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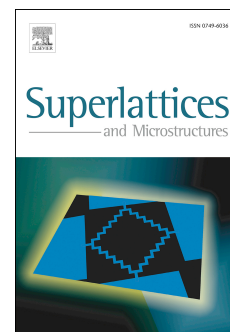
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# Time-resolved photoluminescence investigation of (Mg, Zn) O alloy growth on a non-polar plane

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## Abstract

Excitons recombination dynamics in ZnMgO alloy have been studied by time-resolved photoluminescence according to temperature. At low temperature, localization effects of the exciton are found to play a significant role. The photoluminescence (PL) decays are bi-exponential. The short lifetime has a constant value, whereas the long lifetime shows a dependency with temperature. For temperature higher than 100 K the declines show an mono-exponential decay. The PL declines are dominated by non-radiative process at temperatures above 150 K. The

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