*supplementary*

# Bismuth-Germanate Glasses: Synthesis, Structure, Luminescence, and Crystallization

**Ksenia Serkina [1], Irina Stepanova [1], Aleksandr Pynenkov [2], Maria Uslamina [2], Konstantin Nishchev [2], Kirill Boldyrev [3], Roman Avetisov [1] and Igor Avetissov [1,*]**

[1] Department of Chemistry and Technology of Crystals, D. Mendeleev University of Chemical Technology of Russia (MUCTR), 125480 Moscow, Russia; serkina.k.v@muctr.ru (K.S.); stepanova.i.v@muctr.ru (I.S.); armoled@mail.ru (R.A.)
[2] Institute of High Technologies and New Materials, National Research Mordovia State University, 430005 Saransk, Russia; alekspyn@yandex.ru (A.P.); uslaminam@mail.ru (M.U.); nishchev@inbox.ru (K.N.)
[3] Laboratory of Fourier-Spectroscopy, Institute for Spectroscopy RAS, 108840 Troitsk, Russia; kn.boldyrev@gmail.com
* Correspondence: avetisov.i.k@muctr.ru

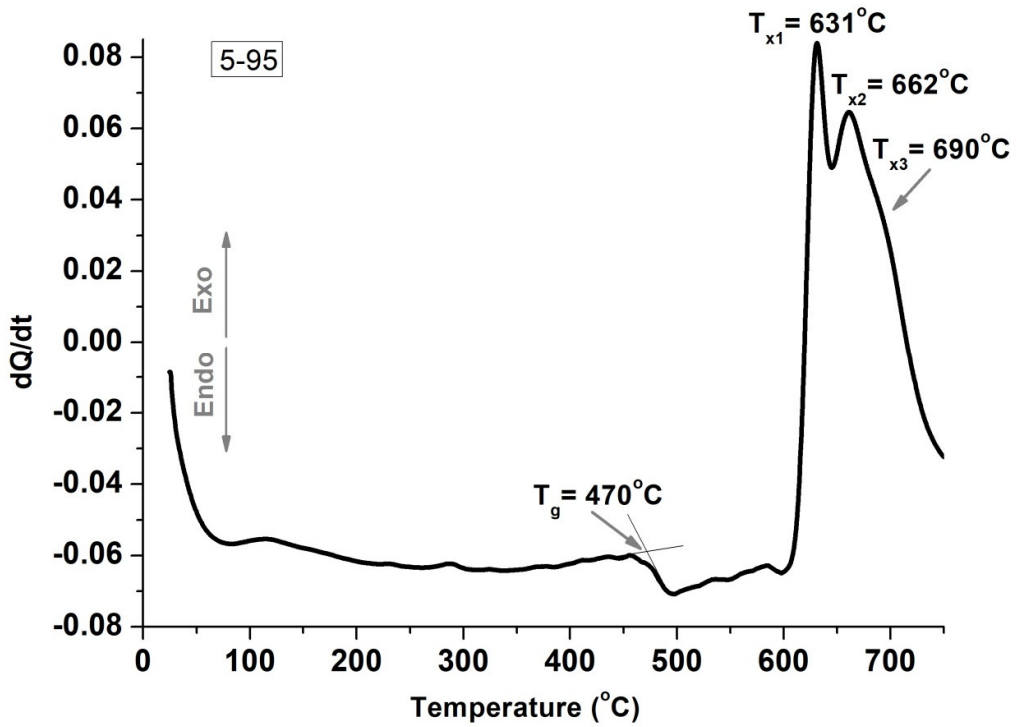


**Figure S1.** DSC curve of synthesized 5-95 glass.

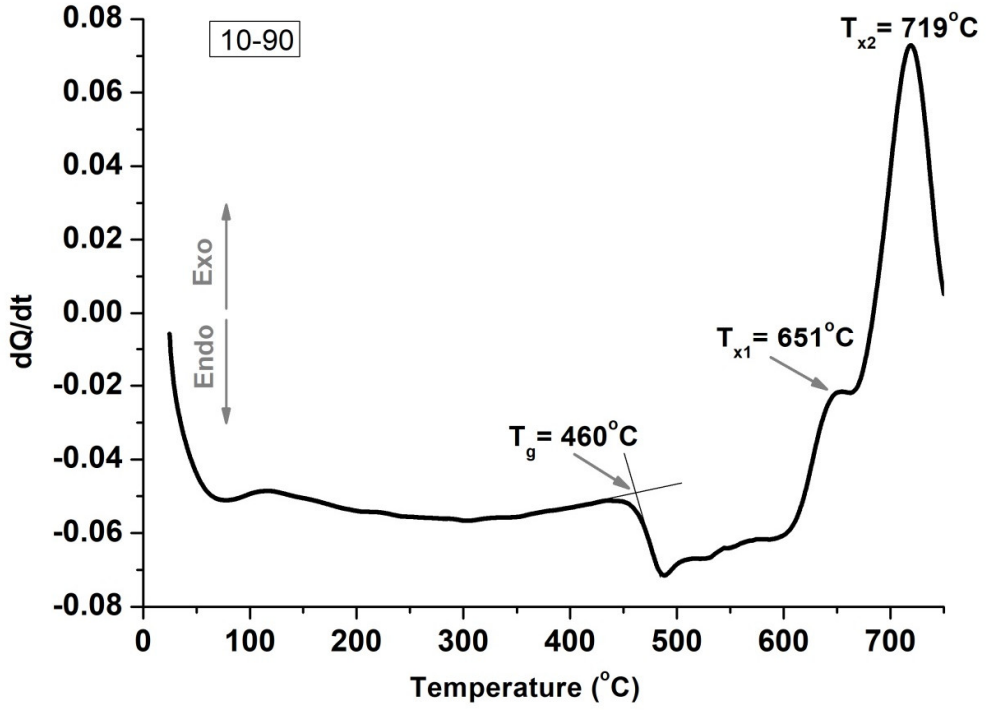


**Figure S2.** DSC curve of synthesized 10-90 glass.

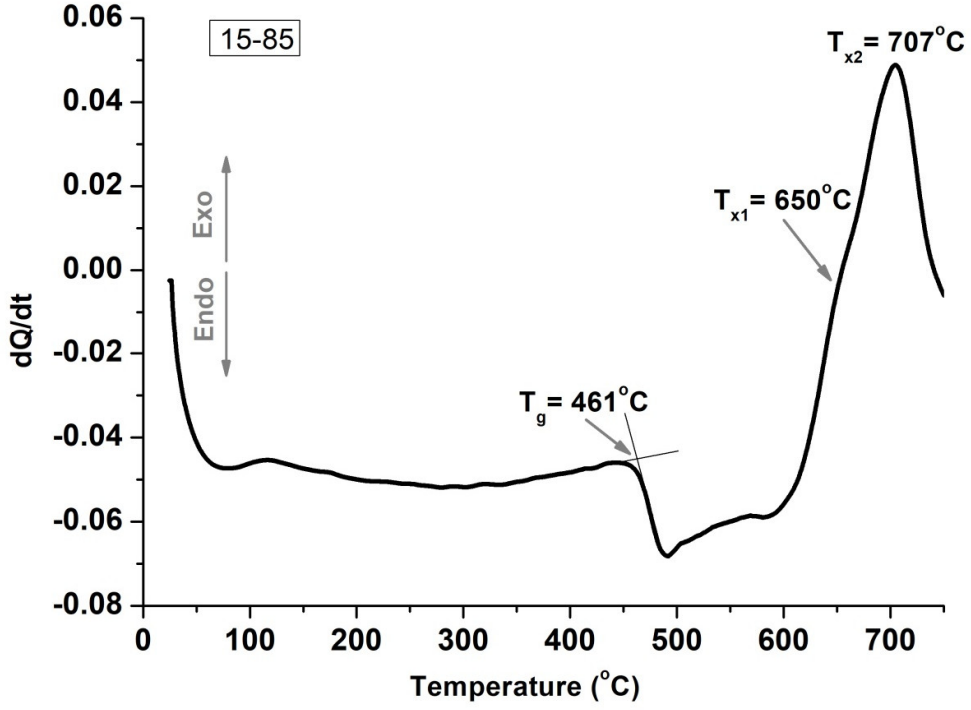


