

**substance: Ho<sub>2</sub>O<sub>3</sub>**

**property: crystal structure, physical properties**

**Ho<sub>2</sub>O<sub>3</sub> [88L]**

**structure:** cubic

**activation energy for conductivity**

$E_A$	2.74 eV	$T = 800 \dots 1200 \text{ K}$ ,	energy band diagram: Fig. 1
		val.-cond. band	

**conductivity**

$\sigma$	$5.13 \cdot 10^2 \text{ } \Omega^{-1} \text{ m}^{-1}$	p-type
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**mobility**

$\mu_p$	$0.133 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$	$T = 900 \text{ K}$
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$\mu_n$	$0.128 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$	$T = 900 \text{ K}$
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**References:**

88L Lal, H.B., Kanchan Gaur: J. Mater. Sci. 23 (1988) 919.

**Fig. 1.**

Energy band diagram for rare-earth sesquioxides [88L].

