

## Supporting Information for

# Enhanced Perovskite Electronic Properties via a modified Lead(II) Chloride Lewis Acid-Base Adduct and Their Effect in High- Efficiency Perovskite Solar Cells

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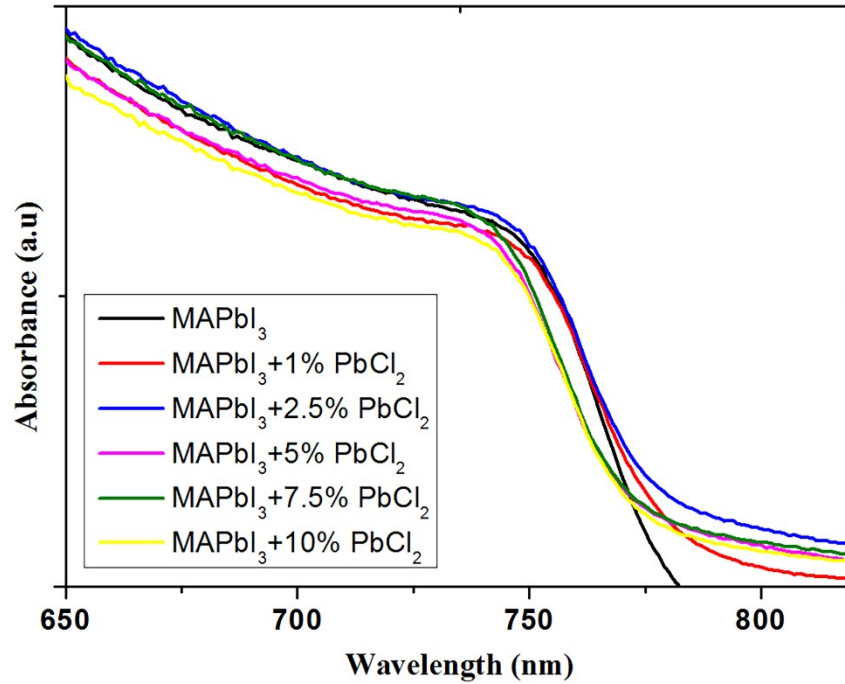
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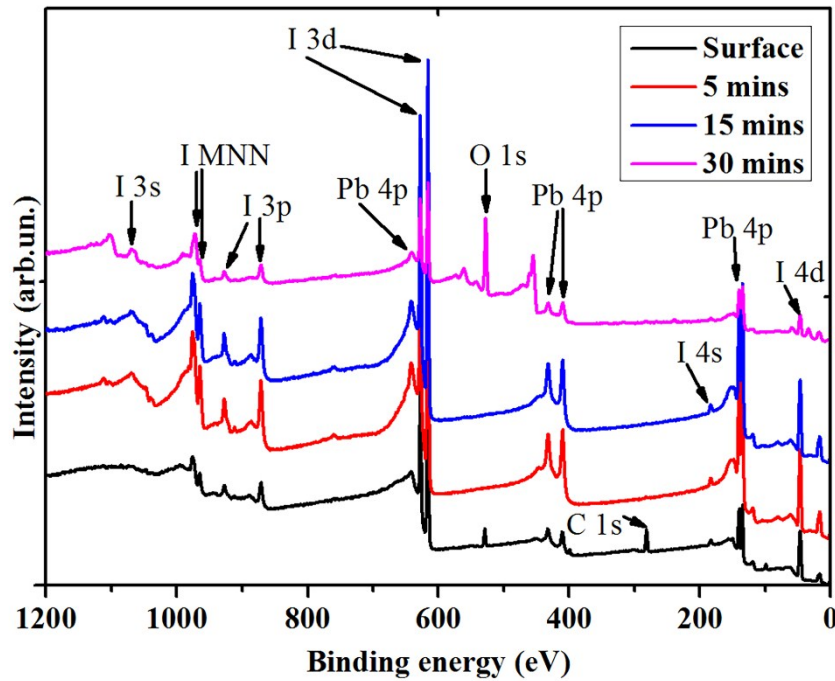
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**Fig. S1** Ultraviolet-Visible absorption spectra of perovskite films with different  $\text{PbCl}_2$ -additive in perovskite precursor.



**Fig. S2** XPS depth profiling of perovskite film with 2.5 %  $\text{PbCl}_2$  in perovskite precursor with different etching time.