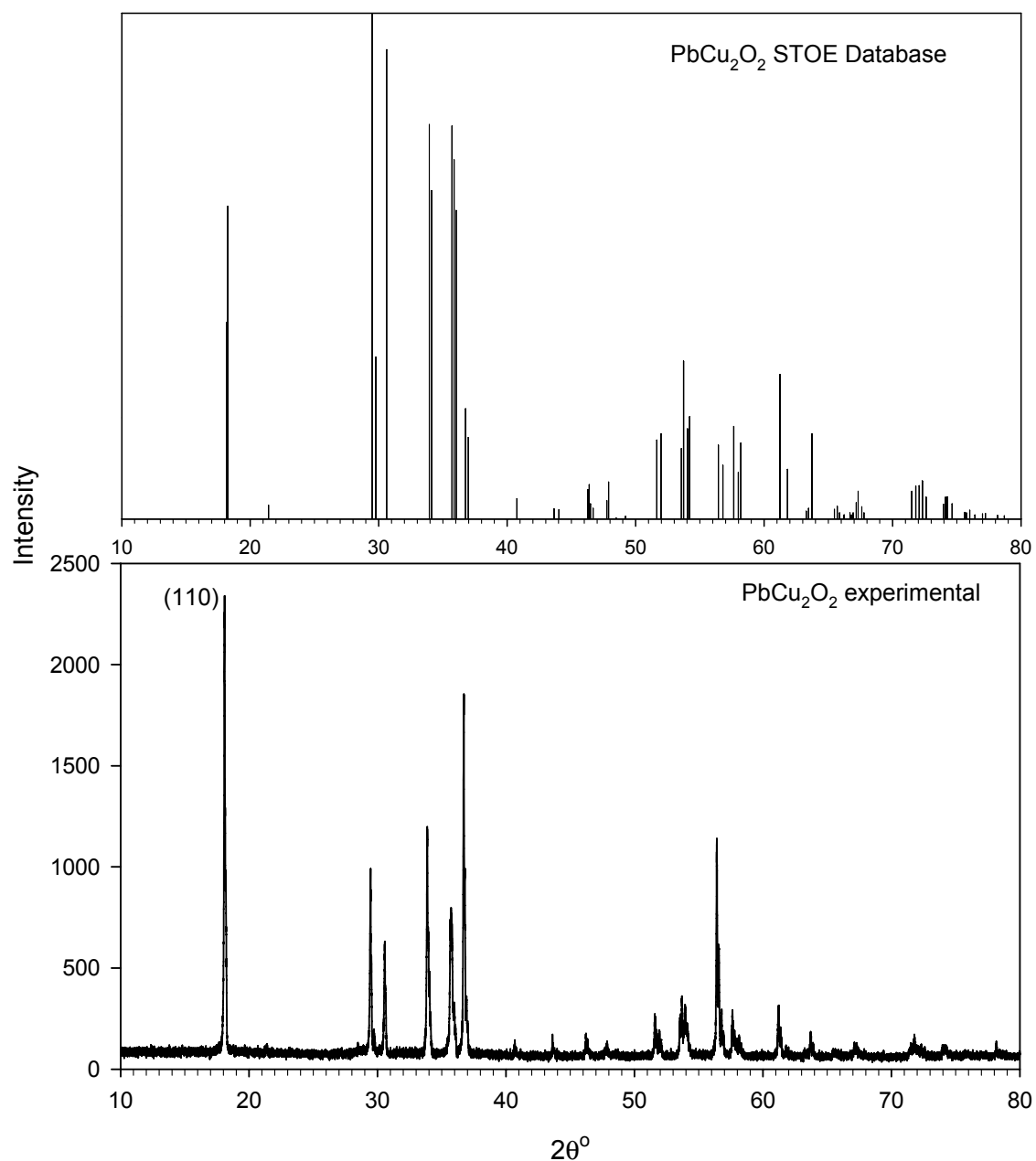


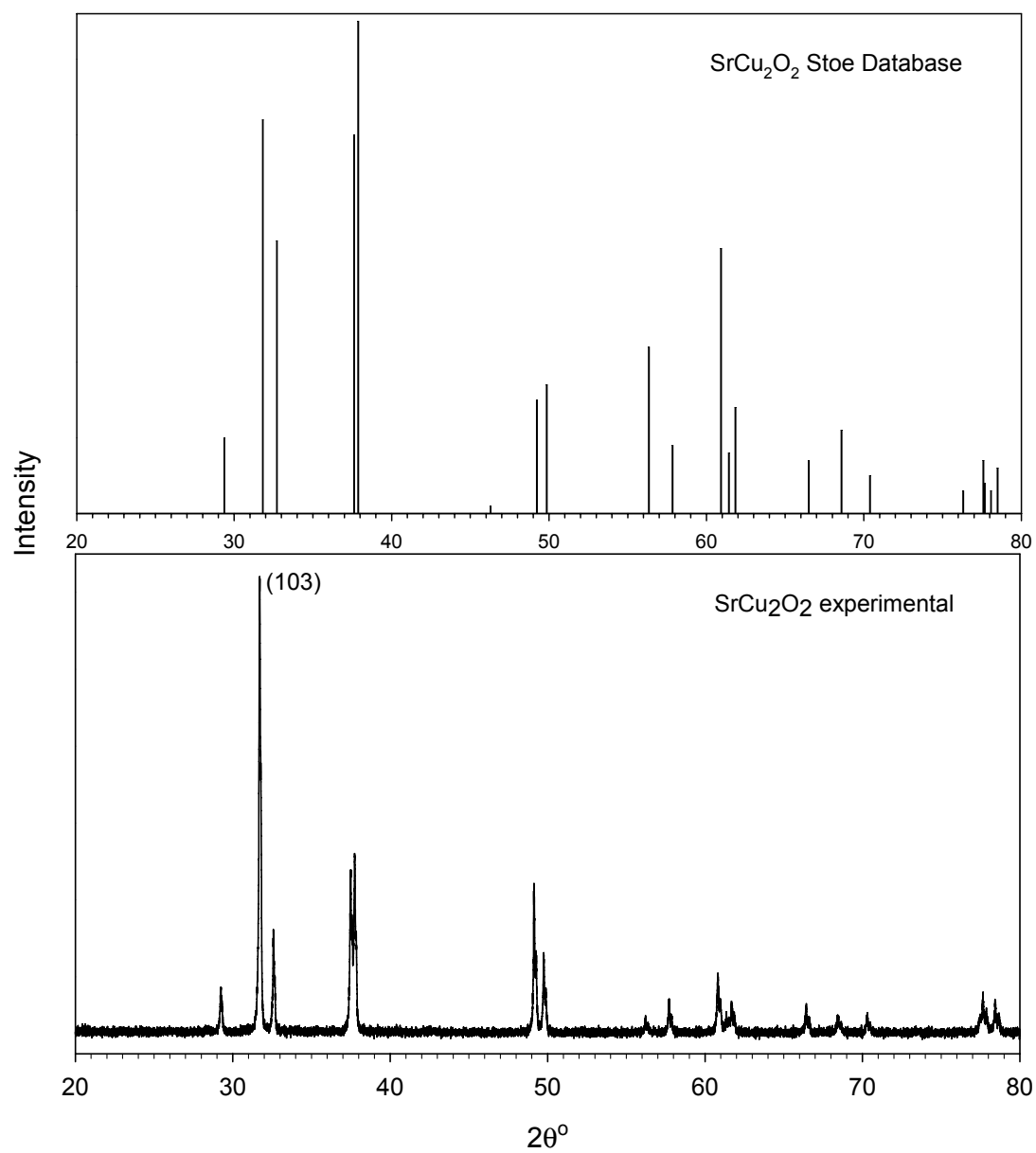
### Electronic Supplementary Information File.

