



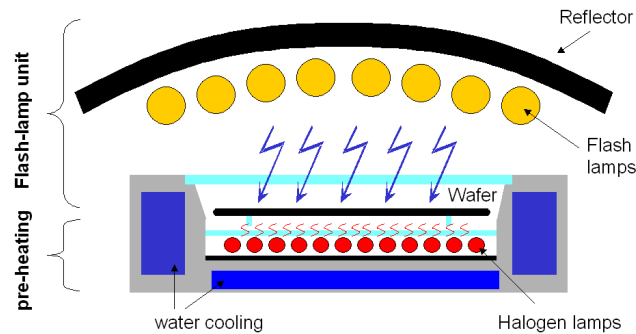
# Superconducting Nb Flash lamp processing

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# Resources: Semiconductor materials

## Material processing: flash lamp annealing



## Material characterization: Raman, RBS, Positron

## Material characterization: magnetic and electrical



SQUID-VSM  
SQUID-MPMS  
Lakeshore Hall Measurement system  
1.8-400 K  
up to 7 T



# Thermal processing of semiconductors

Laser

FLA

RTA

FA

ns

ms

s

min-h

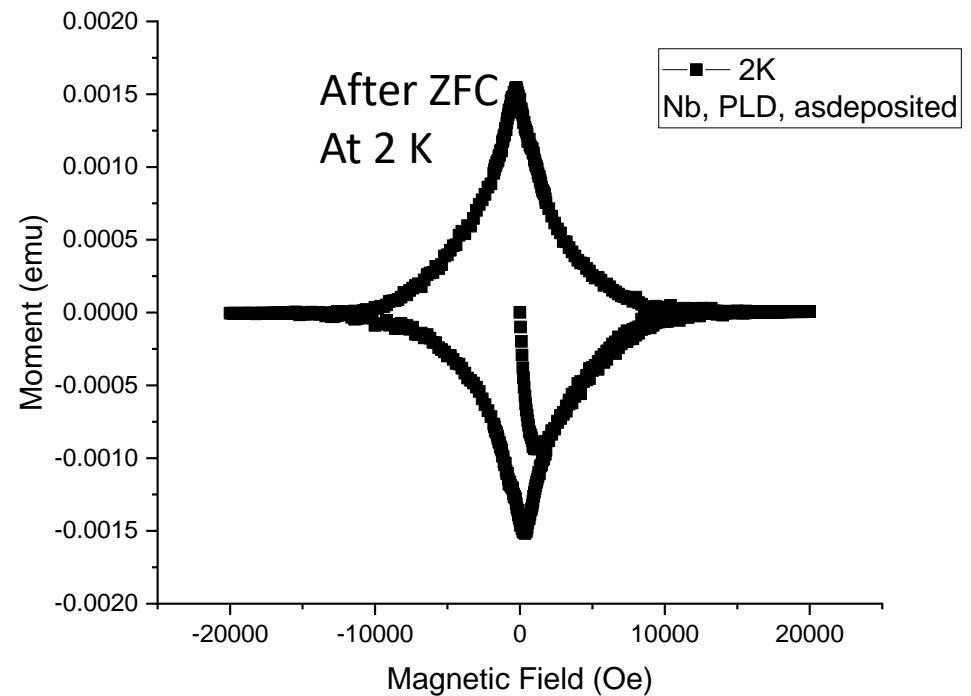
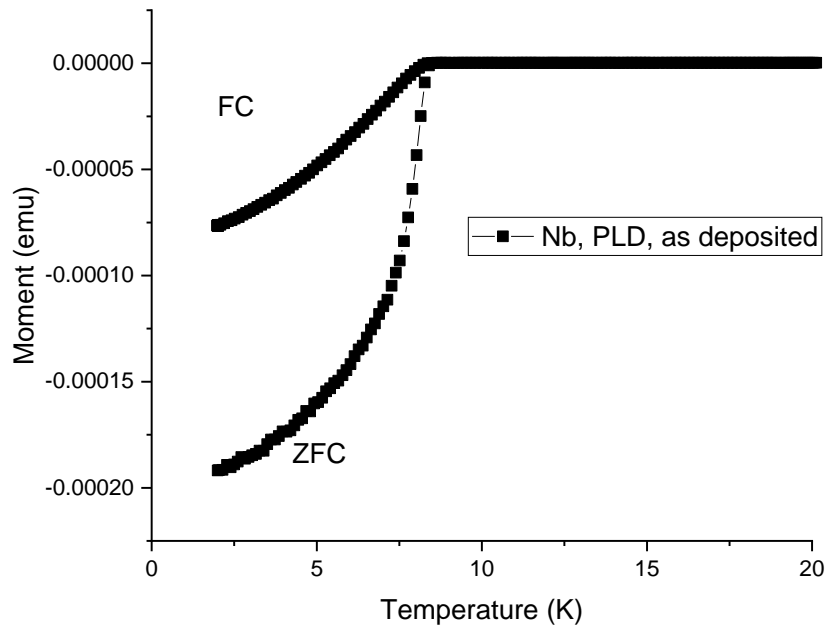


