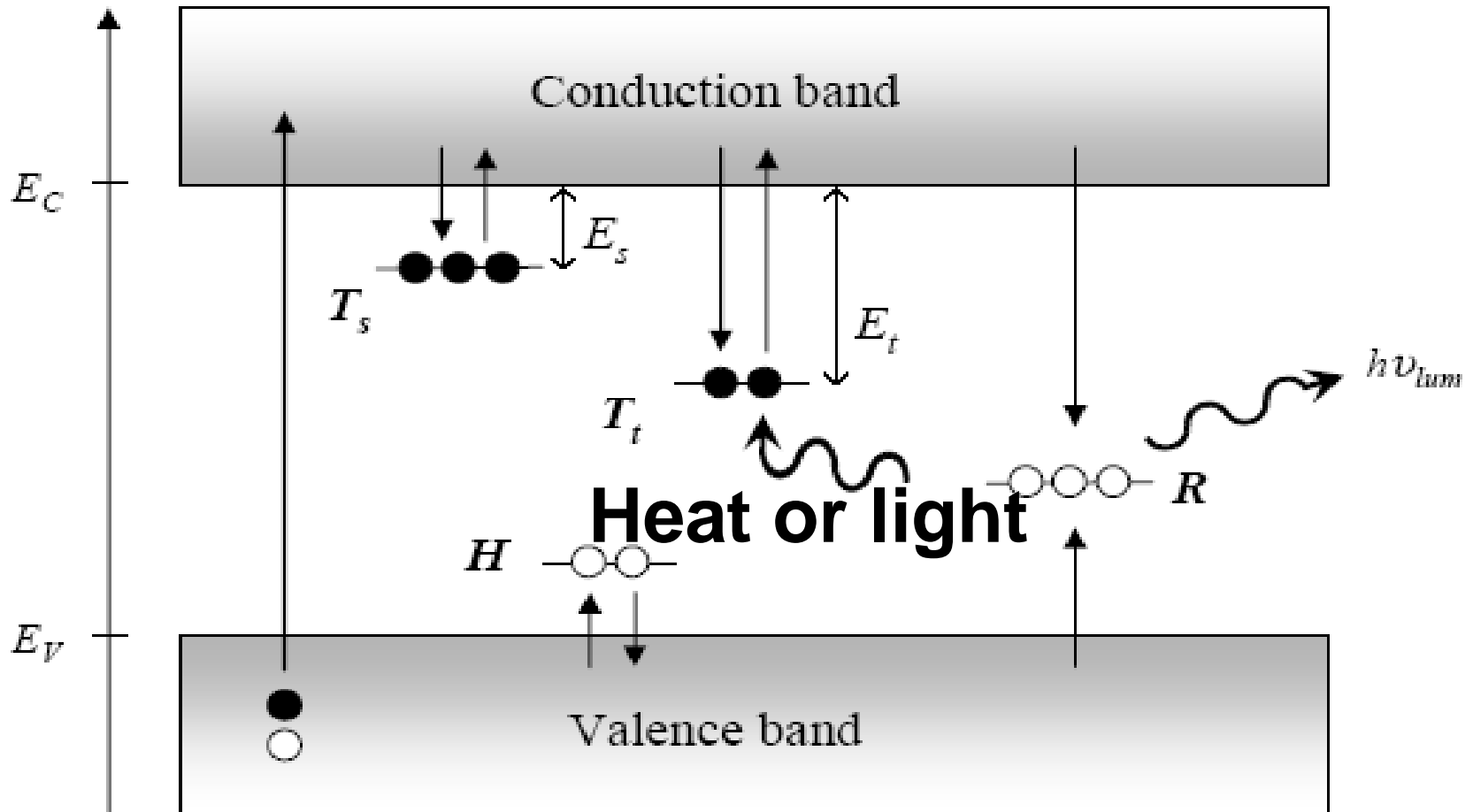


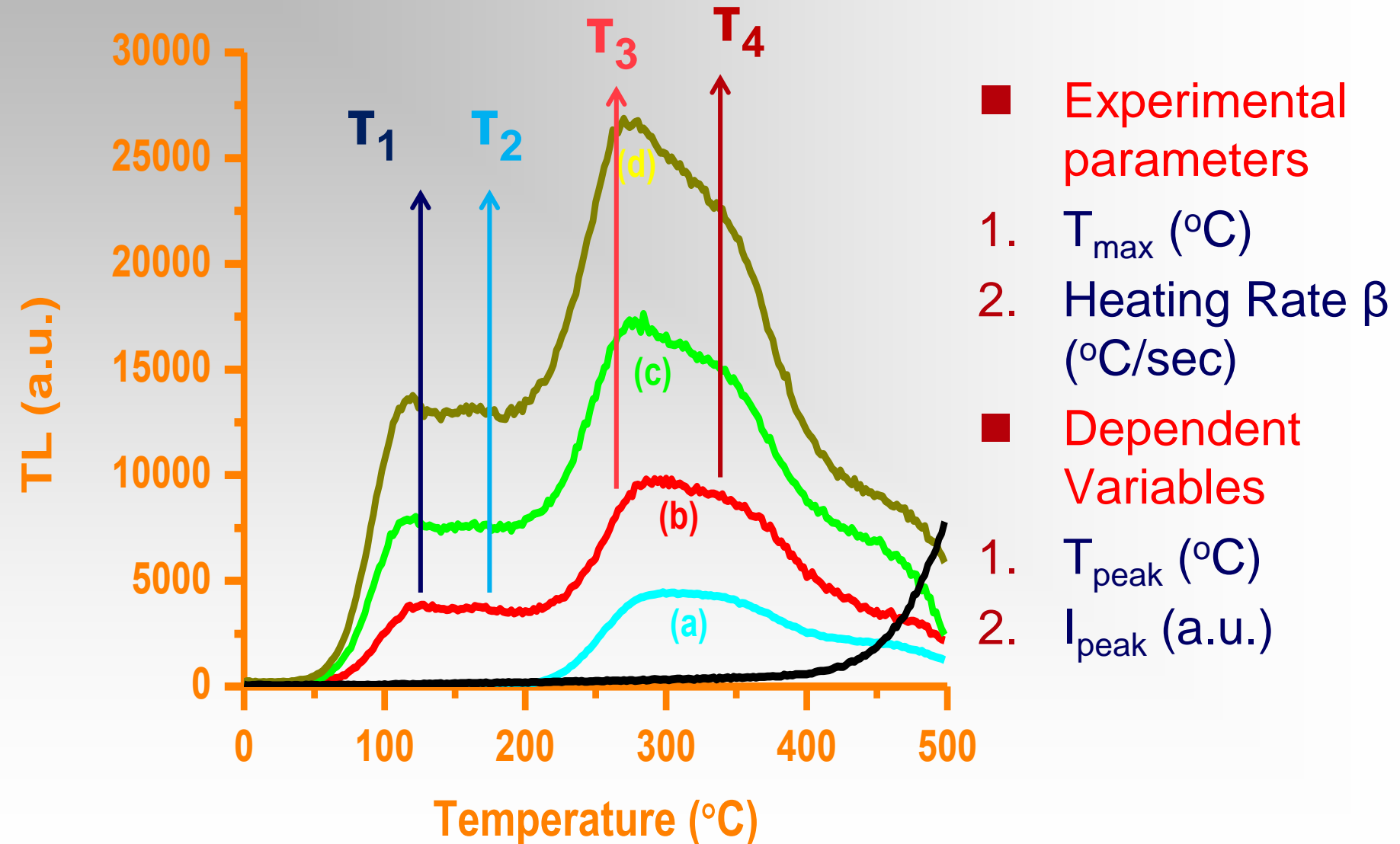
The shape of TL glow curves

- All naturally occurring TL phosphors exhibit complex TL glow curves, consisting of several prominent (easy to identify) as well as a number of hidden (shoulder) TL peaks.
- Only few specific artificially produced TL dosimeters yield single TL glow curves consisting of only one, unique TL peak.
- Each glow peak in the TL glow curve corresponds to one single TL trap.
- Overlapping of various TL peaks!!!

