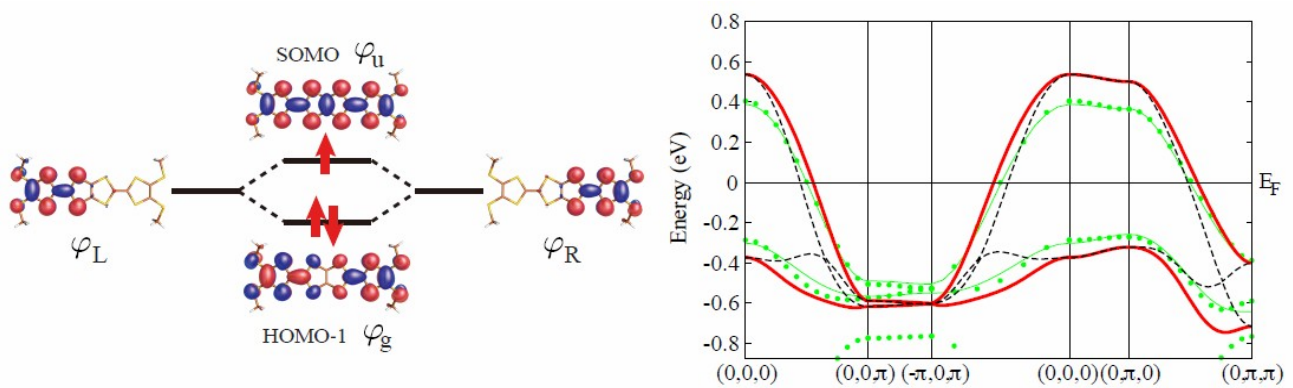


# Theoretical study of electronic states in crystals

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Effective model of a molecular conductor and its band structure

Molecular conductors are crystals where the constituent units are molecules, and there are a full variety of electronic states owing to the various combinations of molecular species and their arrangement in crystals. In order to understand these phenomena and to make it possible to predict them theoretically, I am working on building up the effective model and solving it with the use of the renormalization-group method. The aim of my research is to elucidate the fundamental physical/mathematical concepts in molecular conductors.

Keywords : Condensed matter theory; Low-dimensional electron systems;  
Renormalization-group method