

Supplementary Materials:

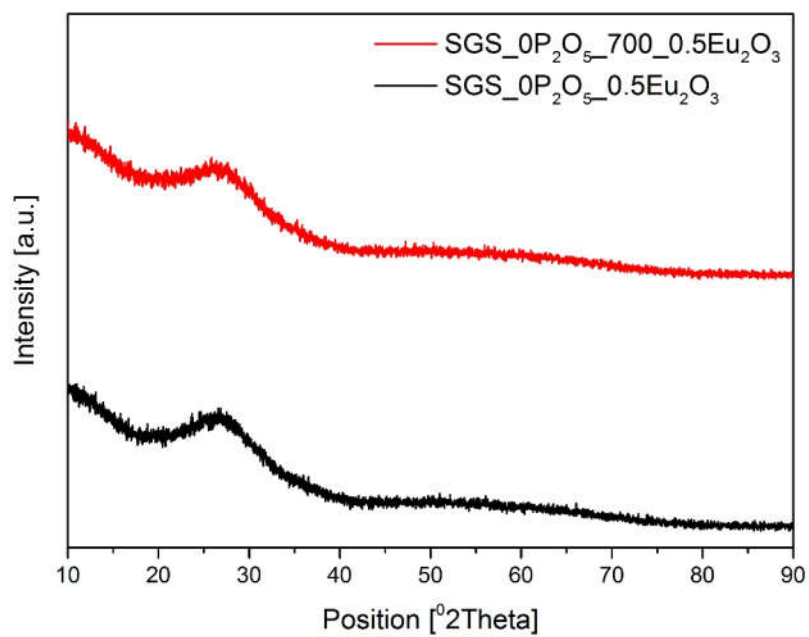


Figure S1. XRD patterns of SGS (without P<sub>2</sub>O<sub>5</sub>).

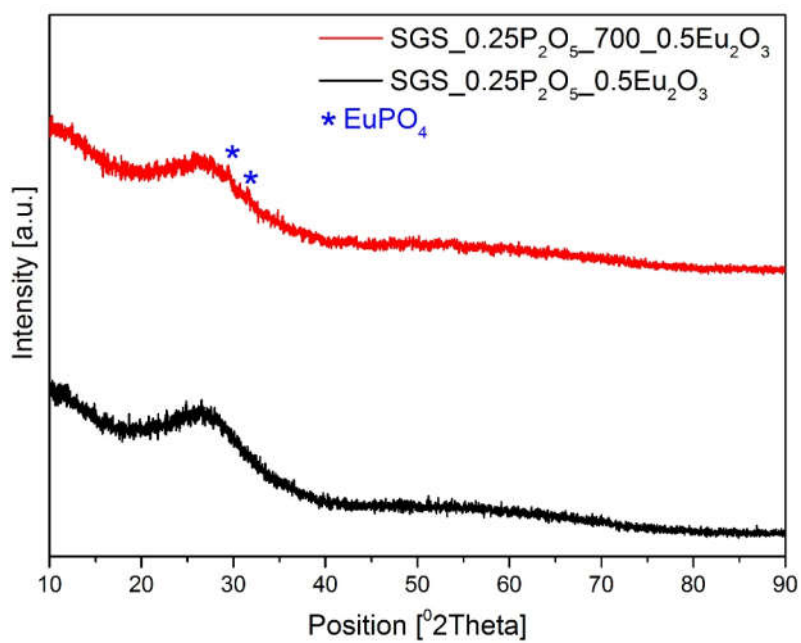


Figure S2. XRD patterns of SGS (with 0.25% P<sub>2</sub>O<sub>5</sub>).

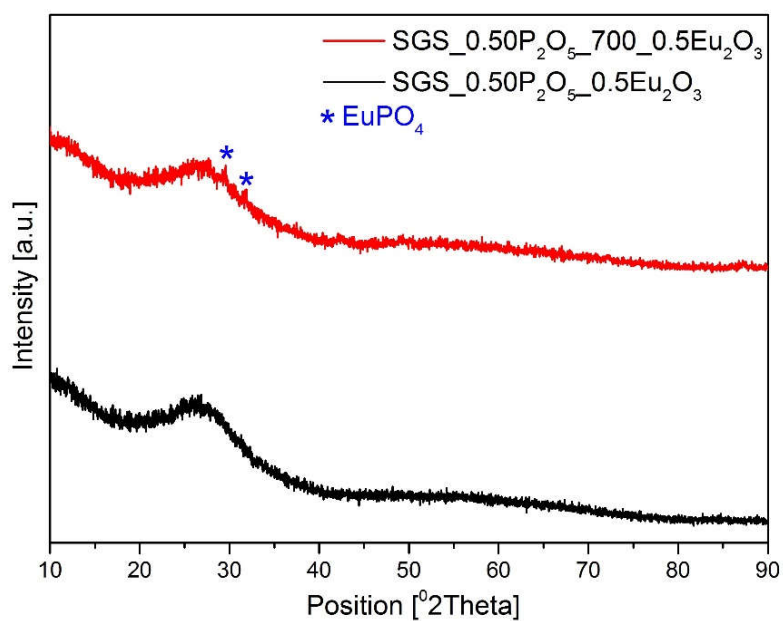


Figure S3. XRD patterns of SGS (with 0.5%  $P_2O_5$  dope).

