Supporting information

Review of the $A^{I}_{2}B^{II}C^{IV}D^{VI}_{4}$ Family as Infrared Nonlinear Optical Materials: The Effect of Each Site on the Structure and Optical Properties

Guangmao Li,[a] Zhihua Yang[a,b], Junjie Li*[a,b] and Shilie Pan*[a,b]

[†]*Key Laboratory of Functional Materials and Devices for Special Environments, Xinjiang Technical Institute of Physics & Chemistry, CAS; Xinjiang Key Laboratory of Electronic Information Materials and Devices; 40-1 South Beijing Road, Urumqi 830011, China*

To whom correspondence should be addressed:

E-mail: lijunjie@ms.xjb.ac.cn and slpan@ms.xjb.ac.cn

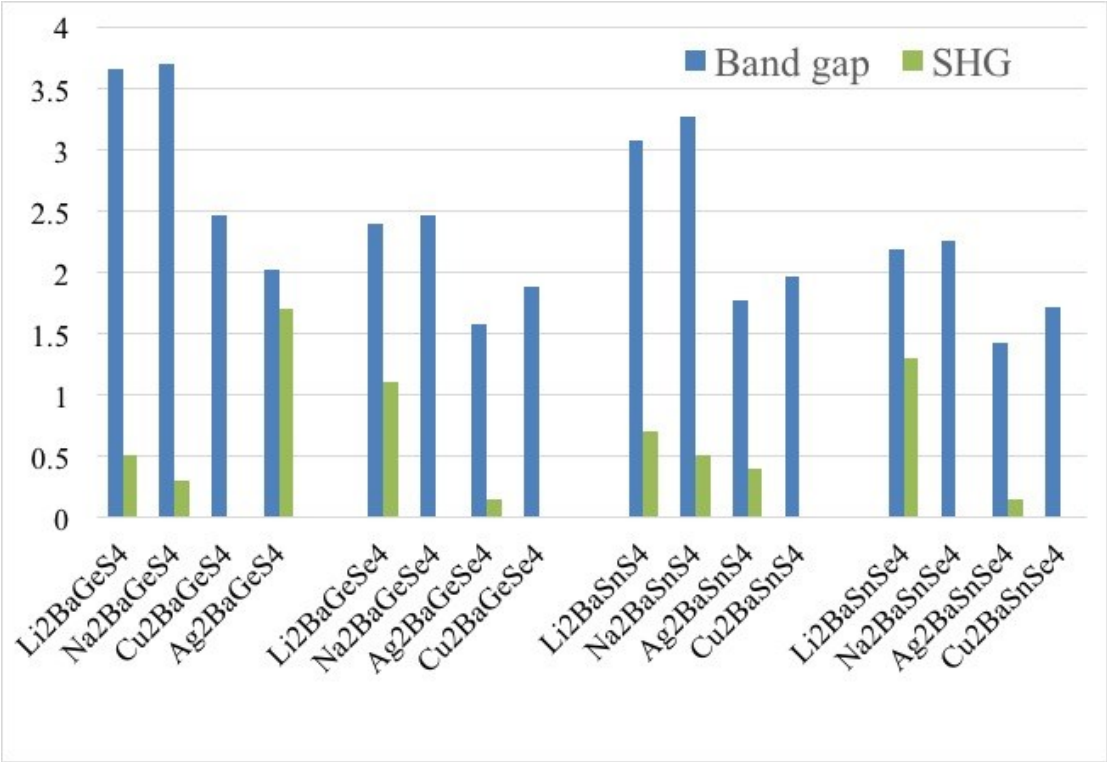

Figure S1. Histogram of properties (band gap and SHG response) comparisons among A_2BaGeS_4, $A_2BaGeSe_4$, A_2BaSnS_4, and $A_2BaSnSe_4$ (A = Li, Na, Cu, Ag).

