International Day of Light 2019: young researchers conference
Location: building 51, room 015

Program

9:00-9:30 Welcome reception
9:30-9:40 Prof. Adrian Stern, Electro-Optics and Photonics Eng. Dep. Head

Session I
Chair: Prof. Adrian Stern
9:40-9:55 Parry Yu Chen
Lightning-fast solution of scattering problems in nanophotonics: an effortless modal approach
9:55-10:10 Angeleene Ang
Tailoring the trapping potential of cesium atoms using nano-antennas of different shapes on waveguide
10:10-10:25 Ashish Prajapati
Photon management utilizing deep-Subwavelength sidewall features in Nanopillar arrays for broadband absorption enhancement of the solar radiation
10:25-10:40 Daler Dadadzhanov
Surface Enhanced Near-IR Absorption (SENIRA) of Molecular Overtone Transitions with Gold Nanorods

10:40-11:10 Coffee break

Session II
Chair: Prof. Gabby Sarusi
11:10-11:55 Keynote Presentation: Prof. Motti Segev, Technion
Topological Photonics
11:55-12:10 Vladislav Kravets
Multiscale LiDAR compressive sensing with Russian dolls ordered Hadamard basis
12:10-12:25 Yaron Heiser
Deep neural network for reconstruction of compressive sensing hyperspectral images
12:25-12:40 Saswata Mukherjee
Non-Invasive imaging through a thin scattering layer using a SLM
12:40-12:55 Mani Ratnam Rai
Resolution Enhancement of incoherent imaging systems using a phase-only spatial light modulator
12:55-13:10 Angika Bulbul
Superresolution Far-Field Imaging by Annular Array of Coded Phase Apertures

13:10-14:10 Lunch break + Poster session
Session III
Chair: Prof. Amiel Yeshaya
14:10-14:20
KLA Price awarding
14:25-15:05
Dr. Avner Safrani,
Invited Talk: KLA Low Coherence Dual Interferometry System for Wafer Thickness Measurements
15:05-15:20
Eyal Yacoby
Studies at Ben-Gurion University of continuous wave diode pumped cesium and potassium lasers with gas circulation
15:20-15:35
Ilya Auslander
Experimental and theoretical studies of diode-pumped alkali lasers
15:35-15:50
Aviran Halstuch
Femtosecond inscription of tunable, narrow-band, and phase shifted fiber Bragg gratings
15:50-16:10
Coffee break

Session IV
Chair: Prof. Shlomi Arnon
16:10-16:25
Hadar Manis-Levy
Energy band alignment role of CBD grown PbS(Th,O)/CdS heterojunctions for PV SWIR detection
16:25-16:40
Chen Klein
Molecular–Reductant-induced-control-of-a-Graphene Organic Interface for Electron injection
16:40-16:55
Ankit Chauhan
Near-field optical microscopy of silicon arrays composed of subwavelength light funnel arrays
16:55-17:10
Sarah Sowmya Priya Konedana
Light Funnel Arrays realized on Silicon-on-insulator
17:10-17:20
Prof. Adrian Stern
Concluding remarks

Registration is free but required via: https://forms.gle/en31VjGUNPzY1Lqx9

Sponsors:
13:15-14:15

**Poster session**

Lidor Kahana  
*Up-conversion MMW imaging system based on Glow Discharge Detector row attached to commercial contact image sensor*

Kobi Aflalo  
*Yellow LASER for Eye Surgery*

Odded Geffen  
*Developing a machine vision system for detecting laying hens*

Moti Ben Laish  
*Ultra-wideband and inexpensive glow discharge detector for millimeter wave wireless communication based on upconversion to visual light*

Israel Hory  
*Design and simulation of a chemical bio-sensor based on double ring resonator waveguide*

Rudrarup Sengupta  
*A unique technology proposition on room Temperature THz detection with graphene on AlGaN/GaN HEMT*

Yakov Greenberg  
*Silicon Mode Converters Based on Dielectric Metamaterial Waveguide*

Shaul Shmilovich  
*Nano-satellite hyperspectral imager based on a wedge shaped liquid crystal for spectral multiplexing*

Shimon Elkabetz  
*Frequency conversion from single nano-particles*

Yosef Bivas  
*Sum-frequency generation from touching dimer*

Evyatar Rimon  
*An optical frequency atomic clock: the most accurate machine ever built*

Improved Power Conversion Efficiency of Organic Solar Cells by Integrating Grating Metasurfaces

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