Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Perovskite Beyond Photovoltaics: Field Emission from Morphology Tailored Nanostructured Methylammonium Lead Triiodide

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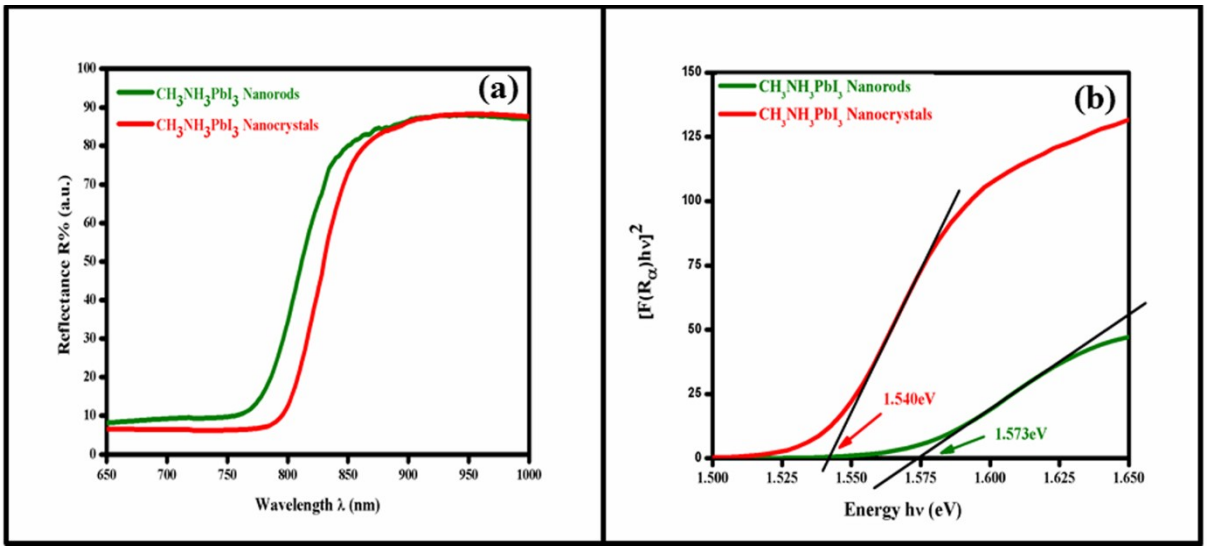

Figure S1: (a) Reflectance R (%) vs. λ (nm) spectra, (b) Kubelka – Munk plot for direct energy band gap type of $CH_3NH_3PbI_3$ nanorods and nanocrystals.

