# RJ10: Understanding Carrier Specific Dynamics in $CH_3NH_3PbBr_3$ by Femtosecond Tabletop XUV Spectroscopy

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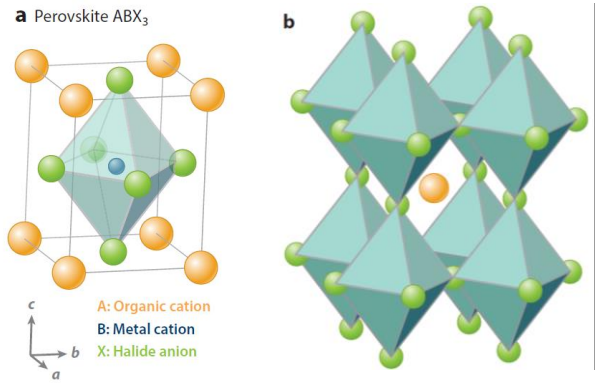
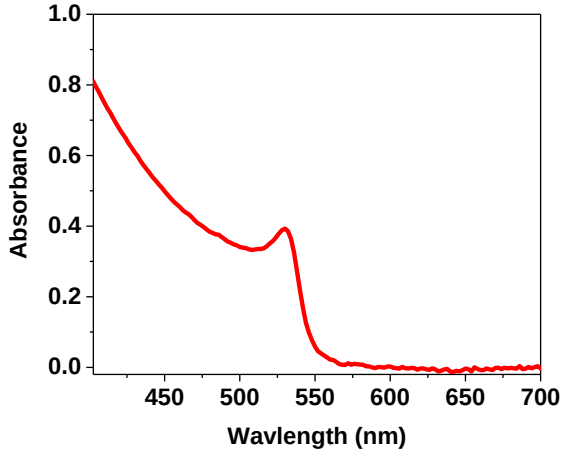
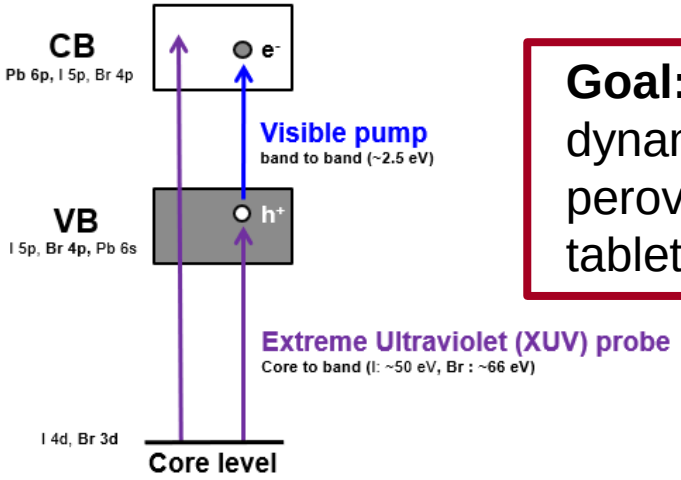
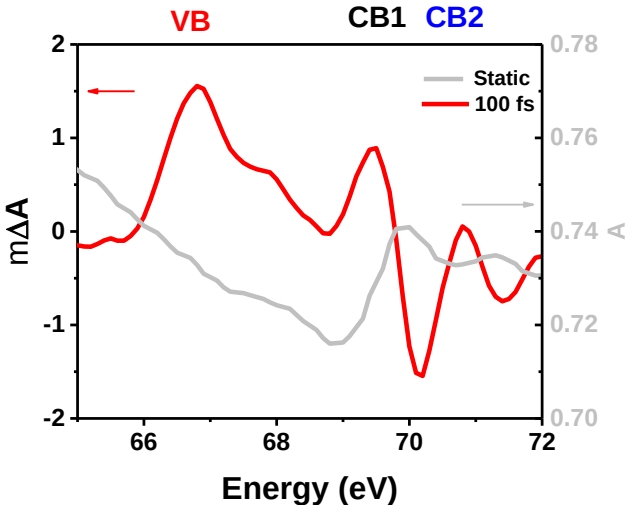
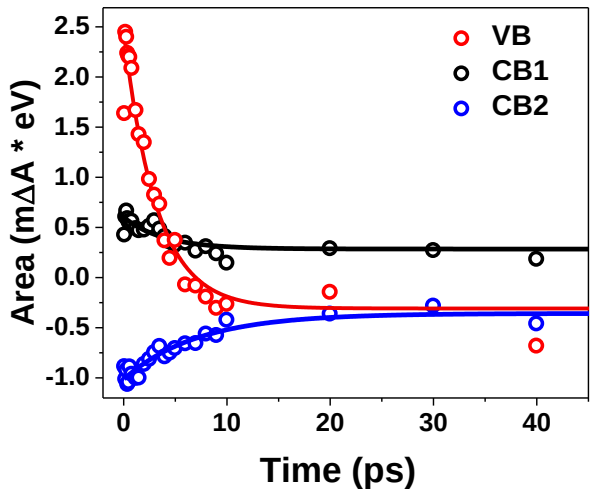



**Goal:** Study carrier specific dynamics of organohalide perovskites using femtosecond tabletop XUV spectroscopy




- Distinct signal for holes and electrons and spin specific states are observed for $CH_3NH_3PbBr_3$
- Transient XUV signal for $CH_3NH_3PbBr_3$ shows three main features
- CB1 signal intensity depends on the relative ratio of band gap renormalization and band filling
- tXUV spectral modeling is performed by incorporating band gap renormalization and band filling effects

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