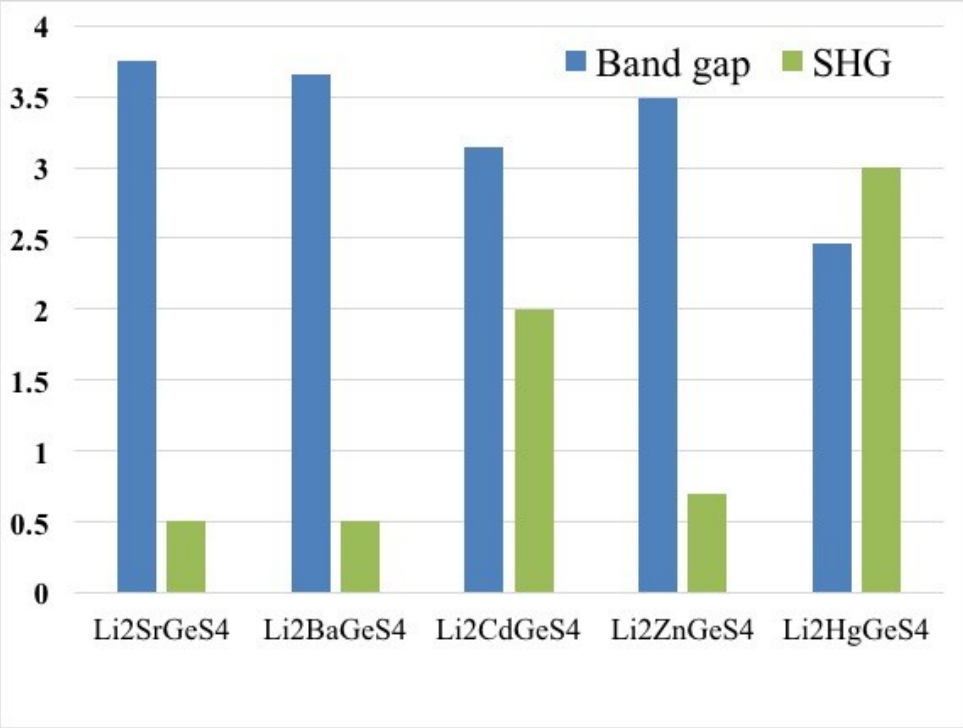

Figure S2. Histogram of properties (band gap and SHG response) comparisons among $Li_2B^{II}GeS_4$ (B = Sr, Ba, Zn, Cd, Hg).

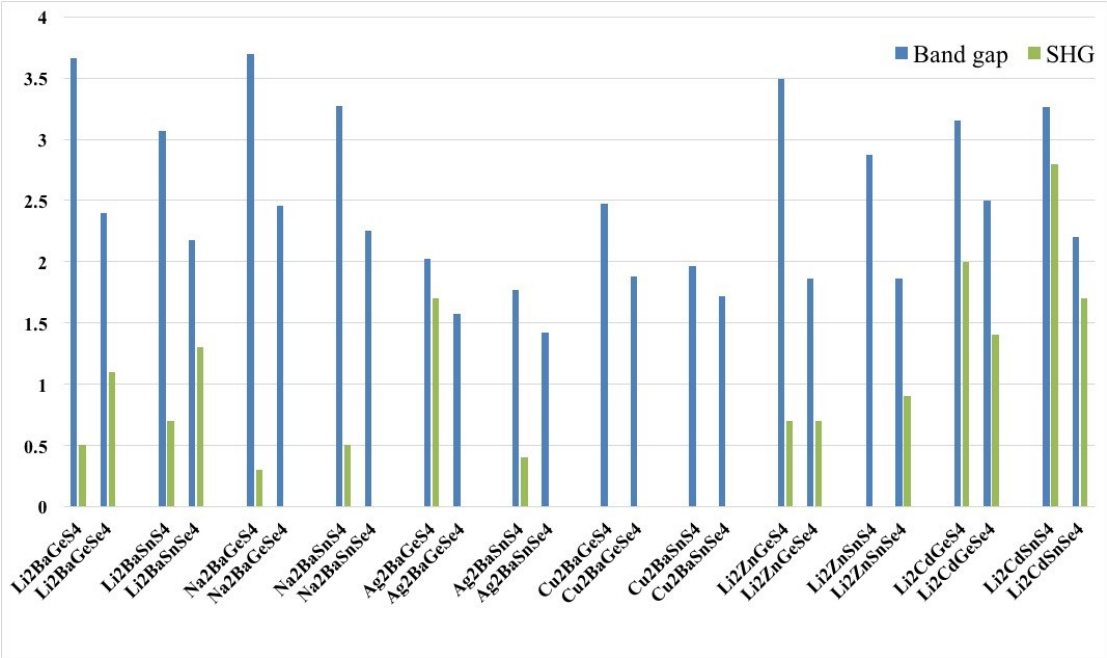

Figure S3. Histogram of properties (band gap and SHG response) comparisons among sulfides and relative selenides.