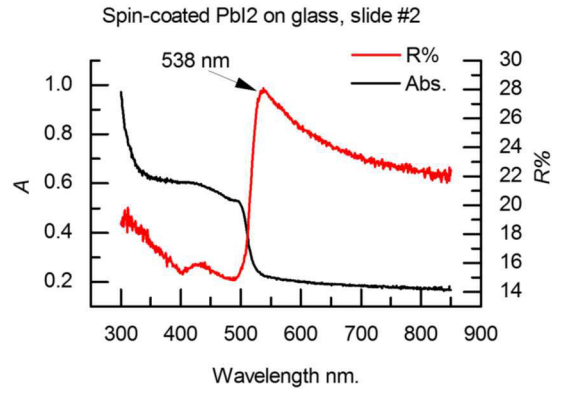
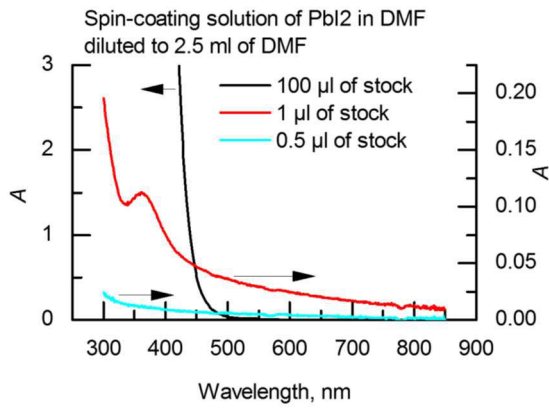
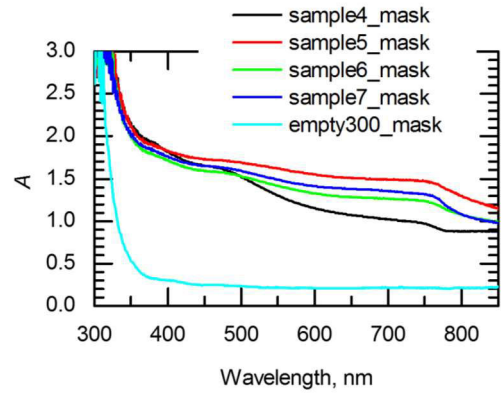
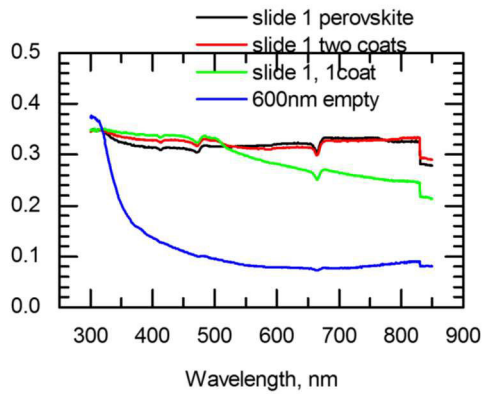


**Absorbance spectra:**



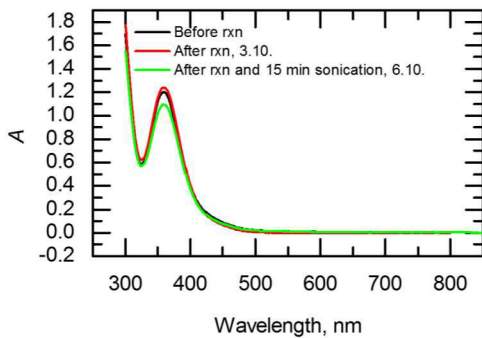
Absorbance of lead iodide on glass compared to the same slides reflectance

