

substance: Yb<sub>2</sub>S<sub>3</sub>  
property: crystal structure, physical properties

γ-Yb<sub>2</sub>S<sub>3</sub>

energy gap

$E_g$	0.5 eV	X-ray spectra	83S
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ε-Yb<sub>2</sub>S<sub>3</sub>

crystal structure	rhombohedral (Al <sub>2</sub> O <sub>3</sub> -structure, D <sub>3d</sub> <sup>6</sup> – R $\bar{3}$ c)
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lattice parameters

$a$	6.772 Å	(hexagonal setting)	color: yellow [68S]	64F
$c$	18.28 Å			

electrical conductivity

$\sigma$	3·10 <sup>-5</sup> Ω <sup>-1</sup> cm <sup>-1</sup>	68S
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activation energy for conductivity

$E_A$	0.29 eV	68S
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## References:

- 64F Flahaut, J., Domange, L., Parelo, M.: C. R. Acad. Sci. Paris 258 (1964) 594.  
68S Sleight, A. W., Prewitt, C. T.: Inorg. Chem. 7 (1968) 2282.  
83S Soldatov, A.V., Gusatinskii, A.N., Karin, M.G., Sidorin, K.K., Sadovskaya, O.A.: Inorg. Mater. 19 (1983) 951-954.