

Supporting Information

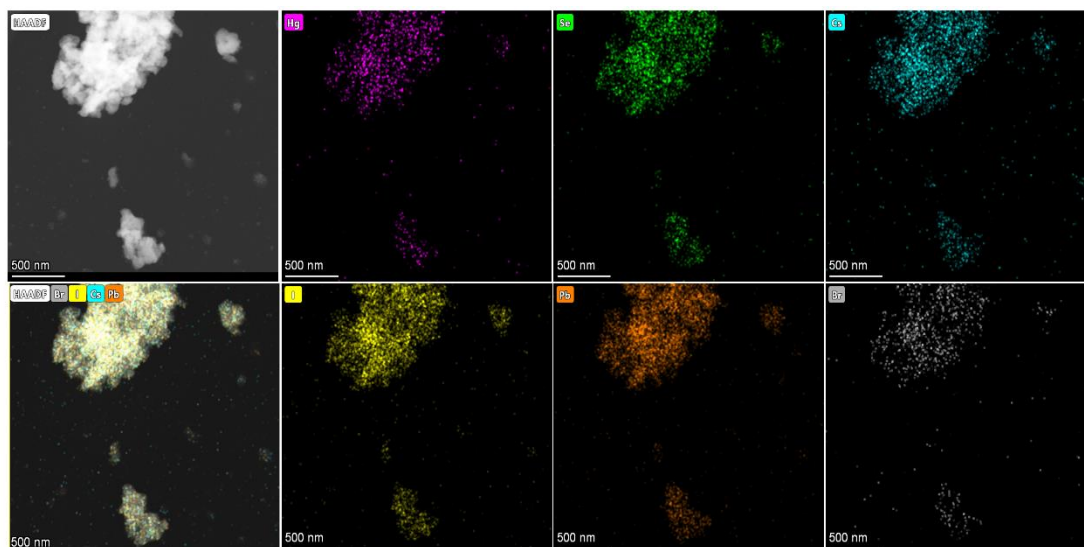


Figure S1. EDS images of elements Hg, Se, Cs, Pb, I, and Br in the HgSe/CsPbBr_xI_{3-x} heterostructure

Substance	Θ	$\sin\Theta$	$d_{(110)}$ (Å)	a (Å)
CsPbI ₃	9.9745	0.173	4.4473	6.289
CsPbBr _x I _{3-x}	10.135	0.176	4.3715	6.182

Table S1. Calculation of lattice constants for CsPbBr_xI_{3-x} crystals

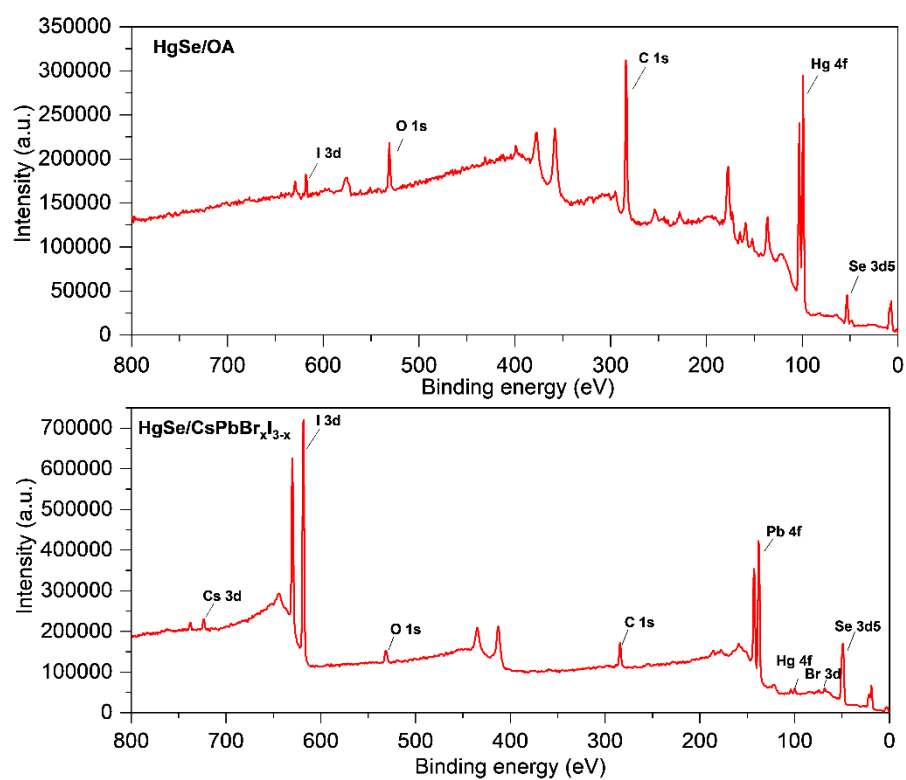


Figure S2. Total XPS spectra of HgSe and HgSe/CsPbBr_xI_{3-x}

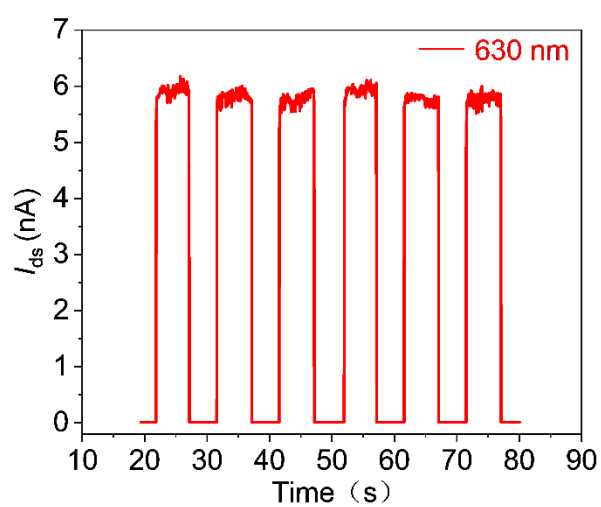


Figure S3. I-T switching curves of CsPbBr_xI_{3-x}