

2.  $\text{Ni}_2\text{MnSn}$ ,  $\text{Pd}_2\text{MnSn}$  の光吸収スペクトル

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The optical absorption spectra  $\epsilon_2(o, \omega)$  of  $\text{Ni}_2\text{MnSn}$  and  $\text{Pd}_2\text{MnSn}$  are evaluated on the basis of the realistic band structure obtained by the tight-binding orthogonalised plane wave (TB-OPW) method. The transitions between OPW in the hybridised states contribute dominantly to the main structure of the spectra, as was the case in  $\text{Cu}_2\text{MnAl}$ . The common properties in  $\epsilon_2(o, \omega)$  of the ferromagnetic Heusler alloys  $\text{X}_2\text{MnZ}$  ( $\text{X} = \text{Ni}, \text{Pd}, \text{Cu}$ ;  $\text{Z} = \text{Al}, \text{Sn}$ ) are examined using the present results and those obtained previously for  $\text{Cu}_2\text{MnAl}$ . Three peaks below 4eV and a peak above 7eV beyond which  $\epsilon_2(o, \omega)$  decreases rapidly are observed as the common structures of the three alloys. These structures are related to the d state of Mn in the three alloys.