Synthesis of Cs based Halide Perovskite Nanoplatelets by Controlling Ratio of Components

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Perovskite nanocrystals have being recognize as very attractive materials to apply optoelectronic devices due to their unique properties such as high color purity caused by narrow full width at half maximum, easy control of band-gap by various combination of components and so on. Moreover, other factor of feeling as charming materials is that by using nanocrystals, some properties solves that were not appropriate for certain devices such as long diffusion length, small binding energy. Additionally advantages that each dimension of perovskite nanocrystals can show up disparate optoelectronic properties due to different physical confinement. Here, we demonstrated synthesis of Cs based halide perovskite nanoplatelets by controlling ratio of components. As the results of controlling ratio of components, we can check change from nanocube to nanoplatelets, and through additional controlling, we can gain smaller nanoplatelet.