Accepted Manuscript

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PII: S0925-8388(18)31049-1

DOI: 10.1016/j.jallcom.2018.03.179

Reference: JALCOM 45409

To appear in: Journal of Alloys and Compounds

Received Date: 23 January 2018
Revised Date: 13 March 2018
Accepted Date: 14 March 2018

Please cite this article as: M. Zhang, M. Wang, Z. Yang, J. Li, H. Qiu, Preparation of all-inorganic perovskite quantum dots-polymer composite for white LEDs application, *Journal of Alloys and Compounds* (2018), doi: 10.1016/j.jallcom.2018.03.179.

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ACCEPTED MANUSCRIPT

Preparation of All-inorganic Perovskite Quantum Dots-Polymer Composite for

White LEDs Application

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Keywords: Perovskite

dots, quantum Composite film,

Photoluminescence decay mechanism

ABSTRACT: In recent years, all-inorganic lead halide perovskite $CsPbX_3$ (X = Cl,

Br, I) nanocrystals as kinds of new luminescent materials have attracted more and

more attentions because of their size tunable emission wavelength, narrow emission

peak, high luminous efficiency and good air stability. Herein we have synthesized

all-inorganic halide perovskite nanocrystals by hot-injection method and anion

exchange reaction, achieving the whole visible light region from 410 to 700 nm with

narrow spectral in the range of 15-40 nm. Moreover, a white light emitting diode

(WLED) was constructed by stacking CsPbBr₃ QDs-ethyl acetate composite film and

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