

TRR Guest Scientist Lecture / Seminar

Date/Time: 20.05.2021 / 15:00 Uhr
Location: Online - Zoom

Zhipei Sun

Department of Electronics and Nanoengineering, Aalto University, Finland
QTF Centre of Excellence, Department of Applied Physics, Aalto University, Finland.



Two-dimensional layered materials for nonlinear photonics

Abstract:

This talk will discuss our recent results on nonlinear photonics with two-dimensional layered (e.g., graphene, transition metal dichalcogenides, and black phosphorus) materials. The results show the advantages of utilizing low-dimensional nanomaterials for various integrated nonlinear photonic and optoelectronic applications, such as high-purity quantum emitters, wavelength converters, and ultrafast lasers. Further, I will present our recent advances in employing hybrid structures, such as mixed-dimensional heterostructures, plasmonic structures, and silicon/fibre waveguides integrated structures.

Contact:

Prof. Dr. Klaus Jöns
klaus.joens@uni-paderborn.de