

Electronic Supplementary Information for

Electrochemiluminescence resonance energy transfer (EREF) towards

trinitrotoluene sensor based on layer-by-layer assembly of luminol-layered

double hydroxides and CdTe quantum dots

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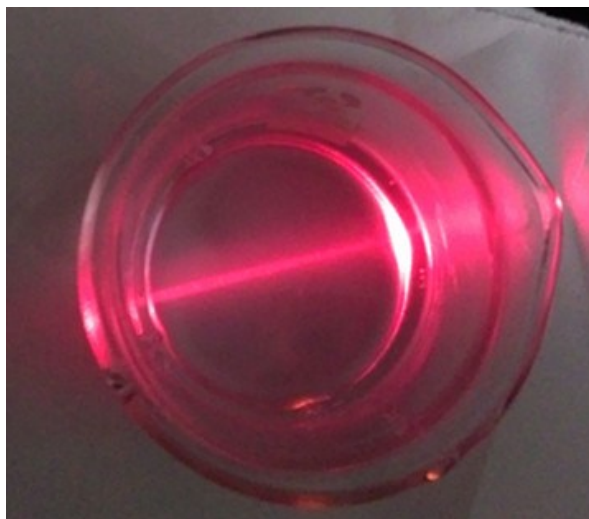


Figure S1 Photo of a colloidal suspension of 3-AMS-CoAl LDHs.

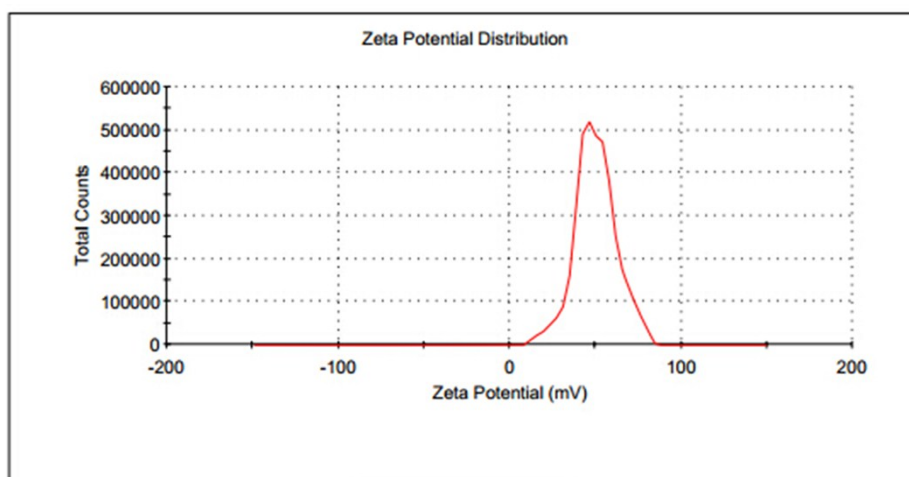


Figure S2 Zeta potential of a colloidal suspension of 3-AMS-CoAl LDHs.

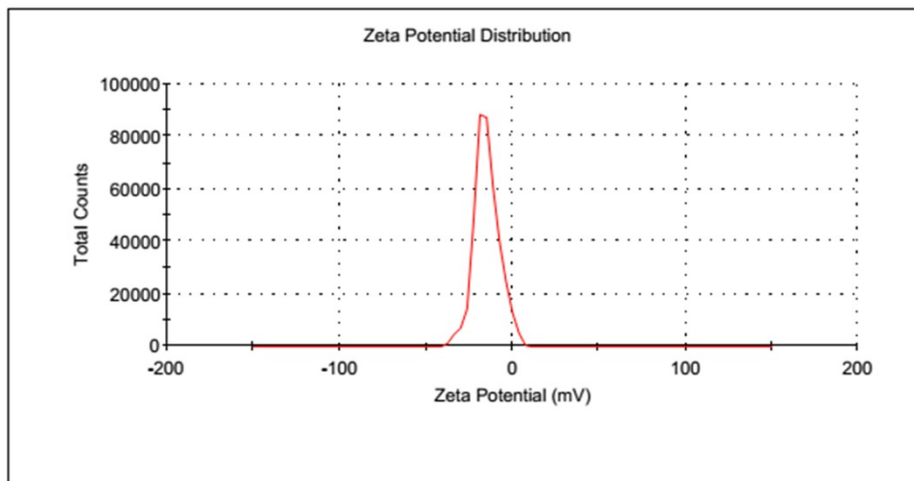


Figure S3 Zeta potential of CdTe QDs.

