

## The sign of the electric field gradient of wide bandgap semi-conductors measured with $\beta$ - $\gamma$ angular correlation

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The sign of the electric field gradient can be measured with the  $\beta$ - $\gamma$ -perturbed angular correlation. This can help in the understanding and improvement of current models and simulations of crystal structures. In this work the wide bandgap semiconductors AlN, GaN and ZnO are investigated..

The results from the last two collections at ISOLDE are presented.  $^{115}\text{Cd}$  and  $^{111}\text{Ag}$  were implanted in  $3\mu\text{m}$  thin films of GaN and AlN on sapphire substrate and in bulk ZNO. After thorough annealing we performed  $\beta$ - $\gamma$  PAC measurements.

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