



## POSTERS – Life Sciences

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### P-1

#### **ADDING “COLORS” TO CRYO-RM: EXTRACTING LOCAL CHEMICAL INFORMATION FROM RADIATION DAMAGE**

Gili Abelya<sup>1</sup>, Gabriel A. Frank<sup>1,2</sup>, Ran Zalk<sup>3</sup>

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### P-2

#### **RNA EXPORT THROUGH THE NUCLEAR PORE COMPLEX IS DIRECTIONAL**

Asaf Ashkenazy-Titelman, **Mohammad Atrash**, Alon Boocholez, Yaron Shav-Tal

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### P-3

#### **SINGEL CELL DYNAMIC MORPHOKINETIC ANALYSIS AS A TOOL TO STUDY THE SIGNALING AND METABOLISM MOLECULAR MECHANISMS OF CELL MOTILITY – THE ROLE OF MET IN SARCOMA AS A MODEL**

**Monika Bhowmik**

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### P-4

#### **STUDY THE INTERPLAY BETWEEN DRIVER GENE AND MODIFIER GENES DICTATES BREAST CANCER DEVELOPMENT – MET ONCOGENE AND AI PATHOMICS & MICROSCOPY AS A MODEL**

**Michal Bloom**<sup>1</sup>, Yuval Man<sup>1</sup>, Daniel Moshel<sup>1</sup>, Dvora Kidron<sup>2</sup>, Galia Tsarfaty<sup>3</sup>, Judith Horev<sup>1</sup>, Fuad A Iraqi<sup>1</sup>, Ilan Tsarfaty<sup>1</sup>

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### P-5

#### **ACIDITY FLUCTUATIONS INDUCE STRUCTURAL AND FUNCTIONAL CHANGES IN COLLAGEN HYDROGEL**

**Orit Bronner**<sup>1</sup>, Einat Nativ-Roth<sup>2</sup>, Raquel Isidoro Silva<sup>2</sup>, Netta Vidavsky<sup>1</sup>

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### P-6

#### **IMAGING OF PRECANCER TUMOR MODEL TO STUDY THE RELATIONSHIP BETWEEN MICROCALCIFICATIONS AND MALIGNANCY**

**Amit Cohen**, Lotem Gotnayer, Dina Aranovich, Netta Vidavsky

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### P-7

#### **AN IMAGING SYSTEM WITH MULTI-MODALITY APPLICATIONS (SIM/STED/STORM) APTITUDES FOR SUPER-RESOLUTION IN SPACE AND TIME**

**Nitsan Dahan, Yael Lupu Haber**

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## P-8

### **A NANOSTRUCTURAL STUDY OF BLOOD SYSTEMS USING CRYOGENIC ELECTRON MICROSCOPY**

Irina Davidovich<sup>1</sup>, Carina Levin<sup>2</sup>, Yeshayahu Talmon<sup>1</sup>

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## P-9

### **ELUCIDATING THE FORMATION OF NANOPOROUS BIOSILICA USING CRYO ELECTRON MICROSCOPY**

Diede de Haan<sup>1</sup>, Lior Aram<sup>1</sup>, Nadav Elad<sup>2</sup>, Katya Rechav<sup>2</sup>, Eyal Shimoni<sup>2</sup>, Assaf Gal<sup>1</sup>

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## P-10 - CANCELLED

## P-11

### **OPTIMAL MULTI-CHANNEL WAVEFRONT SHAPING FOR HIGH DENSITY 3D LOCALIZATION MICROSCOPY**

Boris Ferdman<sup>1,2</sup>, Elias Nehme<sup>2,3</sup>, Lucien Weiss<sup>5</sup>, Tal Naor<sup>2</sup>, Daniel Freedman<sup>4</sup>, Tomer Michaeli<sup>3</sup>, Yoav Shechtman<sup>1,2</sup>

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## P-12

### **ENGINEERING THE POINT-SPREAD FUNCTION OF CONFOCAL MICROSCOPY**

Lidan Fridman, Dvir Yelin

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## P-13

### **THE STRUCTURAL BASIS FOR THE VIRULENCE AND HOST-PATHOGEN INTERACTIONS OF MICROBIAL AMYLOIDS**

Nimrod Golan, Amit Parizat, Meytal Landau

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## P-14

### **GLUCOCORTICOID ENHANCE CHEMOTHERAPY-DRIVEN STRESS GRANULE ASSEMBLY AND PROMOTE GRANULE RIGIDITY LINKED TO CELL DEATH**

