

## ALP, zinblende modification: effective mass parameters

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

|                   |   |
|-------------------|---|
| <b>substance:</b> | aluminum phosphide (ALP), zinblende modification  |
| <b>property:</b>  | effective-mass parameters (electronic properties) |

#### conduction band effective mass

(in units of  $m_0$ )

| Physical Property | Numerical Values | Remarks  | Ref.                |
|-------------------|------------------|--|---------------------|
| $m(\Gamma_{6c})$  | 0.16             | 14-band k·p method   | <a href="#">05J</a> |
|                   | 0.186            | ab-initio calculation within self-consistent within GW approximation | <a href="#">06C</a> |

#### 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.