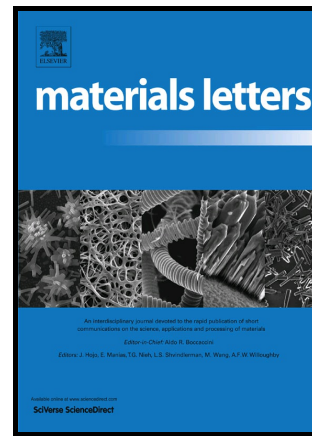


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The influence of chloride on interdiffusion method for perovskite solar cells

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ABSTRACT

Fully converting the lead salt to perovskite is crucial for the performance of the perovskite solar cells via the sequential deposition method. By applying mixture of PbI_2 and PbCl_2 as the lead salts here, a fast conversion rate was found and a new PbICl phase was involved.

Keywords: Perovskite solar cells; $\text{CH}_3\text{NH}_3\text{PbI}_3$; PbICl ; Interdiffusion method

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1. Introduction

Photovoltaic is a very promising renewable energy technology, due to the availability of sunshine and the maturity of semiconductor technology. The newly developed perovskite solar cell with updated power conversion efficiency (PCE) of 20.1% has drawn great interests [1]. Now, three types of fabrications methods are mainly applied for the perovskite solar cells: one step precursor deposition method, sequential deposition method and vapor based deposition

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