

Accepted Manuscript

Sequential deposition of hybrid halide perovskite starting both from lead iodide and lead chloride on the most widely employed substrates

Vanira Trifiletti, Alessandro Cannavale, Andrea Listorti, Aurora Rizzo, Silvia Colella



PII: S0040-6090(18)30335-3
DOI: doi:[10.1016/j.tsf.2018.05.022](https://doi.org/10.1016/j.tsf.2018.05.022)
Reference: TSF 36665
To appear in: *Thin Solid Films*
Received date: 4 August 2017
Revised date: 8 May 2018
Accepted date: 8 May 2018

Please cite this article as: Vanira Trifiletti, Alessandro Cannavale, Andrea Listorti, Aurora Rizzo, Silvia Colella , Sequential deposition of hybrid halide perovskite starting both from lead iodide and lead chloride on the most widely employed substrates. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Tsf(2017), doi:[10.1016/j.tsf.2018.05.022](https://doi.org/10.1016/j.tsf.2018.05.022)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Sequential deposition of hybrid halide perovskite starting both from lead iodide and lead chloride on the most widely employed substrates.

Vanira Trifiletti ^{a,*}, Alessandro Cannavale ^{b,c}, Andrea Listorti ^a, Aurora Rizzo ^b, Silvia Colella ^{a,b}

^a *Università del Salento, Dipartimento di Matematica e Fisica “E. De Giorgi”, Via per Arnesano, Lecce, Italy, 73100;*

^b *Istituto di Nanotecnologia CNR-Nanotec, Distretto Tecnologico via Arnesano 16, 73100 Lecce, Italy;*

^c *Department of Civil Engineering and Architecture (DICAR), Politecnico di Bari, via Orabona 4, 70125 Bari (Italy)*

Abstract

The introduction of hybrid perovskites is revolutionizing the field of solution processable next-generation optoelectronic devices, with outstanding results achieved in solar energy conversion devices, lasing, light emitting diodes, and thermoelectric generators. An intelligent design of the material properties is a critical element in the technological development of such devices and, to achieve it, excellent control of the material deposition procedures is of paramount importance. Here we compare the growth of hybrid perovskite, starting both from lead iodide and lead chloride, through a simple two-step method on the most widely employed substrates, and we present diverse morphologies, realized varying the substrates and the deposition procedures.

* Corresponding author.

Present address: Department of Materials Science and Milano-Bicocca Solar Energy Research Center – MIB-Solar
University of Milano-Bicocca, Via Cozzi 55, 20125, Milano, Italy
E-mail: vanira.trifiletti@unimib.it

Download English Version:

<https://daneshyari.com/en/article/8032602>

Download Persian Version:

<https://daneshyari.com/article/8032602>

[Daneshyari.com](https://daneshyari.com)