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Supporting Informations **Table S1 -** Crystal data and intensity collection details

Formulae	U_7Te_{12}	Th_7Te_{12}
Space group	P -6 (n° 174)	P -6 (n° 174)
Parameters : a(Å)	12.312(1)	12.300(2)
c(Å)	4.260(1)	4.566(1)
Z	1	1
d_{cal} (g.cm^{-1})	9.493	8.758
Temperature (K)	293	
Diffractometer	CAD-4 (Enraf-Nonius)	
λ ,monochromator	Mo Kα (0.71073Å), graphite	
Scan type	ω-2θ	
Linear absorption coefficient (cm^{-1})	632.6	592.5
Crystal dimensions (mm^3)	0.02x0.02x0.18	0.04x0.04x0.18
Absorption correction	Gaussian	Gaussian
Transmission factors (min, max, average)	0.064, 0.157, 0.118	0.069, 0.152, 0.117
Secondary extinction parameter	3.507×10^{-7}	$4.882\ 10^{-7}$
Number of refined parameters	40	40
Number of measured reflections	3488	3682
Number of averaged reflections	2862	2779
Number of reflections in least square refinement	1275	1404
Limits	$\theta \leq 45$	$\theta \leq 40$
	$-24 \leq h \leq 0, 0 \leq k \leq 24, 0 \leq l \leq 8$	$-22 \leq h \leq 0, 0 \leq k \leq 22, 0 \leq l \leq 8$
R(F) for I>3 σ(I)	0.052	0.063
Rω(F) for I>3σ(I)	0.063	0.078
Goodness of fit	1.401	1.646
Final Dif. Fourier max / min peak intensity (e$^-$/ Å^3)	9.4 / - 7.8	10.6 / - 6.5

$R(F) = (\sum||F_o|-|F_c||)/\sum|F_o|$; $R\omega(F) = [\sum\omega(|F_o|-|F_c|)^2/\sum\omega F_o^2]^{1/2}$

Table S2 General Displacement parameters for U_7Te_{12}

Atom	U(1,1)	U(2,2)	U(3,3)	U(1,2)	U(1,3)	U(2,3)
U(1)	0.0075(3)	U(1,1)	0.0102(6)	U(1,1)	0	0
U(2)	0.0119(2)	0.0142(2)	0.0067(3)	0.0095(1)	0	0
U(3)	0.0076(2)	0.0079(2)	0.0068(3)	0.0031(1)	0	0
Te(1)	0.0084(4)	0.0079(3)	0.0090(6)	0.0029(3)	0	0
Te(2)	0.0089(3)	0.0096(3)	0.0090(6)	0.0058(2)	0	0
Te(3)	0.0081(4)	0.0108(4)	0.0132(7)	0.0038(3)	0	0
Te(4)	0.0067(3)	0.0077(4)	0.0168(8)	0.0032(3)	0	0

The form of the anisotropic displacement parameter is : $\exp[-2\pi^2\{h^2a^{*2}U(1,1)+ k^2b^{*2}U(2,2) + l^2c^{*2}U(3,3) + 2hka^*b^*U(1,2) + 2hla^*c^*U(1,3) + 2klb^*c^*U(2,3)\}]$ where a*, b*, and c* are reciprocal lattice constants.

Table S3 General Displacement parameters for Th_7Te_{12}

Atom	U(1,1)	U(2,2)	U(3,3)	U(1,2)	U(1,3)	U(2,3)
Th(1)	0.0056(3)	U(1,1)	0.0107(6)	U(1,1)	0	0
Th(2)	0.0026(2)	0.0030(2)	0.0075(3)	0.0006(1)	0	0
Th(3)	0.0070(2)	0.0032(2)	0.0074(3)	0.0024(1)	0	0
Te(1)	0.0090(4)	0.0076(4)	0.0143(7)	0.0055(3)	0	0
Te(2)	0.0054(4)	0.0077(4)	0.0117(7)	0.0041(3)	0	0
Te(3)	0.0051(4)	0.0046(4)	0.0090(6)	0.0018(3)	0	0
Te(4)	0.0058(4)	0.0046(4)	0.0114(6)	0.0027(3)	0	0

The form of the anisotropic displacement parameter is : $\exp[-2\pi^2\{h^2a^{*2}U(1,1)+ k^2b^{*2}U(2,2) + l^2c^{*2}U(3,3) + 2hka^*b^*U(1,2) + 2hla^*c^*U(1,3) + 2klb^*c^*U(2,3)\}]$ where a*, b*, and c* are reciprocal lattice constants.