

Lu <sub>8</sub> Te	<i>hP9</i>	(189) <i>P</i> -62 <i>m</i> – gfd
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# **Lu<sub>8</sub>Te** [1]

Structural features: Infinite columns of base-linked TeLu<sub>6</sub>Lu<sub>3</sub> tricapped trigonal prisms; additional Lu between the columns. Ordering variant of Fe<sub>2</sub>P (or its branch Mg<sub>2</sub>In).

Chen L., Corbett J.D. (2003) [1]

Lu<sub>8</sub>Te

$a = 0.9$ ,  $c = 0.3687$  nm,  $c/a = 0.410$ ,  $V = 0.2586$  nm<sup>3</sup>,  $Z = 1$

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
Lu1	3 <i>g</i>	<i>m2m</i>	0.277	0	$\frac{1}{2}$		anticuboctahedron Te <sub>2</sub> Lu <sub>10</sub>
Lu2	3 <i>f</i>	<i>m2m</i>	0.6135	0	0		13-vertex polyhedron Lu <sub>12</sub> Te
Lu3	2 <i>d</i>	-6..	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{2}$		pseudo Frank-Kasper Lu <sub>11</sub>
Te4	1 <i>a</i>	-62 <i>m</i>	0	0	0		pseudo Frank-Kasper Lu <sub>9</sub> Te <sub>2</sub>

Transformation from published data: origin shift 0 0  $\frac{1}{2}$

Experimental: single crystal, diffractometer, X-rays, R = 0.033, T = 273 K

Remarks: In the text of [1] the temperature for the data collection is given as room temperature, however, in the deposited material as 273 K.

References: [1] Chen L., Corbett J.D. (2003), J. Am. Chem. Soc. 125, 7794-7795.