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## Electronic Supplementary Information (ESI)

## Synthesis and nonlinear optical switching of Bi<sub>2</sub>S<sub>3</sub> nanorods and enhancement in the Bi<sub>2</sub>S<sub>3</sub>@Au nanorod-composites

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<sup>†</sup>Department of Chemistry, National University of Singapore, Singapore 117543 <sup>‡</sup>Department of Physics, National University of Singapore, Singapore 117542 **Figure S1:** Representative EDX spectrum of the  $Bi_2S_3@Au$  nanorod composite. The presence of Cu peaks were due to the Cu grids used, which are carbon-coated.



Element	Weight%	Atomic%
S K	17.59	57.99
Au M	10.02	5.38
Bi M	72.39	36.63
Totals	100.00	

**Figure S-2.** TEM micrographs of  $Bi_2S_3@Au$  nanorod composites after repeated washings: (a) 5 cycles; (b) 10 cycles.

