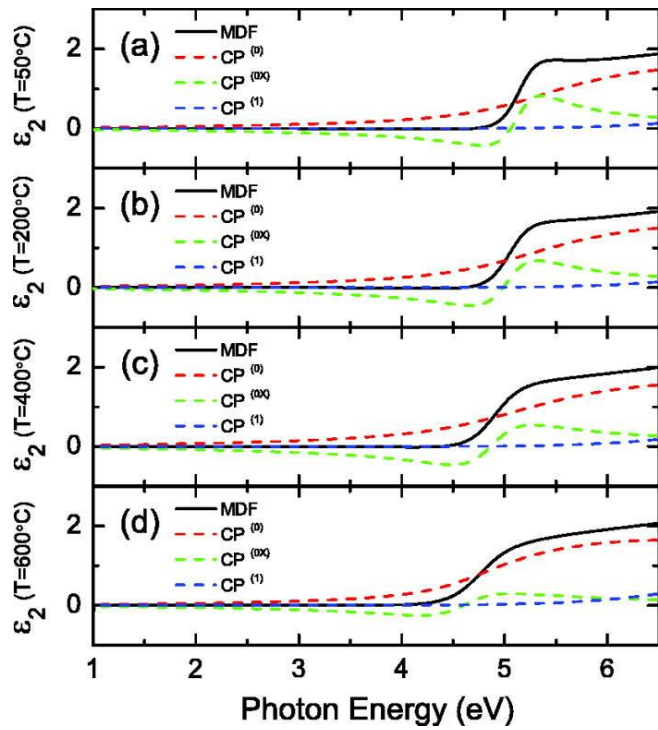
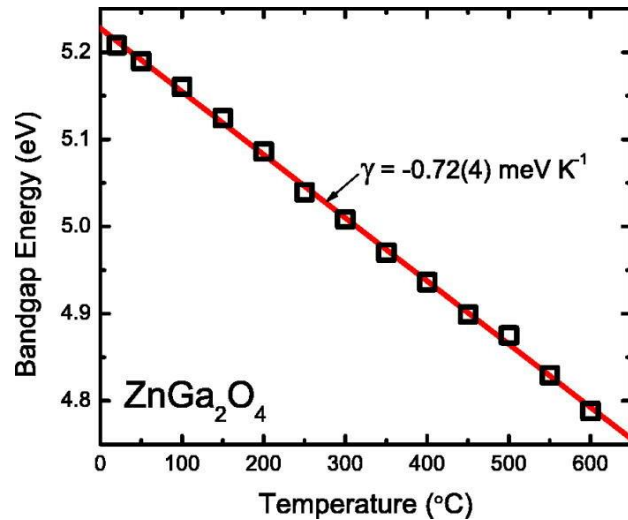


Temperature evolution of (a) real (ϵ_1) and (b) imaginary (ϵ_2) parts of the dielectric function. Offset value of 0.5 for each spectra. Black solid lines determined by a photon energy-by-photon energy approach (PBP) and colored dashed lines by critical point model analysis (MDF). Both approaches show to be in excellent agreement.



MDF Critical point approach (black solid lines) determined for ϵ_2 with M_0 -type critical point (red dashed lines), excitonic (green dashed lines), and Gaussian (blue dashed lines) contributions to the dielectric function for selected temperatures (a) 50, (b) 200, (c) 400, and (d) 600°C.



Spectroscopic ellipsometry analysis of the direct bandgap (black squares) of ZnGa_2O_4 ranging from 22°C to 600°C. Slope of linear approximation (red solid line) of $-0.72(4)$ meV K^{-1} with 90% interval of confidence for the last digit designated with parenthesis.