

Electronic Supplementary Information

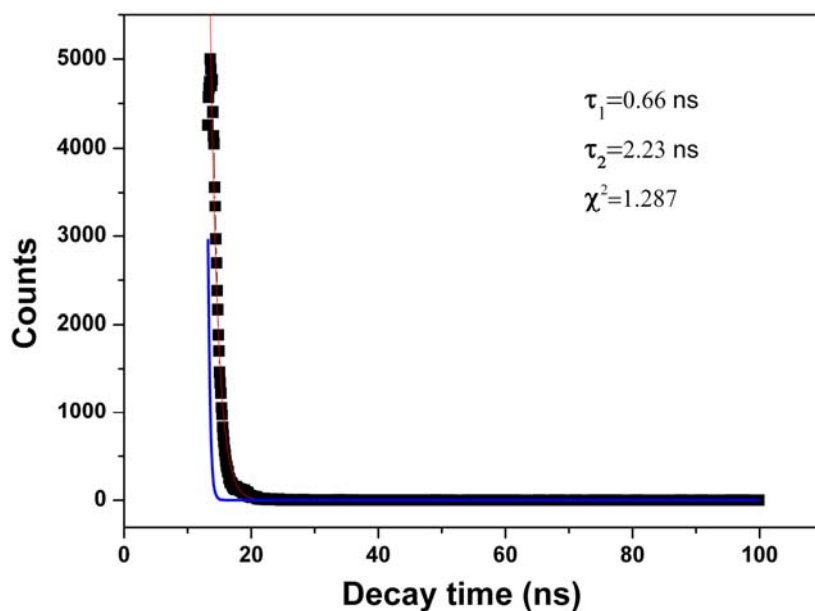


Figure S1. Fluorescence decay curves for ZnO film (the black blocks represent experimental data, the solid red line represents fitting results, and the solid blue line represents hydrogen background). The emission decay lifetimes are $\tau_1 = 0.66$ ns (83.37%) and $\tau_2 = 2.23$ ns (16.63%), $\chi^2 = 1.287$. The luminescence lifetimes for SiW₁₂/ZnO film are too short to be detected under the same condition.