

Results and discussion:

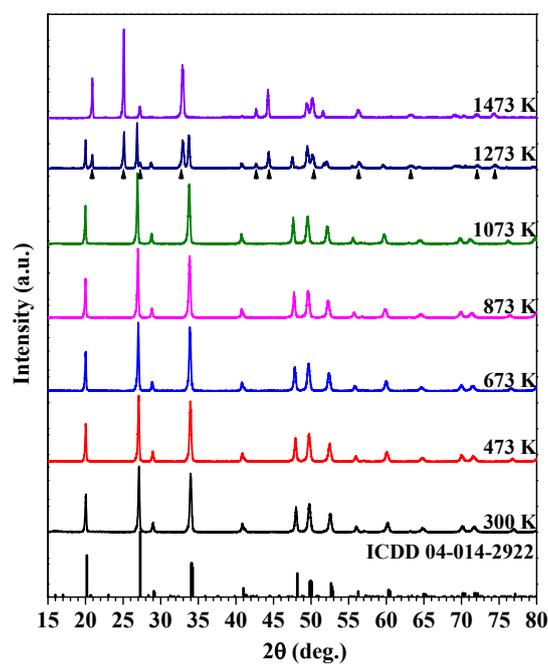


Figure S1a Representative X-ray diffraction patterns of $\text{YBO}_3:\text{Eu}^{3+}$ sample recorded at different temperatures during heating experiments

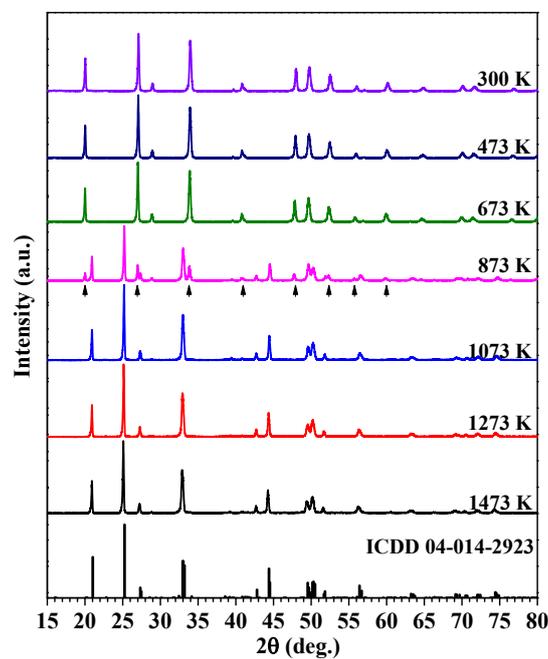


Figure S1b Representative X-ray diffraction patterns of $\text{YBO}_3:\text{Eu}^{3+}$ sample recorded at different temperatures during cooling experiments

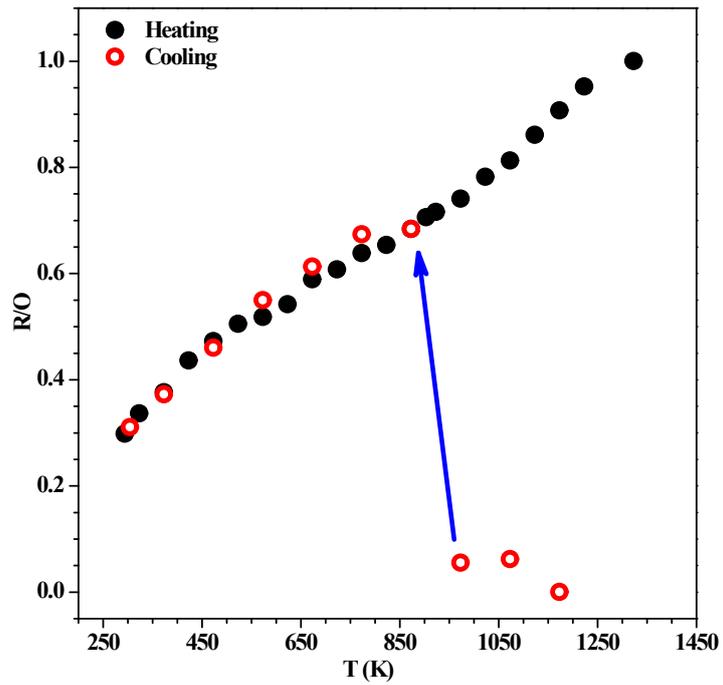


Figure S2 The intensity ratio R/O as a function of temperature.

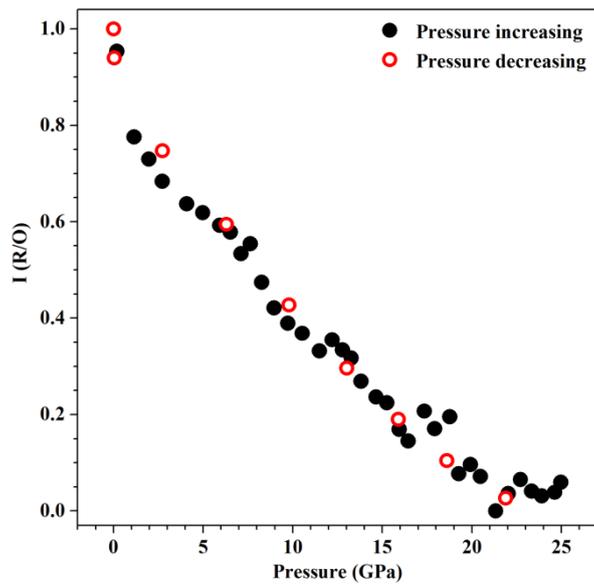


Figure S3 The intensity ratio R/O as a function of pressure.