

The Paul Drude Institute for Solid State Electronics (PDI), member of the Forschungsverbund Berlin e.V. in Germany, is an independent research institute of the Leibniz Association with about 100 employees from over 15 nations, carrying out basic and applied research at the nexus of materials science, condensed matter physics, and device engineering. We invite applications for the position as

## Scientist (f/m/d) Nitride Epitaxy

The PDI is one of the internationally leading research institutions for the growth of novel optoelectronic materials by molecular beam epitaxy (MBE) and conducts research on fundamental physical aspects and applications of semiconductor hetero- and nanostructures, superlattices, and artificial materials by design. Emphasis is placed on exploring their electronic and optical functionalities and exploiting properties emerging at the nanoscale for future applications in solid-state electronics and photonics. More information can be found at [www.pdi-berlin.de](http://www.pdi-berlin.de).

The successful candidate will be responsible for the growth experiments on PDI's nitride MBE systems. Position responsibilities include:

- MBE growth of various types of nitride structures with high material quality and their characterization as well as analysis
- advancing PDI's nitride MBE growth program by refining, further developing, and innovating understanding of growth processes and equipment expertise
- coordinating the operations of the nitride MBE systems including the work of users and maintenance by engineers
- advising B.Sc., M.Sc., and Ph.D. students
- coordinating collaborations internally and with external partners
- representing nitride growth activities to the scientific community and to the public

Immediate tasks will be the growth of high-electron mobility transistor structures with the perspective to innovate novel heterostructures encompassing emerging nitride material systems.

We are looking for a dedicated and motivated researcher who enjoys working collaboratively in a diverse team. Candidates for this position should have:

- a doctoral degree in physics, materials science, electrical engineering, or a related field
- hands-on knowledge in group-III nitride epitaxy or molecular beam epitaxy of other materials, reflected in publication record
- competence in structural characterization and physical property measurements
- expertise in the physics and/or applications of semiconductor thin films and nanostructures
- good communication skills and the ability to work in an interdisciplinary team of scientists and engineers
- ambition to take up a scientific junior leadership role

The position is initially a fixed term appointment with the possibility to be turned into a permanent scientist staff position. The application period starts **April 4, 2023**, application review and interviews will begin **May 2, 2023**.

All applicants must submit their application package (PDF file) including a cover letter with a summary of relevant skills and experiences, curriculum vitae, publication list, relevant degree certificate(s) and transcript(s), and contact information for three references to [recruiting@pdi-berlin.de](mailto:recruiting@pdi-berlin.de) with the subject line "Nitride epitaxy".

PDI takes an active role in building a talented, inclusive, and culturally competent workforce. We understand that our shared future is guided by basic principles of fairness and mutual respect. We aim to increase the number of female scientists at the institute, applications from women are particularly welcome. Among equally qualified applicants, preference will be given to candidates with disabilities. Salary and benefits are according to the Treaty for German public service (TVöD Bund). As equal opportunity and family-friendly employer, we offer highly flexible employment conditions, such as flexible working hours, parental leave, and home office. We strive to create a family- and life-conscious work environment.



Please send scientific and related inquiries to the department head epitaxy Dr. Lutz Geelhaar (he/him/his) [geelhaar@pdi-berlin.de](mailto:geelhaar@pdi-berlin.de) and inquiries regarding diversity, equity, and inclusion to the equal opportunity officer Katrin Morgenroth (she/her/hers) [gleichstellung@pdi-berlin.de](mailto:gleichstellung@pdi-berlin.de).

