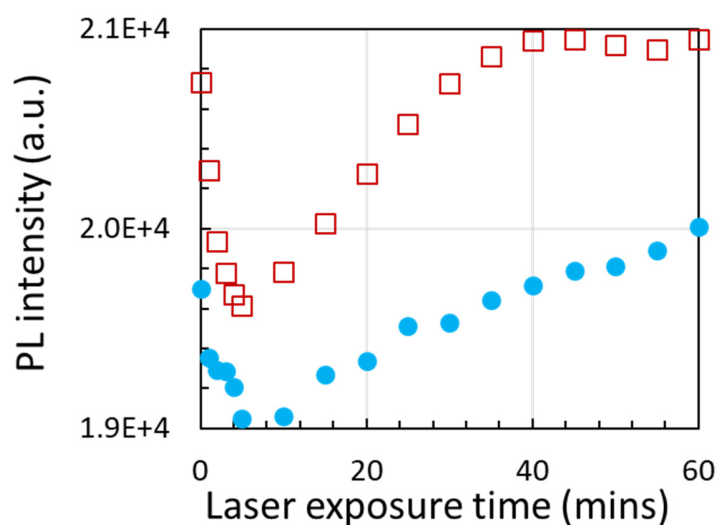


Supporting information

# Enhanced Photoluminescence and Prolonged Carrier Lifetime through Laser Radiation Hardening and Self-Healing in Aged MAPbBr<sub>3</sub> Perovskites Encapsulated in NiO Nanotubes

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**Figure S1.** Photoluminescence intensity from MAPbBr<sub>3</sub> encapsulated in NiO nanotubes as a function of laser exposure times from two pieces of LED device. The structure of LED is described in the reference [1]. The LED device was fabricated 24 months ago, run for 140 hours, and was cut into pieces for SEM examination of the cross section of LED device for the reference paper [1].

1. Gonzalez-Rodriguez, R.; Hathaway, E.; Lin, Y.; Coffey, J.L.; Cui, J. Encapsulated MAPbBr<sub>3</sub> in Nickel Oxide Nanotubes and Their Electroluminescence. *Nanoscale* **2022**, *14*, 6417–6424, <https://doi.org/10.1039/D2NR00019A>.