#### A comparative study of the electronic structures of $\text{SrCu}_2\text{O}_2$ and $\text{PbCu}_2\text{O}_2$ by density functional theory, high resolution X-ray photoemission and electron paramagnetic resonance spectroscopy.

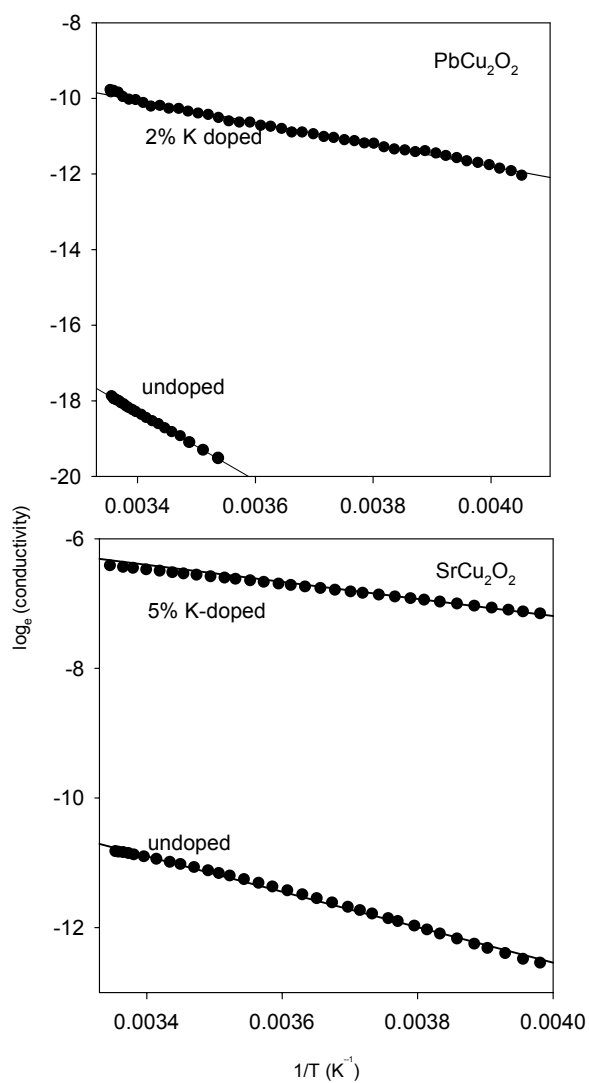
K. G. Godinho, G.W. Watson, A. Walsh, A.J.H. Green, D.J. Payne, J. Harmer and  
R.G. Egdell



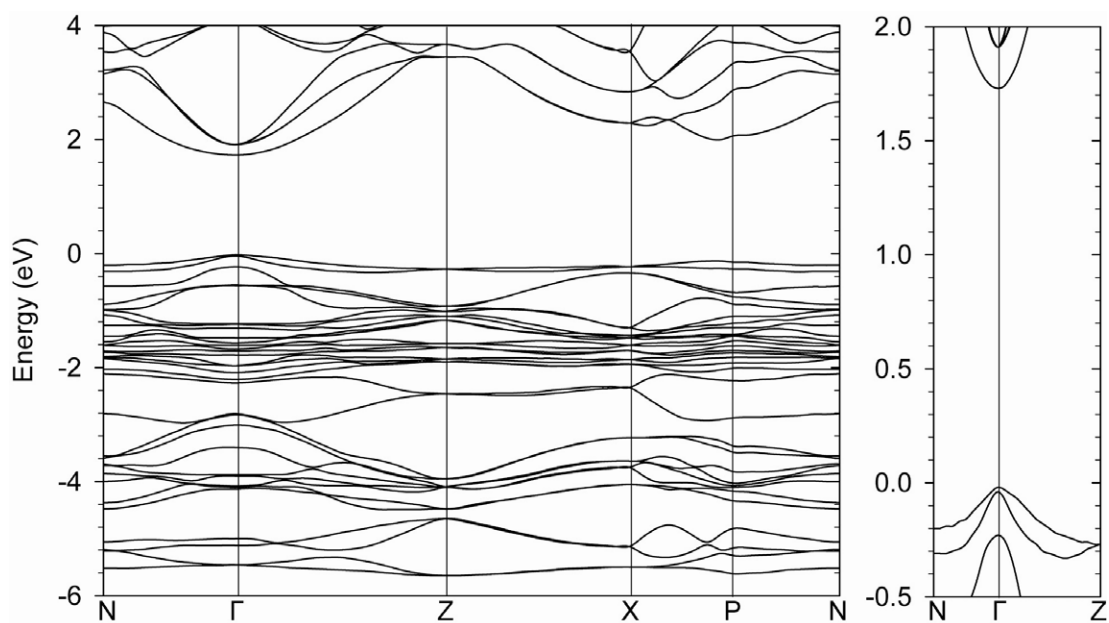
Experimental and reference powder XRD pattern for  $\text{PbCu}_2\text{O}_2$ .



