Supporting information for

Microwave-assisted cation exchange toward synthesis of near-infrared emitting PbS/CdS core/shell quantum dots with significantly improved quantum yields through a uniform growth path

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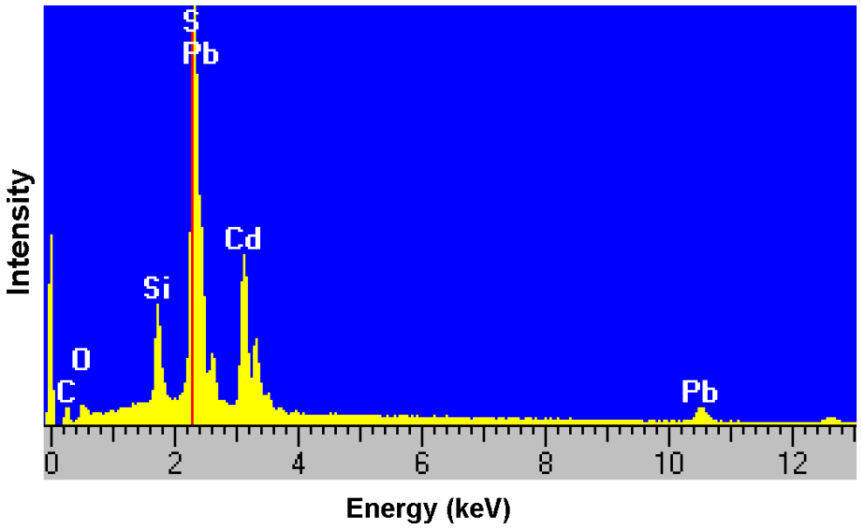

Figure S1. EDX spectrum confirming the presence of all expected elements (Pb, Cd and S) in the PbS/CdS core/shell QDs. Note that the silicon peak comes from the substrate.