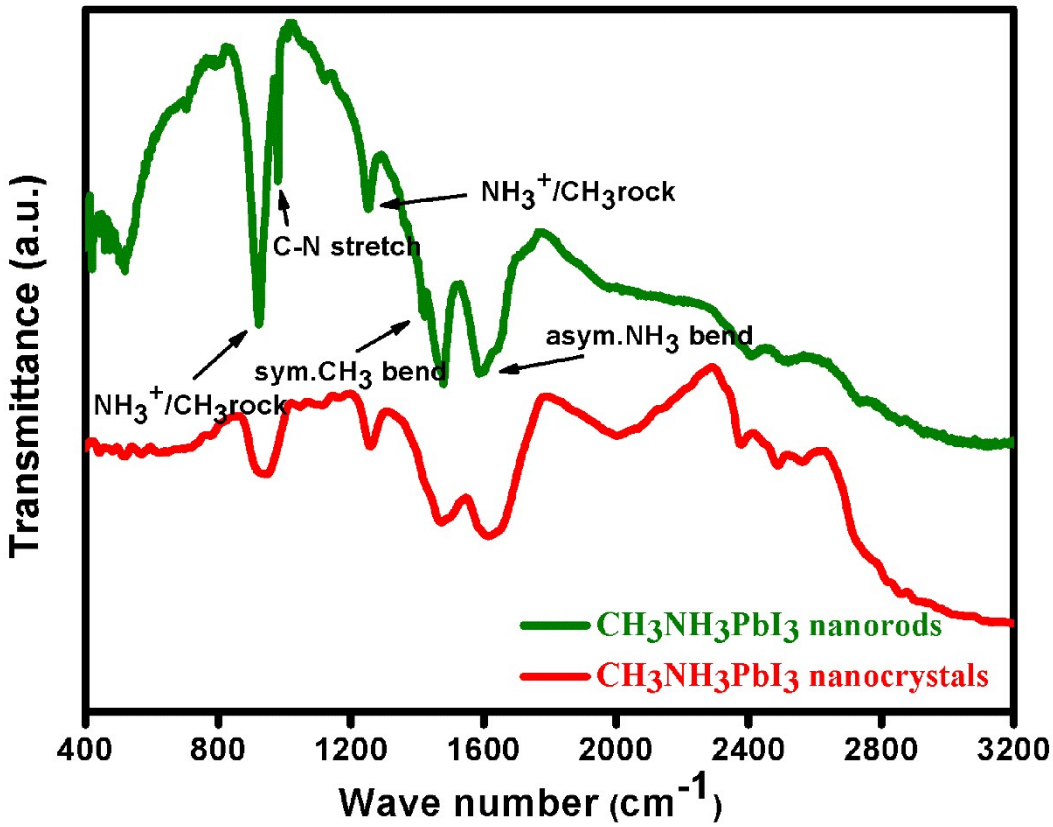

Figure S2: FTIR transmittance spectra of $CH_3NH_3PbI_3$ nanorods and nanocrystals.

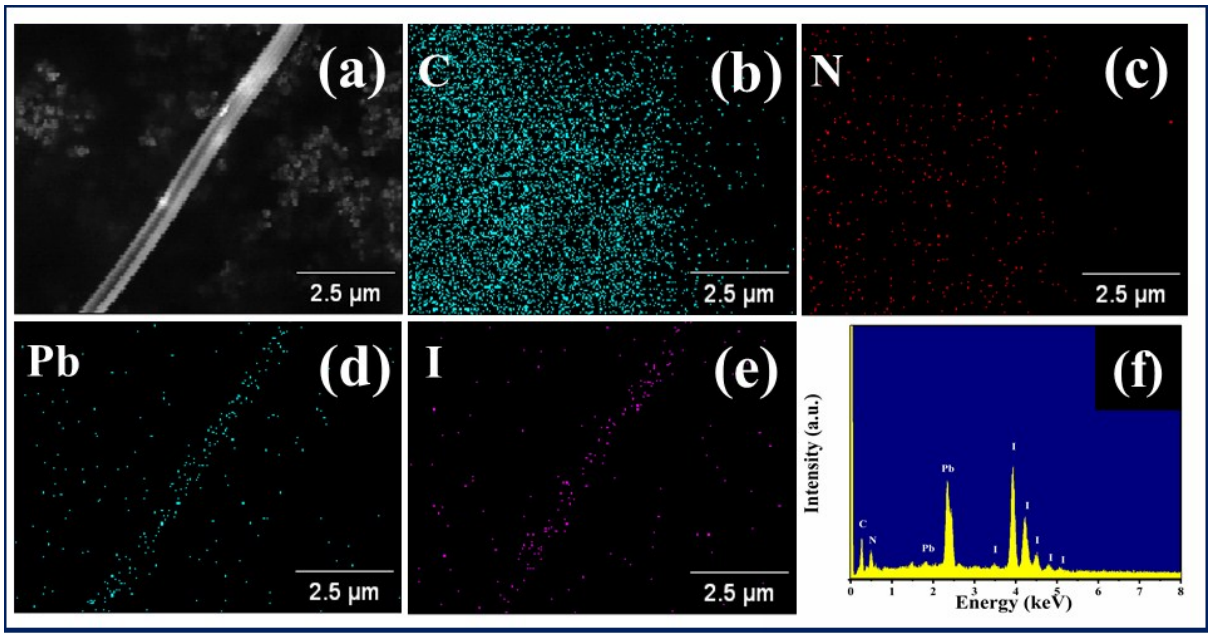

Figure S3: Elemental mappings and Energy dispersive X-ray spectra of $CH_3NH_3PbI_3$ nanorods.

