

Supporting Information for

## **Threaded structure and blue luminescence of $(\text{CuCN})_{20}(\text{Piperazine})_7$**

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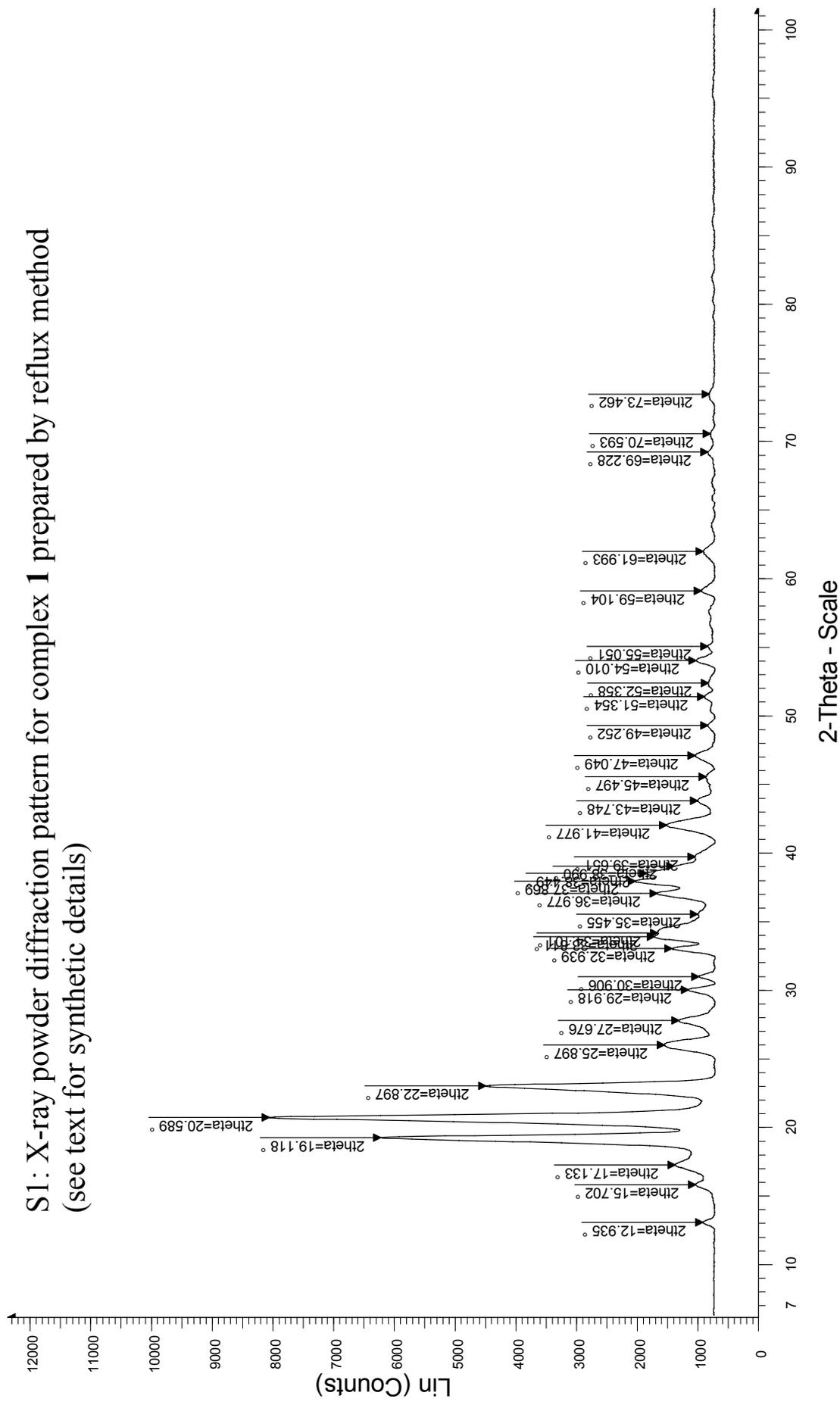