The absorbance spectra of lead iodide in DMF



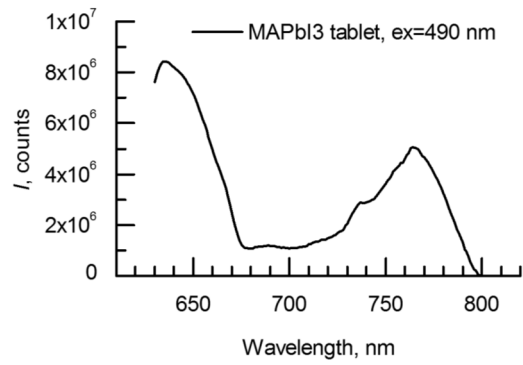
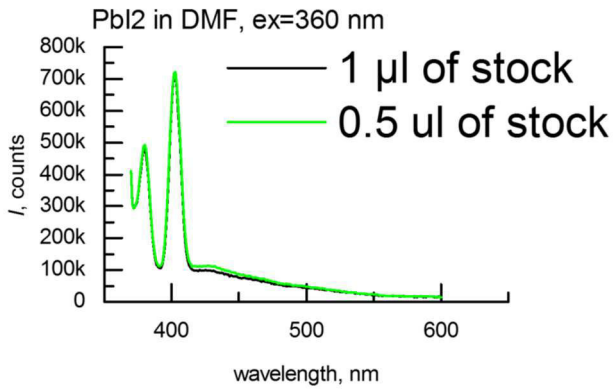
Absorbance calculated from transmittance for the 3<sup>rd</sup> batch of cells

The absorbance spectra of the first solar cell at various stages of preparation



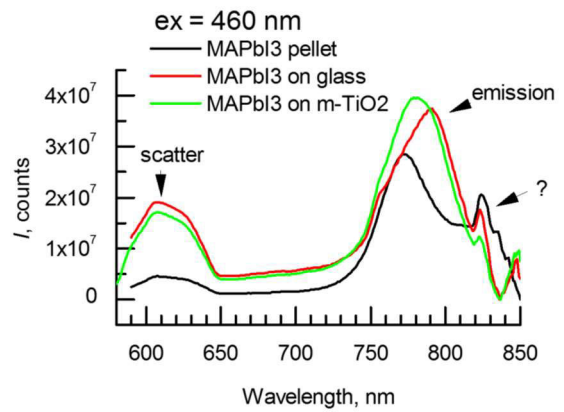
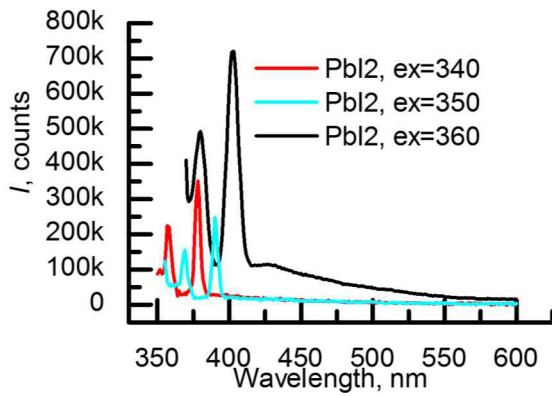
Absorbance of MAI in 2-propanol before and after perovskite powder reaction

**Emission spectra:**



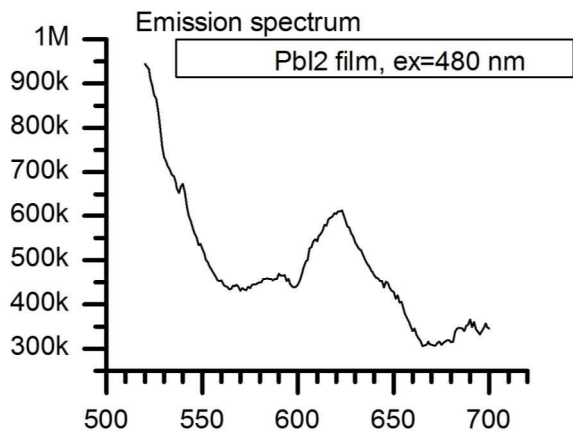
The emission spectrum of the perovskite pellet

