

Nanomaterials and thin films in Institute of Solid State Physics, University of Latvia: research directions and capabilities

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In this talk, brief overview of research activities and capabilities in Thin Films Laboratory (Institute of Solid State Physics, University of Latvia, Riga) will be given. The Institute of Solid State Physics, University of Latvia (ISSP UL) is an internationally recognized research centre in materials science and cross-disciplinary research with modern infrastructure for the synthesis and analysis of various types of materials and 650 m² ISO class 4 - 8 cleanrooms. Thin Films Laboratory focuses on thin films science, deposition technologies and nanoscale materials (nanowires, nanoparticles, 2D materials) research. Some recent topics include but are not limited to growth and characterization of various functional core-shell nanowire heterostructures, nanoparticle and 2D materials synthesis for *ink-jet* printing, nanostructure manipulations *in-situ* scanning electron microscope, various metal oxide thin films deposition. Recent infrastructure upgrades for nanofabrication and thin film deposition at ISSP UL will be presented.