Tutorial onplasmonic nanoresonators for light emission enhancement

Mihail Petrov

School of Physics and Engineering, ITMO University, Russia

Abstract

In this talk we will cover the basic aspects of plasmonics such as localized resonance in single nanostructures and propagating surface plasmon polariton waves, and discuss the main ideas beyond the plasmonic assisted biosensing techniques. A special attention will be paid to photoluminescene and Raman emission enhancement with plasmonic resonances. This lecture will help you to smoothly dive into the fascinating area of optical biosensing where plasmonic plays a key role.