Electronic Supplementary Information

Alkylthiol-Enabled Se Powder Dissolving for Phosphine-Free Synthesis of Highly Emissive, Large-sized and Spheric Mn-Doped ZnSeS Nanocrystals

Bao Ke,^{a,#} Xianwei Bai,^{b,#} Rongkai Wang,^c Yayun Shen,^c Chunxiao Cai,^a Kun Bai,^a Ruosheng Zeng,^{*,a} Bingsuo Zou,^b Zhencheng Chen^{*,a}

^aSchool of Material Science and Engineering, School of Life and Environmental Sciences, Guilin University of Electronic Technology, Guilin 541004, P. R. China

bSchool of Materials Science & Engineering, Beijing Institute of Technology, Beijing 100081, P. R. China

cSchool of Chemistry and Materials Science, Guizhou Normal University, Guiyang 550001, P. R. China

dDepartment of Experiential Practice, Guilin University of Electronic Technology, Guilin 541004, P. R. China

*Corresponding authors: zengrsh@guet.edu.cn (R. Zeng), chenzhcheng@guet.edu.cn (Z. Chen)

#These authors contributed equally to the paper.

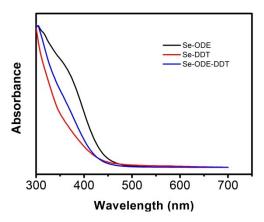


Figure 1S. UV-vis absorption spectra of Se powder dissolving in the different organics.

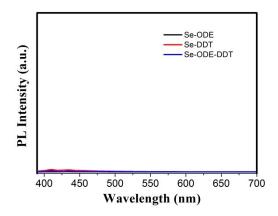


Figure 2S. PL spectra of Se powder dissolving in the different organics.

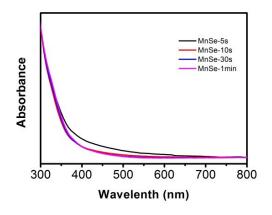


Figure 3S. UV-vis absorption spectra of MnSe cores at the different growth time.

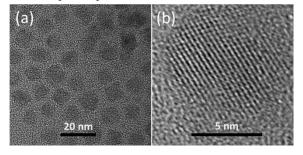


Figure S4. TEM and HRTEM images of Mn:ZnSeS QDs.