

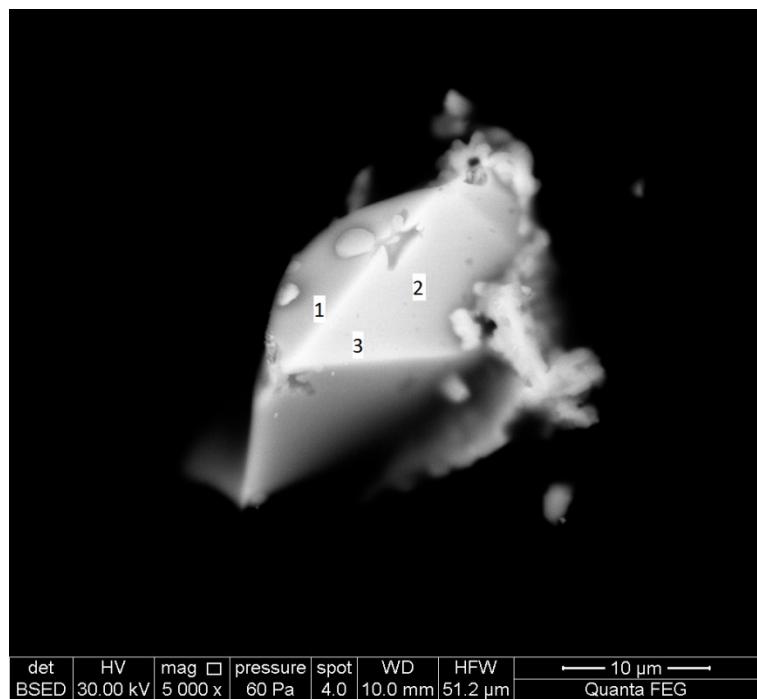
# Structural Flexibility of Potassium Uranyl Oxo-tellurates Isolated from High-Temperature/High-Pressure Reactions

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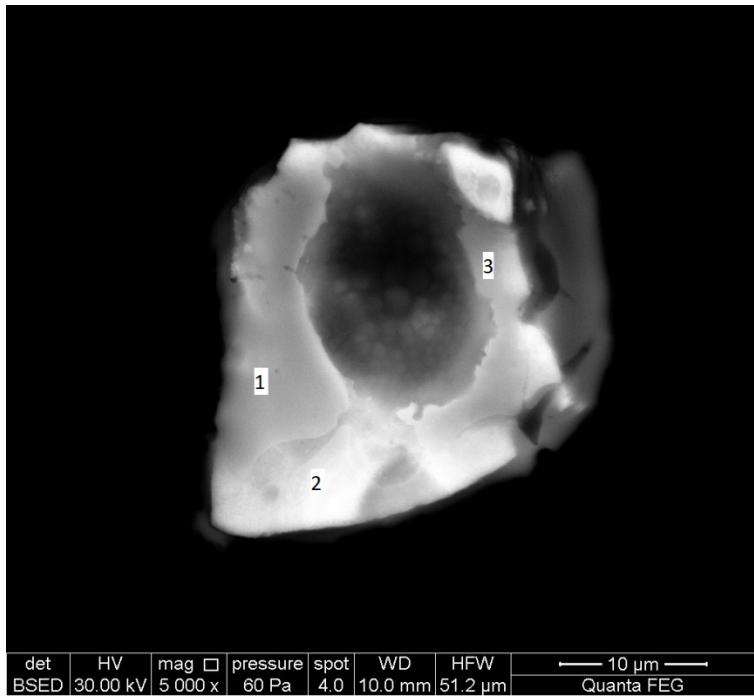
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**Figure S1 (a).** BSE image of  $\text{K}_2[(\text{UO}_2)_3(\text{Te}^{\text{IV}}\text{O}_3)_4]$  and locals of EDS measurements (1, 2, 3).

