

# Tentative list of posters

## Thin films, Electronic and Optoelectronic Devices

**P-TF-1 Schottky Barrier Height Formation and Electrical Characterization of Diodes Based on TiN/p-Si(100)**

A. Douhin, BGU

**P-TF-2 Template Growth of PbS, CdS and ZnS Nanocrystals on Polydiacetylene Langmuir Film: A GIXD Study**

Y. Lifshitz, Amir Berman, BGU

**P-TF-3 Morphological Characterization of PbS Thin Films Chemically Deposited on GaAs(100) Substrates**

A.Osherov, BGU

**P-TF-4 Polarized Near field Scanning Optical Microscopy - A Novel Method for Chirality Measurements on Surfaces**

A.Landau, BIU

**P-TF-5 Investigation of the Thermally Deposited VO<sub>2</sub> Thin Films**

A. Axelevitch, HAIT

**P-TF-6 Proximity Effect, Crossed Andreev Reflections and the Pseudogap in High-Temperature Superconductors**

O. Yuli, HU

**P-TF-7 Study of The PbS Condensate Thin Films By The Saxs Method**

V. Gomozov, Kharkov Technical University

**P-TF-8 Non-Gaussian Dark Current Noise in a P-type Quantum-Well Infrared Photodetectors**

N. Snapi, Soreq NRC

**P-TF-9 Effect of Deposition Conditions on the Characteristics of Highly Transparent and Conducting ZnO-SnO<sub>2</sub> Thin Films Deposited by Filtered Vacuum Arc Deposition (FVAD)**

E. Çetinörgü, TAU

**P-TF-10 Multiple Aspect Ratio Structural Integration (MASIS) for MOEMS (micro-opto-electro-mechanical-systems)**

N. Elman, TAU

**P-TF-11 Self-Assembly Process of Dipeptide-Nanotube Films**

N.Hendler, N.Sidelman, TAU

**P-TF-12 Carbon Nanotubes Based Ion Sensitive Field Effect Transistors for Neuronal Sensing**

I. Kalifa, TAU

**P-TF-13 Proton Exchange in Magnesium-Oxide-Doped Stoichiometric Lithium Tantalate**

N. Sahian Amit, TAU

**P-TF-14 Stable Blue-Emitting Conjugated Polymer/Inorganic Layered Compound Guest/Host Nanocomposites**

E. Aharon, Technion

**P-TF-15 The Self-Organization of Semiconducting Polymer/Mesoporous Silica Nanocomposites**

S. Kirmayer, Technion

**P-TF-16 Chemical Evolution of Quasi-Amorphous BaTiO<sub>3</sub>**

D. Ehre, WIS

**P-TF-17 Spin-Polarized Electronic Structure of Mn-IV-V<sub>2</sub> Chalcopyrites**

D. Naveh, WIS

**P-TF-18 Chemical Bath Deposited CdS/CdSe-Sensitized Porous TiO<sub>2</sub> Solar Cells**

O. Niitsoo, WIS

## **Molecular Electronic**

**P-ME-1 General Parameterization of Molecular I-V Curves Based on the Simmons Tunneling Model**

A. Vilan, BGU

**P-ME-2 From Poly (G)-Poly(C) to G4:**

- Length comparison study

- Effect of metallization on the G4 morphology and polarizability

J. Ghabboun, HU

**P-ME-3 Topographic and Polarizability Characterization of SP1-Protein-Gold Nanoparticle Hybrids**

I. Medalsy, HU

**P-ME-4 STM Characterization of Single DNA Molecules: Tunneling Spectroscopy and Contrast Inversion**

E. Shapir, HU

**P-ME-5 From a Single Molecular Electronics Device to a Molecular Electronics Network**

N. Elman, TAU

**P-ME-6 Photo and Voltage Induced Self-Assembled Monolayer of Photo-System-I Based Nanoparticles**  
M. Shai-li, TAU

**P-ME-7 Self-Assembled DNA Based Electrical Circuits**  
E. Capua, WIS

**P-ME-8 STM-Induced Switching of Dye Molecule Charge State on a GaAs Substrate**  
S. R. Cohen, WIS

**P-ME-9 Raman Scattering From a Single Molecule between Two Metal Nanoparticles**  
T. Dadosh, WIS

**P-ME-10 p-GaAs-S-Alkyl / Hg Junction**  
G. Neshet, WIS

**P-ME-11 Odd and Even Effects of Alkyl Chain Molecules in Metal/Molecular/Semiconductor (Me/Mo/Se) Devices**  
O. Seitz, WIS

**P-ME-12 Sequence Dependence of the Charge Transport Properties of Double Stranded DNA**  
C. Nogues, WIS

## **Nanomaterials and Nanomechanics**

**P-NM-1 Nanomaterials in Two Dimensions**  
S. Acharya, BGU

**P-NM-2 Substantial Improvement of Dye sensitized Solar Cell (DSSC) Photovoltaic Characteristics by Conformal TiO<sub>2</sub> and/or MgO Coatings of the Titania Nanocrystalline Electrode**  
L. Grinis, BIU

