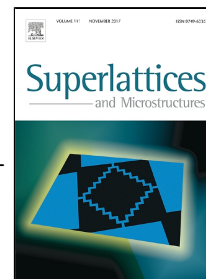


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Optimization of the photoelectric properties and photo-stability of $\text{CH}_3\text{NH}_3\text{PbBr}_x\text{I}_{3-x}$ films for efficient planar perovskite solar cells



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Highlight

- 1, The phase segregation happened in the $\text{CH}_3\text{NH}_3\text{PbBr}_x\text{I}_{3-x}$ films under illumination.
- 2, The instability of the $\text{CH}_3\text{NH}_3\text{PbBr}_x\text{I}_{3-x}$ films under illumination was adverse to the performance and stability of the corresponding devices.
- 3, The phase segregation in $\text{CH}_3\text{NH}_3\text{PbBr}_x\text{I}_{3-x}$ films with moderate bromine content can be suppressed.
- 4, The stable PCE of the devices based on mole ratio of 3:7 under illumination can reach 13.8%.

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