

SIRKELI, Vadim, RADEVICI, Ivan et al. Magnetic and luminescent properties of nickel-doped ZnSe crystals. In: Solid State Sciences. 2015, Vol. 50, pp. 74-80. ISSN 1293-2558.

Magnetic and photoluminescent properties of nickel-doped ZnSe crystals with [impurity](#) concentrations varied by changing the Ni amount in the source material from 0.001 to 0.50 at.% are studied in 5–300 K temperature range. Investigation of magnetic properties shows that Ni impurity in ZnSe forms isolated paramagnetic centers and probability of Ni–Ni pairs formation is negligible due to low Ni concentration in the samples. The contribution of Ni impurity to edge emission and its influence on infra-red emission are discussed. It is found that complete concentration quenching of [luminescence](#) within all studied spectral range is observed starting with Ni concentration of 0.50 at.%.