Landolt-Börnstein Substance/Property Index

III/41: Semiconductors
(revised and extended contents of the volumes III/17 and III/22)

Subvolume III/41A2: Impurities and defects in Group IV elements, IV-IV and III-V compounds

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IV-IV compounds
silicon carbide (SiC)

III-V compounds
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boron phosphide (BP) gallium arsenide (GaAs)
aluminum nitride (AlN) gallium antimonide (GaSb)
aluminum arsenide (AlAs) indium phosphide (InP)
aluminum antimonide (AlSb) indium arsenide (InAs)
gallium nitride (GaN) indium antimonide (InSb)

Solid solutions between III-V compounds
\[
\begin{align*}
&Ga_1-x Al_x P_x & Ga_1-x Al_x Sb \\
&Ga_1-x Al_x Sb_x & Ga_1-x In_x P \\
&InAs_1-x P_x & Ga_1-x In_x As \\
&Ga_1-x Al_x As & \\
\end{align*}
\]

Quaternary alloys
\[
\begin{align*}
&Ga_1-x Al_{1-x} As_x Sb_{1-y} \\
&Ga_1-x In_{1-x} As_x P_{1-y} \\
&(Ga_1-x Al_{1-x} As_x)_{1-y} In_{1-y} P \\
&(Ga_1-x Al_{1-x} As_x)_{1-y} In_{1-y} As \\
\end{align*}
\]
Aluminum arsenide (AlAs)
- deep defect states
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- vibrational modes of impurities

Aluminum nitride (AlN)
- impurities and defects

Aluminum antimonide (AlSb)
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- optical properties of deep defects
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  deep defect states

Indium gallium aluminum arsenide ((Ga(x)Al(1-x))(y)In(1-y)As)
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