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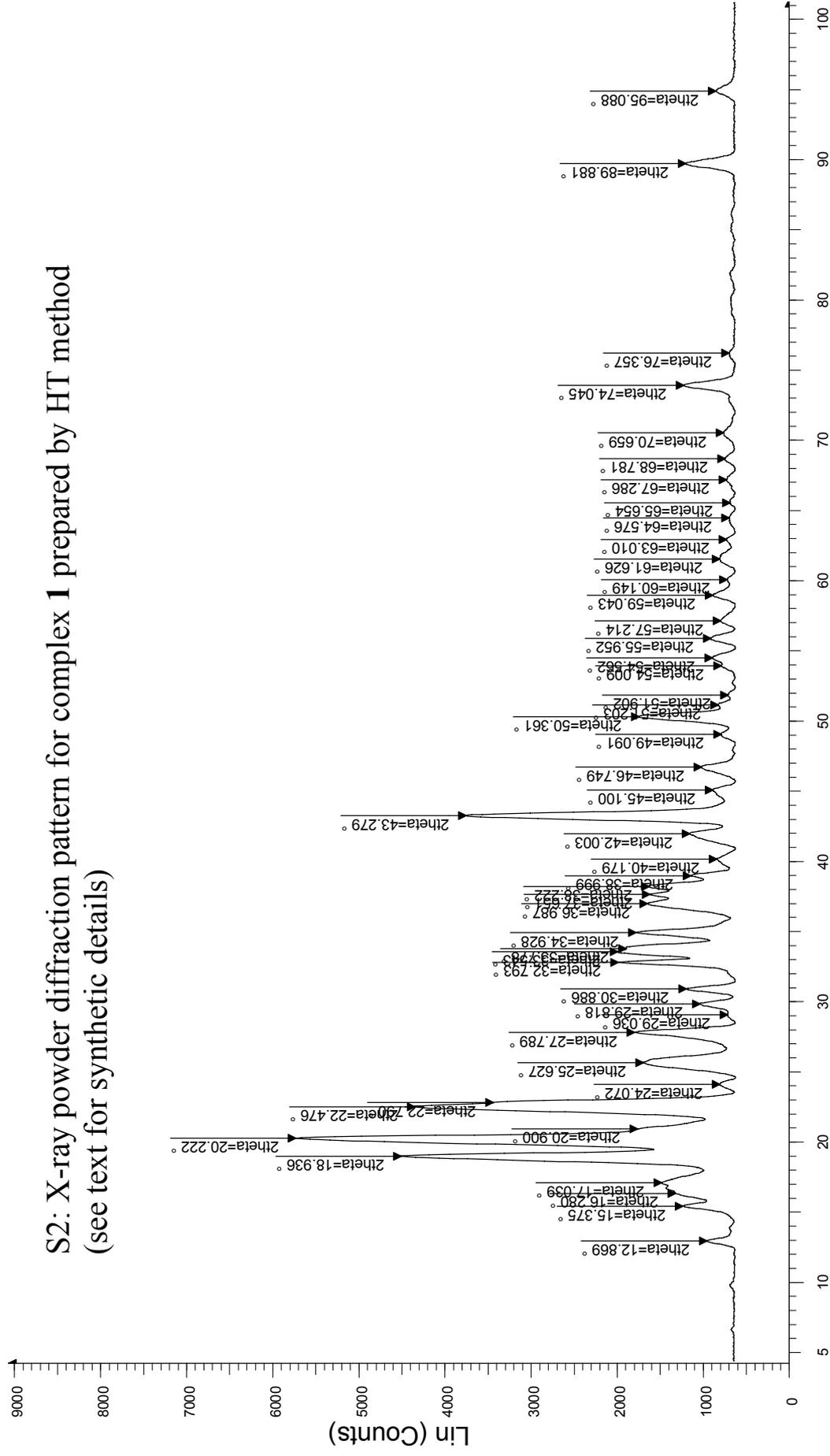
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# S1: X-ray powder diffraction pattern for complex **1** prepared by reflux method (see text for synthetic details)