**Table S1 (a).** Atom ratio of  $\text{K}_2[(\text{UO}_2)_3(\text{Te}^{\text{IV}}\text{O}_3)_4]$ . (U is keep as 1)

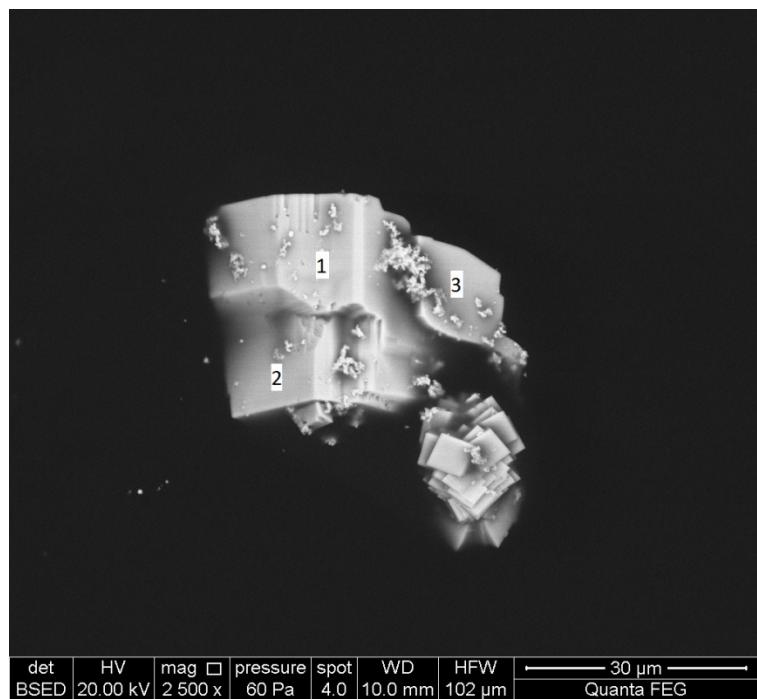
	U	K	Te
Point1	1	0.66	1.30
Point2	1	0.66	1.23
Point3	1	0.90	1.59
Average	1	0.74	1.37



**Figure S1 (b).** BSE image of  $\text{K}_2[(\text{UO}_2)\text{Te}^{\text{IV}}_6\text{O}_{14}]$  and locals of EDS measurements (1, 2, 3).

**Table S1 (b).** Atom ratio of  $\text{K}_2[(\text{UO}_2)\text{Te}^{\text{IV}}_6\text{O}_{14}]$ . (U is keep as 1)

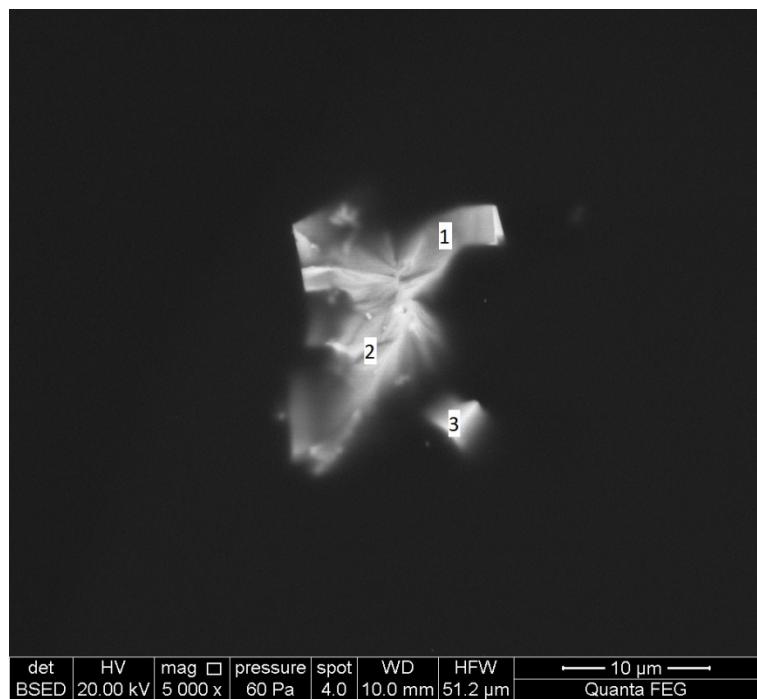
	U	K	Te
Point1	1	1.87	6.05
Point2	1	2.99	6.01
Point3	1	2.88	6.42
Average	1	2.58	6.16



**Figure S1 (c).** BSE image of  $\alpha\text{-K}_2[(\text{UO}_2)\text{Te}^{\text{VI}}\text{O}_5]$  and locals of EDS measurements (1, 2, 3).