Hila Hamiel<sup>1</sup>, Avital Schwed-Gross<sup>1</sup>, Gabriel P. Faber<sup>1</sup>, Mor Angel<sup>1</sup>, Rakefet Ben-Yishay<sup>2</sup>, Dana Ishay-Ronen<sup>2</sup>, Yaron Shav-Tal<sup>1</sup>

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## P-15

### **SEEING THE IMPULSE RESPONSE OF THE TYMPANIC MEMBRANE**

Matan Hamra, Lidan Fridman, Rotem Yacoby, Dvir Yelin

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**P-16**

**HIGH CONTENT SCREENING AT ULTRASTRUCTURAL LEVEL OF HUMAN CELLS BY HMULTI-CLEM**

**Sarah Hassdenteufel, Nir Cohen, Yury Bykov, Maya Schuldiner**

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**P-17**

**THE ROLE OF MODIFIER GENES IN EMBRYO AND TUMOR DEVELOPMENT – BRCA1 AS A MODEL**

**Hala Kassis, Dvora Kidron, Galia Tsarfaty, Judith Horev, Ilan Tsarfaty**

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**P-18**

**HOW cryo-EM ILLUMINATES THE UNIQUE TOPOLOGY AND PRE-LOADED RECEPTOR PRESENT WITHIN THE LASSA VIRUS' SPIKE COMPLEX**

**Michael Katz**

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**P-19**

**SUPERVISED MACHINE LEARNING FOR THE QUANTIFICATION OF LIPID DROPLETS DYNAMICS**

**Nadav Kislev, Dafna Benayahu**

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**P-20**

**TARGETING ORGANELLE-ORGANELLE ORGANIZATION VIA MICROSCOPY-BASED HIGH-CONTENT PHENOTYPIC SCREENING AND GENERATIVE NEURAL NETWORKS**

**Naor Kolet<sup>1</sup>, Alon Shpigler<sup>2</sup>, Shahar Golan<sup>3</sup>, Assaf Zaritsky<sup>1</sup>**

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**P-21**

**MAPPING OF PHASE SEPARATION OF SUPRAMOLECULAR PROTEIN ASSEMBLIES BY LIVE-CELL HOLOTOMOGRAPHY MICROSCOPY**

**Orlando Marin, Arina Dalaloyan, Michael Elbaum**

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**P-22**

**UNCOVERING THE ROLE OF PALLADIN IN THE MET/HGF AXIS IN BREAST CANCERS**

**Ori Mayer, Ohad Doron, Or Megides, Ori Moskowitz, Joshua Bugis, Ilan Tsarfaty, Noam Shomron**

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## P-23

### **UNRAVELING THE NUCLEAR ARCHITECTURE OF *PLASMODIUM FALCIPARUM* USING CRYO-SCANNING TRANSMISSION ELECTRON TOMOGRAPHY (CSTET)**

**Debakshi Mullick**<sup>1</sup>, Peter Kirchweger<sup>2</sup>, Prabhu Prasad Swain<sup>4</sup>, Michael Elbaum<sup>1</sup>, Katya Rechav<sup>5</sup>, Ron Dzikowski<sup>3</sup>, Vera Mitesser<sup>3</sup>, Neta Regev-Rudzki<sup>6</sup>

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## P-24 - CANCELLED

## P-25

### **UNRAVELING THE DYNAMICS OF NUCLEAR SPECKLES AND GENE EXPRESSION DURING HERPES VIRUS INFECTION**

**Shani Nadav Eliyahu**<sup>1</sup>, Sami Salminen<sup>2</sup>, Vesa Aho<sup>2</sup>, Salla Mattola<sup>2</sup>, Maija Vihinen-Ranta<sup>2</sup>, Yaron Shav-Tal<sup>1</sup>

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## P-26

### **LIVE CONFOCAL IMAGING OF GROWING ARABIDOPSIS ROOTS**

**Alessia Perilli**<sup>1</sup>, Yoni Koren<sup>2</sup>, Oren Tchaicheeyan<sup>2</sup>, Ayelet Lesman<sup>2</sup>, Yasmine Meroz<sup>1</sup>

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## P-27

### **USING EXPANSION MICROSCOPY TO STUDY THE FORM AND FUNCTION OF NUCLEAR ENVELOPE INVAGINATIONS IN ZEBRAFISH EMBRYONIC DEVELOPMENT**