File: (CuCN)20(Pip)7 421 reflux good.raw - Type: Detector - Start: 6.140 ° - End: 101.720 ° - Step: 0.030 ° - Step time: 180. s - Temp.: 25 °C (Room) - Time Started: -1 s - 2-Theta: 6.140 ° - Theta: 173.000  
Operations: Y Scale Add 708 | Background 1.000, 1.000 | Import

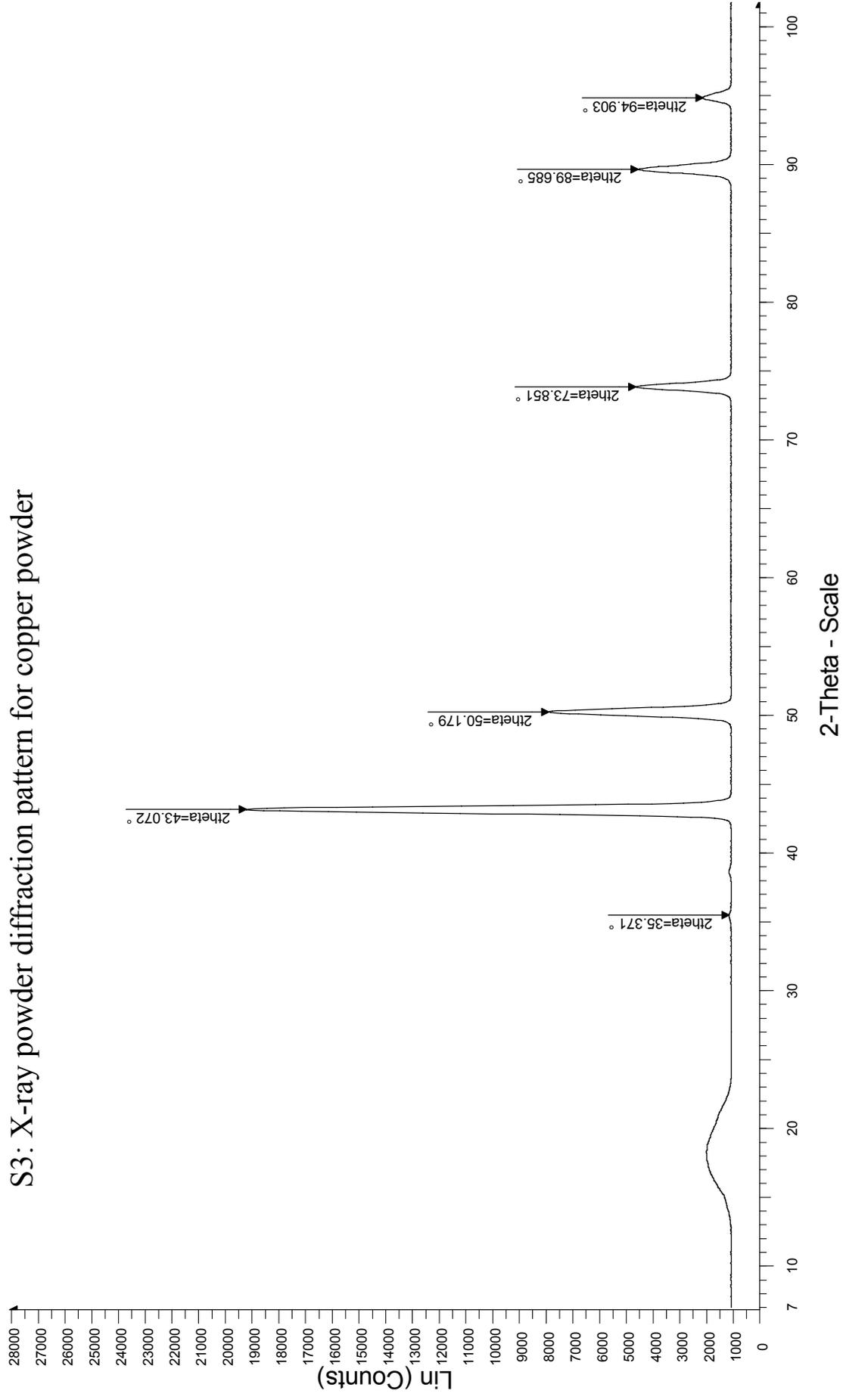
# S2: X-ray powder diffraction pattern for complex **1** prepared by HT method (see text for synthetic details)



## 2-Theta - Scale

File: (CuCN)20(Pip)7 311 HT.raw - Type: Detector - Start: 4.220 ° - End: 101.420 ° - Step: 0.030 ° - Step time: 180. s - Temp.: 25 °C (Room) - Time Started: -1 s - 2-Theta: 4.220 ° - Theta: 173.000 ° - Chi: Operations: Y Scale Add 625 | Background 1,000,1,000 | Import

### S3: X-ray powder diffraction pattern for copper powder



File: Cu powder.raw - Type: Detector - Start: 6.820 ° - End: 101.920 ° - Step: 0.030 ° - Step time: 180. s - Temp.: 25 °C (Room) - Time Started: -1 s - 2-Theta: 6.820 ° - Theta: 173.000 ° - Chi: 54.78 ° - Phi: Operations: Y Scale Add 1000 | Background 1.000,1.000 | Import

S4: Thermal ellipsoid drawing of repeat unit of **1** illustrating close Cu...Cu interactions

