Supplementary Table S2. Powder X-ray diffraction data (*d* in Å) for cuprocherokeeite (*I*calc > 2.5).

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *I*obs | *d*obs | *d*calc | *I*calc | *hkl* |  | *I*obs | *d*obs | *d*calc | *I*calc | *hkl* |
| 17 | 7.46 | 7.3679 | 11 | 0 0 2 |  | 7 | 2.483 | 2.4726 | 8 | 4 1 3 |
| **100** | **5.27** | 5.2552 | 100 | 2 1 0 |  | **22** | **2.435** | 2.4560 | 4 | 0 0 6 |
|  |  | 5.0625 | 5 | -2 1 1 |  | 2.4207 | 16 | -4 1 4 |
| 10 | 4.92 | 5.0081 | 11 | -2 0 2 |  |  |  | 2.3358 | 3 | 0 4 1 |
| 4.8444 | 8 | 2 1 1 |  |  |  | 2.2714 | 4 | 2 2 5 |
|  |  | 4.7315 | 3 | 0 2 0 |  | 11 | 2.247 | 2.2395 | 14 | 4 1 4 |
| **48** | **4.53** | 4.5049 | 46 | 0 2 1 |  | 7 | 2.215 | 2.2004 | 3 | -2 4 1 |
|  |  | 4.4264 | 9 | -2 1 2 |  |  |  | 2.1815 | 4 | 2 4 1 |
|  |  | 4.2095 | 3 | 1 2 1 |  | 7 | 2.076 | 2.0791 | 6 | -4 3 3 |
|  |  | 4.1443 | 3 | 2 1 2 |  | 2.0721 | 4 | 4 2 4 |
| 4 | 3.717 | 3.6839 | 4 | 0 0 4 |  | 6 | 2.049 | 2.0561 | 6 | 6 1 0 |
|  |  | 3.6247 | 3 | 2 2 1 |  | 2.0422 | 4 | -2 4 3 |
| **34** | **3.431** | 3.4330 | 30 | 0 1 4 |  | 10 | 2.0005 | 2.0028 | 3 | -2 1 7 |
| **24** | **3.315** | 3.3052 | 26 | -2 0 4 |  | 2.0014 | 3 | 2 3 5 |
| **27** | **3.130** | 3.1596 | 19 | 4 0 0 |  | 1.9978 | 3 | 2 4 3 |
| **68** | **3.081** | 3.0844 | 12 | 0 3 1 |  | 11 | 1.9220 | 1.9233 | 13 | 0 2 7 |
| 3.0748 | 60 | -2 2 3 |  | 5 | 1.9008 | 1.9089 | 3 | 2 1 7 |
|  |  | 2.9834 | 5 | -4 1 1 |  | 1.8983 | 3 | -6 0 4 |
| **26** | **2.924** | 2.9292 | 27 | 2 2 3 |  | 1.8937 | 5 | 4 4 0 |
| 2.9225 | 5 | 2 1 4 |  | 7 | 1.8728 | 1.8745 | 5 | 2 4 4 |
|  |  | 2.8924 | 5 | 4 1 1 |  | 8 | 1.8397 | 1.8420 | 3 | 0 0 8 |
|  |  | 2.8138 | 3 | 0 1 5 |  | 1.8401 | 5 | -6 2 3 |
| 10 | 2.783 | 2.7912 | 9 | -2 3 1 |  | 5 | 1.8109 | 1.8130 | 4 | 2 5 0 |
| 7 | 2.729 | 2.7529 | 11 | 2 3 1 |  | 3 | 1.7659 | 1.7773 | 3 | -2 1 8 |
| 2.7095 | 4 | -2 2 4 |  | 1.7660 | 3 | 6 0 4 |
| **21** | **2.669** | 2.6542 | 30 | 0 3 3 |  | 21 | 1.7215 | 1.7255 | 3 | 6 3 1 |
| 15 | 2.640 | 2.6276 | 4 | 4 2 0 |  | 1.7184 | 9 | -2 3 7 |
| 2.6184 | 4 | -4 2 1 |  | 12 | 1.7029 | 1.7034 | 3 | -5 4 2 |
|  |  | 2.5770 | 6 | 2 2 4 |  | 1.7017 | 8 | -4 2 7 |
| 11 | 2.551 | 2.5562 | 8 | 4 2 1 |  |  |  | 1.6834 | 3 | 0 5 4 |
|  |  | 2.5312 | 5 | -4 2 2 |  | 10 | 1.6514 | 1.6580 | 5 | 2 3 7 |