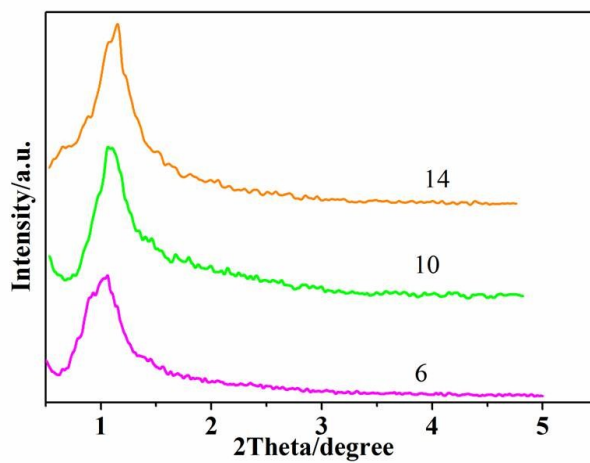


Figure S4 XRD patterns of (3-AMS-CoAl LDHs/CdTe QDs)_n (n=6, 10, 14).

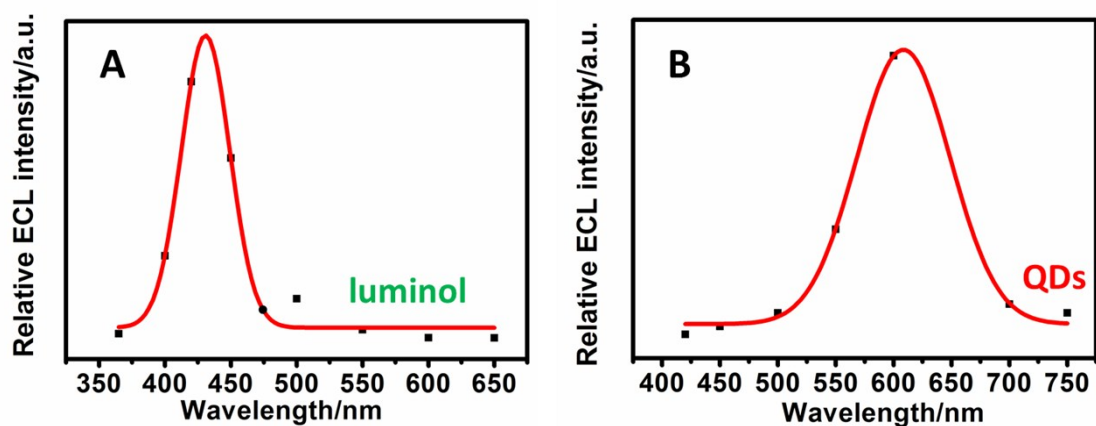


Figure S5 The relative ECL intensity of (A) luminol and (B) QDs at different wavelengths.

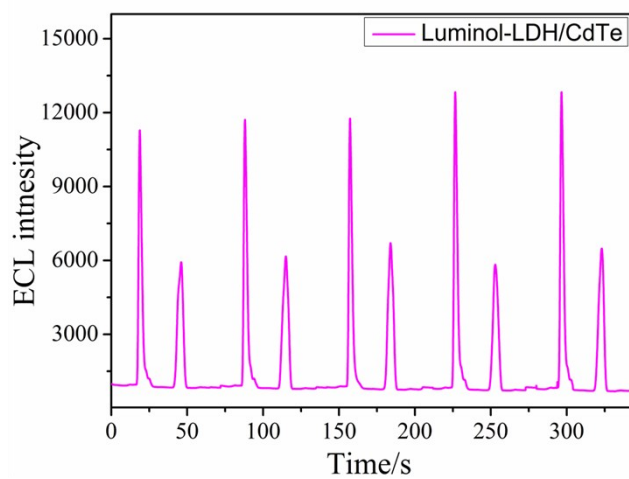


Figure S6 Stability of (3-AMS-CoAl LDHs/CdTe QDs)₁₀ film.

