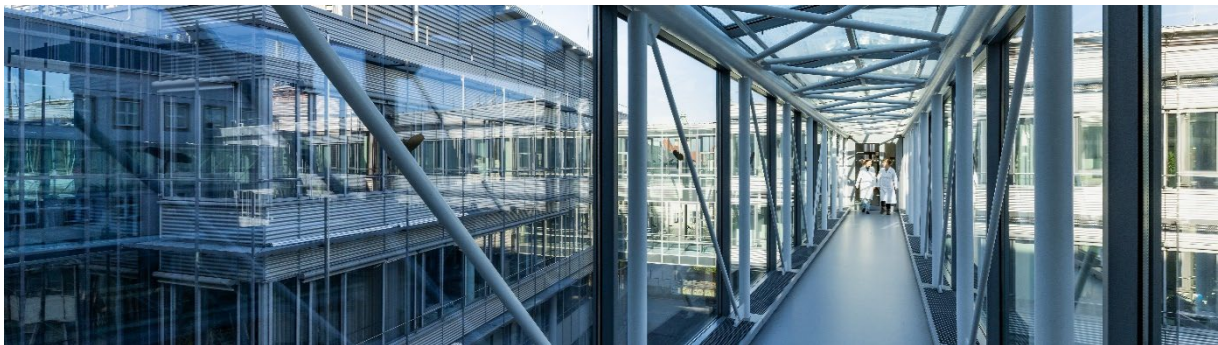


The Leibniz Institute for Solid State and Materials Research Dresden e. V. (IFW Dresden) conducts modern materials research on a scientific basis for the development of new and sustainable materials and technologies. The institute employs an average of 500 people from over 40 nations and, in addition to its scientific tasks, is dedicated to promoting young scientists and engineers. The IFW supports its employees in reconciling work and family life and regularly undergoes the audit [berufundfamilie@](mailto:berufundfamilie@ifw-dresden.de). Further information at: <http://www.ifw-dresden.de>.



The Institute of Metallic Materials at the Leibniz Institute for Solid State and Materials Research Dresden (IFW Dresden) offers a

Doctoral Researcher Position (m/f/div)

on the topic “hybrid 2D superconducting/magnetic quantum devices”, starting in October 2026.

Project description:

Since their emergence, spintronics and van der Waals (vdW) materials have largely evolved separately but are now converging. This shift is driven by the discovery of 2D long-range magnetic order. Their intrinsic stacking flexibility allows the heterostructures without lattice-matching constraints, including hybrid systems combining magnetism and superconductivity. The PhD candidate will develop expertise in transport, spectroscopic and advanced fabrication methodologies for vdW heterostructures, including cryogenic stacking in inert and ultra-high vacuum environments to achieve ultraclean interfaces¹. The student will work in Dresden at the Superpuddles lab, in close synergy with the QTLab at the University of Naples Federico II, using complementary expertise.

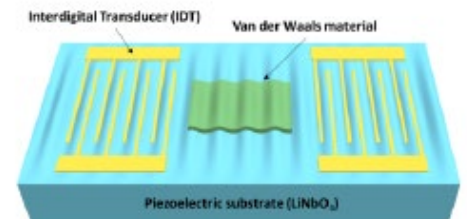


Figure: Surface acoustic wave device formed by two pairs of interdigital transducers (IDTs) on top of a piezoelectric substrate, and a van der Waals materials placed in-between to excite spin waves.

¹ <https://www.nature.com/articles/s44287-024-00132-8>



Your profile:

We are looking for a highly motivated and team-oriented student (m/f/div), who holds a master's degree in physics, engineering or quantum science and technology. Successful candidate (m/f/div) is enthusiast about fundamental science, highly ambitious and a good team-player. Good communication skills in written and spoken English are required.

What we offer:

- a modern, well-equipped workplace on the campus of the Technische Universität Dresden,
- flexible, family-friendly working hours,
- 30 days vacation per year,
- Company pension scheme (VBL),
- Benefits for job ticket/Germany ticket,
- Special annual payment,
- Capital-forming benefits,
- Company health management (back training, health day with various offers),
- discounted sports offers from the Dresden University Sports Center,
- Job-related further training opportunities and language courses,
- Company restaurant with a variety of breakfast and lunch dishes.
- a future-oriented environment with a workplace with modern research infrastructure,
- working with international and interdisciplinary scientists from different fields,
- working on current research fields.

The contract is limited to 12 months and will be extended by another 2 years upon a successful mid-term evaluation. The employment relationship, including the salary is according to the German tariff TV-L and is task-related up to pay group 13 TV-L with 65%.

Notes on the application:

IFW Dresden strives for a balanced gender ratio in all areas. In science, IFW Dresden would like to increase the proportion of women and therefore explicitly invites suitably qualified female scientists to apply. Applications from severely disabled individuals and those with equal status according to § 2 paragraph 3 SGB IX are explicitly welcomed. A corresponding proof must be included with the application documents.

If you are interested in the position, please send your application including a CV and the list of publications, a motivation letter describing the research career goals, skills and experience, copies of certificates citing the reference number **035-26-2107** as a single pdf file (other formats will not be accepted) no later than **30 June 2026** to

bewerbung@ifw-dresden.de.

For further information, contact Prof. Dr. Nicola Poccia (n.poccia@ifw-dresden.de) or Dr. Haider Golam (g.haider@ifw-dresden.de).