

## Supplementary materials:

# Facile Synthesis of Methylammonium Lead Iodide Perovskite with Controllable Morphologies with Enhanced Luminescence Performance

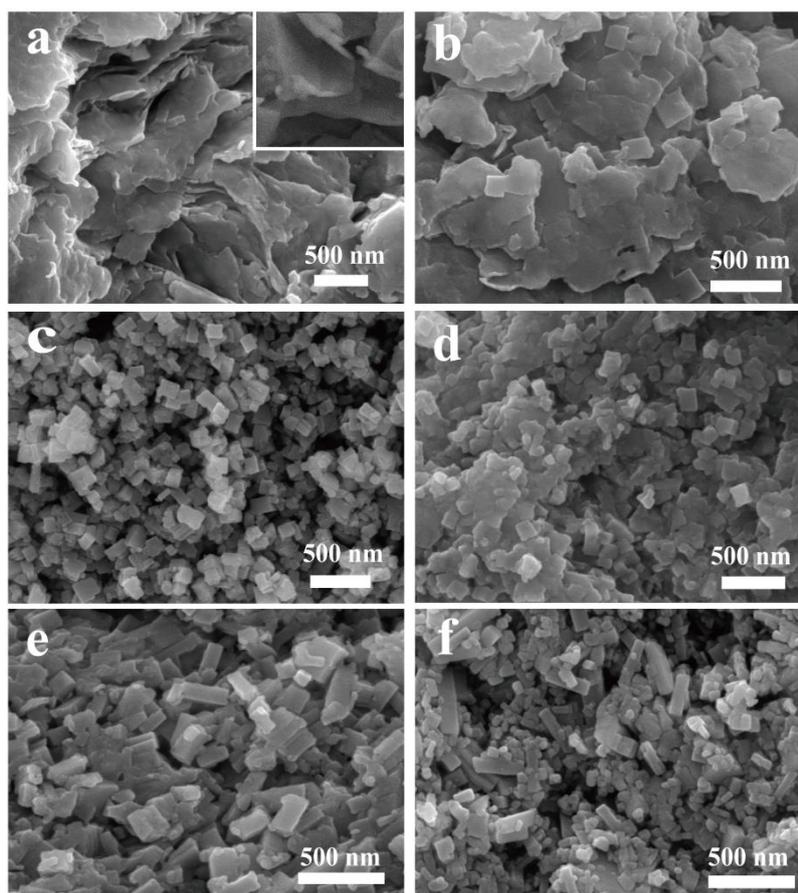
Tao Wang <sup>1</sup>, Huafang Zhang <sup>1,2,\*</sup>, Sumin Hou <sup>1</sup>, Yan Zhang <sup>1</sup>, Quanjun Li <sup>3</sup>, Zhenlong Zhang <sup>1,2</sup>, Huiping Gao <sup>1,2</sup>, and Yanli Mao <sup>1,2,\*</sup>

<sup>1</sup> School of Physics and Electronics, Henan University, Kaifeng 475004, China; wangtaoun@163.com (T.W.); hsm369688227@163.com (S.H.); zy2019un@163.com (Y.Z.); zhenlong2015@163.com (Z.Z.); gaohp@henu.edu.cn (H.G.)