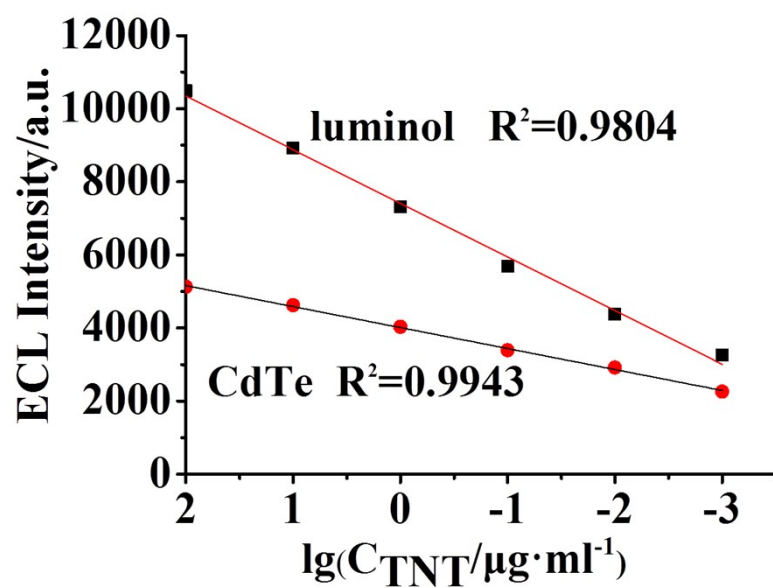


Figure S7 The plot of ECL intensity vs TNT concentration.

Table S1 The detection limit for TNT compared with other probes.

	this paper	<i>ACS Appl. Mater. Interfaces</i> 2015, 7, 21038–21046.	<i>Anal. Chem.</i> 2015, 87, 4530–4537.	<i>Angew. Chem.</i> 2008, 120, 8729–8732.	<i>Anal. Chem.</i> 2006, 78, 2279–2285.	<i>J. Mater. Chem. A</i> , 2013, 1, 3561–3564.
Detection limit for TNT (μg/L)	0.65	1.135	998	0.908-1.589	0.1	9.1

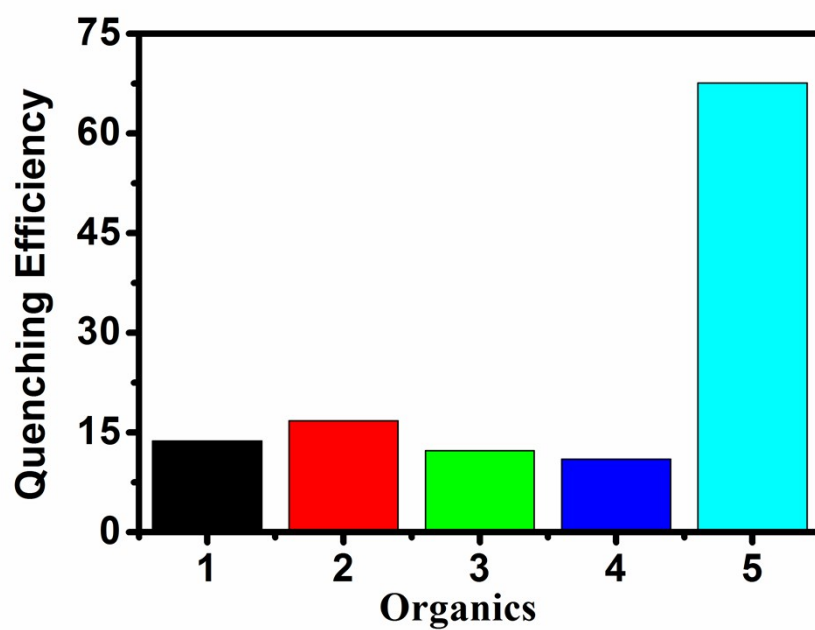


Figure S8 The extinction of the ECL intensity, normalized to a blank, after being challenged with interfering organics: 1. DNT, 2. NB, 3. TOL, 4. benzene, 5. TNT.