

# The Comparative Studies of Gamma-ray Shielding Properties of the PbO-BaO-B<sub>2</sub>O<sub>3</sub> Glass System by Using FLUKA Code to XCOM Program and Accessible Experimental Data.

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We had performed computer simulations by using FLUKA code for investigating the gamma-ray shielding properties of the xPbO-(50-x)BaO-50B<sub>2</sub>O<sub>3</sub> glass system (where  $5 \leq x \leq 45$  mol%) for the 356, 662, 1173, and 1330 keV photons (gamma-ray) energies. Then we compared the results to the XCOM program and the experimental data. We found, the results agree very well with the XCOM and the real data. Furthermore, we also found that the results from FLUKA slightly closer to the experimental data than the XCOM.

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