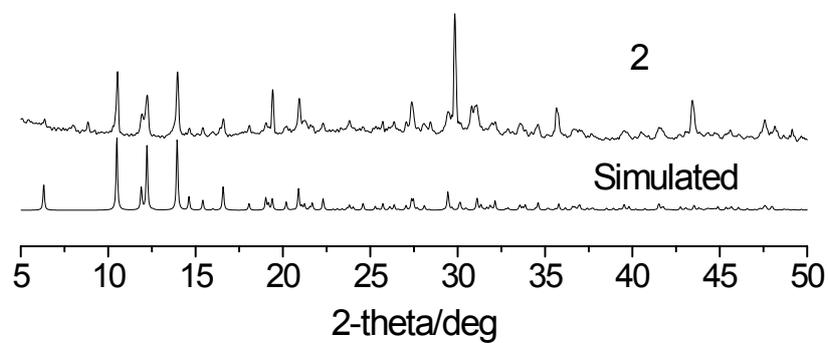
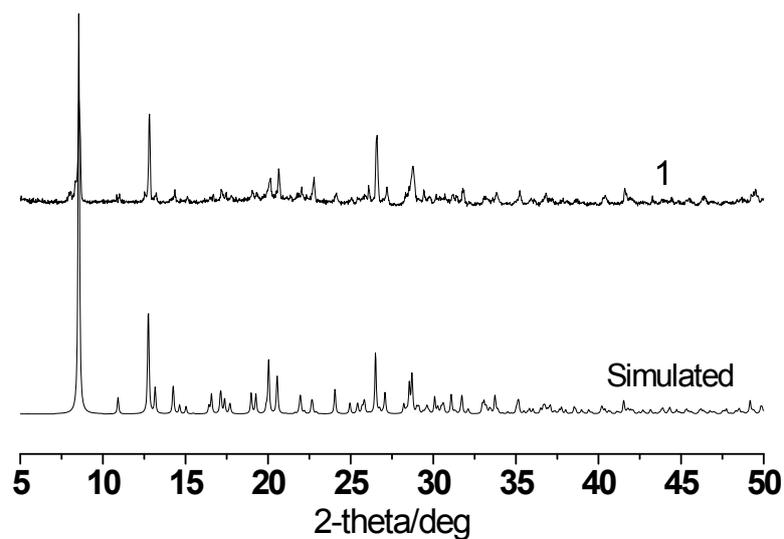


Supporting Information

**A series of new manganese thioarsenates(V) based on different unsaturated  
[Mn(amine)<sub>x</sub>]<sup>2+</sup> complexes**

