Supporting Information

**One-Pot Synthesis of Hydrophilic CuInS₂ and CuInS₂/ZnS Colloidal Quantum Dots**

Jianbing ZHANG, a, b Weipeng SUN,a Liping YIN,a Xiangshui MIAO a,b and Daoli ZHANG a, b, *

a School of Optical and Electronic Information, Huazhong University of Science and Technology, No. 1037 Luoyu Road, Hongshan District, Wuhan City, Hubei Province, 430074, P. R. China. Electronic mail: zhang_daoli@hust.edu.cn

b Wuhan National Laboratory for Optoelectronics, 1037 Luoyu Road, Hongshan District, Wuhan City, Hubei Province, 430074, P. R. China

**Synthesis of hydrophilic CdS and ZnS nanocrystals.** The synthetic method is the same with the case of CuInS₂ quantum dots with the cation precursors were replaced by Cd(Ac)₂·2H₂O and Zn(Ac)₂·2H₂O respectively.

![Figure S1](image)

**Figure S1.** The absorption and photoluminescence spectra of CdS colloidal quantum dots. (The remarkable surface-related emission is due to poor surface-capping.)
Figure S2. XRD pattern of CdS colloidal quantum dots.

Figure S3. The photoluminescence spectrum of ZnS colloidal quantum dots.
Figure S4. XRD pattern of ZnS colloidal quantum dots.