

AIM: To check the different shape of the glow curves of each material and to assess the number of peaks present.

Synthetic Materials: Aluminum oxide (TLD 500, $\text{Al}_2\text{O}_3:\text{C}$), Berilium oxide (BeO), Magnesium Borate ($\text{MgB}_4\text{O}_7:\text{Dy,Na}$), TLD 200 ($\text{CaF}_2:\text{Dy}$), Lithium fluoride (TLD 100, $\text{LiF}:\text{Mg,Ti}$)

Natural Materials: Quartz, Salt.

PROTOCOL:

Step 1. Irradiation (0.5 Gy for synthetic materials, 15 Gy for natural materials)

Step 2. TL measurement (350 °C, HR=1 °C/s) after irradiation

Step 3. TL measurement (350 °C, HR=1 °C/s) without irradiation for the background measurements.

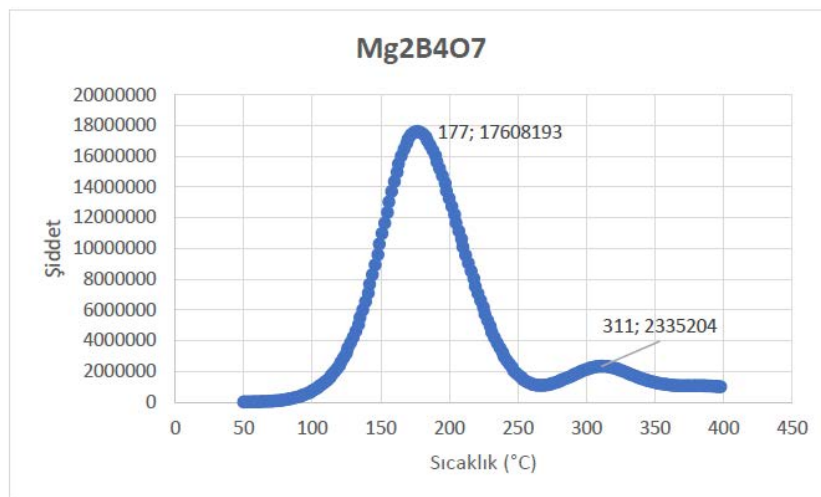


Fig. 1: TL glow curve of Magnesium Borate (HR=1°C/s)

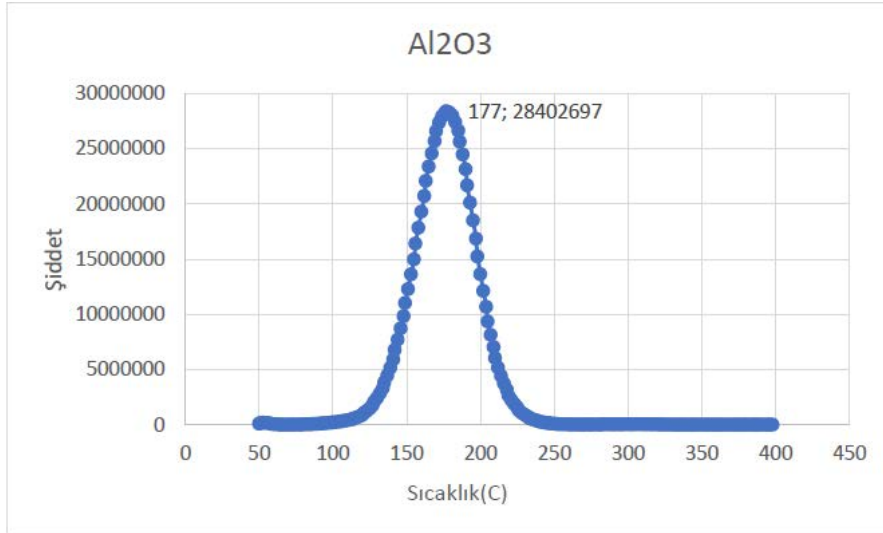


Fig. 2: TL glow curve of Aluminum oxide (HR=1°C/s)

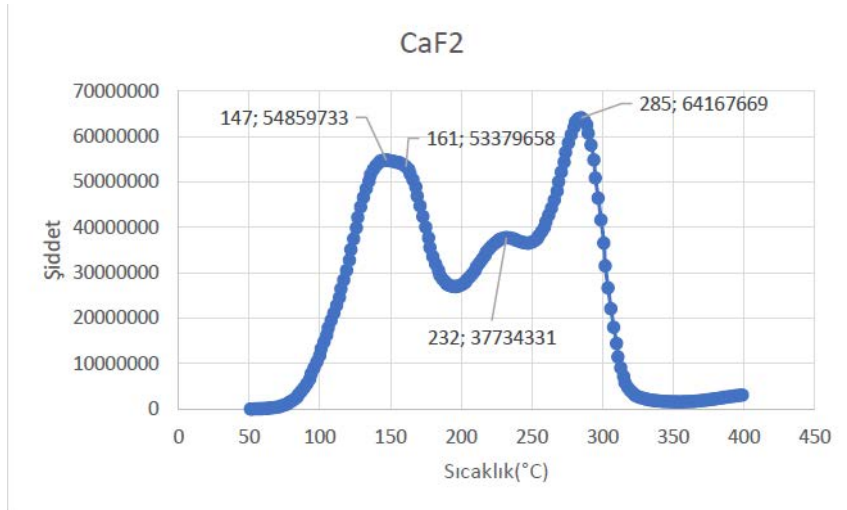


Fig. 3: TL glow curve of TLD 200 (HR=1°C/s)