**Ory Perlsman**, Limor Freifeld

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## P-28

### **CUSTOM SAMPLING AND PROCESSING TECHNIQUES IN CRYO-SCANNING TRANSMISSION ELECTRON MICROSCOPY**

**Shahar Seifer**, Michael Elbaum

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## P-29

### **UNCOVERING THE FUNDAMENTAL PRINCIPLES OF MUSCLE REGENERATION USING LIVE CELL IMAGING AND MACHINE LEARNING (PROPOSED AS A TANDEM TALK)**

**Amit Shakarchy**<sup>1</sup>, Giulia Zarfati<sup>2</sup>, Yael Elbaz-Alon<sup>2</sup>, Ori Avinoam<sup>2</sup>, Assaf Zaritsky<sup>1</sup>

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**P-30**

**APPLYING IN SILICO LABELING VIA TRANSFER LEARNING TO DISSECT ORGANELLE – ORGANELLE SPATIAL DEPENDENCIES**

**Kathrine Smoliansky, Assaf Zaritsky**

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**P-31**

**SPATIAL BIOLOGY SOLUTIONS FOR BIOMARKER DISCOVERY**

**Robert Stad**

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**P-32**

**ORGAN-ON-A-CHIP PLATFORM WHICH ENABLES SUPER RESOLUTION MICROSCOPY**

**Yfat Weiss<sup>2</sup>, Yifat Weiss<sup>1,3</sup>, Ofir Sade<sup>1</sup>, Uri Ashery<sup>1,3</sup>, Ben Maoz<sup>2,3</sup>**

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**P-33 - CANCELLED**



## POSTERS – Materials Science

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### P-34

#### **METHODOLOGY FOR MEASURING THE ELASTIC AND INELASTIC MEAN FREE PATHS FOR SCATTERING OF FAST ELECTRONS IN TECHNOLOGICALLY IMPORTANT THIN-FILM OXIDES**

**Adham Basha**<sup>1</sup>, George Levi<sup>1</sup>, Yang Li<sup>3</sup>, Guy Ankonina<sup>3</sup>, Pini Shekhter<sup>2</sup>, Lior Kornblum<sup>3</sup>, Ilan Goldfarb<sup>1</sup>, Amit Kohn<sup>1</sup>

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### P-35

#### **HALLOYSITE BASED PICKERING EMULSIONS FOR AGRICULTURE**

**Avital Benhaim**<sup>1,2</sup>, Guy Mechraz

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### P-36

#### **SOLID STATE DEWETTING OF Ni-Co BILAYERS ON SAPPHIRE: INSIGHTS ON PORE FORMATION**

**Anuj Bisht**<sup>1</sup>, Yuanshen Qi<sup>2</sup>, Leonid Klinger<sup>1</sup>, Eugen Rabkin<sup>1</sup>

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### P-37

#### **WHAT ARE THE OPTIMAL CONDITIONS FOR DETECTION OF A SMALL PORE BY HIGH RESOLUTION TRANSMISSION ELECTRON MICROSCOPY?**

**Roei Broneshter**, Wayne D. Kaplan

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### P-38

#### **EXUDATION OF GLASS FROM GRAIN BOUNDARIES IN ALUMINA**

**Noy Fabri**<sup>1</sup>, Rachel Marder<sup>1</sup>, Riccardo Rovai<sup>2</sup>, Wayne D. Kaplan<sup>1</sup>

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### P-39

#### **TWO DIMENSIONAL (2D) DOPING PROFILE IN PATTERNED InP/InGaAs LAYERS USING PLASMA FOCUSED ION BEAM (PFIB)**

**Ilana Grimberg**<sup>1</sup>, Galit Atiya<sup>2</sup>, Michael Klina<sup>2</sup>, Yehuda Furst<sup>1</sup>

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#### P-40

### **SMART – DESIGN OF UNIVERSALLY DECORATED NANO – PARTICLES FOR DRUG DELIVERY APPLICATION DRIVEN BY ACTIVE TRANSPORT**

**Gal Halbi Yosipov**<sup>1</sup>, Itay Fayer<sup>2</sup>, Dina Aranovich<sup>1</sup>, Shachar Gat<sup>1</sup>, Vitali Yeruhimowitz<sup>1</sup>, Rony Granek<sup>2,3</sup>, Anne Bernheim-Groswasser<sup>1,3</sup>