**Figure S3.** DSC curve of synthesized 15-85 glass.

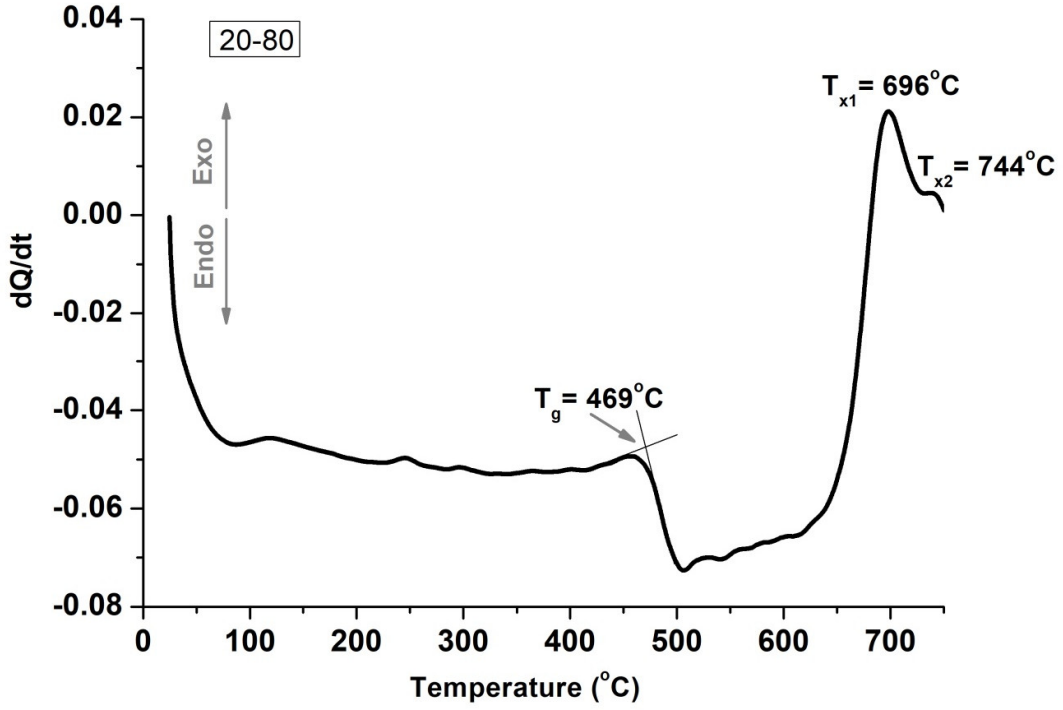


**Figure S4.** DSC curve of synthesized 20-80 glass.

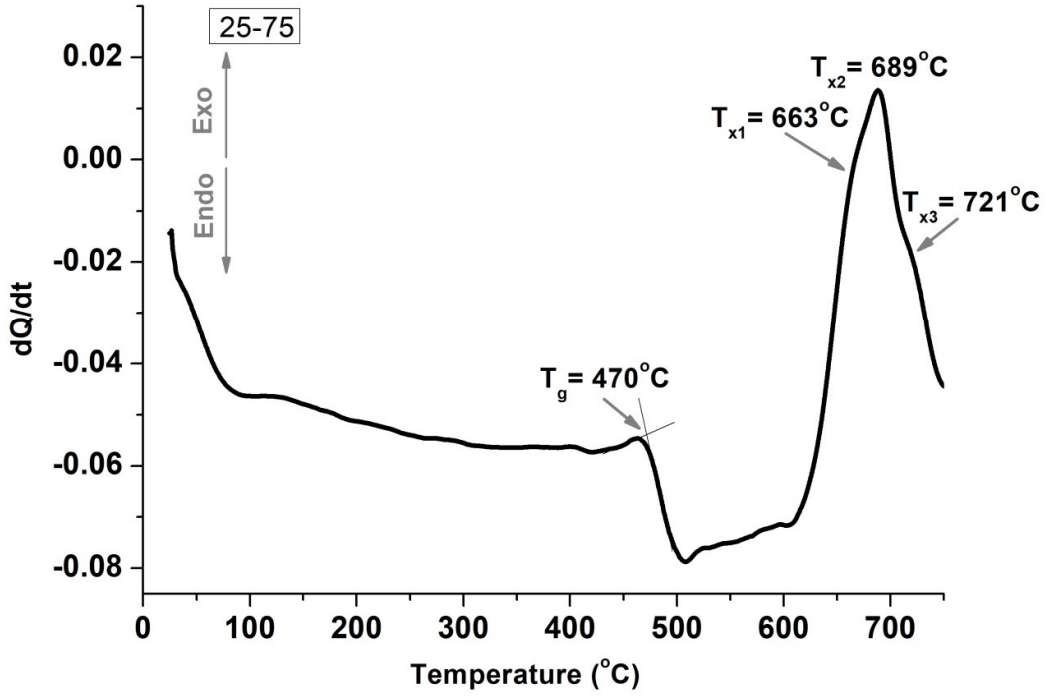


**Figure S5.** DSC curve of synthesized 25-75 glass.

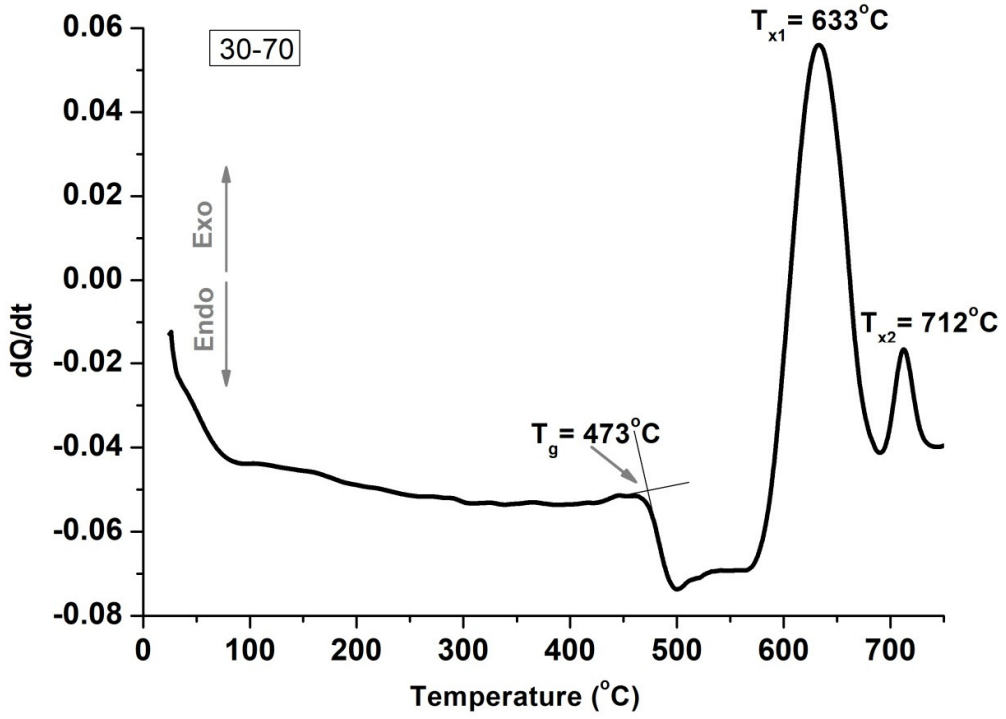


