

Abstract Submitted  
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**Ferroelectricity and Rashba-type band splittings in metal halides**

MINSUNG KIM, Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Korea, JINO IM, ARTHUR FREEMAN, Department of Physics and Astronomy, Northwestern University, Evanston, Illinois 60208, USA, JISOON IHM, Department of Physics and Astronomy, Seoul National University, Seoul 151-747, Korea, HOSUB JIN<sup>1</sup>, Center for Correlated Electron Systems, Institute for Basic Science (IBS), Seoul 151-747, Korea — In this study, we investigate Rashba-type band splittings in metal halides. We use a minimal tight-binding model and first principles calculations based on density functional theory to understand the electronic structures of the materials. We find that different types of Rashba bands occur in the conduction and valence band edges in terms of the angular momentum textures. Also, the characteristics of the band splittings will be discussed in connection with the ferroelectric property.

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