Electronic Supplementary Information

Synthesis of Various Metal Selenide Nanostructures Using the Novel Selenium Precursor 1,5-bis(3-methylimidazole-2-selone)pentane

Tianyu Bai, Chunguang Li, Daxin Liang, Feifei Li, Di Jin, Zhan Shi,* and Shouhua Feng

State Key Laboratory of Inorganic Synthesis and Preparative Chemistry, College of Chemistry, Jilin University, 2699 Qianjin Street, Changchun 130012, P. R. China

Email: zshi@mail.jlu.edu.cn



Fig. S1 EDX spectrums of (a) a single CdSe nanosphere, (b) Bi₂Se₃ nanodisc, (c) ZnSe nanowire and (d) PbSe star-shaped nanostructure, where the strong signals of C and Cu are generated from the Cu grids.



Fig. S2 The TGA curves of (a) hollow CdSe nanospheres, (b) Bi₂Se₃ nanodiscs, (c) ZnSe nanowires, (d) PbSe star-shaped nanostructures.



Fig. S3 XPS spectra of the as-synthesized hollow CdSe nanospheres in the present of PVP ($M_w = 55000$).



Fig. S4 Absorption spectrums of Bi₂Se₃ nanodiscs, ZnSe nanowires and PbSe star-shaped nanostructures.



Fig. S5 XPS spectra of the as-synthesized Bi_2Se_3 nanodiscs