Jian Zhou, Xiao-Feng Tan, Xing Liu, Miao Qing, Rong-Qing Zhao, and Qiuling Tang



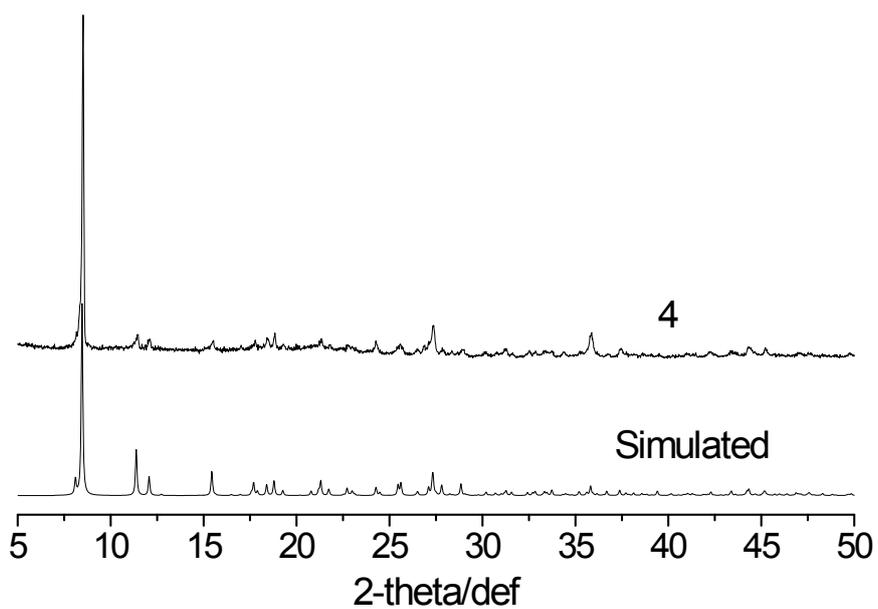
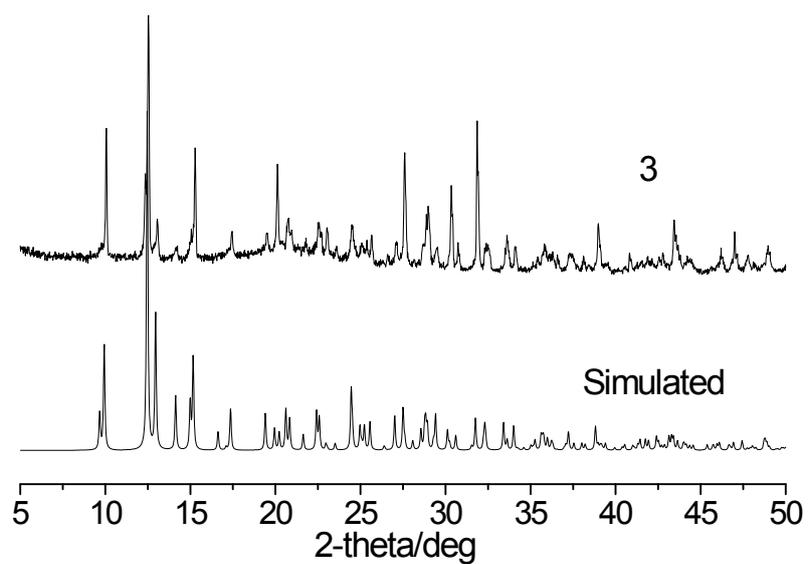


Fig. S1 Experimental and simulated powder XRD patterns.( The simulated XRD pattern of **1-4** is slightly different from the measured one. It means that **1-4** are sensitive to the moisture and air)

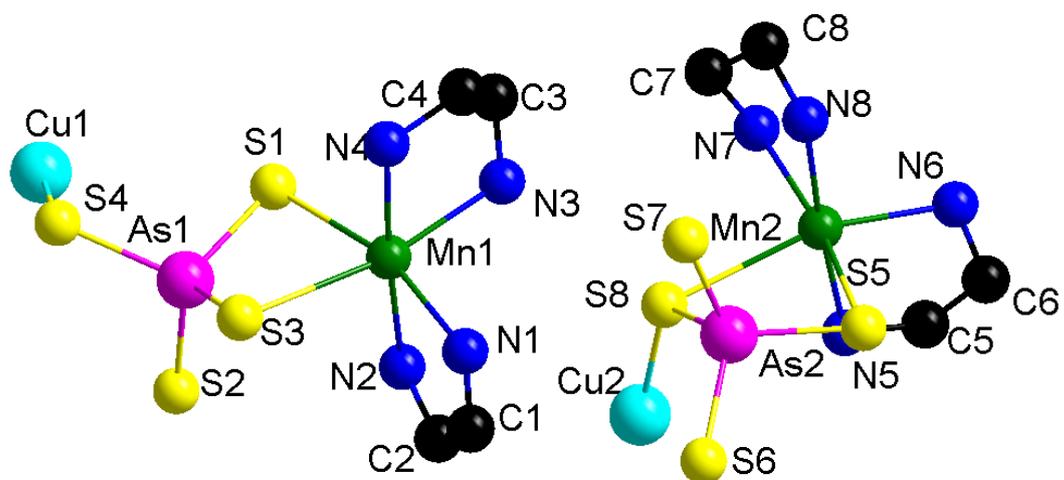


Fig. S2 The asymmetric unit of **1** (H atoms bonded to C and N atoms have been omitted for clarity).

