

POSTER PRESENTATIONS

Aptamer-functionalized gold nanoparticles for the highly-sensitive dual-detection of C-reactive protein // Alexandru-Milentie Hada (Cluj-Napoca)

Rotavirus-proteins affinity dynamics via surface plasmon resonance biosensor // César Herreño (Bogota)

Plasmonic Surface Lattice Resonances in Arrays of Gold Nanoparticles // César Herreño (Bogota)

Near Infrared Plasmonic & reduced Graphene Oxide Hybrid Nanoplatform for Photothermal Therapy // Alexandru Holca (Cluj-Napoca)

Monitoring Photolipid Bilayer Membrane Switching with Plasmonic Nanorods // Dominik Kammerer (Munich)

Investigating ligand binding to G-quadruplex DNA at the single-molecule level via plasmon-enhanced fluorescence // Ashish Kar (Leuven)

Gold Nanorod DNA Origami Antennas for 3 Orders of Magnitude Fluorescence Enhancement in NIR // Karol Kolář (Fribourg)

New strategy for DNA identification using surface enhanced Raman spectroscopy // Andrzej Kudelski (Warsaw)

Plasmonic bound states in the continuum for strong light-matter interaction // Yao Liang (Hong Kong)

Raman-based Detection of Antibiotics and Metabolites in Pharmaceutical Formulations and Clinical-relevant Matrices // Chen Liu (Jena)

Characterization of the sensing potential of assembled plasmonic nanostructures // Yeshni Luximon (Jena)

Development of EVs Detection Device Based on AC Electroosmosis // Ibuki Machi (Kure)

Large $Ti_3C_2X_n$ MXene dimers as SERS substrates // Hayk Minassian (Yerevan)

Mathematical model to predict the cellular internalization of gold nanoparticles // Orlando Narváez González (Bogota)

Insulator-based Dielectrophoresis Device Utilizing Positive Dielectrophoresis for Dielectric Characteristics Measurement // Koki Nietani (Kure)

Aiming for metasurfaces by DNA-assisted lithography // Johannes Parikka (Jyväskylä)

Nanoantenna Conjugated Graphene Photodetector // Abhinav Raina (Cologne)

Optimizing Photothermal Therapy for Cancer Treatment using Scuff-EM and K-Wave Simulations // Angelo Abraham Sanz (Bogota)

Bi-metallic and nano-porous particles fabricated by pulsed UV laser irradiation for plasmonic sensing // Gabriele Schmidl (Jena)

Ultrafast spatiotemporal chiroptical response of dielectric and plasmonic nanoparticles // Ankit Kumar Singh (Jena)

SERS probing of endolysosomes with gold nanostars // Cecilia Spedalieri (Berlin)

Optical waveguide (OW) biosensor // Keiji Tada (Nishinomiya)

Near-Infrared Luminescent Platinum Nanoclusters for in vivo Imaging and Biomedical Application // Shin-ichi Tanaka (Kure)

On the Road from Top-down to Bottom-up by DNA-Assisted Lithography // Kostí Tapio (Jyväskylä)

Controlling the selective adsorption of plasmonic DNA origami nanostructures using polar surface arrays // Z. Wang (Braunschweig)

Meta-devices for 6G applications and beyond // Jing Cheng Zhang (Hong Kong)

Monitoring Photolipid Bilayer Membrane Switching with Plasmonic Nanorods // Jinhua Zhang (Munich)

LOCATION

- 1 Leibniz IPHT, Campus Beutenberg
- 2 Hotel Steigenberger Esplanade
- 3 Hotel Schwarzer Bär
- 4 Hotel Ibis
- 5 Hotel Maxx
- 6 Hotel Best Western
- 7 Bus No.10, 11, 12
- 8 Schott Villa
- 9 Ernst Haeckel Monument



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MOLECULAR PLASMONICS 2023

MAY 11 – MAY 13, 2023

Leibniz IPHT // Campus Beutenberg // Jena

www.leibniz-ipht.de



DFG

Leibniz
Association

PROGRAM

Organizers: Wolfgang Fritzsche & Thomas Pertsch

THURSDAY, MAY 11, 2023

Leibniz IPHT, Campus Beutenberg

Bus no. 10, 11, 12

12:00 Workshop "DNA Mitteldeutschland" //
Get-together & Lunch Buffet

12:30 Presentations

17:00 END

appr. 30 min walk to Schott Villa

Schott Villa, Downtown (Above Westbahnhof Train Station)

18:00 Get-together

18:15 Guided Museum Tour

18:45 Guided Museum Tour

19:30 DINNER

FRIDAY, MAY 12, 2023

Leibniz IPHT, Campus Beutenberg

Bus no. 10, 11, 12

8:00 Registration

8:30 Opening & Introduction // Wolfgang Fritzsche

8:40 Plasmonic Nanoparticles
Au Nanoparticles as Nanozymes //
Itamar Willner (Jerusalem)