**Table S1 (c).** Atom ratio of  $\alpha\text{-K}_2[(\text{UO}_2)\text{Te}^{\text{VI}}\text{O}_5]$ . (U is keep as 1)

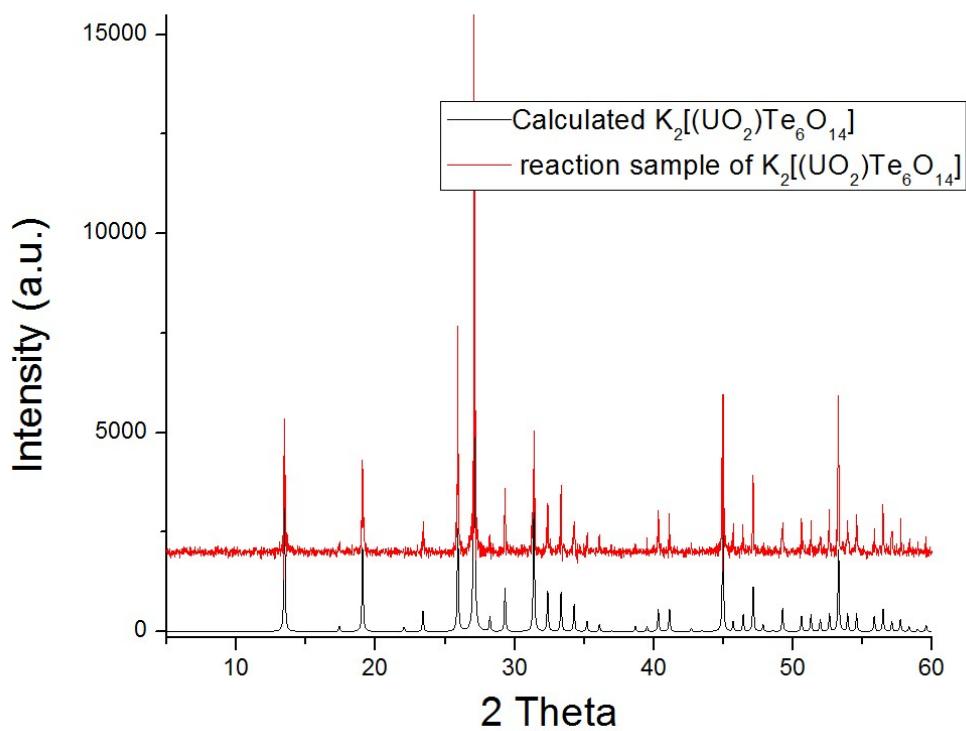
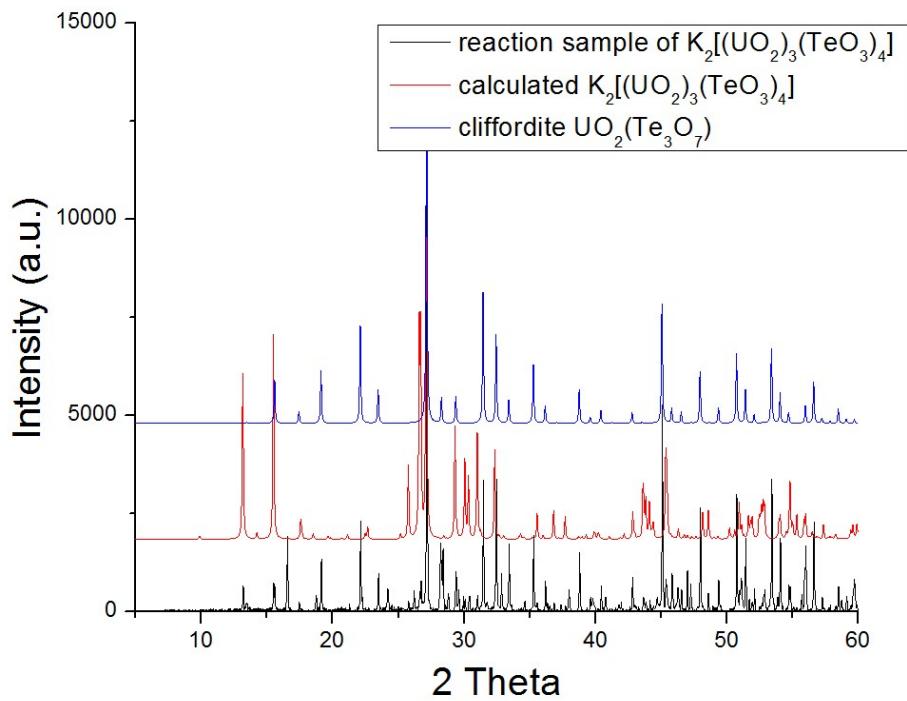
	U	K	Te
Point1	1	2.13	1.10
Point2	1	2.07	1.14
Point3	1	2.25	1.22
Average	1	2.58	6.16