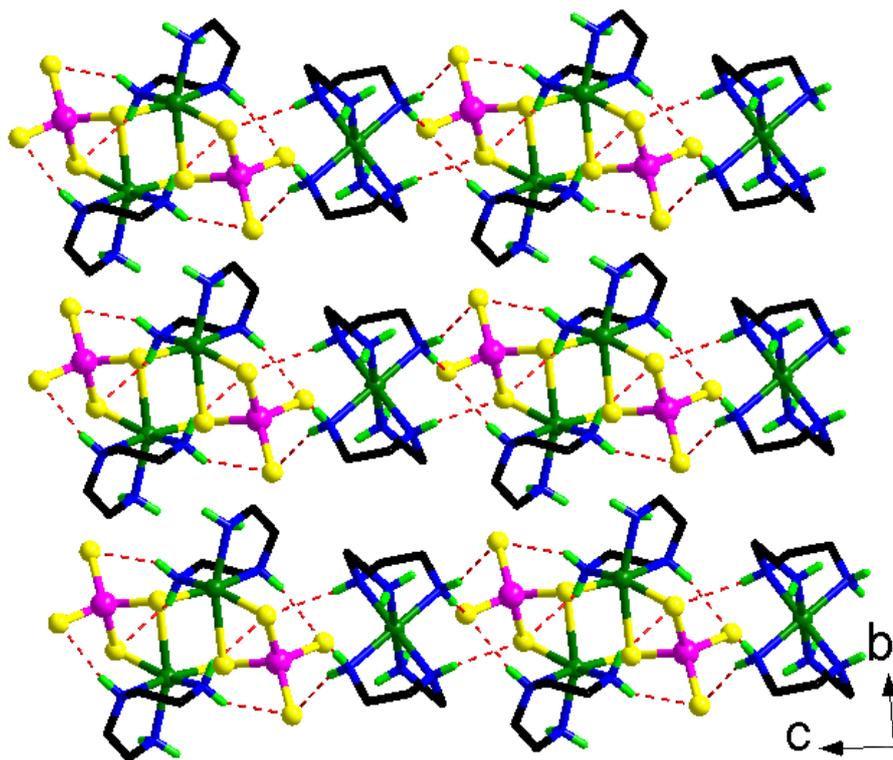


Fig. S3 The crystal packing of **2**.

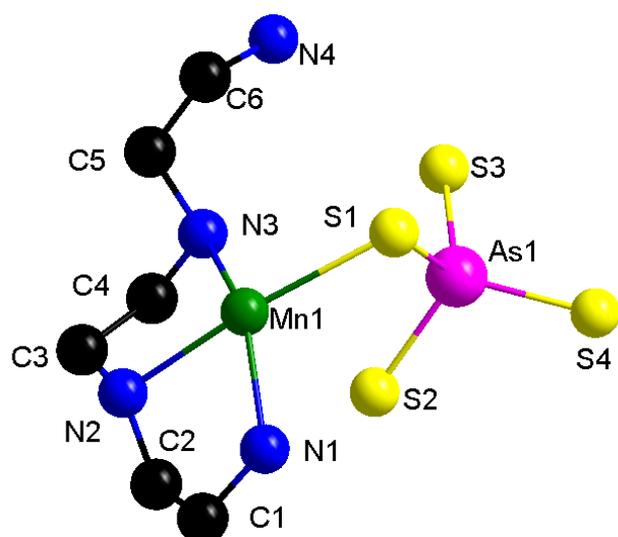


Fig. S4 The asymmetric unit of **3** (H atoms bonded to C and N atoms have been omitted for clarity).

