

Method tags: Characterization/Experiment, Modelling/Simulation, Processing/Nanofabrication, Wetlab/Biochemistry, Single-molecule experiments, Fluorescence microscopy.

Scientific tags: Biophysics, Low-temperature transport, Nanothermodynamics, Photonics, Microfluidics/Nanofluidics.

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Heiner Linke's research group uses experimental and numerical methods to study phenomena in diverse systems such as semiconductor nanostructures, biomolecular systems, and fluids. An overall question is how thermal fluctuations in non-equilibrium systems can be harvested to produce useful work, for example in thermoelectricity or in molecular motors. This includes research in nanothermodynamics and in the use of molecular motors, for example for parallel computing.