

## 岩塩型低温超電導物質の結合性と転移温度

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### **Chemical bonding and transition temperature of low-temperature superconductors with rock salt structure**

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Low-temperature binary superconductor of titanium nitride, vanadium nitride, zirconium nitride, and niobium nitride with rock salt structure have been studied using the Discrete Variational- $X\alpha$  molecular-orbital method. We have estimated the ratio of BOP (bond overlap population) in the cluster models where the center site atom is replaced by other atom and displaced. As a calculated result, we found that some ternary alloys based on above binary superconductors may have higher transition temperatures than that of the binary superconductors.