**Table S1.** Powder X-ray data (*d* in Å) for uranoclite compared with that calculated from the structure (Huys *et al.*, 2010). Calculated intensities have been factored so that the sum of the intensities of the reflections contributing highest observed line equal 100. Only calculated lines with *I* ≥ 1.5 are listed.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *I*obs | *d*obs | *d*calc | *I*calc | *hkl* |  | *I*obs | *d*obs | *d*calc | *I*calc | *hkl* |  | *I*obs | *d*obs | *d*calc | *I*calc | *hkl* |
| 38 | 8.85 | 8.7908 | 34 | 0 0 2 |  |  |  | 2.6019 | 8 | 1 2 3 |  | 18 | 1.8879 | 1.8858 | 2 | 1 2 7 |
|  |  | 5.7809 | 5 | 0 1 1 |  | 16 | 2.504 | 2.5154 | 4 | 1 1 6 |  | 1.8845 | 2 | 4 0 6 |
| 100 | 5.340 | 5.3316 | 50 | 2 0 0 |  | 2.5083 | 2 | 2 2 2 |  | 1.8830 | 3 | 3 2 5 |
| 5.3087 | 50 | 1 1 0 |  | 2.4861 | 7 | 4 0 2 |  | 1.8763 | 5 | -3 2 6 |
|  |  | 5.1502 | 3 | -1 1 1 |  | 33 | 2.463 | 2.4750 | 4 | -1 2 4 |  |  |  | 1.8726 | 3 | 2 1 8 |
| 63 | 5.051 | 5.0234 | 54 | 0 1 2 |  | 2.4705 | 8 | 2 0 6 |  |  |  | 1.8618 | 4 | -3 1 8 |
|  |  | 5.0166 | 8 | 1 1 1 |  | 2.4535 | 13 | -2 1 6 |  | 14 | 1.7919 | 1.8011 | 2 | 4 1 6 |
|  |  | 4.7645 | 2 | -2 0 2 |  | 2.4441 | 10 | 4 1 0 |  | 1.7833 | 4 | -1 2 8 |
| 83 | 4.421 | 4.4518 | 18 | 1 1 2 |  |  |  | 2.4267 | 2 | 3 1 4 |  | 1.7811 | 5 | -4 0 8 |
| 4.3954 | 28 | 0 0 4 |  | 21 | 2.411 | 2.4156 | 11 | 1 2 4 |  | 1.7751 | 5 | -6 0 2 |
| 4.3774 | 50 | 2 0 2 |  | 2.3823 | 11 | -4 0 4 |  |  |  | 1.7715 | 2 | 5 1 4 |
| 8 | 4.276 | 4.2332 | 7 | 0 1 3 |  |  |  | 2.3237 | 2 | 0 1 7 |  | 18 | 1.7649 | 1.7593 | 3 | -3 2 7 |
| 13 | 4.035 | 4.0204 | 12 | 2 1 0 |  | 13 | 2.334 | 2.3181 | 15 | -3 2 1 |  | 1.7582 | 3 | 0 0 10 |
|  |  | 3.9819 | 7 | -2 1 1 |  | 12 | 2.292 | 2.2778 | 8 | -3 2 2 |  | 1.7547 | 6 | -1 3 5 |
| 38 | 3.781 | 3.7598 | 41 | -2 1 2 |  | 7 | 2.222 | 2.2277 | 3 | 1 2 5 |  | 1.7524 | 4 | 3 3 1 |
| 57 | 3.586 | 3.5703 | 23 | 0 1 4 |  | 2.2201 | 2 | -4 1 4 |  |  |  | 1.7498 | 4 | 5 2 0 |
| 3.5622 | 35 | -2 0 4 |  | 2.2089 | 2 | 3 2 2 |  | 15 | 1.7393 | 1.7389 | 5 | 1 2 8 |
| 14 | 3.480 | 3.4674 | 13 | -1 1 4 |  |  |  | 2.2025 | 2 | -2 1 7 |  | 1.7279 | 8 | 1 3 5 |
|  |  | 3.4324 | 2 | -2 1 3 |  |  |  | 2.1887 | 3 | 4 0 4 |  |  |  | 1.7219 | 2 | 3 1 8 |
| 3 | 3.329 | 3.3093 | 4 | 1 1 4 |  | 12 | 2.115 | 2.1121 | 4 | 3 2 3 |  | 15 | 1.7181 | 1.7192 | 6 | -2 0 10 |
|  |  | 3.2431 | 2 | 2 0 4 |  | 2.1039 | 9 | -1 2 6 |  | 1.7167 | 4 | -3 3 3 |
|  |  | 3.2094 | 3 | 2 1 3 |  | 17 | 2.072 | 2.0684 | 9 | 0 1 8 |  | 1.7106 | 4 | 6 0 2 |
|  |  | 3.0738 | 2 | 3 1 0 |  | 2.0609 | 10 | 4 1 4 |  | 1.7067 | 3 | 6 1 0 |
| 8 | 2.947 | 2.9303 | 8 | 0 0 6 |  |  |  | 2.0387 | 4 | 3 1 6 |  | 9 | 1.6808 | 1.6932 | 2 | -1 1 10 |
| 9 | 2.880 | 2.9140 | 5 | -1 2 1 |  | 37 | 2.005 | 2.0040 | 2 | 1 3 0 |  | 1.6722 | 3 | 3 3 3 |
| 2.8891 | 2 | 1 2 1 |  | 2.0027 | 5 | -5 1 2 |  | 7 | 1.6529 | 1.6475 | 4 | 6 1 2 |
| 2.8658 | 8 | 2 1 4 |  | 2.0005 | 5 | 3 2 4 |  | 1.6425 | 2 | -6 1 4 |
| 33 | 2.828 | 2.8297 | 8 | 3 1 2 |  | 1.9952 | 4 | -1 3 1 |  | 8 | 1.6262 | 1.6216 | 5 | 4 0 8 |
| 2.8121 | 18 | -1 2 2 |  | 1.9939 | 3 | -3 2 5 |  | 1.6178 | 2 | -5 2 5 |
| 6 | 2.767 | 2.7679 | 6 | 1 2 2 |  | 1.9895 | 6 | -2 1 8 |  | 1.6117 | 3 | -3 3 5 |
|  |  | 2.7464 | 2 | -2 1 5 |  | 1.9871 | 12 | 1 3 1 |  | 6 | 1.5939 | 1.6080 | 3 | 1 2 9 |
| 22 | 2.686 | 2.6780 | 13 | -2 0 6 |  | 10 | 1.9605 | 1.9632 | 6 | -4 1 6 |  | 1.5956 | 2 | 6 0 4 |
| 2.6573 | 16 | -1 2 3 |  | 7 | 1.9306 | 1.9355 | 6 | -1 2 7 |  | 1.5837 | 5 | 5 2 4 |
|  |  | 2.6342 | 2 | 3 1 3 |  |  |  | 1.9294 | 2 | 4 1 5 |  | 3 | 1.5754 | 1.5700 | 4 | 2 1 10 |
| 19 | 2.632 | 2.6225 | 12 | -3 1 4 |  |  |  | 1.9257 | 3 | 5 1 2 |  | 5 | 1.5575 | 1.5569 | 2 | -5 2 6 |
|  |  | 2.6185 | 2 | -1 1 6 |  |  |  | 1.8967 | 2 | -5 1 4 |  | 1.5562 | 2 | -5 1 8 |