

Figure S1. Volume changes of LiO_6 , ScO_6 , GeO_4 .

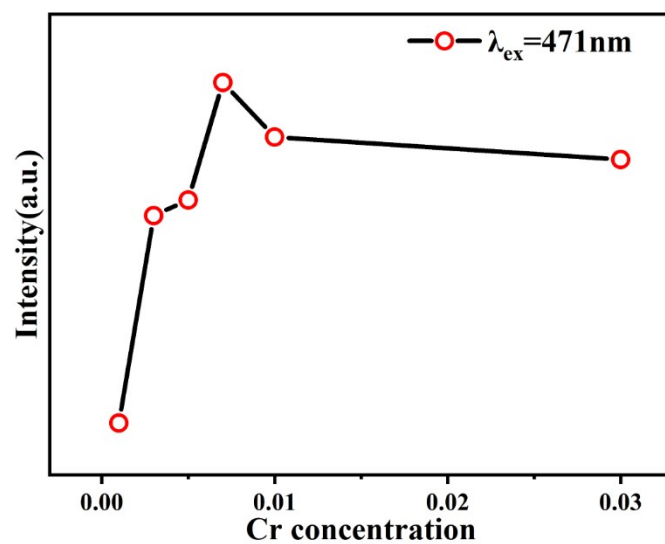


Figure S2. PL maximum intensity of LiScGeO₄:xCr (x=0.001-0.03).

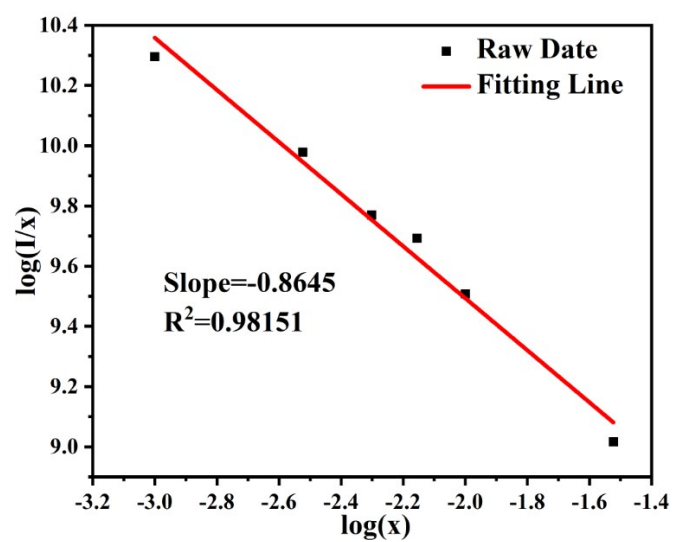


Figure S3. Relationship between $\log(I/x)$ and $\log x$.

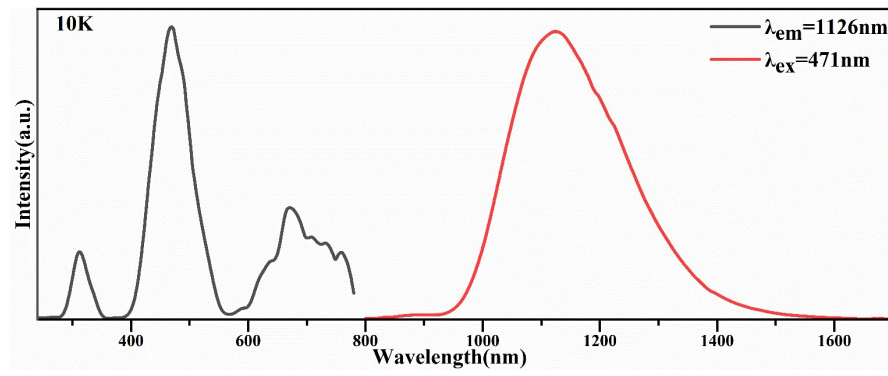


Figure S4. PL and PLE spectra of LiScGeO₄:0.007Cr at 10K.

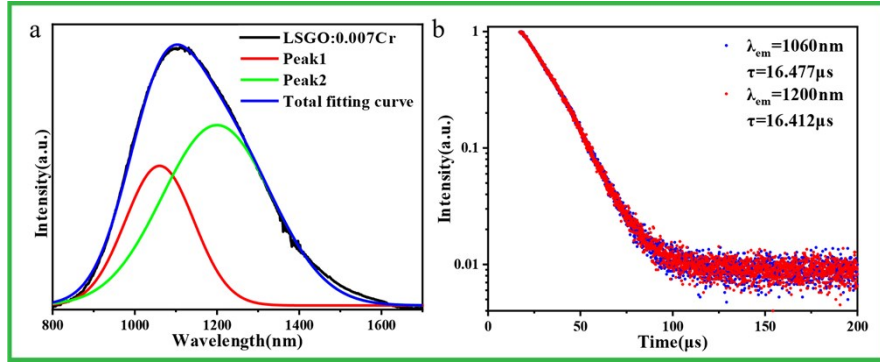


Figure S5. (a) Gaussian fitting of the emission spectrum; (b) Monitoring the decay curves at 1060nm and 1200nm respectively.