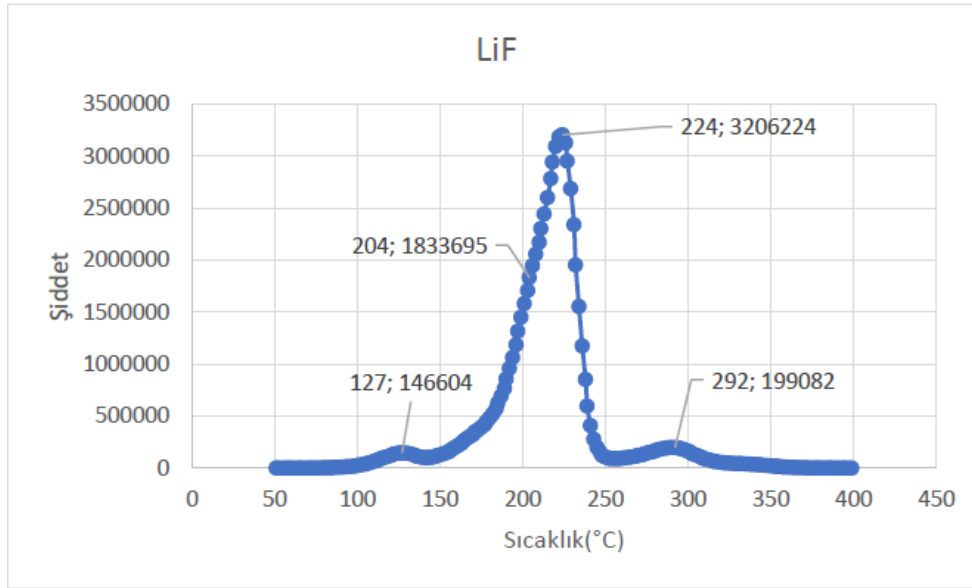


Fig. 4: TL glow curve of TLD 100 (HR=1°C/s)

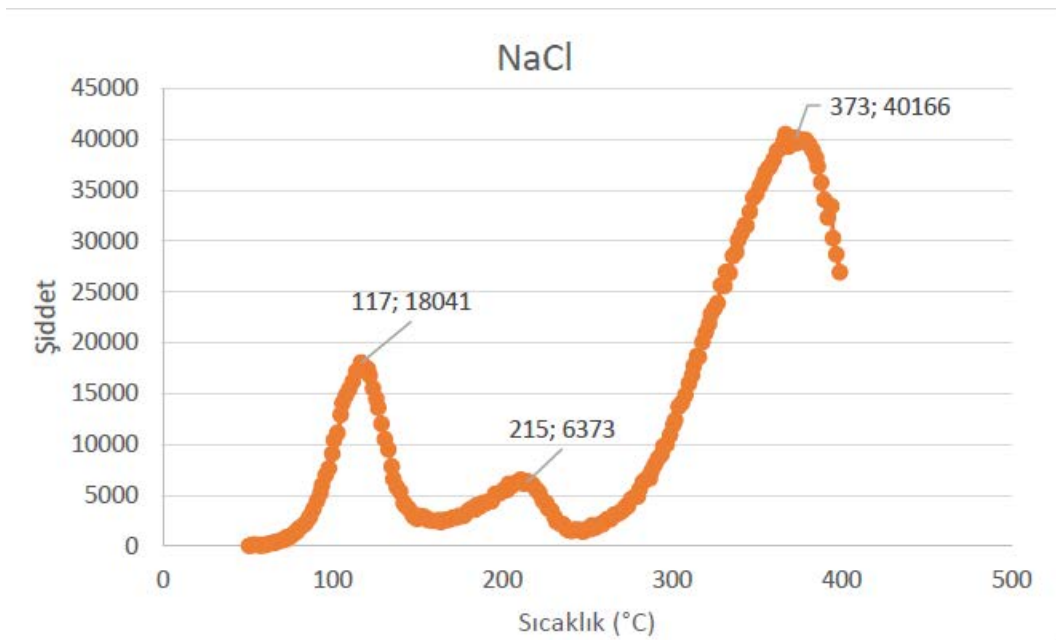


Fig. 5: TL glow curve of natural salt (HR=1°C/s)