

## OPTICAL PROPERTIES OF COBALT/CHROMIUM DOPED BULK ZNSE

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Spectroscopic ellipsometry combined with transmittance measurements have been used to estimate the optical constants of ZnSe:Co and ZnSe:Cr crystals, which were grown from the melt by the modified high-pressure Bridgman method. Fig. 1 presents the changes in refractive index ( $n$ ) and extinction coefficients ( $k$ ). One can see that these variations depend on the chosen dopant.

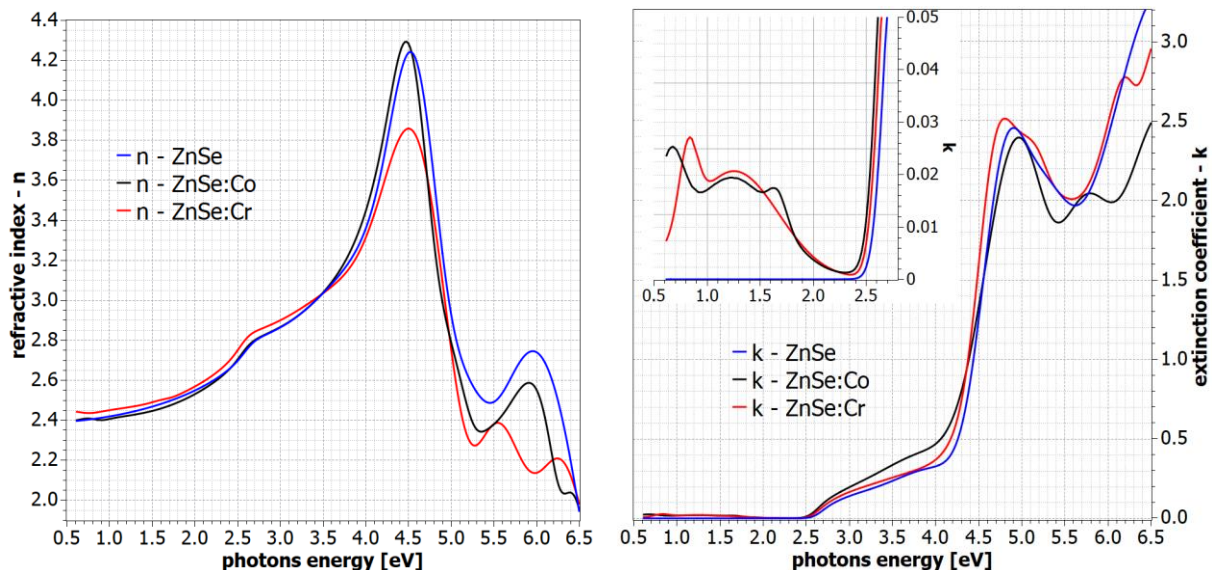


Fig. 1. Change in refractive index ( $n$ ) and extinction coefficient ( $k$ ) for ZnSe, ZnSe:Co, ZnSe:Cr crystals obtained from samples models fitted to ellipsometric measurements.

Moreover, transmission measurements also show the additional bands at around 1400-2000 nm for ZnSe:Cr, as well as at around 700-800 nm and 1400-1900 nm for ZnSe:Co compared to ZnSe.

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