

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Photoemission Spectroscopy on the System of Noncentrosymmetric Lithium Ternary Borides¹ RIKIYA YOSHIDA, IZUMI HASE, KOZO OKADA, HIROYUKI TAKEYA, KAZUTO HIRATA, TAKAYUKI MURO, HIROYUKI OKAZAKI, MITSUTOSHI TAJIMA, MASAOKI HIRAI, YUJI MURAOKA, TAKAYOSHI YOKOYA, Okayama University — We performed x-ray photoemission spectroscopy at BL27SU of SPring-8 on polycrystalline samples of $\text{Li}_2\text{Pd}_{1.5}\text{Pt}_{1.5}\text{B}$ and $\text{Li}_2\text{Pt}_3\text{B}$ prepared by the arc melting method. We also employed a polycrystalline platinum plate commercially available for comparison. We also performed the calculation of valence band structure of $\text{Li}_2\text{Pt}_3\text{B}$ using full-potential augmented plane wave method with local density approximation. Our experimental data on the samples and the previous photoemission study on $\text{Li}_2\text{Pd}_3\text{B}$ support that electron correlations do not play an important role in them.

¹The x-ray photoemission experiments were performed at SPring-8 under the proposal number of 2007B1519. One of the authors (R. Y.) thanks Grant-in-Aid for Attractive Education in Grant-in-Aid for Attractive Education in Graduate School.

Rikiya Yoshida
Okayama University

Date submitted: 25 Nov 2007

Electronic form version 1.4