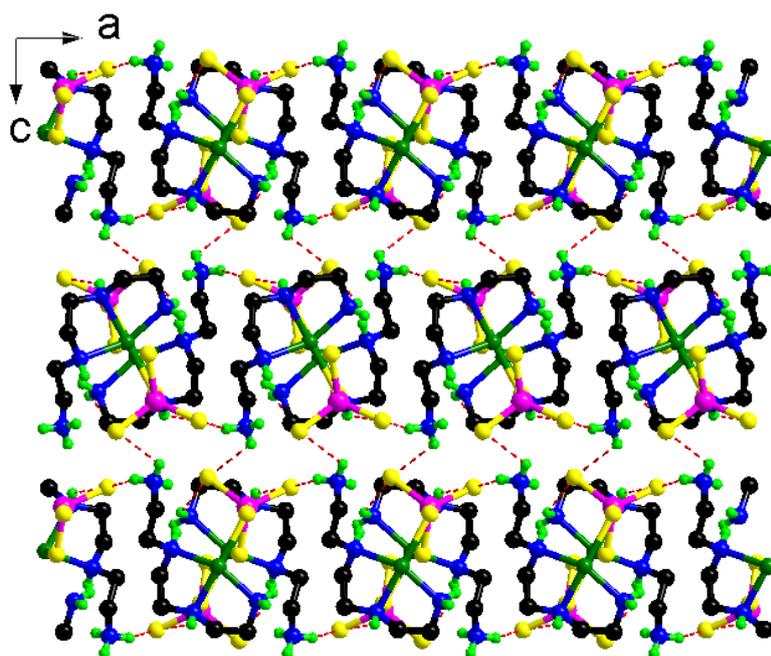


Fig. S5 3-D hydrogen bonding network structure.

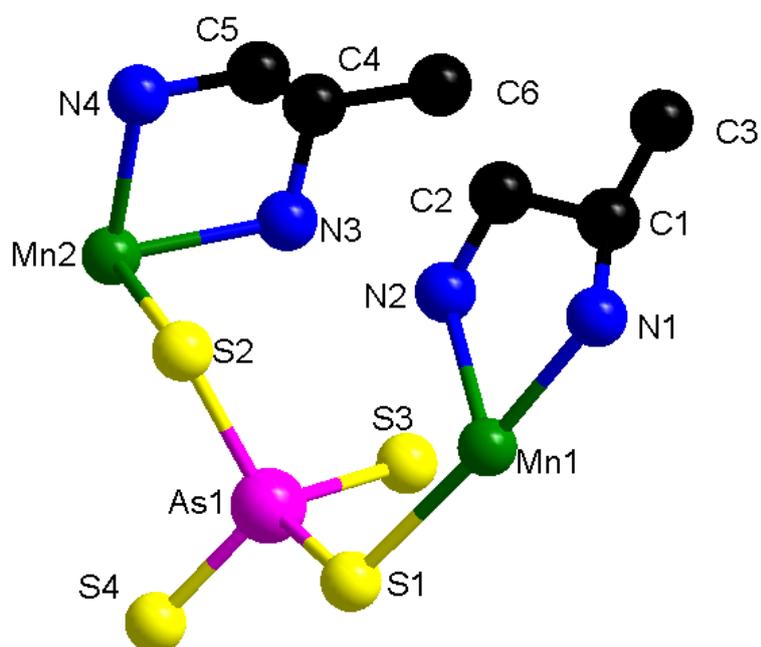


Fig. S6 The asymmetric unit of **4** (H atoms bonded to C and N atoms have been omitted for clarity).

