Electronic Supplementary Information (ESI)

Fabrication of large-area PbSe films at the organic-aqueous interface and their near-infrared photoresponse [†]

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Fig. S1: FESEM image of a fragment of PbSe film obtained when Pb: Se precursor ratio is 1:3.



Fig. S2. XPES analysis of film exposed to oxygen for more than 30 days. a) Se 3d spectra. The peak in the region between 50 eV and 55 eV corresponds to lead bound Se²⁻ (splitting is due to spin-orbit coupling) and the peak in the region between 56 eV and 60 eV corresponds to oxygen bound Se (IV); b) Pb-4f spectrum.

Initial Pb : Se mole ratio of precursors			Final Pb: Se mole ratio in the films
	Conc . unit	Std. Dev	
	(mg/L)		
1:3	Pb : 16.061	0.039	1.02 : 1
	Se : 5.948	0.021	
1:2	Pb : 6.642	0.006	1.03 : 1
	Se : 2.461	0.017	
1:1	Pb : 8.540	0.076	1.05 : 1
	Se : 3.092	0.036	

 Table S1: ICP-OES analysis of as-synthesized PbSe films