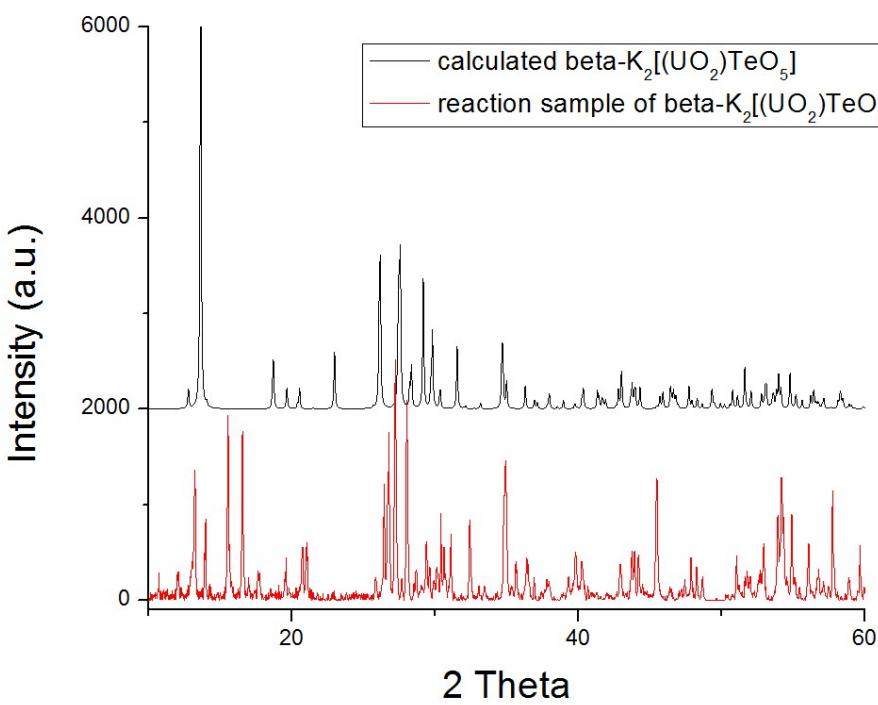
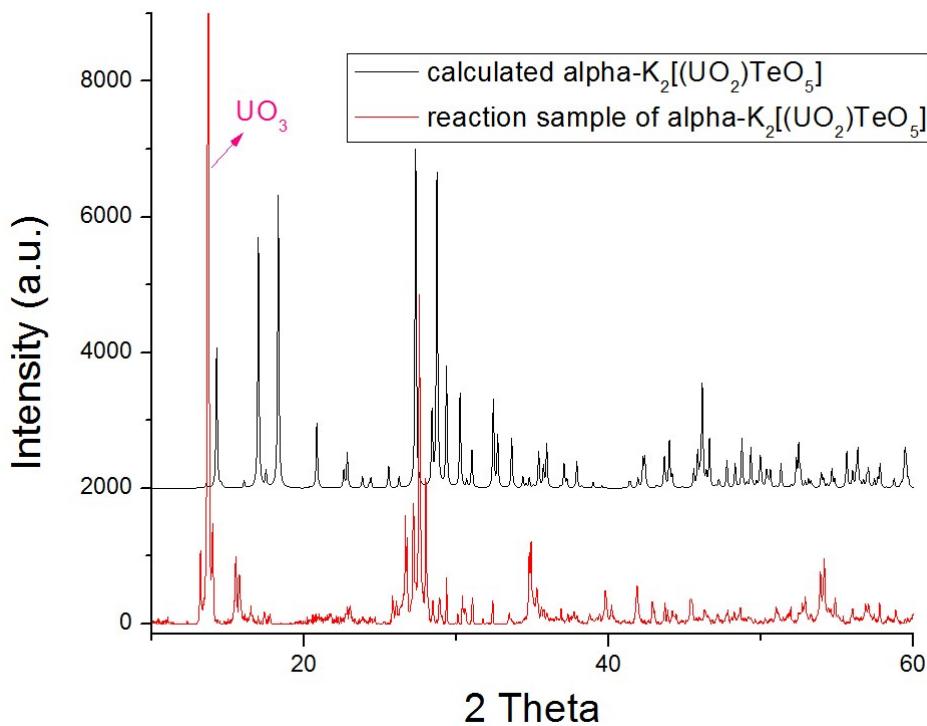


**Figure S1 (d).** BSE image of  $\beta$ - $K_2[(UO_2)Te^{VI}O_5]$  and locals of EDS measurements (1, 2, 3).

**Table S1 (d).** Atom ratio of  $\beta$ - $K_2[(UO_2)Te^{VI}O_5]$ . (U is keep as 1)

	U	K	Te
Point1	1	2.45	1.02
Point2	1	2.06	1.34
Point3	1	2.55	1.26
Average	1	2.35	1.21





**Figure S2.** Powder XRD of reaction product of  $K_2[(UO_2)_3(Te^{IV}O_3)_4]$ ,  $K_2[(UO_2)Te^{IV}_6O_{14}]$ ,  $\alpha\text{-}K_2[(UO_2)Te^{VI}O_5]$  and  $\beta\text{-}K_2[(UO_2)Te^{VI}O_5]$ , respectively.