

substance: HfS₃

property: crystal structure, physical properties

(S: structure (space group), CG: crystal growth (the numbers in parentheses correspond to T_1 and T_2 , the temperatures (in °C) of the hot and cold end of the crystal growth tube, respectively), C: colour).

(The references in the last column refer to all data of this document)

lattice parameters

a	5.09 Å	S: ZrSe ₃ type, $C_{2h}^2 - P2_1/m$	61G,
b	3.59 Å	CG: halogen transport	63H,
c	8.96 Å	(750...900/550...600)	71L,
β	98.4°	C: ochre	73S, 75F

resistivity

ρ_b	$10^2 \Omega \text{ cm}$	synthetic single crystal
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energy gap

E_g	3.1 eV	optical gap
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References:

- 61G Grimmeiss, H. G., Rabenau, A., Hahn, H., Ness, P.: Z. Elektrochem. 65 (1961) 776.
- 63H Haraldsen, H., Kjekshus, A., Rost, E., Steffensen, A.: Acta Chem. Scand. 17 (1963) 1283.
- 71L Landolt-Börnstein (New Series), ed.: K. H. Hellwege, Vol. III/6, Springer Verlag: Berlin, Heidelberg, New York 1971.
- 73S Schairer, W., Shafer, M. W.: Phys. Status. Solidi (a) 17 (1973) 181.
- 75F Furuseth, S., Brattas, L., Kjekshus, A.: Acta Chem. Scand. 29A (1975) 623.