

Supporting Information

Phase separation strategy to facilyly form fluorescent $[Ag_2]^{2+}/[Ag_m]^{n+}$ quantum clusters in boro-alumino-silicate multi-phase glasses

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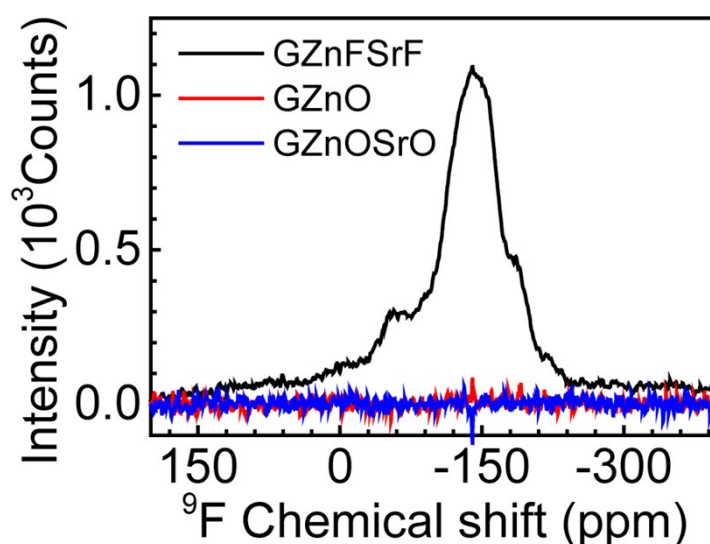


Figure.S1 ^9F NMR spectra of GZnFSrF, GZnO and GZnOSrO. It evidenced that the F in GZnO and GZnOSrO are all volatilized and there is no fluorine in the glass residue structure.

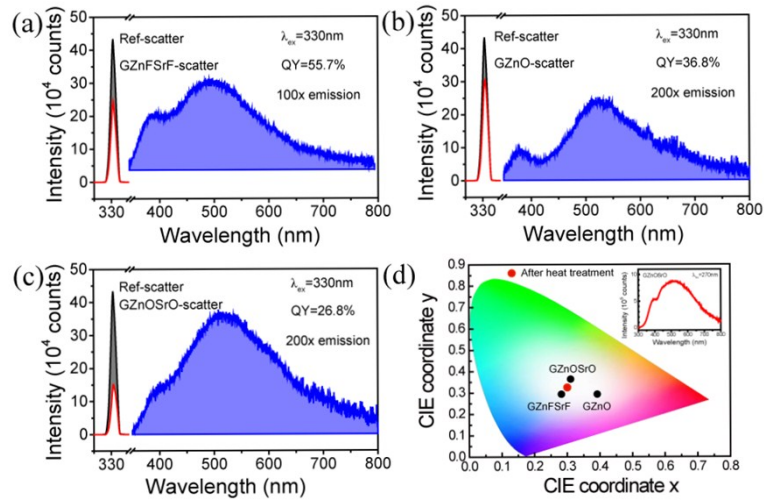


Figure.S2 Spectra of quantum yield (QY) measurement for sample: (a) GZnFSrF annealed at 510 °C for 2h; (b) GZnO annealed at 480 °C for 2h and GZnOSrO annealed at 570 °C for 2h (c). CIE chromaticity of precursor glass of GZnFSrF, GZnO and GZnOSrO, the red point represent CIE chromaticity of GZnOSrO annealed at 570 °C for 2h, the inset is the corresponding emission spectra.

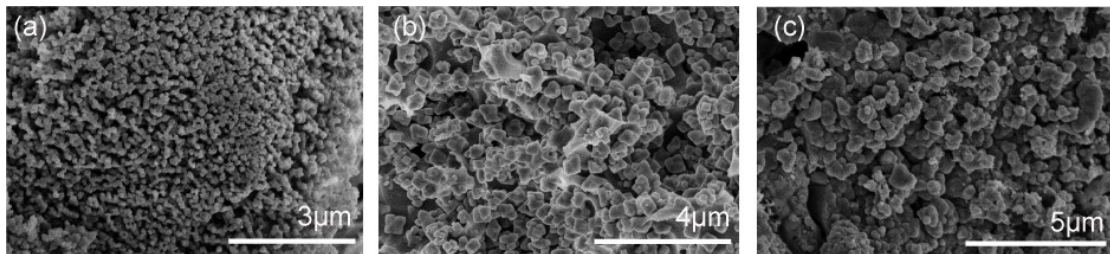


Figure.S3 SEM observation of the interconnected borate phase separation in GZnFSrF (a), and tetragonal prismatic $ZnAlO_4$ phase separation in GZnO (b) and irregular oxide phase separation in GZnOSrO (c).