

12th International Workshop on Beam Injection  
Assessment of Microstructures in Semiconductors

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# Motion of dislocations at Vickers indentations in (0001) GaN

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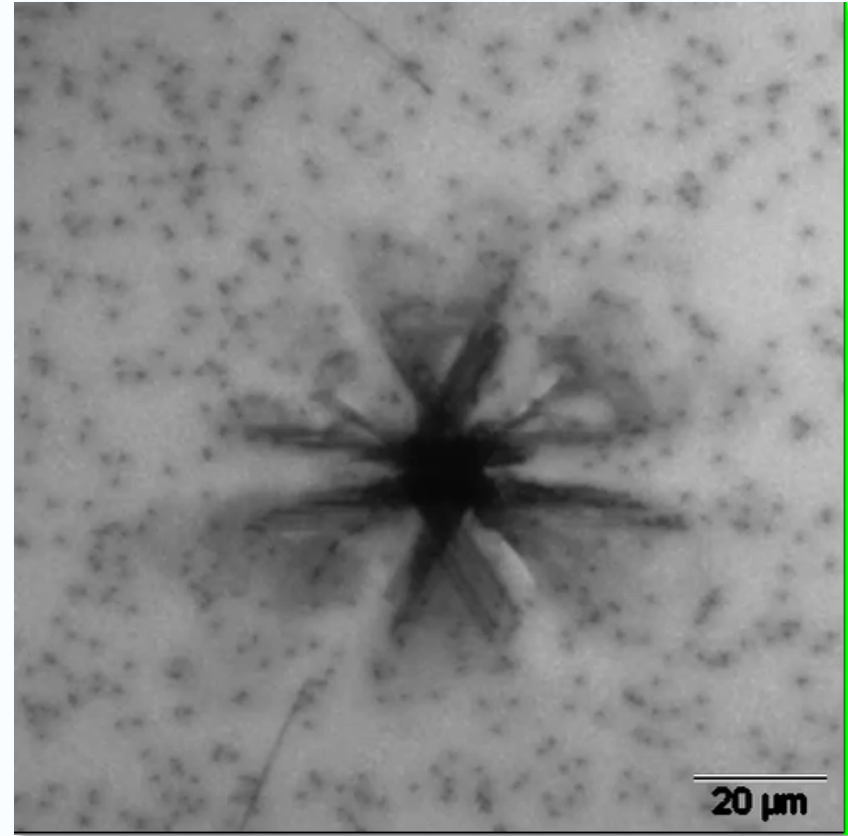
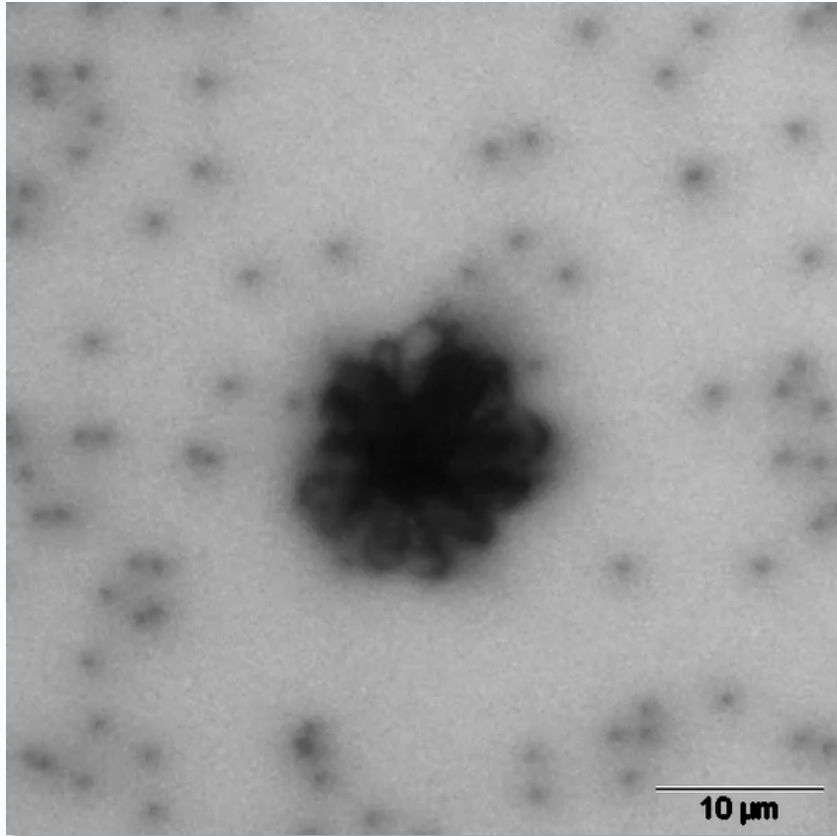
Interdisziplinäres Zentrum  
für Materialwissenschaften  
– Nanotechnikum Weinberg –



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# Motion in the residual strain field