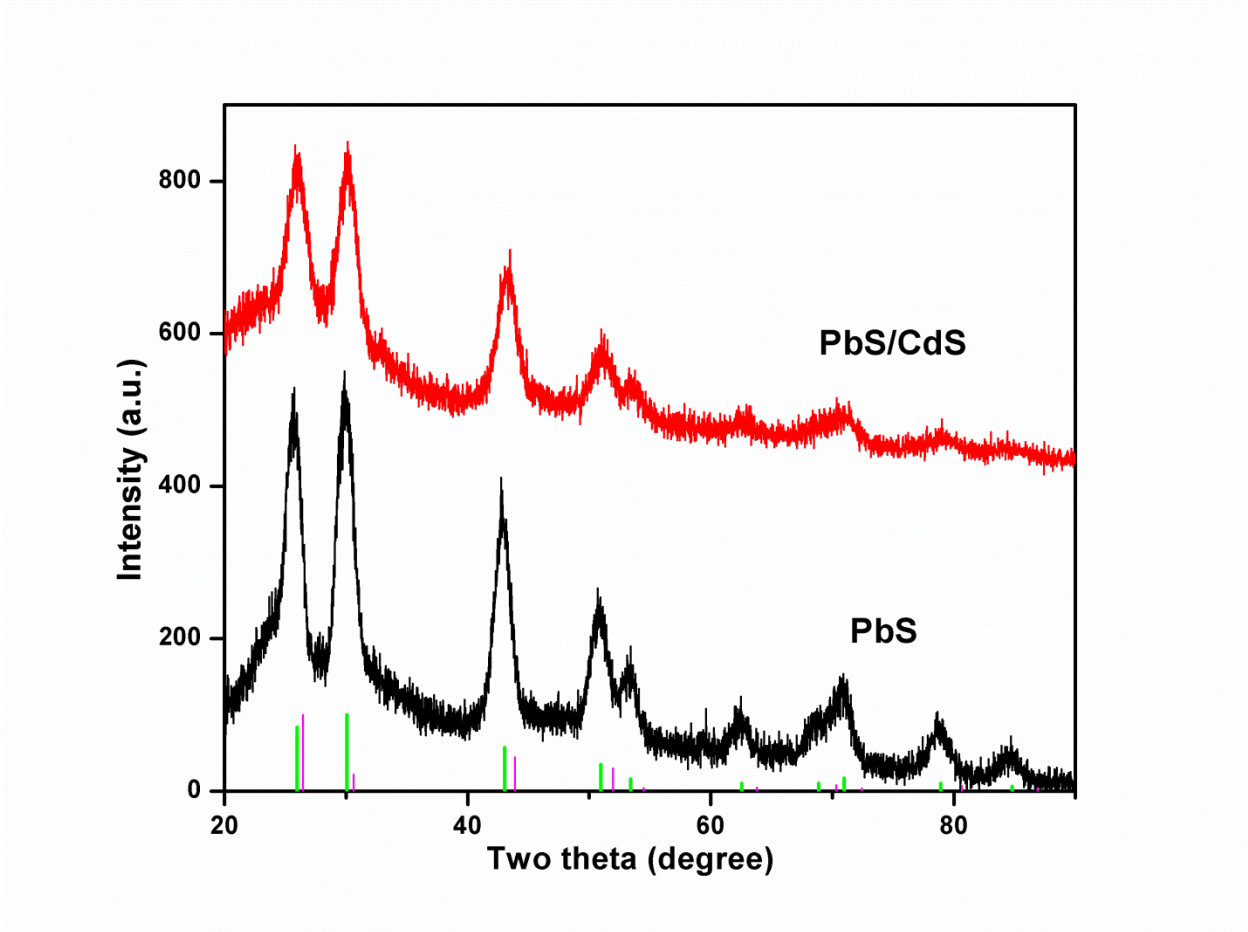

Figure S2. XRD patterns of PbS and PbS/CdS QDs. The JCPDS card files for PbS (05-0592, green line) and for CdS (01 089 0440, magenta line) are shown below the spectra for identification.

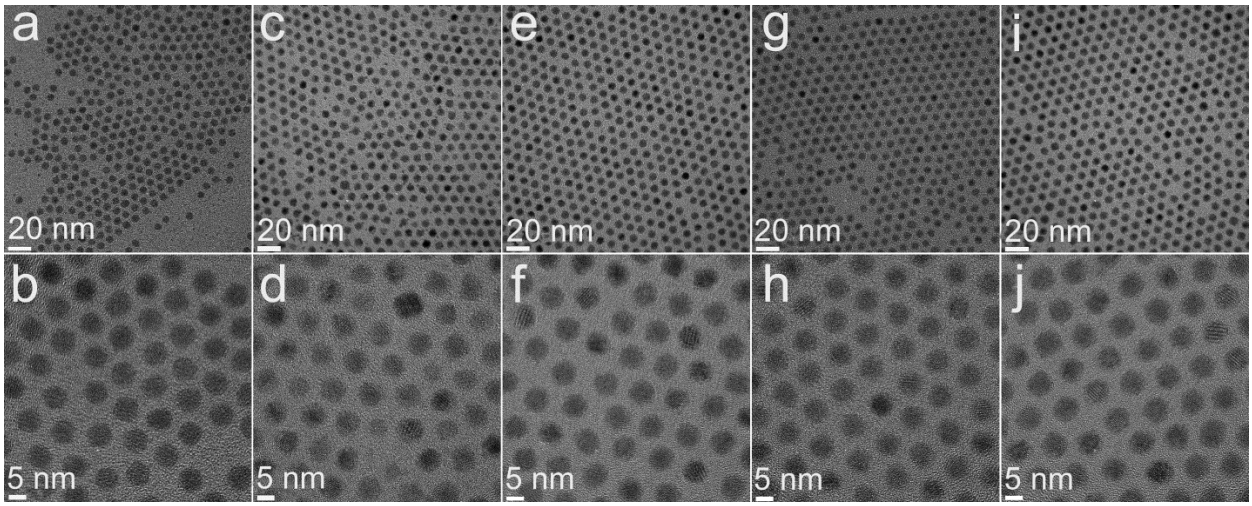

Figure S3. TEM images of PbS/CdS QDs: the reaction time for (a, b), (c, d), (e, f), (g, h), and (i, j) is 10 s, 60 s, 3 min, 10 min, and 20 min, respectively.