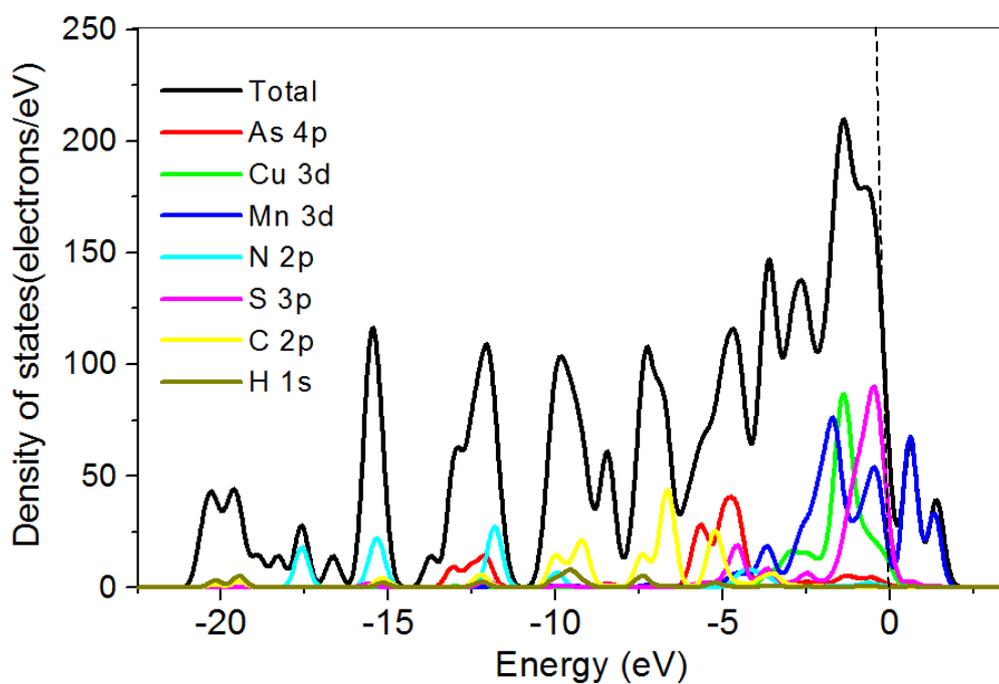
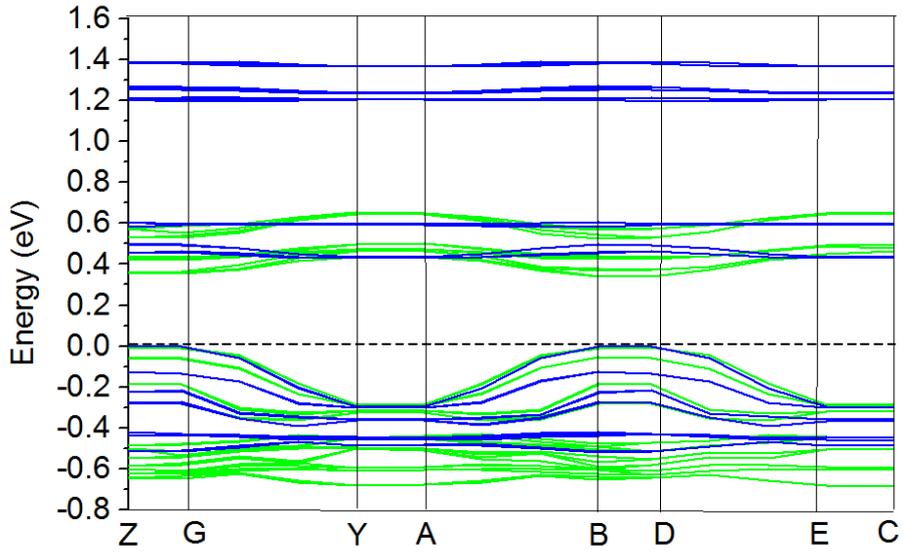
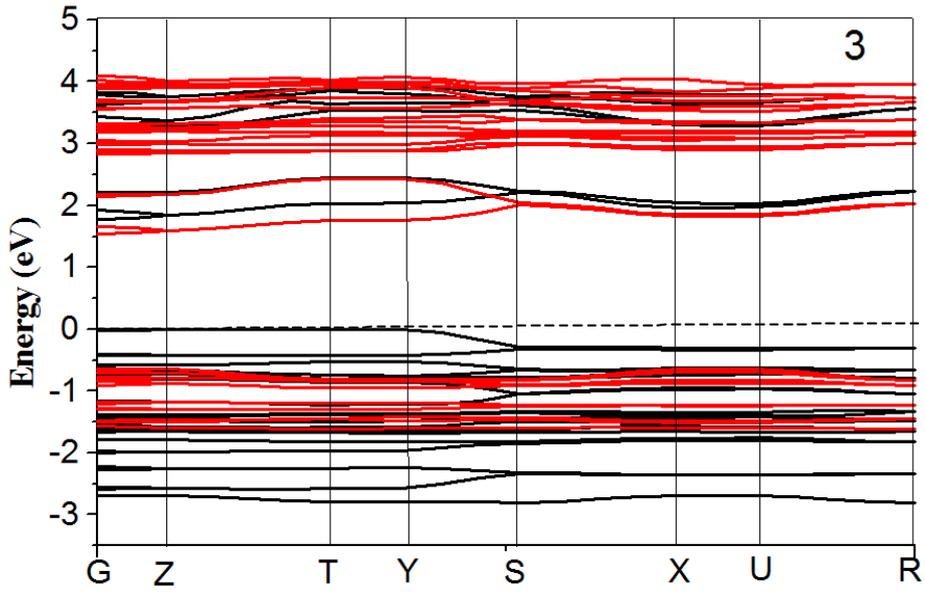


