

substance: Lu₂S₃
property: crystal structure, physical properties

ε-Lu₂S₃

crystal structure		rhombohedral (Al ₂ O ₃ -structure, D _{3d} ⁶ – R $\bar{3}$ c)		
lattice parameters				
<i>a</i>	6.722(2) Å	(hexagonal setting)	color: yellow	75R
<i>c</i>	18.160(3) Å			
Debye temperature				
Θ _D	266(l) K			81G
melting point				
<i>T</i> _m	1850°C			81G
heat capacity: Fig. 1				

References:

- 75R Range, K. J., Leeb, R.: Z. Naturforsch. 30b (1975) 637.
81G Gschneidner, K. A., Beaudry, B. J., Takeshita, T., Eucker, S. S., Taher, S. M. A., Ho, J. C., Gruber, J. B.: Phys. Rev. B 24 (1981) 7187.

Fig. 1.

$\epsilon\text{-Lu}_2\text{S}_3$. Temperature dependence of heat capacity [81G].