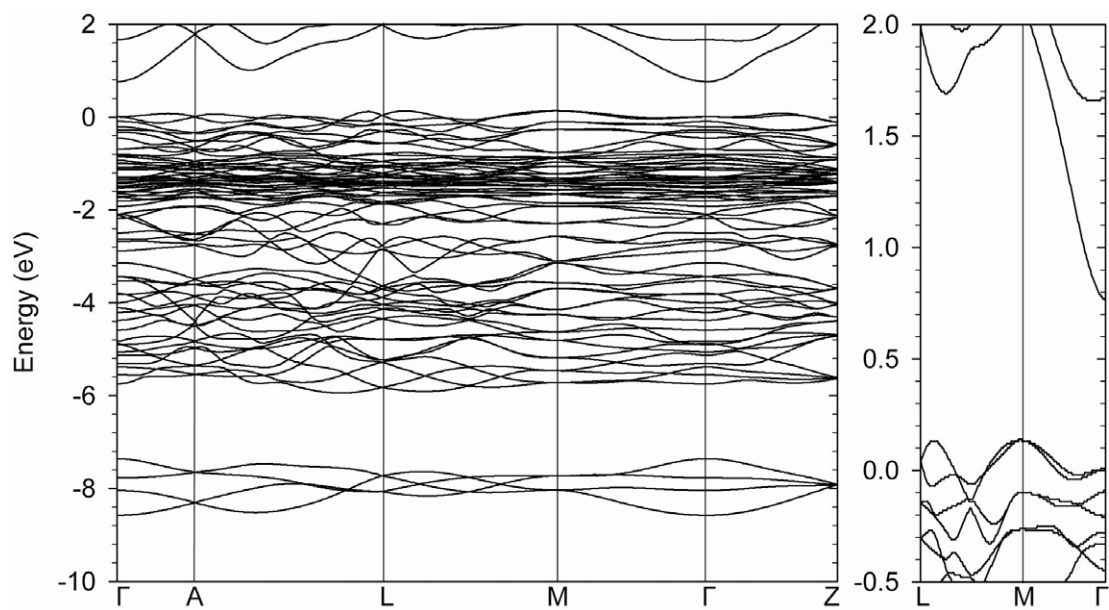
Experimental and reference powder XRD pattern for SrCu<sub>2</sub>O<sub>2</sub>.



Electronic conductivity data for  $\text{PbCu}_2\text{O}_2$  and  $\text{SrCu}_2\text{O}_2$ . The photograph show samples mounted for the 4 probe measurements.



Full electronic bandstructure for SrCu<sub>2</sub>O<sub>2</sub>



Full electronic bandstructure for PbCu<sub>2</sub>O<sub>2</sub>