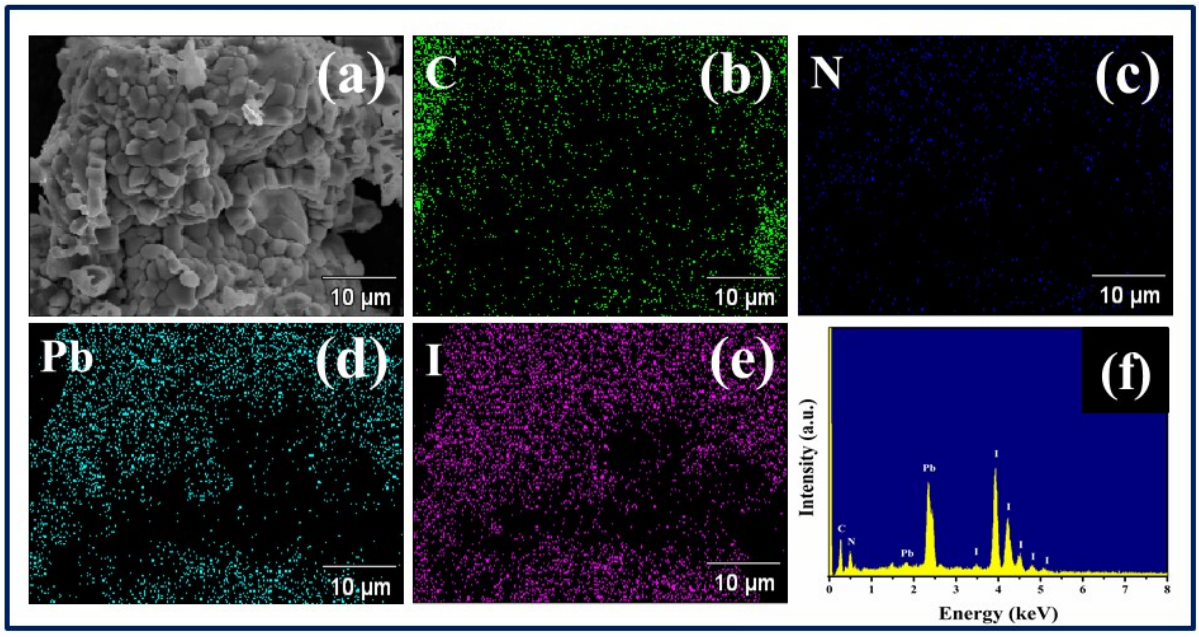

Figure S4: Elemental mappings and Energy dispersive X-ray spectra of $CH_3NH_3PbI_3$ nanocrystals.