Monitoring Cytokine Secretion by LSPR //
Eiichi Tamiya (Osaka)

Optimizing Gold Nanotriangles for LSPR //
Katya Podlesnaia (Jena)

DNA Origami-assisted Nanoantennas //
Jer-Shing Huang (Jena)

Workshop

Chair: Wolfgang Fritzsche

10:20 COFFEE BREAK

11:00 Tailored Light-matter Interactions
Light Emission Control by Metasurfaces //
Thomas Pertsch (Jena)

Self-assembled Optical Antennas //
Guillermo Acuna (Fribourg)

Tailored Local Fields // Bert Hecht (Würzburg)

Single-Crystal Metal Films // Gary Leach (Vancouver)

Poster Pitch Talks // Katya Podlesnaia

LUNCH & POSTER SESSION

14:00 SERS & Machine Learning
Imaging and Spectroscopy at High Speed //
Alexandre Brolo (Victoria)

Machine Learning-assisted SERS // Xing Yi Ling (Singapore)

Numerical Optimization of Scattering Response //
Phillip Manley (Berlin)

15:15 COFFEE BREAK & POSTER SESSION

15:45 Coupling Light to Molecules
Ultra-fast Photochemistry // Jussi Toppari (Jyväskylä)

Tuning of Dielectric Metasurface // Sarah Walden (Jena)

Molecular Plasmonics and Lettuces // Bill Barnes (Exeter)

17:00 Excursion // Hike to Ernst Haeckel Monument

19:00 POSTER & BEER (& BARBECUE)

SATURDAY, MAY 13, 2023

Leibniz IPHT, Campus Beutenberg

Bus no. 10 departs downtown at 8:32 a.m.

9:00 Metal-enhanced Imaging & Sensing
Metal and Graphene Induced Energy Transfer Imaging //
Jörg Enderlein (Göttingen)

Implanted Plasmonic Sensors // Carsten Sönnichsen (Mainz)

Detection of Single Proteins // Jerome Wenger (Marseille)

Plasmon-enhanced Fluorescence //
Sjoerd Noteboom (Eindhoven)

Chair: Jer-Shing Huang

Chair: Itamar Willner

Chair: Alex Brolo

Chair: Bill Barnes

10:40 COFFEE BREAK

11:00 Electron-induced Reactions & Chirality
Plasmon-induced Surface Grafting //
Nordin Felidj (Paris)

Plasmonic Activation of Nucleobases //
Sergio Kogikoski (Potsdam)

Multi-electron Reactions on Particles //
Wouter Koopman (Potsdam)

Colorimetric Visualization of Chirality //
Jacky Loo (Helsinki)

12:40 END OF THE SESSIONS & LUNCH

Chair: Jussi Toppari

POSTER PRESENTATIONS

Modulating the Temporal Dynamics of Nonlinear Ultrafast Plasmon Resonances //
Hira Asif (Antalya)

DNA origami based plasmonic nanoantennas for SERS – transition from
few-molecule to single molecule detection // Ilko Bald (Potsdam)

Incorporation of highly ordered gold nanoparticles into the pores of porous
silicon membranes // Juan Barrios (Hamburg)

Influence of metal nanoparticle size on plasmon-induced reactions //
Christina Beresowski (Potsdam)

Towards modulating near-field plasmonic coupling for enhanced optical
spectroscopy // Dario Cattozzo Mor (Prague)

Broadband Four-Wave Mixing Enhanced by Plasmonic Surface Lattice Resonance
and Localized Surface Plasmon Resonance in an Azimuthally Chirped Grating //
Abhik Chakraborty (Jena)

Monitoring plasmon-mediated chemical reactions on immobilized noble metal
nanoparticle // Lars Dannenberg (Berlin)

Dielectric Loaded Plasmonics for Active Tuning of Spin-Orbit Coupled Surface
Plasmon Polaritons // Abhrodeep Dey (Jena)

Raman-based detection of natural products in microbial communication // Tony Dip (Jena)

Excitonic nanostructures for sensing and spectroscopy // Arpan Dutta (Jyväskylä)

Exploring the sensitivity and reproducibility of electrochemically assisted SERS
using silver nanostructures // Aradhana Dwivedi (Jena)

Point-of-care Raman microspectroscopy for detecting head and neck tumour
markers in body liquids // Edoardo Farnesi (Jena)

Composition-Dependent Liposome Structure as Revealed by Surface-Enhanced
Raman Scattering and Cryo-Electron Microscopy // Yiqing Feng (Berlin)

Hot Electron Mediated Plasmonic Catalysis monitored by Surface-Enhanced Raman
Spectroscopy employing Ag Nanorods Array // Shashank K. Gahlaut (Potsdam)

Photonic and plasmonic resonators with topological properties for sensitive
sensing and quantum applications // Manuel Gonçalves (Ulm)