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(71)Name of Applicant :
1)Pandit Deendayal Petroleum University
Address of Applicant :Pandit Deendayal Petroleum University
Raisan Village Gandhinagar Gujarat India 382 007 -----

Name of Applicant : NA
Address of Applicant : NA
(72)Name of Inventor :
1)Dr. Pankaj Yadav
Address of Applicant :Pandit Deendayal Petroleum University
Raisan Village Gandhinagar Gujarat India 382 007 -----

2)Ms. Nishi Parikh
Address of Applicant :Pandit Deendayal Petroleum University
Raisan Village Gandhinagar Gujarat India 382 007 -----

3)Dr. Daniel Prochowicz
Address of Applicant :Kasprzaka 44/52 01-224 Warsaw -----

4)Dr. Mohammad Mahdi Tavakoli
Address of Applicant :02139 MA Cambridge Massachusetts USA

(57) Abstract :

“METHOD FOR SYNTHESIZING HALIDE PEROVSKITE SINGLE CRYSTALS” The present invention provides a method for synthesizing halide perovskite single crystals. Said method for synthesizing halide perovskite single crystals controls the growth of halide perovskite single crystals. It makes the crystal suitable for device fabrication by controlling the crystal growth. Said invention reduces the defect density and trap states in the bulk of the perovskites. The method for synthesizing halide perovskite single crystals use of 3-MPA facilitates the self-assembly process involved in crystallization and speeds up the process. Said method enables the growth of single crystals at comparatively low temperature and also provide improvement in charge carrier lifetime and provides better charge transport by reducing the non-radiative recombination.

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