Energy band diagram



Experimental TL glow curves



Un-fired

A1 → Nepal

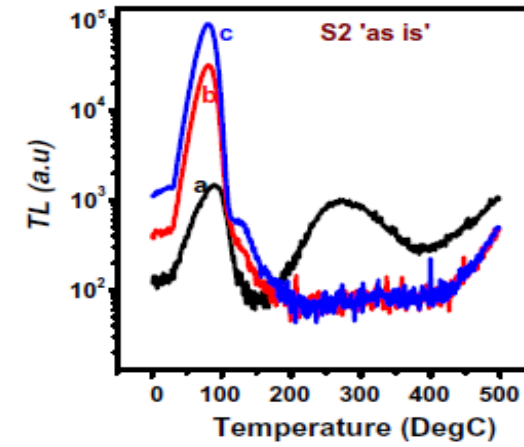
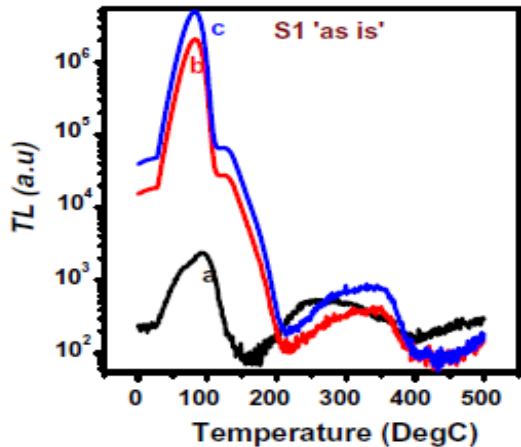
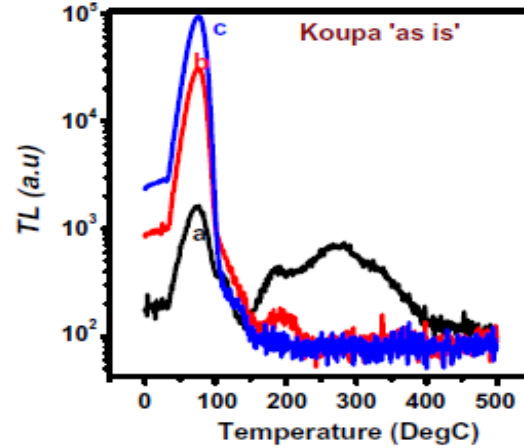
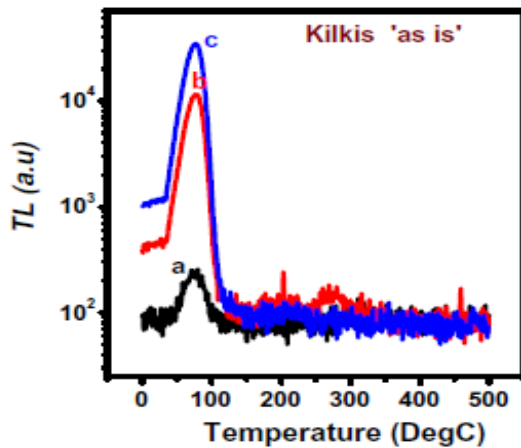
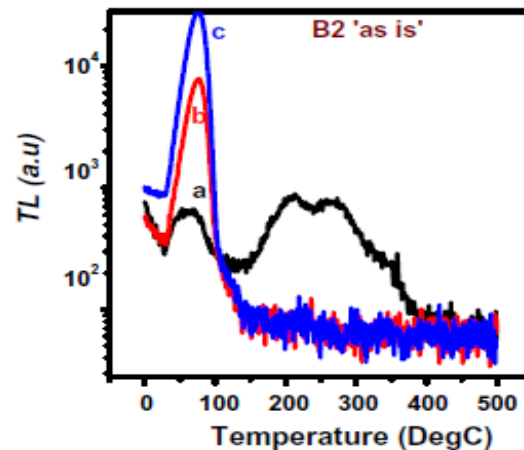
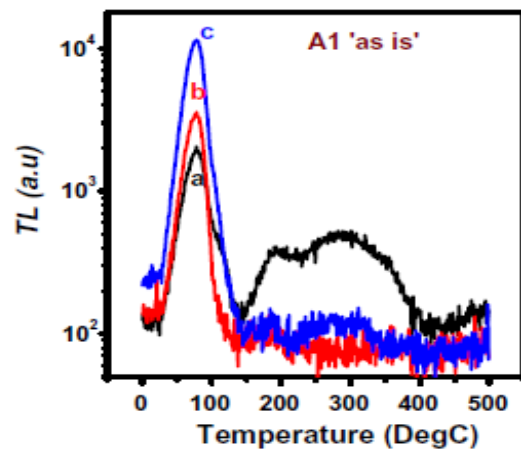
B2 → India