Indentation at RT → Annealing → CL Imaging



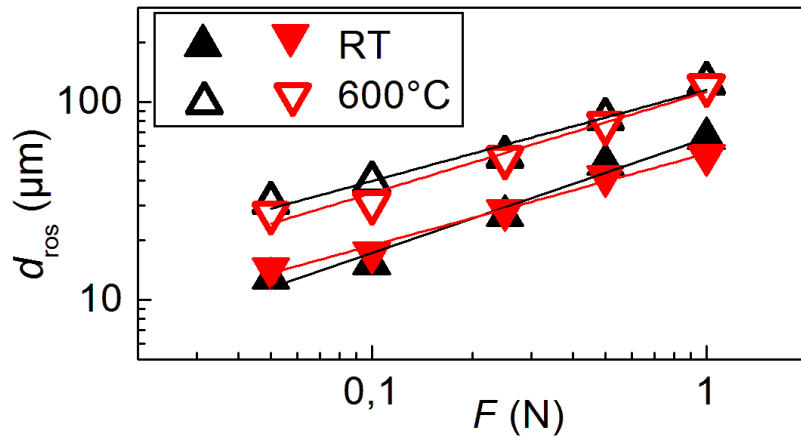
Indentation-induced dislocations → mobile

Grown-in dislocations → sessile

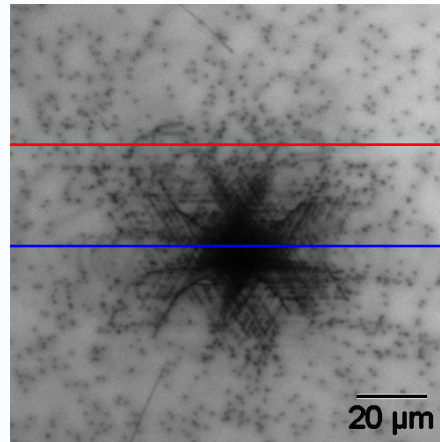
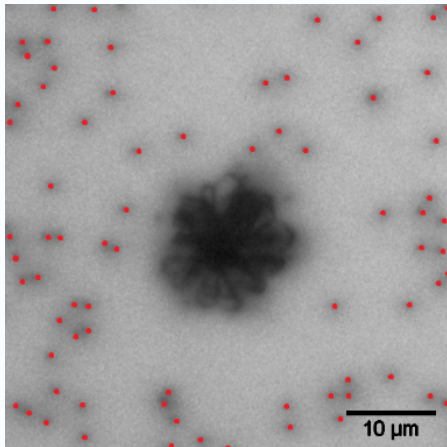
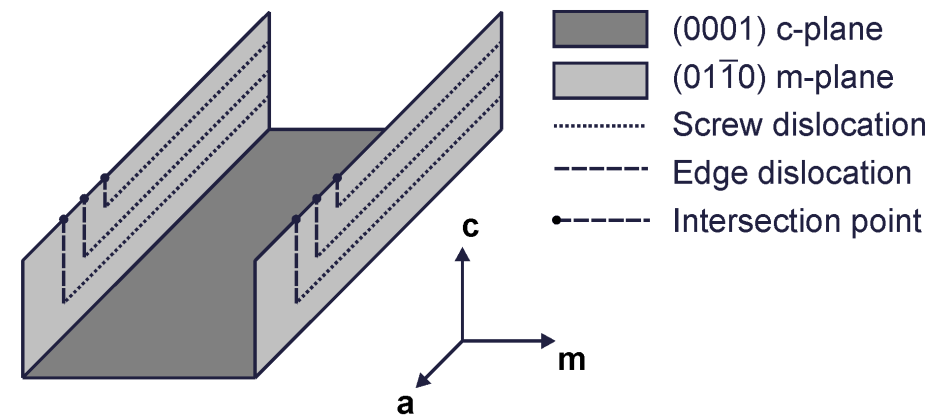
No strain relaxation via dislocation motion

# Evaluation

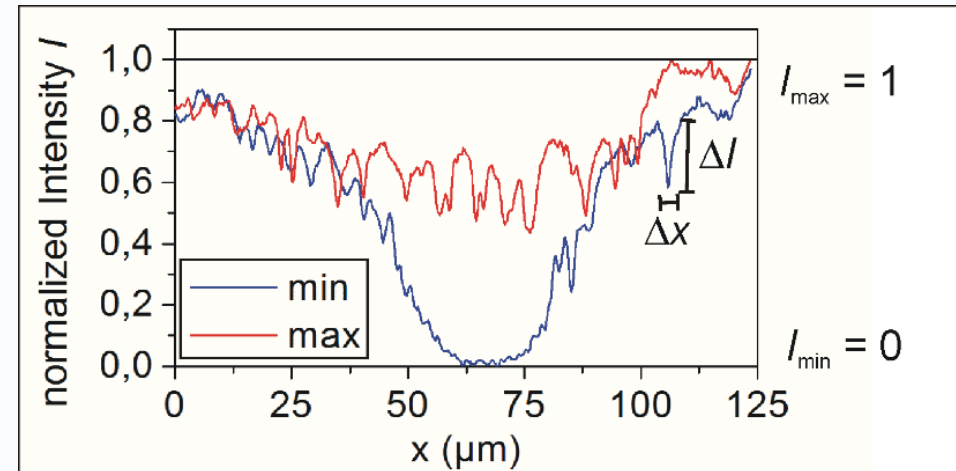
## Size of dislocation rosettes



## Models of dislocation motion



Individual dislocations



CL contrast studies