

**substance: OsP<sub>2</sub>**

**property: physical properties**

Energy level scheme is similar to that given for FeAs<sub>2</sub> (Fig. 1).

**energy gap**

$E_g$	$\approx 1.2$ eV	RT	from diffuse reflectance of sintered samples	63H
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**magnetic susceptibility**

(in  $10^{-6}$  cm<sup>3</sup> mol<sup>-1</sup>,  $\chi$  in CGS units)

$\chi_m$	- 74	$T = 295$ K	powder sample	63H
	- 50	$T = 85$ K		
	- 97	$T = 90...760$ K, $B < 0.8$ T	polycrystalline sample	68H

**far infrared absorption:** for spectrum in the range 150...500 cm<sup>-1</sup>, see [77L].

**Comparative tables on structural data of transition metal dipnictides:**

**structure, chemical bond:** see document ,

**crystallographical data** of compounds with octahedrally coordinated cations, see document ,

**interatomic distances** in marcasite- and loellingite-type compounds, see document .

## References:

- 63H Hulliger, F.: Nature (London) 198 (1963) 1081.
- 68H Holseth, H., Kjekshus, A.: J. Less-Common Met. 16 (1968) 472.
- 72F Fan, A. K. L., Rosenthal, G. H., McKinzie, H. L., Wold, A.: J. Solid State Chem. 5 (1972) 136.
- 72G Goodenough, J. B.: J. Solid State Chem. 5 (1972) 144.
- 77L Lutz, M. D., Willich, P.: Z. Anorg. Allg. Chem. 428 (1977) 199.

**Fig. 1.**

$\text{FeAs}_2$ . One-electron energy levels for the valence electrons in loellingite [72F, 72G].