**P-NM-3 Microwave Superheating for the Synthesis of TiO<sub>2</sub> Rods**  
Vilas G. Pol, BIU

**P-NM-4 The Effect of Orientation in Nanocrystallites TiO<sub>2</sub> Layers on Electron Transport Properties: Application to Dye Sensitized Solar Cells**  
S. Tirosh, BIU

**P-NM-5 Deposition and Friction Properties of WS<sub>2</sub> Solid Lubricant Films on the Contact Surfaces**  
L. Rapoport, HAIT

**P-NM-6 Electronic Structure of Metal-Semiconductor Nanojunctions in Gold-Tipped CdSe Nanorods**  
D. Steiner, HU

**P-NM-7 Dynamics of Domain Growth in the Inhomogeneous Field of Atomic Force Microscope**  
A. Agronin, TAU

**P-NM-8 Nanodomain Inversion Under Different Humidity Conditions using Atomic Force Microscopy**  
D. Dahan, TAU

**P-NM-9 Automated Identification of Scanning Electron Micrograph Features Using Automatic Target Recognition**  
M. Kaplan, TAU

**P-NM-10 Low Temperature Ultra High Vacuum Kelvin Probe Force Microscopy of InSb Quantum Dots**  
A. Schwarzman, TAU

**P-NM-11 Growth and Annealing of Nanocrystalline Cd<sub>x</sub>Zn<sub>1-x</sub>S Films for Microelectronics**  
S. Stolyarova, Technion

**P-NM-12 Photoelectron Spectroscopy as a Structural Probe of Intermediate Size Clusters**  
O. Guliamov, WIS

**P-NM-13 Size-Dependent Spintronic Properties of Dilute Magnetic Semiconductor Nanocrystals**  
A. Makmal, WIS

**P-NM-14 Inorganic Closed-cage Structures Formed by Laser Ablation**  
M. Bar Sadan, WIS

**P-NM-15 Bending Tests of WS<sub>2</sub> Nanotubes**  
I. Kaplan-Ashiri, WIS

**P-NM-16 Electric Transport Properties and NMR Study of the Fullerene-Like WS<sub>2</sub> Nanoparticles**  
F. Kopnov, WIS

**P-NM-17 Fullerene-like Nanoparticles of Titanium Disulfide**  
A. Margolin, WIS

## **Surface Modification**

### **P-SM-1 Investigation of Molten Iron Behavior in Polycrystalline SiC**

**Heater Contacts**

A. Axelevitch, HAIT

### **P-SM-2 Micrometer Scale Gel Patterns**

E. Jakobs, TAU

### **P-SM-3 Versatile Layer-by-Layer Formation of Palladium Coordination-Based Organic Multilayers: Factors Controlling Optical Properties**

M. Altman, WIS

### **P-SM-4 Polarization Study of Surface-enhanced Raman Scattering of Individual Rhodamine-6G Molecules**

T. O. Shegai, WIS

## **Vaccum Technology**

### **P-VT-1 Hypervelocity Impact Of Organic Fibers / Epoxy**

**Composite Materials**

S. Kats, WIS

### **P-VT-2 Interaction of Water Vapor with Polycrystalline Uranium Surfaces: the Low Temperature Regime**

E. Tiferet, BGU

## **Crystal Growth And Epitaxy**

### **P-CG-1 Nanocrystalline and Single Crystal Lead Selenide Films obtained by Chemical Bath Deposition**

M. Shandalov, BGU

### **P-CG-2 Growth and Thermal Expansion Properties of NaGd(WO<sub>4</sub>)<sub>2</sub> Single Crystal**

S. Perets, BGU

### **P-CG-3 The Unique Growth Process of the Ultrathin Apatite for Bone Formation**

S. Sarig, HU

### **P-CG-4 Carbon Nanotube Networks**

Z. Abrams, TAU

### **P-CG-5 Production of Tungsten Carbide Powder by a Pulsed Submerged Arc**

L. Glikman, TAU

**P-CG-6 High Density Nanometer-Scale InSb Dots Formation Using Droplets  
Heteroepitaxial Growth by MOCVD**  
S. Shusterman, Soreq NRC and TAU

**P-CG-7 Molecular Simulations of Solute/Crystal Interfaces in Protein Solution  
Systems**  
R. Gal, Technion

**P-CG-8 Simulation of Pattern Formation During Czochralski Growth of GeSi Crystals**  
I. Rasin, Technion

**P-CG-9 Role of Serum and Synovial Fluid Immunoglobulins on Monosodium Urate  
Monohydrate (MSUM) Crystal Formation and Deposition in Gout**  
J. Mahamid, WIS