Emission spectrum of lead iodide in DMF



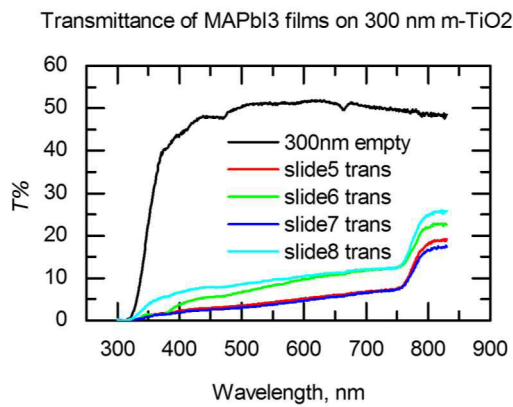
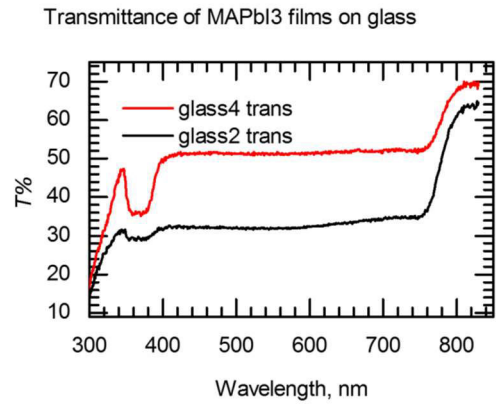
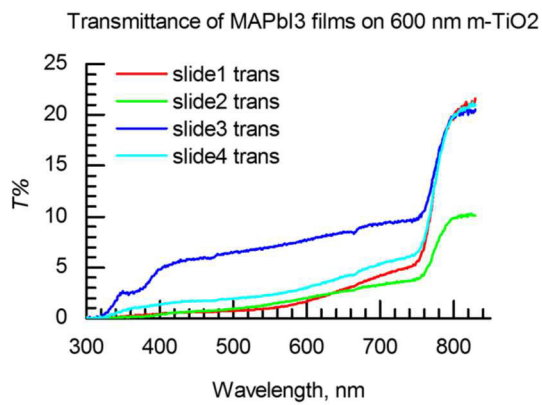
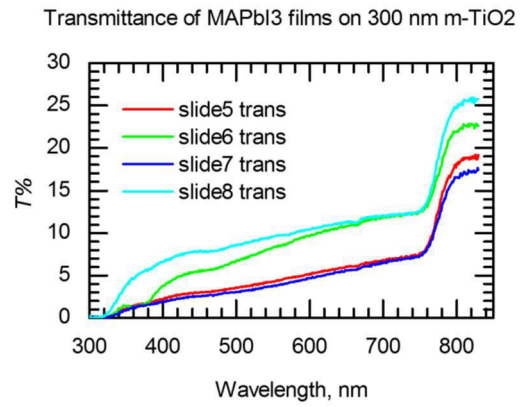
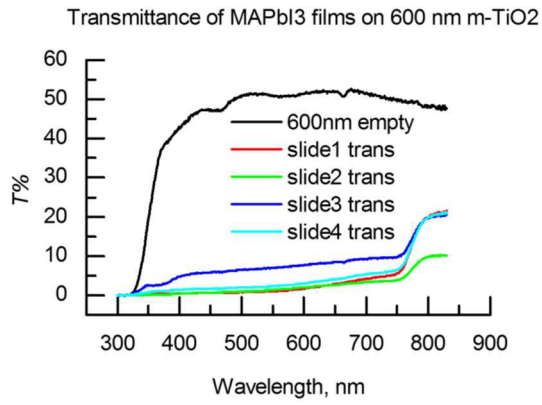
Comparison of different perovskite emission spectra

