पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 16/2024	शुक्रवार	दिनांक: 19/04/2024
ISSUE NO. 16/2024	FRIDAY	DATE: 19/04/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/04/2024

(21) Application No.202441028517 A
(43) Publication Date : 19/04/2024

(54) Title of the invention : PEROVSKITE SOLAR CELLS OPTIMIZATION: THE SIGNIFICANCE OF PROGRESSIVE ANNEALING METHODS

(51) International classification :H01L0051420000, H01L0051000000, H01L0031200000, H01L0031032000, G01R0031260000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

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(57) Abstract :
PEROVSKITE SOLAR CELLS OPTIMIZATION: THE SIGNIFICANCE OF PROGRESSIVE ANNEALING METHODS The method for the development with the PSCs, or perovskite solar cells, have attracted a lot of interest in the photovoltaic community because of their remarkable photoelectric characteristics, which include a large carrier diffusion distance, high light absorption, and a band gap that can be adjusted. One of the most important factors affecting perovskite solar cells' preparation and performance is temperature. The device structure is significantly impacted by the annealing temperature, whereas carrier transport, the perovskite band gap, and interface characteristics are influenced by the operating temperature. The pure crystalline phase, extended charge-carrier lifetime, and low defect density of these MAP-treated perovskite films can significantly increase PSC efficiency without the need for an extra enhancer/passivation layer. The findings suggest that PSC efficiency may be considerably raised by tailoring the absorber layer's thickness. Due to significant advancements in materials development over the past 10 years, perovskite solar cells (PSCs) have seen a fast increase in efficiency, which is now the subject of intensive research. FIG.1

No. of Pages : 16 No. of Claims : 1