

MBE sample preparation proposal

JCNS MBE thin film lab at the MLZ in Garching



Local contact/instrument scientist:

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It is mandatory that you contact the instrument scientist to discuss your research idea and safety requirements before submitting a proposal. The proposal for the MBE system must be related to a proposal submitted to an MLZ instrument.

Only non-proprietary research is accepted. No financial support can be given. The JCNS thin film lab disclaims any liability. This offer may be subject to change without prior notice.

INSTRUCTION FOR THE COMPLETION OF THIS FORM

- Use Arial 12 fonts

- Do not duplicate information that you have already included in your online proposal form.

Please **convert the present file into pdf format** and email it to useroffice@mlz-garching.de

You are kindly requested to **delete the present instructions before creating the pdf file.**

Feel free to adjust the height of the rows if necessary.

Neutron Instrument Proposal No.		
Proposer		
Email address		
Title		
Which neutron instrument is requested?	<input type="checkbox"/> MARIA	<input type="checkbox"/> N-REX
Type of access	<input type="checkbox"/> Remote access: the sample is prepared for you.	<input type="checkbox"/> Collaborative access: you fabricate the sample together with the local contact on site at the JCNS in Garching

Sample composition	<ul style="list-style-type: none"> • What kind of substrate do you want to use? Please note, that during the commissioning phase only SrTiO₃ is accepted. Please comment on the properties, e.g. size, crystal orientation. Are you supplying it? • What are the components of your sample (evaporation materials, atomic oxygen) • Do you aim at epitaxial growth? • State the number of samples.
Sample preparation	<p>Do you have already experience in preparation of such samples? Does a “recipe” exist? Explain the fabrication process and the required parameters, like growth temperature, evaporation rate, heating and/or cooling rates and so on.</p>
Safety issues	<p>Give a brief statement of any potential safety issue known with the required materials, processes or procedures contained in the proposal.</p>
Time schedule	<p>What would be the desired dates and duration for sample fabrication? Please estimate the number of days required to fabricate the proposed sample(s). In case of collaborative access please report your blackout days.</p>
What is the future of the sample?	<ul style="list-style-type: none"> • Which other experiments do you plan on top of the neutron experiments (before and afterwards)? • How must the sample be stored (UHV, vacuum desiccator, air)?