Photonic Devices By Organo-Metallic Halides Based Perovkites Material And Its Method Of Preparation

It is a photonic device for electroluminescence application.This device comprises a perovskite semiconductor film layer disposed between a n-type region and a p-type region, wherein the perovskite semiconductor film layer is made of an organo- metallic halide (ABX3) and is tuned to a band gap, wherein the band gap varies from NIR to visible range at room temperature and at least two inter layers, the at least two inter layers incorporated between the p-type region and perovskite semiconductor film layer and the n-type region and perovksite semiconductor film layer

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