

Abstract Submitted
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Strong Blue Photoemission from Au/ZnO Nanocomposite Material AKIRA UEDA, Fisk University, ESOSA EJOMO, ROBERTO AGA, WARREN COLLINS, RICHARD MU — Several layers of Au (5 nm) and ZnO (20 nm) were alternatively deposited on Si and SiO₂ substrates with an electron beam evaporator. With post-annealing of the samples in air, the samples were characterized with XRD, RBS, SEM, AFM, and PL. The samples annealed at higher temperatures ($\geq 700^\circ\text{C}$) exhibit the growth of ZnO nanocrystals in the system. Along with these observations, the samples annealed at higher temperatures emit strong blue photons due to an electric field.

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