Kilkis → Greece

Koupa → Greece

S1 → Nigeria

S2 → Turkey



Fired

A1 → Nepal

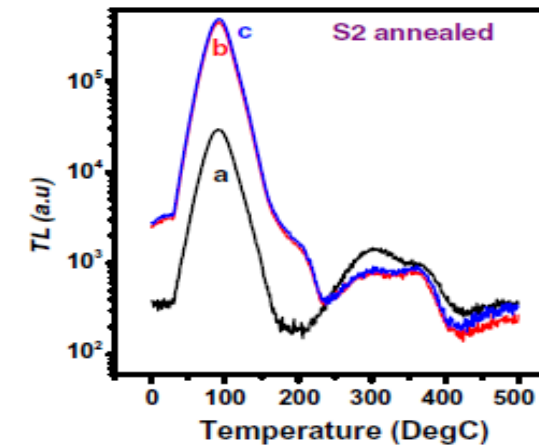
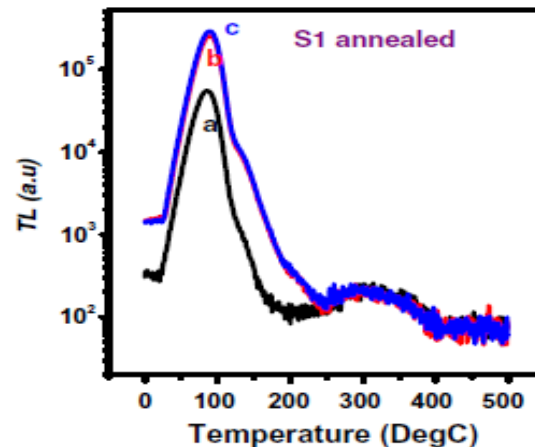
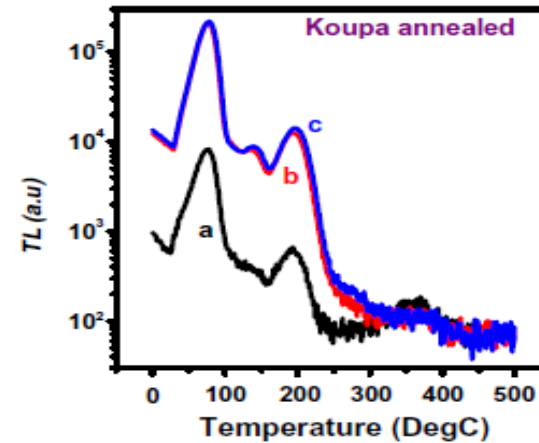
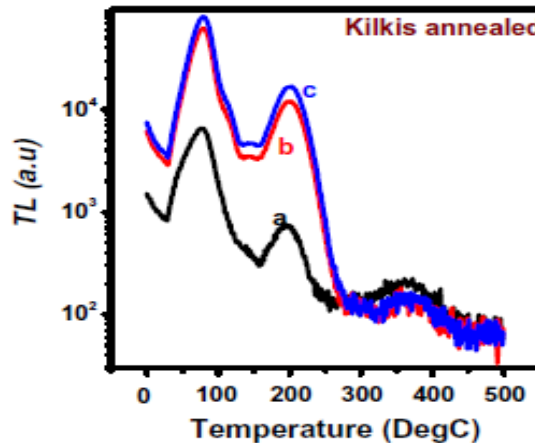
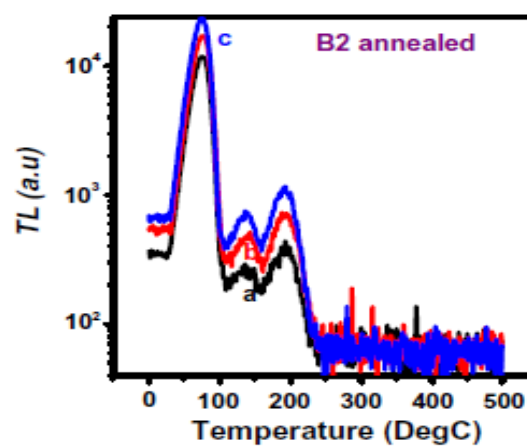
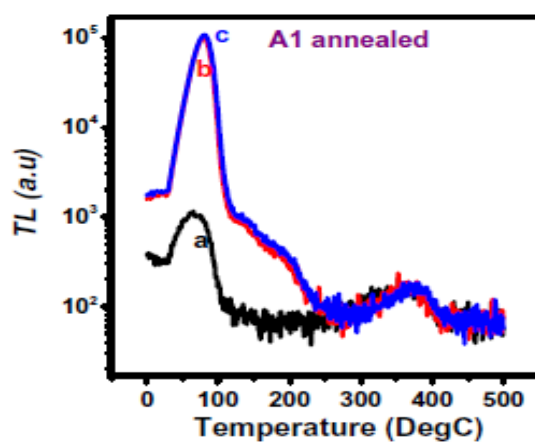
B2 → India

Kilkis → Greece

Koupa → Greece

S1 → Nigeria

S2 → Turkey



(Polymeris et al., NIM B 274, 105 – 110, 2012)

Quantifying luminescence

