**Novel Materials for Ferroelectric Photovoltaics**

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Despite their potential to exceed the theoretical Shockley-Queisser limit, ferroelectric photovoltaics (FPVs) have performed inefficiently due to their extremely low photocurrents. In this talk, I will suggest novel ferroelectric materials that are likely to overcome the challenge, as a result of density functional theory calculations. These works indicate that the large band-gap and inefficient e-h separations of active layer materials are the most important issues to be addressed for FPVs to compete with conventional devices.