

GaP: zinblende modification, effective mass parameters

Semiconductors - New Data and Updates for several III-V (including mixed crystals) and II-VI Compounds

substance:	gallium phosphide (GaP), zinblende modification
property:	effective-mass parameters (electronic properties)

conduction band effective mass

(in units of m_0)

Physical Property	Numerical Values	Remarks	Ref.
$m(\Gamma_{6c})$	0.13	14-band k·p method	05J
	0.130	ab-initio calculation within self-consistent within GW approximation	06C

References

- 05J Jancu, J.-M., Scholz, R., Andrada e Silva, E.A., La Rocca, G.C.: Phys. Rev. B **72** (2005) 193201.
 06C Chantis, A.N., van Schilfgaarde, M., Kotani, T.: Phys. Rev. Lett. **96** (2006) 086405.