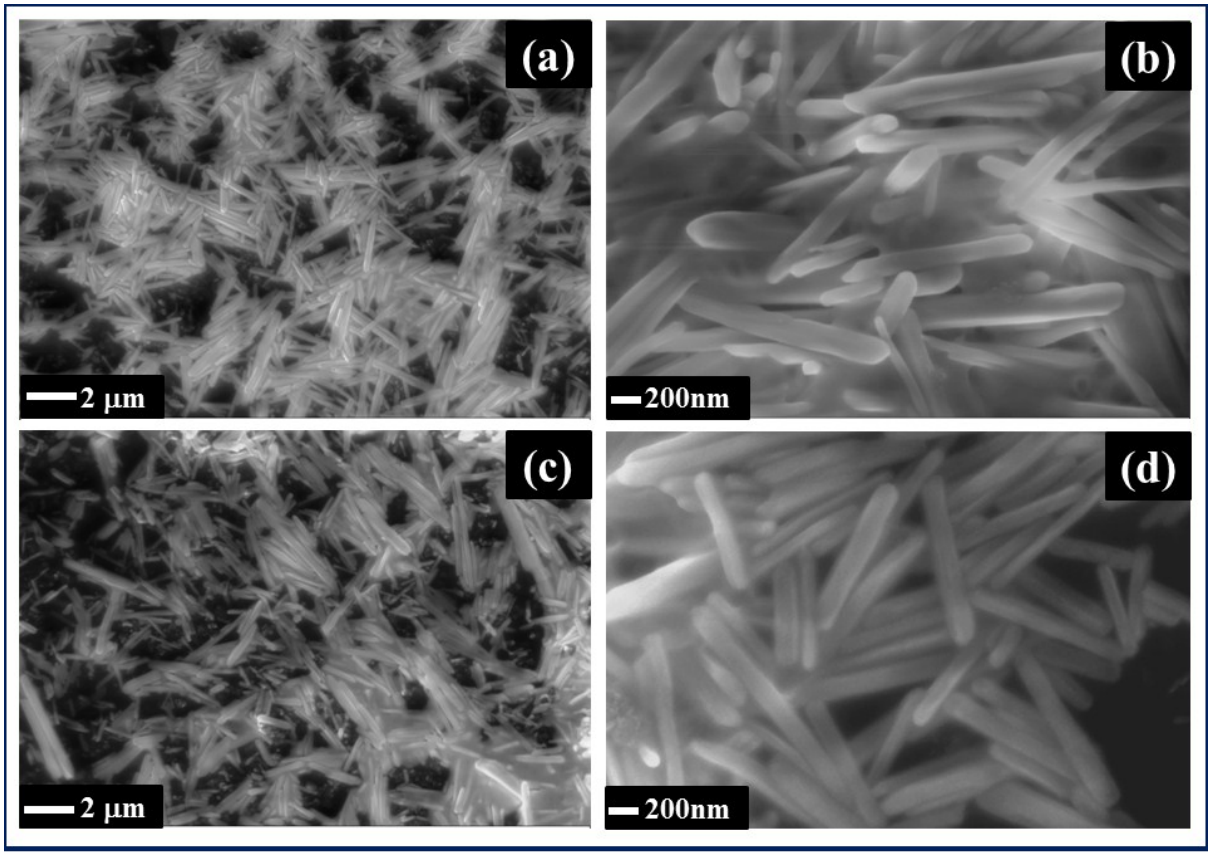

Figure S5: Low and high magnification FESEM images of $CH_3NH_3PbI_3$ nanorods before (figure (a) and (b) respectively) and after (figure (c) and (d) respectively) FE measurement respectively.

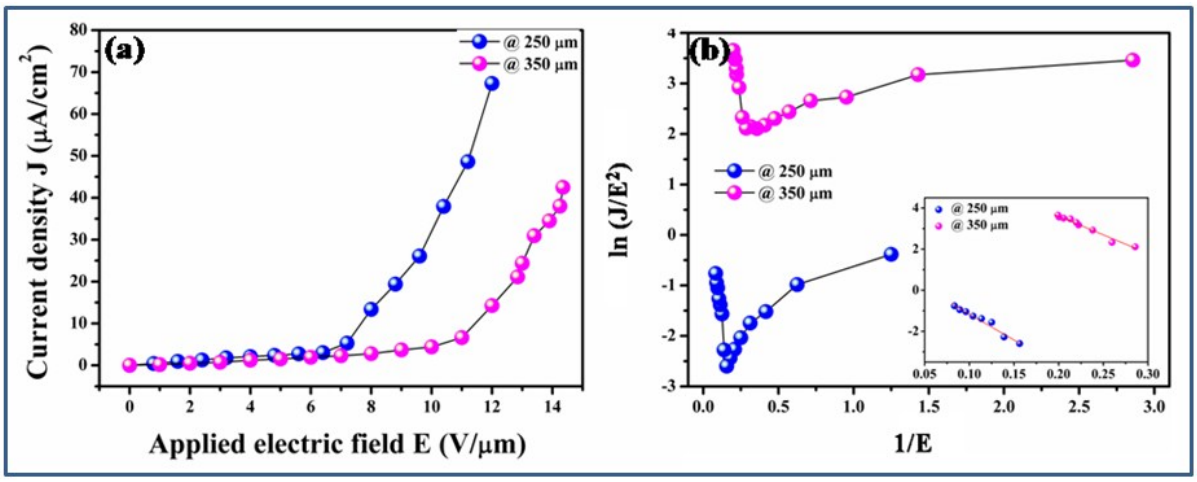

Figure S6: JE (figure a) and FN characteristics (figure b; inset showing the linear characteristic feature) respectively of $CH_3NH_3PbI_3$ nanorods at inter electrode separations 250 μm and 350 μm.

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