**Figure S6.** DSC curve of synthesized 30-70 glass.

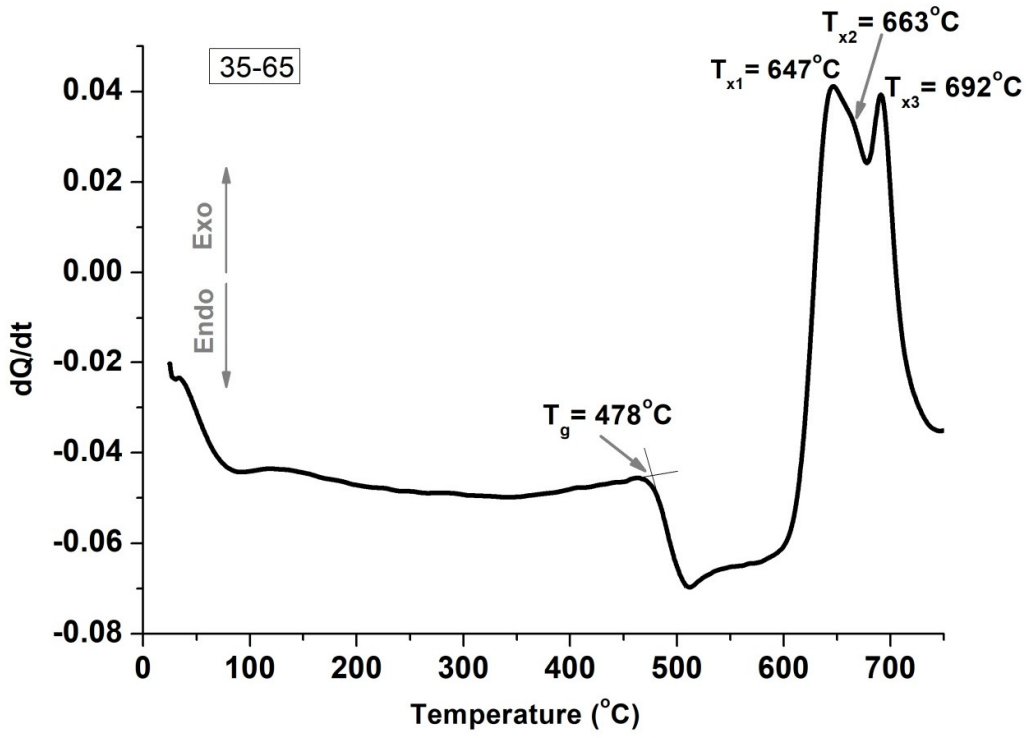


**Figure S7.** DSC curve of synthesized 35-75 glass.

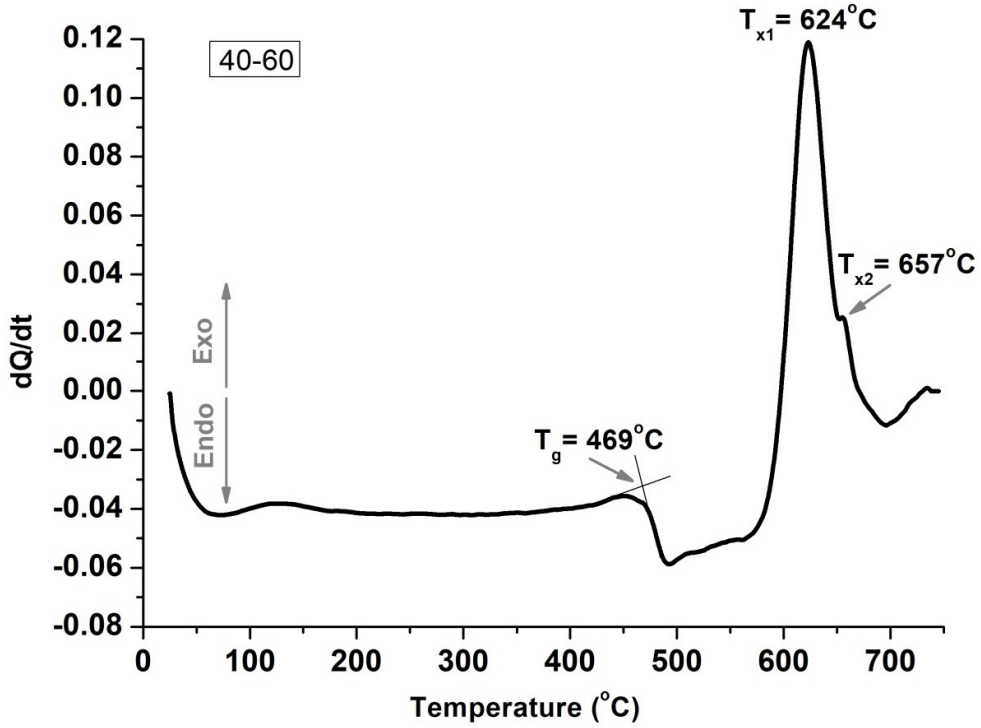


**Figure S8.** DSC curve of synthesized 40-60 glass.

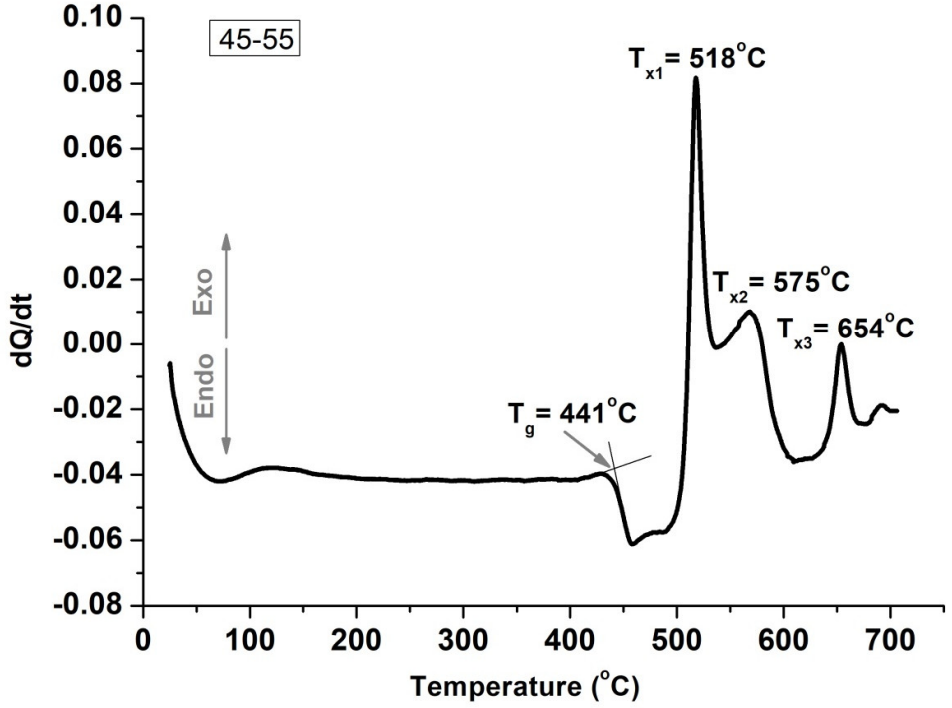


**Figure S9.** DSC curve of synthesized 45-55 glass.

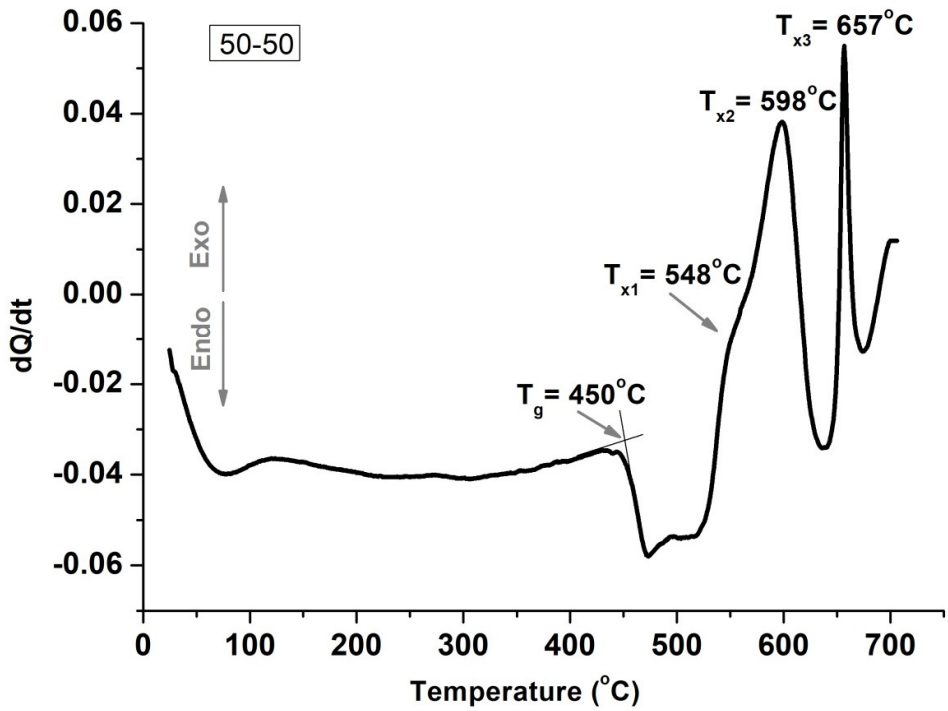


