_{0.97}Ta_{0.55}Mo_{0.45}S_2$·2.3PEO and (b) $Li_{0.99}Ta_{0.90}Mo_{0.10}S_2$·2.2PEO.