Fig. S7 Total and partial DOS for **1**. The Fermi level is set at 0 eV (dotted line).

1



3



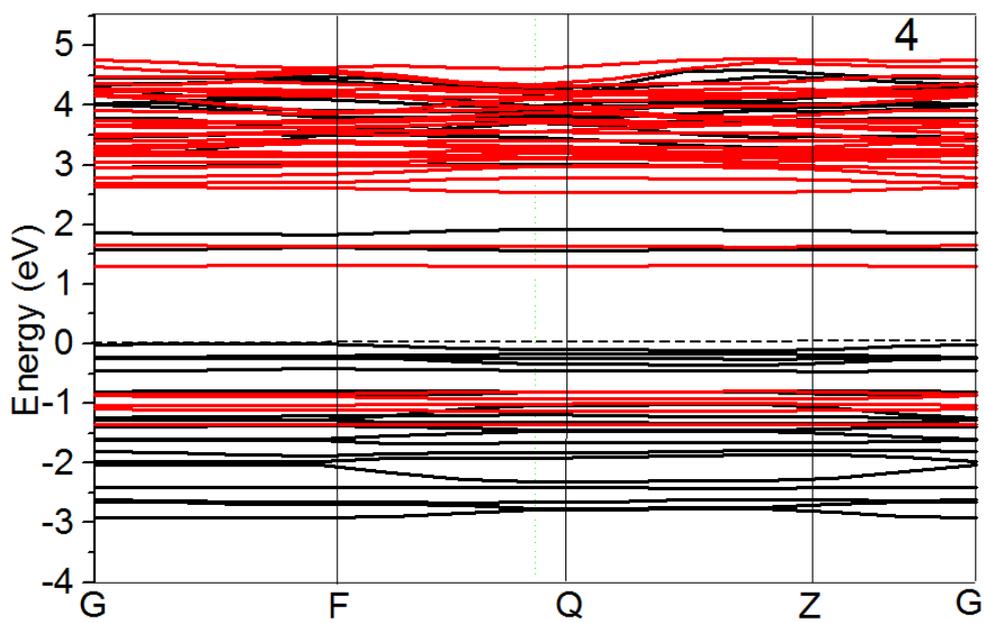


Fig. S8 The calculated band structures of **1**, **3** and **4**. The Fermi level is set at 0 eV (dotted line).