**Figure S10.** DSC curve of synthesized 50-50 glass.

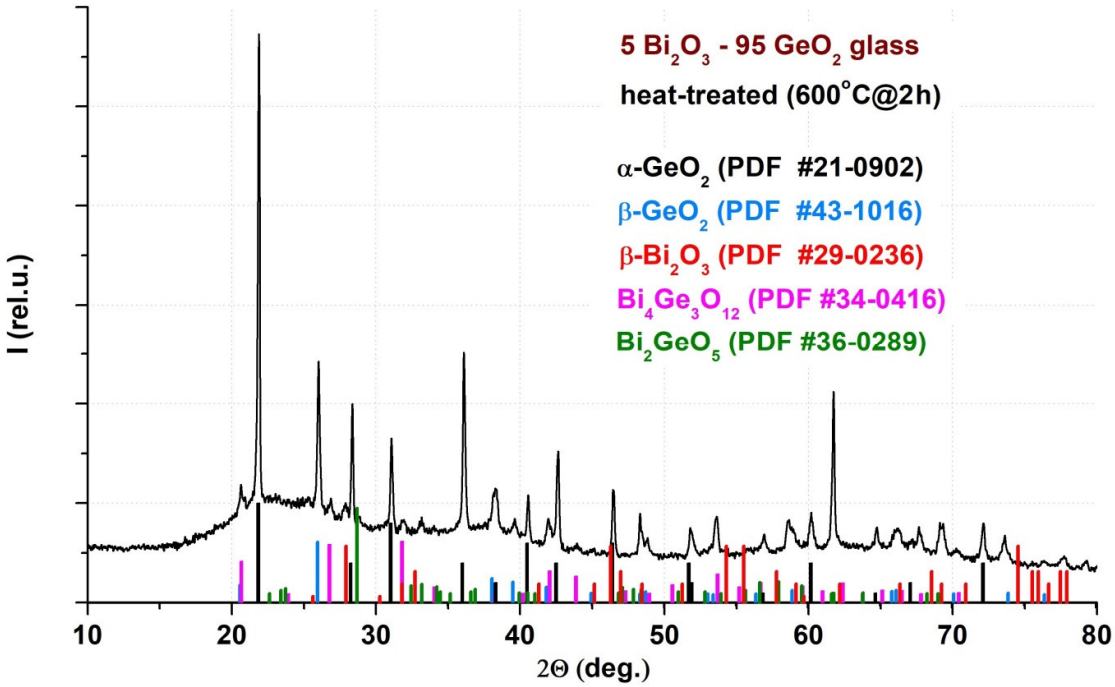


**Figure S11.** XRD patterns of 5-95 glass heat-treated at 600°C.

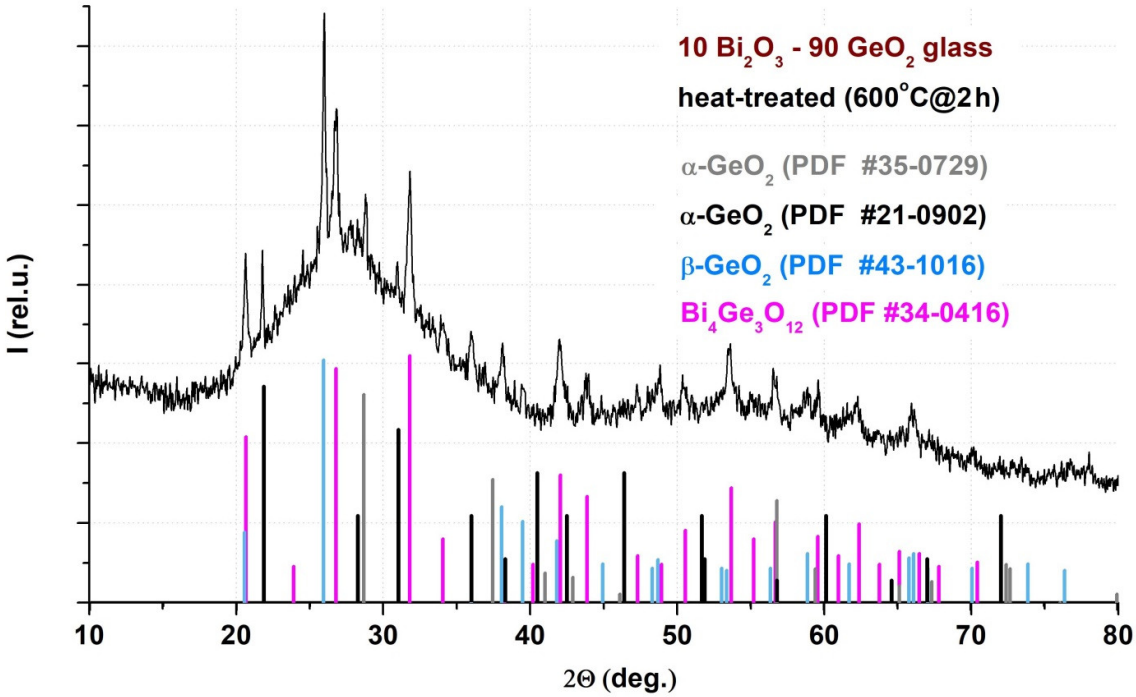


**Figure S12.** XRD patterns of 10-90 glass heat-treated at 600°C.

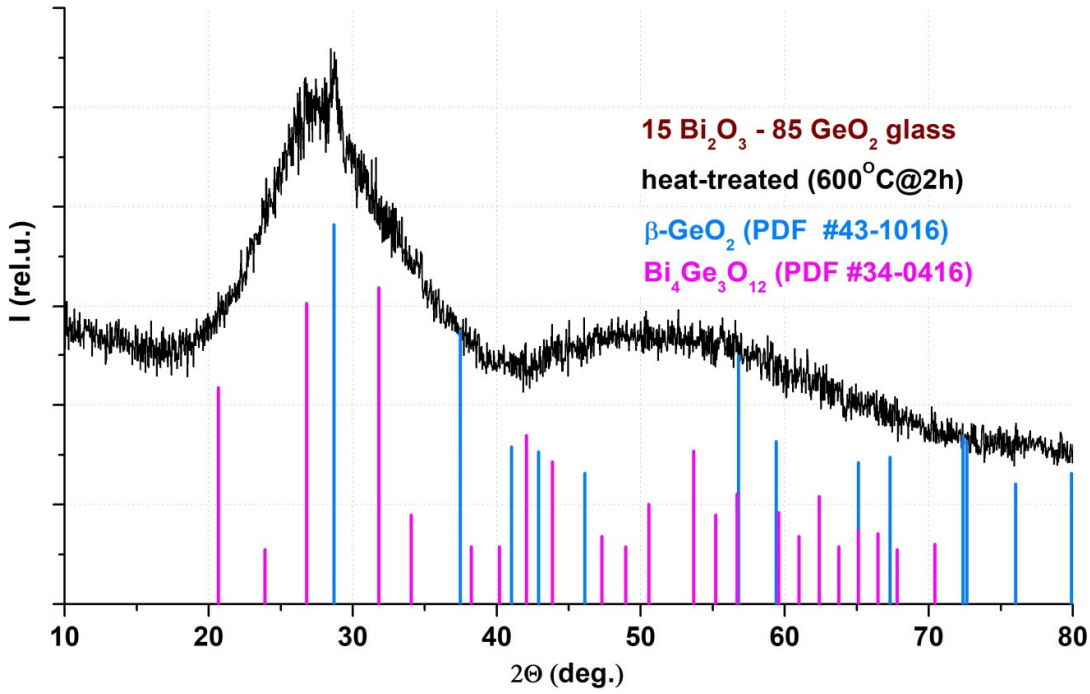


**Figure S13.** XRD patterns of 15-85 glass heat-treated at 600°C.

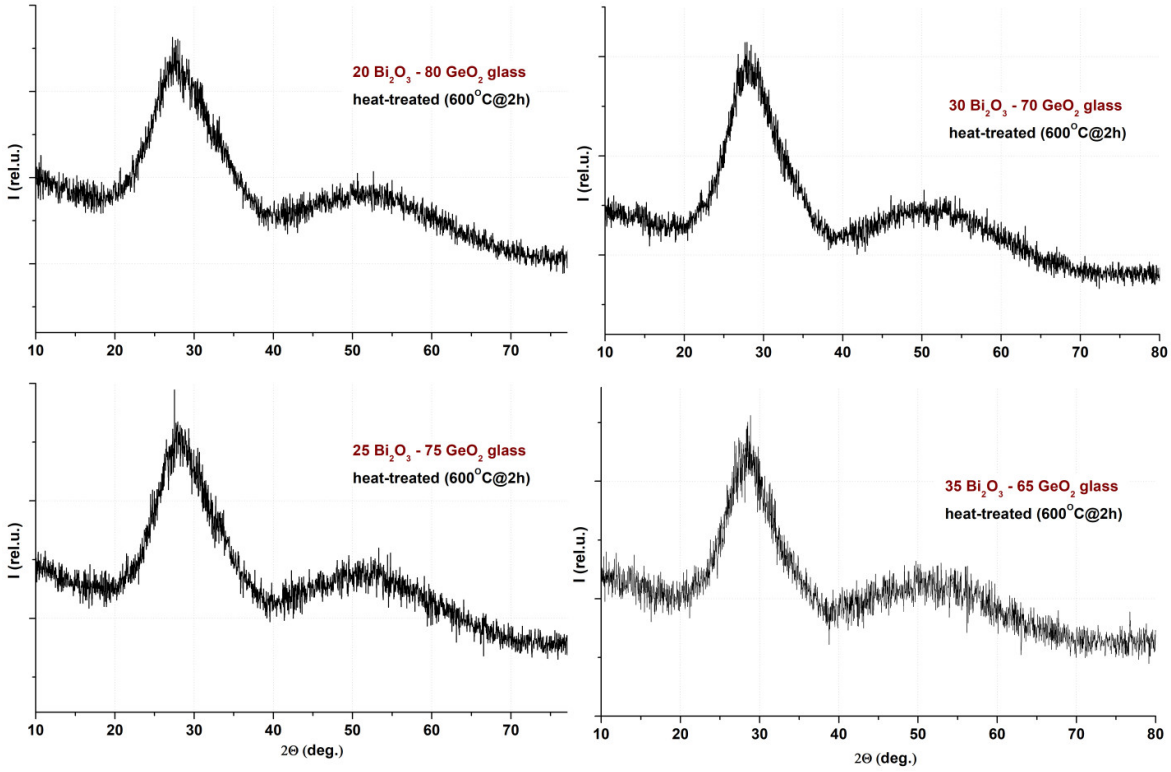


