Simulation of Diffusion Controlled Intermetallic Formation of Au/Al Interface

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used as an initial analysis in the subsequent FEM modeling.

Table 2, Material data of Au/Al compounds

Compound	**Composition (at. % Au)**	**Activation energy (eV)**	**Diffusion coefficient ($\mu m^2/s$)**	**Density (g/cm^3)**
Au	84-100			

For intermetallic growth, on the one hand, it is a common belief that during the growth of compounds, the interfacial stresses and stress gradients serves as additional driving force to accelerate

$$V \frac{1}{3V} \frac{dV}{dC}$$

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