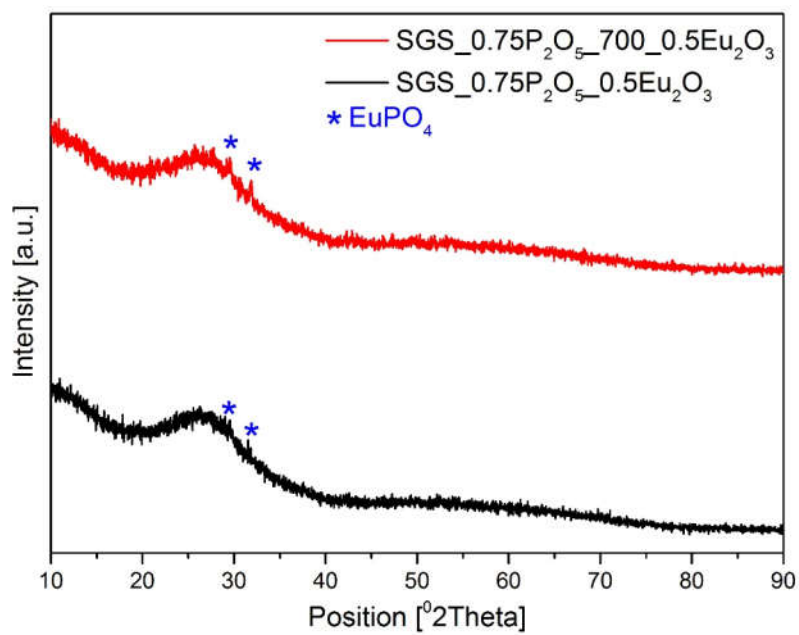
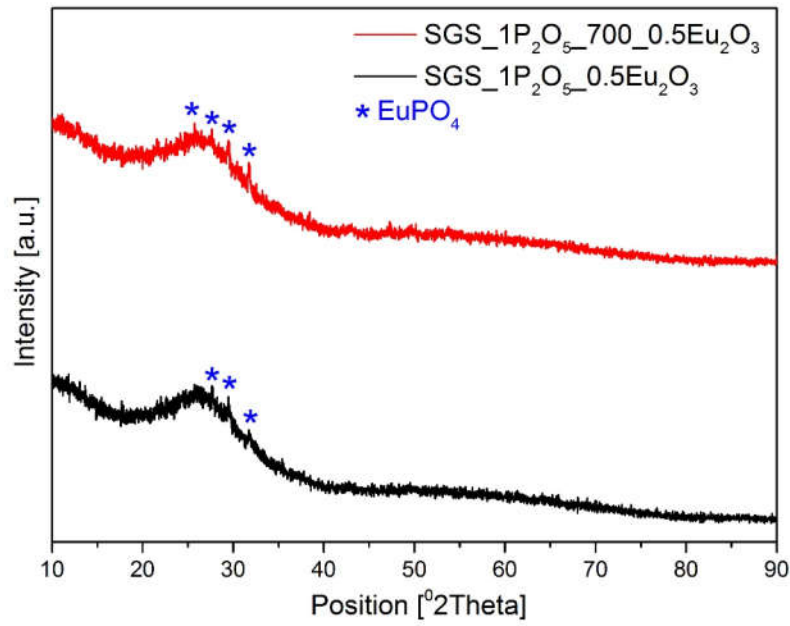


Figure S4. XRD patterns of SGS (with 0.75%  $P_2O_5$  dope).



**Figure S5.** XRD patterns of SGS (with 1.0% P<sub>2</sub>O<sub>5</sub> dope).

The size of the crystallites was determined from the Scherrer formula:

$$D_{hkl} = \frac{k\lambda}{\beta \cos \theta},$$

where:

$D_{hkl}$  - average crystallite size [nm];

$k$  - Scherrer's constant;

$\lambda$  - X-ray wavelength, = 0.15406 [nm];

$\beta$  - half-width of the reflection [rad].