**Figure S14.** XRD patterns of 20-80, 25-75, 30-70, 35-65 glasses heat-treated at 600°C.

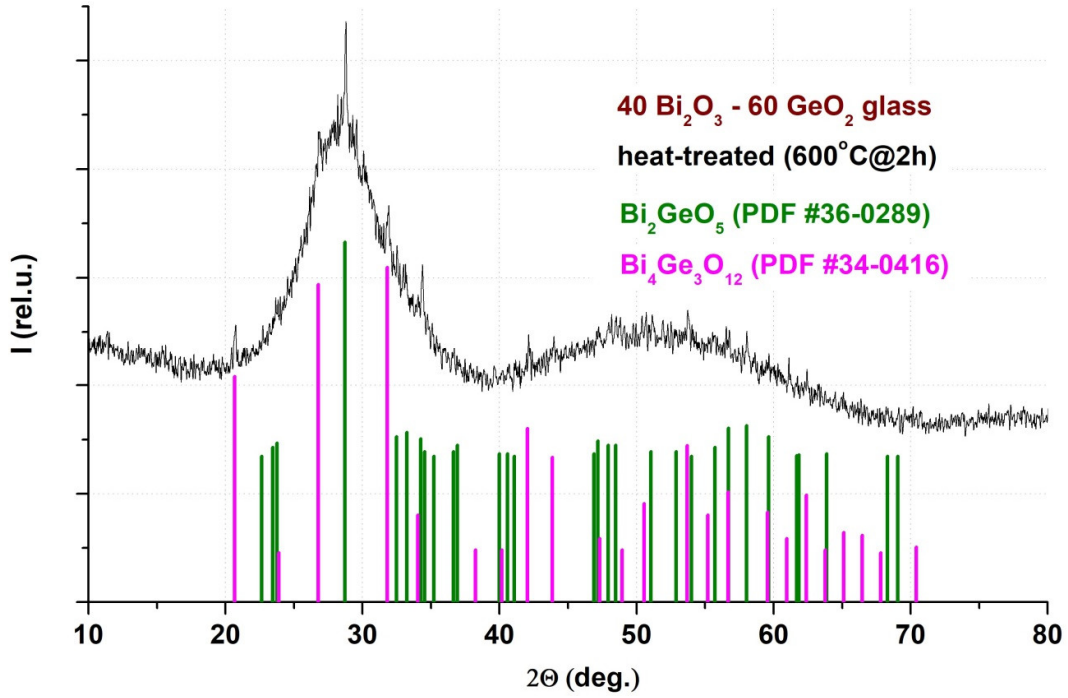


**Figure S15.** XRD patterns of 40-60 glass heat-treated at 600°C.

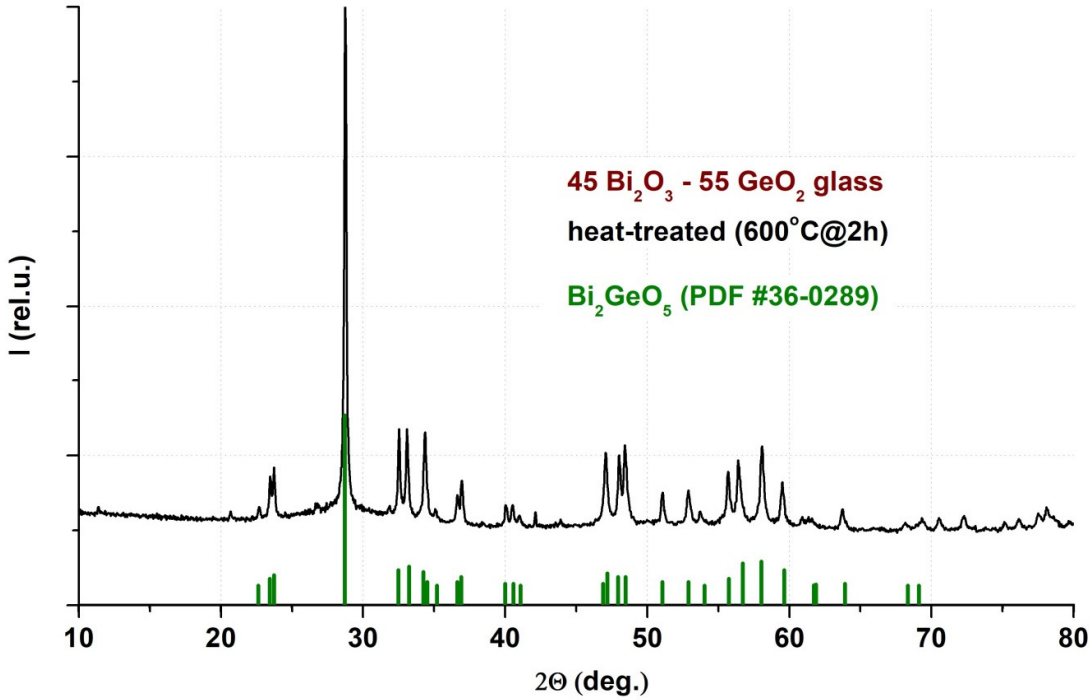


**Figure S16.** XRD patterns of 45-55 glass heat-treated at 600°C.

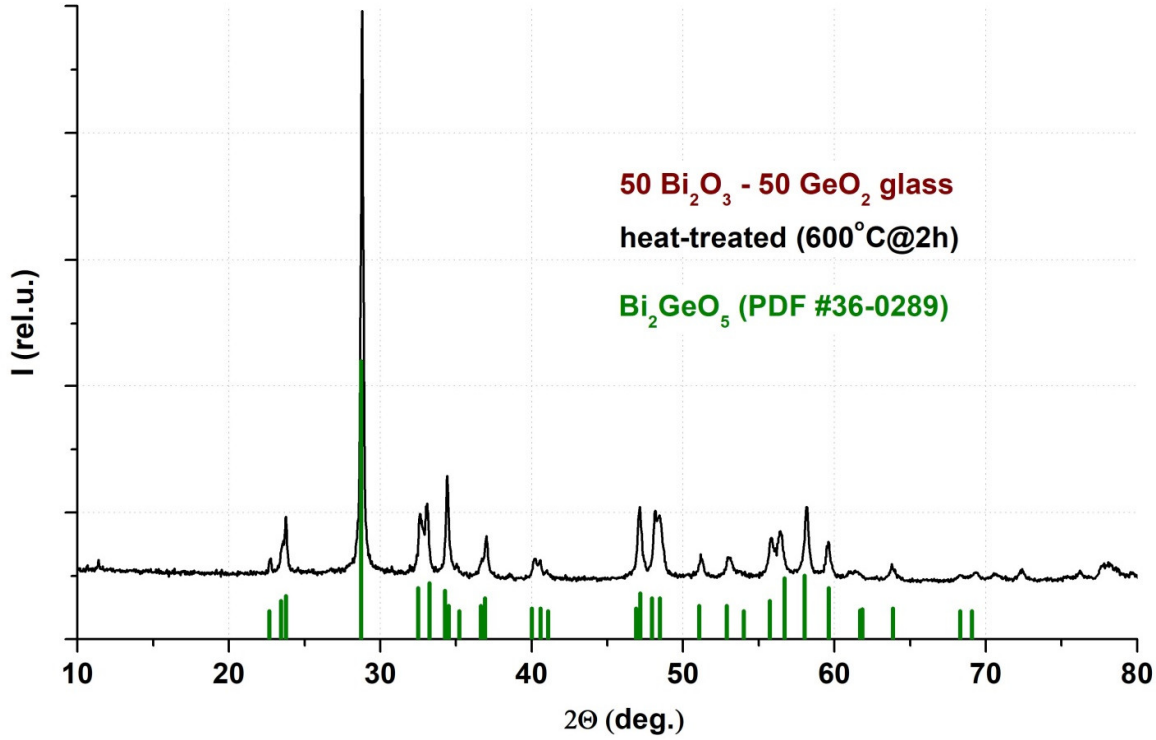


