substance: Ta_2O_5
property: energy gaps

E_g	4.20 eV	RT	direct edge, absorption, Fig. 1	73K
	4.5...4.6 eV			69H, 52A
$E_{g,th}$	3.58 eV	T = 900... 1400°C	from transport data, some evidence also in absorption see Fig. 1	62K, 72K, 74S

For peak energies in optical spectra, see below. No assignments have been made to band-band transitions.

References:

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Fig. 1.

Ta_2O_5. Square of the absorption coefficient vs. photon energy for a non-crystalline film of thickness 6960 Å at RT [73K].