

Supporting Information

Tuning Magnetism and Photocurrent in Mn-Doped Organic-Inorganic Perovskites

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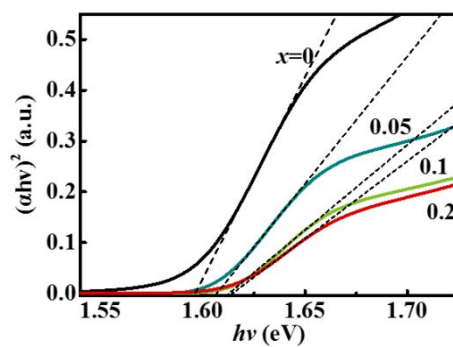


Figure S1. The Tauc plot method to deduce the optical bandgap of perovskite films.

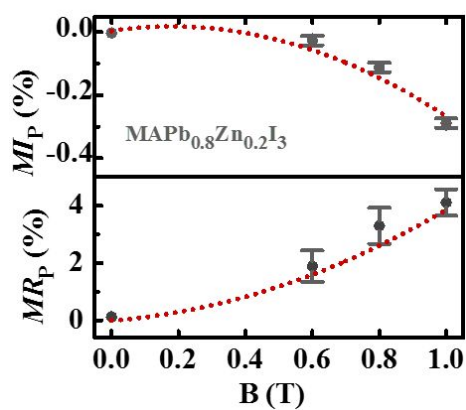


Figure S2. MI_P and MR_P for $\text{MAPb}_{0.8}\text{Zn}_{0.2}\text{I}_3$ samples as a function of the magnetic field, respectively.

Table S1. The fitted positions and areas of Mn 2p XPS peaks.

| Peak | Position (eV) | Area |
|------------------------------------|---------------|---------|
| Pb 4p _{3/2} | 642.6 | 19631.6 |
| Pb 4p _{1/2} | 650.4 | 16026.4 |
| Mn ²⁺ 2p _{3/2} | 640.0 | 21286.1 |
| Mn ²⁺ 2p _{1/2} | 645.3 | 5739.7 |
| Mn ³⁺ 2p _{3/2} | 641 | 8439.0 |