**Figure S17.** XRD patterns of 50-50 glass heat-treated at 600°C.

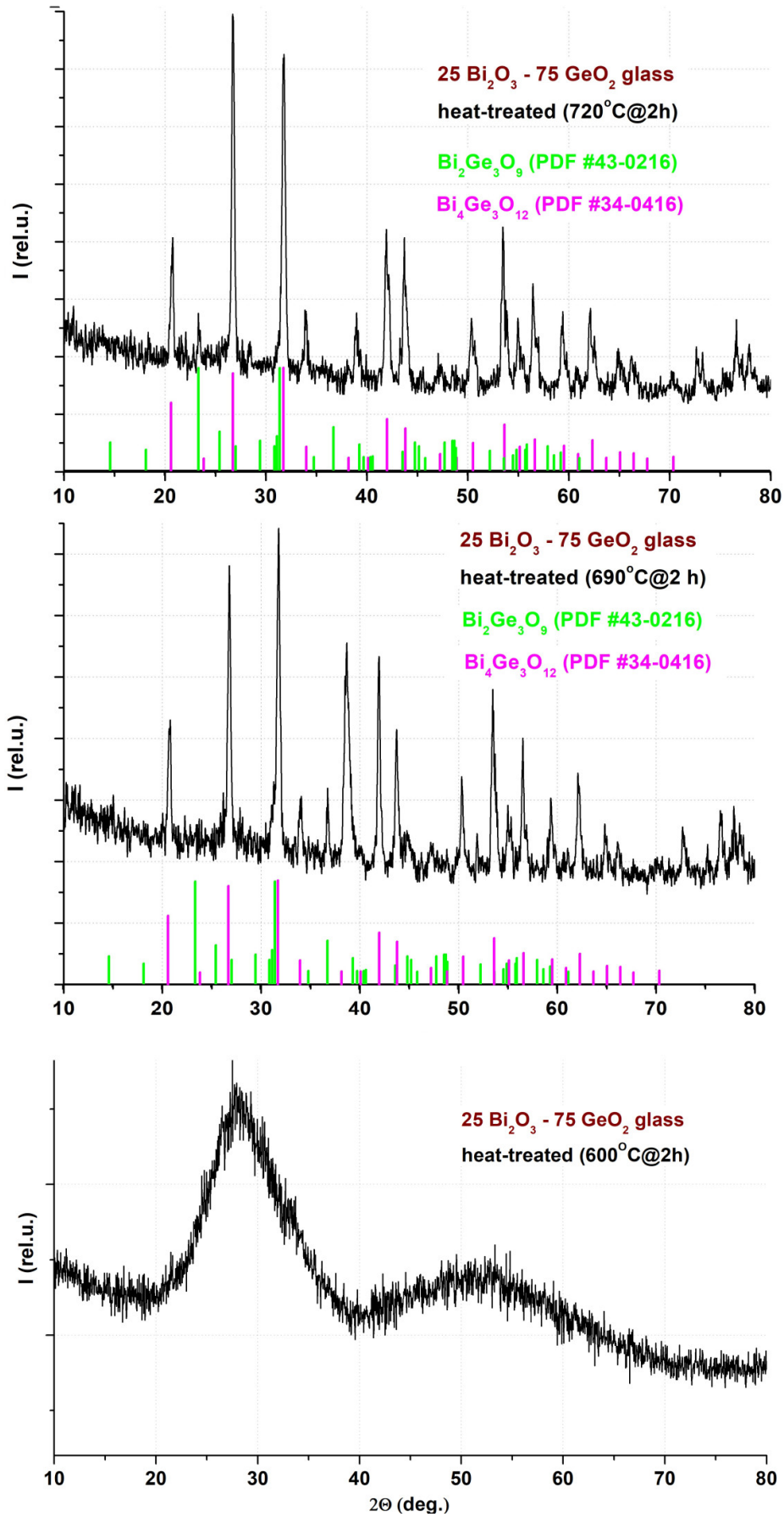


**Figure S18.** XRD patterns of 25-75 glass heat-treated at 600, 690, 720°C.

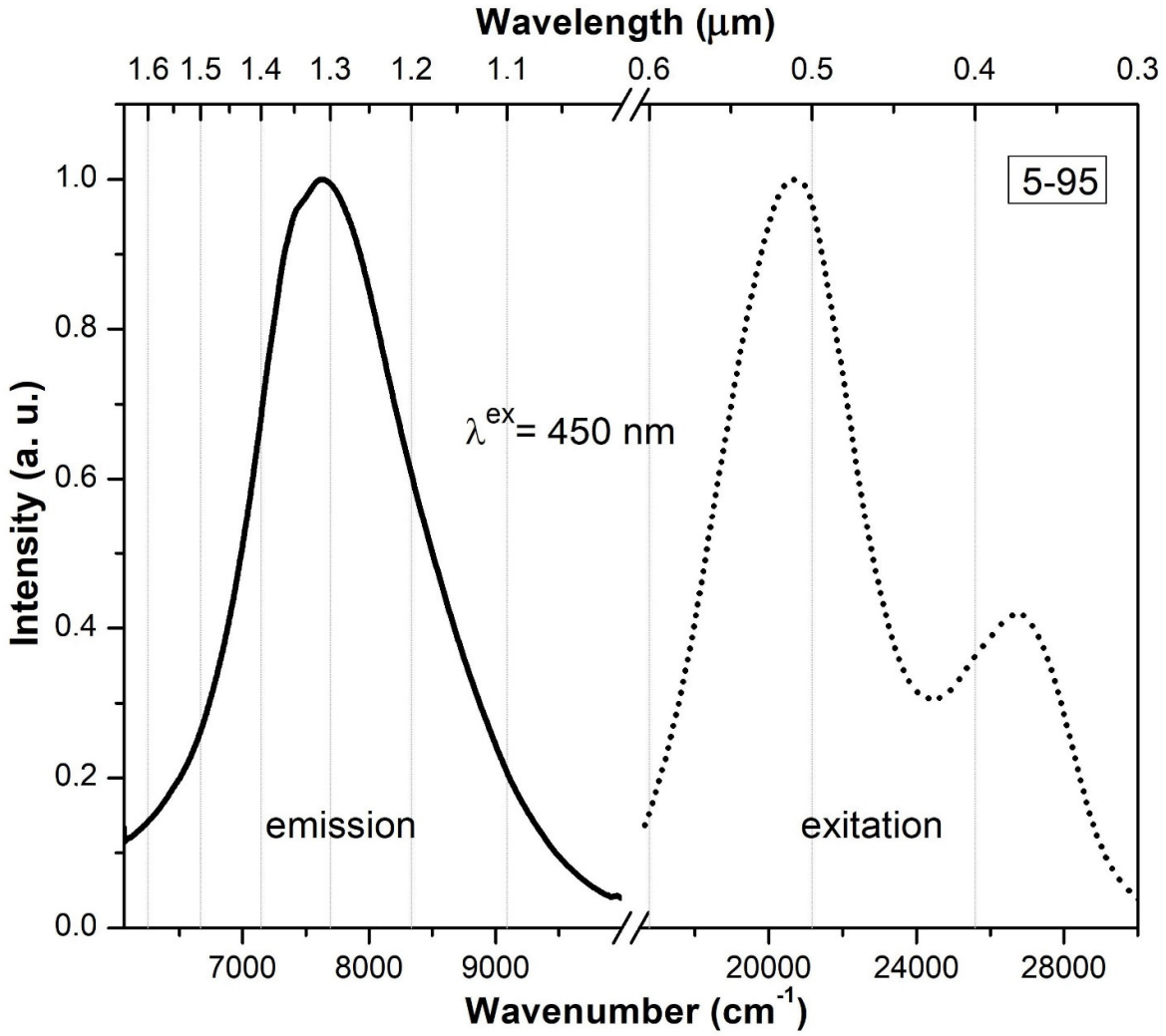


**Figure S19.** Excitation and emission spectra of 5-95 glass ($\lambda^{ex}$=450 nm).