Supplementary information

Scalable Colloidal Synthesis of Uniform Bi$_2$S$_3$ Nanorods as Sensitive Material for Visible-Light Photodetectors

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Fig. S1 a) XRD results of Bi$_2$S$_3$ nanorods prepared using OLA mixed with octylamine (C$_8$) and hexylamine (C$_6$); b) EDS spectrum of Bi$_2$S$_3$ nanorods.

Fig. S2 TEM images of Bi$_2$S$_3$ nanorods prepared at 200 °C for 1 h in OLA mixed with dodecylamine (C$_{12}$).

Fig. S3 I-V curves under the dark and white light for Bi$_2$S$_3$ nanorods prepared in the mixture of oleylamine and dodecylamine (C$_{12}$) at 140, 160, 180 and 200 °C.