Emission spectra of lead iodide in DMF at various excitation wavelengths

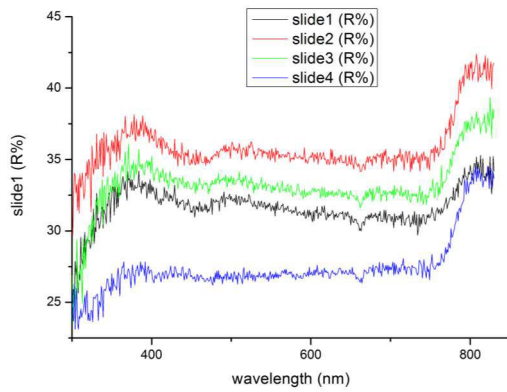


The emission spectrum of lead iodide on mesoporous titanium dioxide

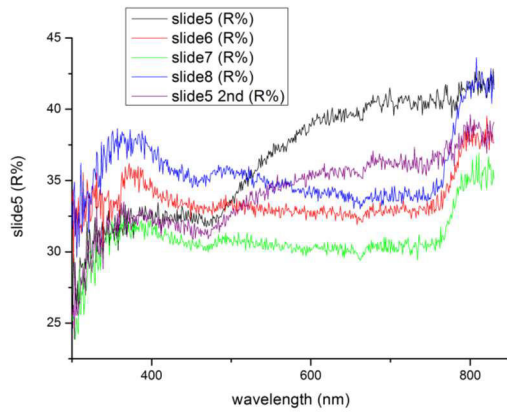
## Transmittance spectra:



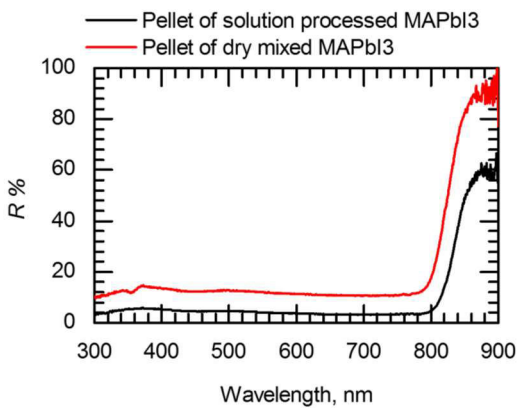
**Reflectance spectra:**



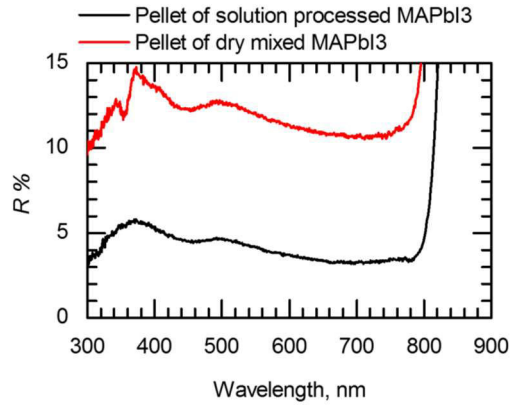
The reflectance spectra of perovskite in the first four solar cell samples prepared



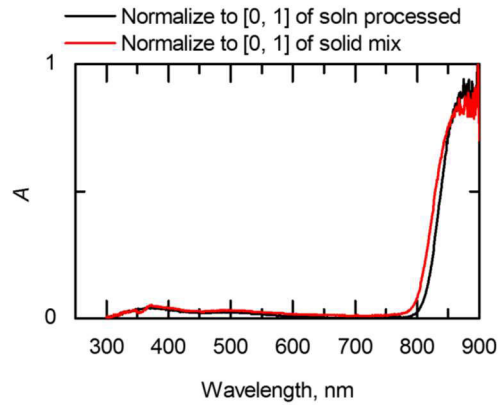
Reflectance spectra of perovskite in the last four samples of the first solar cell batch



Reflectance spectra comparison between perovskite pellets via two different methods



The previous spectra zoomed on the tail part



The comparison of reflectance spectra between pellets normalized