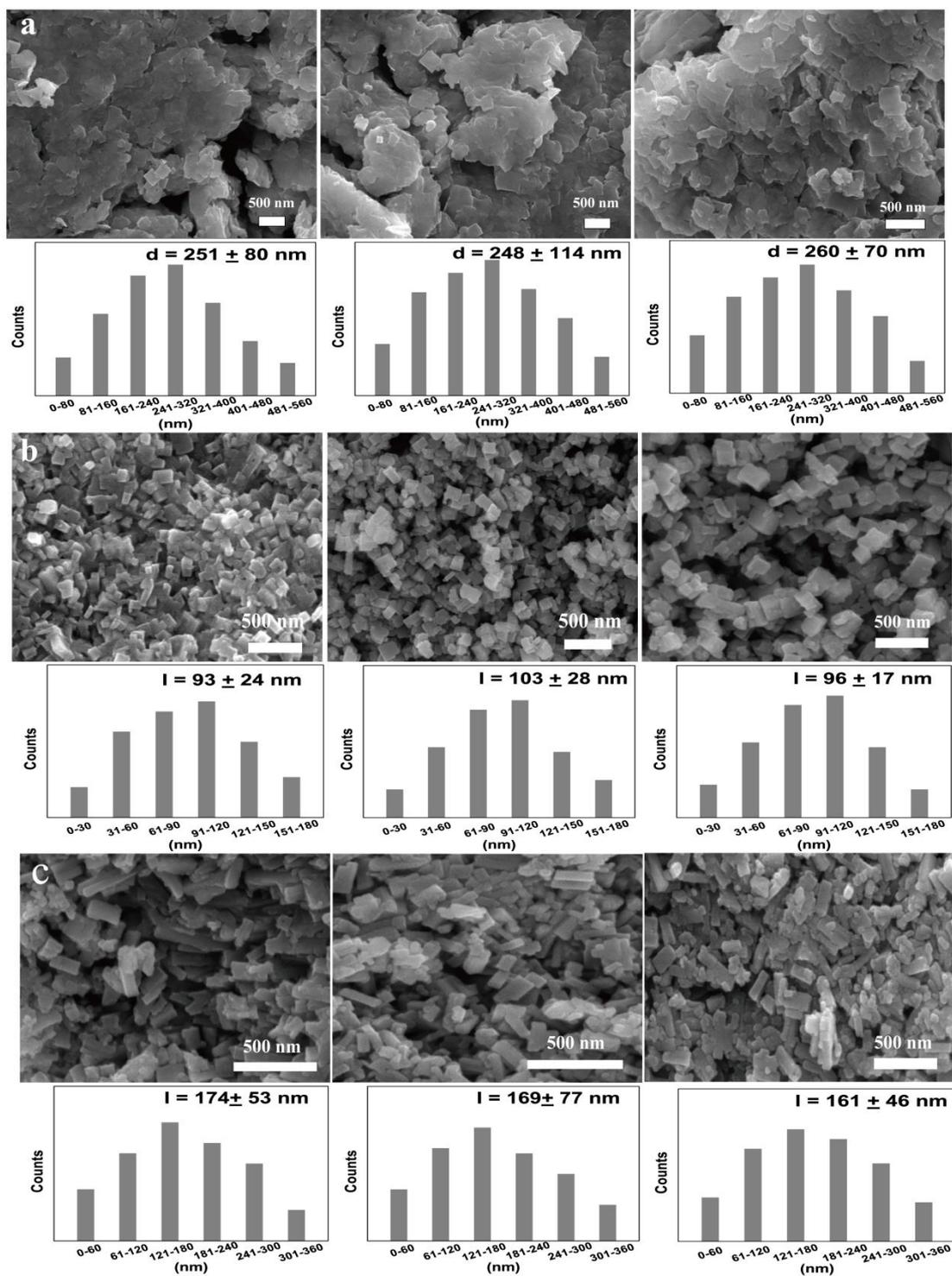
<sup>2</sup> Institute of Macro/Nano Photonic Materials and Application, Henan University, Kaifeng 475004, China

<sup>3</sup> State Key Laboratory of Superhard Materials, Jilin University, Changchun130012, China; liquanjun@jlu.edu.cn

\* Correspondence: zhf610@163.com (H.Z.); ylmao@henu.edu.cn (Y.M.)



**Figure S1.** SEM images of the obtained samples. (a) Np-70, fast addition (26ml/min) (b) Np-70, slow addition (1ml/min) (c) Nc-70, fast addition (26ml/min) (d) Nc-70, slow addition (1ml/min) (e) Nr-50, fast addition (26ml/min) (f) Nr-50, slow addition (1ml/min). Inset of (a): SEM images of PbI<sub>2</sub>.



**Figure S2.** SEM images of the obtained samples and the corresponding size distribution. (a) Np-70, dropping rate: 1 mL/min (b) Nc-70, dropping rate: 26 mL/min, (c) Nr-50, dropping rate: 26 mL/min.

From Figure S2 can note that shapes of nanorods, nanoplates and nanocubes are similar, and the deviation of the measured size are less than 9%, 4%, 3%, respectively. And the size distributions are also stable.