ultra-short annealing

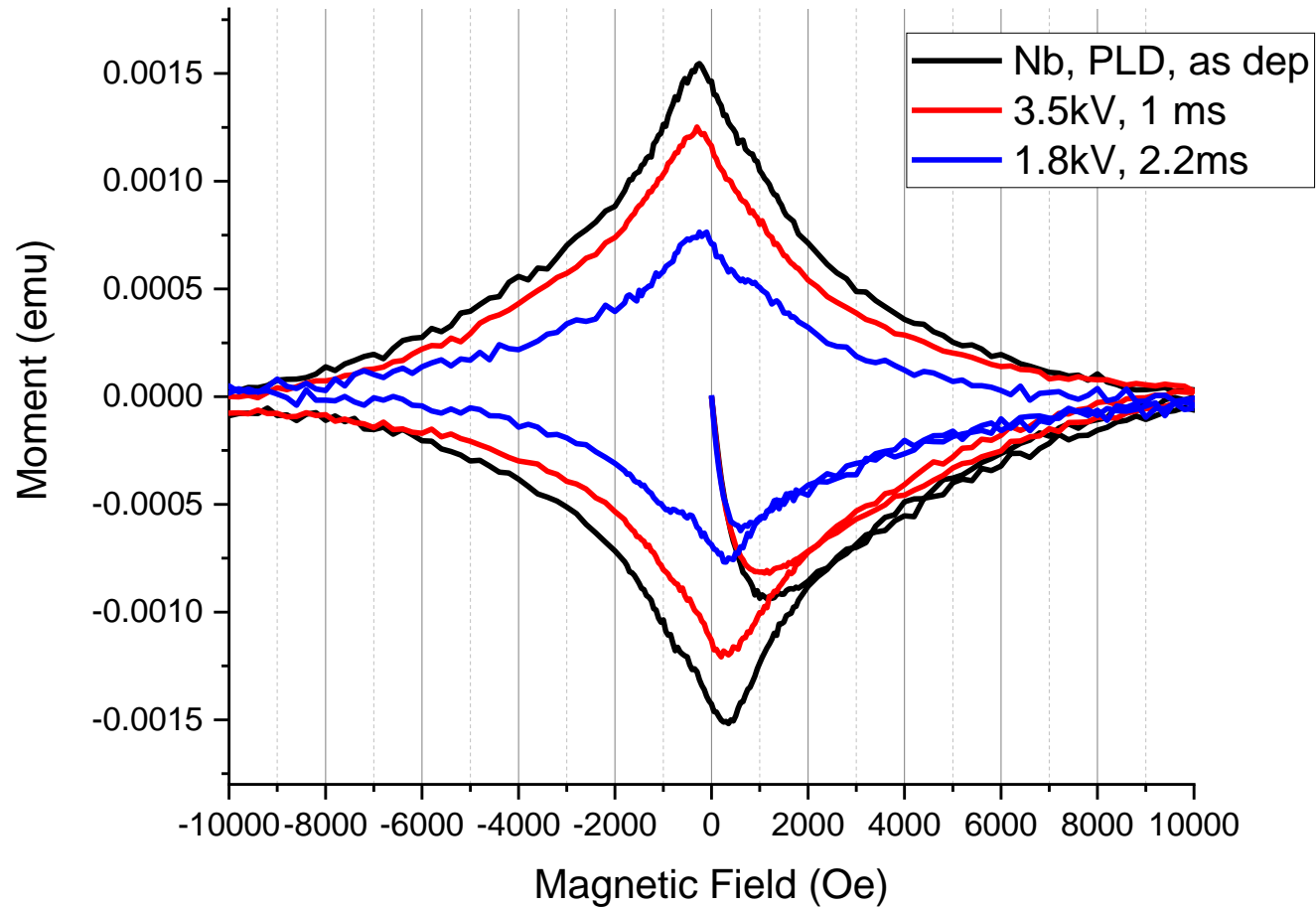


# As-received materials

Nb13052021LCM, Nb on Cu

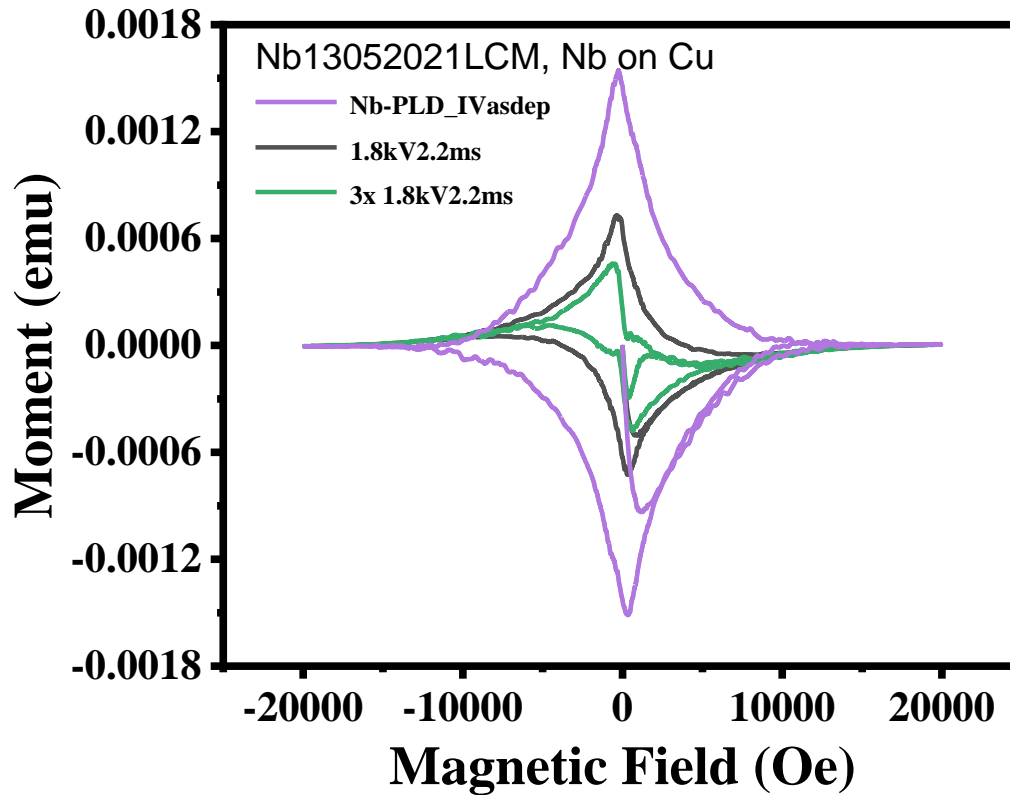


# Nb13052021LCM, Nb on Cu



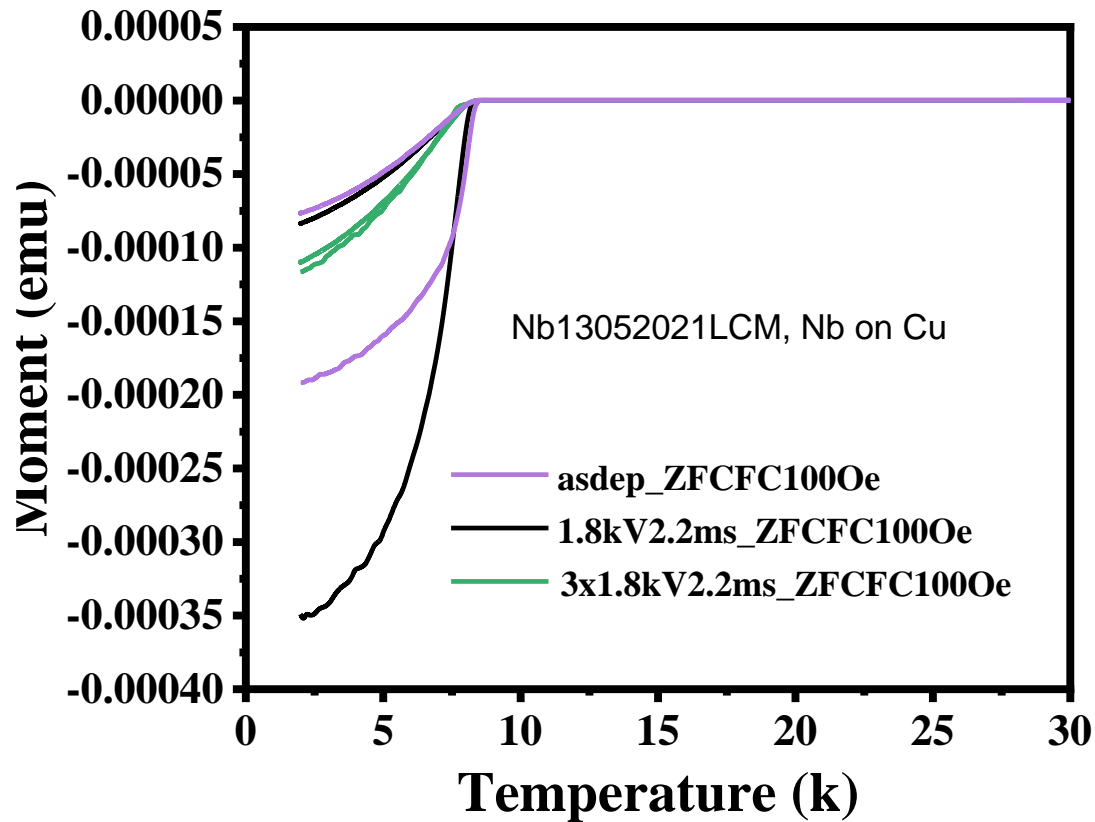
# As-received materials

Nb13052021LCM, Nb on Cu



# As-received materials

Nb13052021LCM, Nb on Cu



# Next step

RBS measurements

Positron annihilation lifetime

Need proposal to apply for beamtime

But I can do RBS for a few samples by using my beamtime