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#### P-41

### **ENHANCED PHOTOCATALYTIC ACTIVITY OF Cs<sub>4</sub>PbBr<sub>6</sub>/ WS<sub>2</sub> NS HYBRID NANOCOMPOSITE**

**Philip Nathaniel Immanuel**, Archana Byregowda, Lena Yadgarov

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#### P-42

### **THE EFFECT OF SALTS ON THE NANOSTRUCTURE OF SLES AQUEOUS SOLUTIONS OBSERVED BY Cryo-TEM**

**Sapir Lifshiz**<sup>1</sup>, Werner Kunz<sup>2</sup>, Yeshayahu Talmon<sup>1</sup>

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#### P-43

### **WRINKLING AND BUCKLING INSTABILITIES OF CONTRACTILE SUSPENDED ACTOMYOSIN SHEETS**

**Gefen Livne**, Anne Bernheim

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#### P-44

### **HERALDED SPECTROSCOPY OF SINGLE NANOCRYSTALS REVEALS EXCITON-EXCITON INTERACTION**

**Gur Lubin**<sup>1</sup>, Ron Tenne<sup>1,2</sup>, Arin Can Ulku<sup>3</sup>, Ivan Michel Antolovic<sup>3</sup>, Samuel Burri<sup>3</sup>, Sean Karg<sup>1</sup>, Venkata Jayasurya Yallapragada<sup>1</sup>, Claudio Bruschini<sup>3</sup>, Edoardo Charbon<sup>3</sup>, Dan Oron<sup>1</sup>

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#### P-45

### **GOLDEN VATERITE AS A MESOSCOPIC METAMATERIAL FOR BIOPHOTONIC APPLICATIONS**

**Andrey Machnev**, Roman Noskov, Pavel Ginzburg

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#### P-46

### **THE INFLUENCE OF CARBON ON THE MICROSTRUCTURE AND WEAR OF ALUMINA**

**Rachel Marder**<sup>1</sup>, Priyadarshini Ghosh<sup>1</sup>, Li-Or Cohen<sup>1</sup>, Ivar Reimanis<sup>2</sup>, Wayne D. Kaplan<sup>1</sup>

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**P-47**

**THIN LAYER BUCKLING IN PEROVSKITE CsPbBr<sub>3</sub> NANOBELTS**

**Emma Massasa**<sup>1</sup>, Rotem Strassberg<sup>1,2</sup>, Amit Vurgaft<sup>1,2</sup>, Yaron Kauffmann<sup>1</sup>, Noy Cohen<sup>1</sup>, Yehonadav Bekenstein<sup>1,2</sup>

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**P-48**

**EFFECT OF LOW ACCELERATION VOLTAGE SCANNING ELECTRON MICROSCOPE OPERATION PARAMETERS ON MICROGRAPH CONTRAST**

**Asia Matatyaho-Ya'akobi**, Yeshayahu Talmon

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**P-49**

**CATHODOLUMINESCENCE SPECTROSCOPY FOR ADVANCED MATERIAL SCIENCE**

**Nicolas MEDARD**, Samuel SONDEREGGER

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**P-50**

**INSIGHTS INTO THE CHEMISTRY OF VAPOR PHASE INFILTRATION FOR IMAGING NON-FULLERENE ACCEPTORS**

**Oded Nahor**<sup>1</sup>, Anthony Cohen<sup>2</sup>, Gitti L. Frey<sup>1</sup>

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**P-51**

**POLYELECTROLYTE COMPLEXES OF QPDMAEMA-*b*-POEGMA WITH DNA AND THE EFFECT OF SERUM ALBUMIN**

**Sapir Rappoport**<sup>1</sup>, Stergios Pispas<sup>2</sup>, Yeshayahu Talmon<sup>1</sup>

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**P-52**

**DOUBLE GAS TREATMENT: A SUCCESSFUL APPROACH FOR STABILIZING THE LI AND MN-RICH NCM CATHODE MATERIALS` ELECTROCHEMICAL BEHAVIOR**

**Hadar Sclar**<sup>1</sup>, Sandipan Maiti<sup>1</sup>, Rosy Sharma<sup>1</sup>, Judith Grinblat<sup>2</sup>, Michael Talianker<sup>3</sup>, Maria Tkachev<sup>2</sup>, Merav Tsubery<sup>1</sup>, Xiaohan Wu<sup>4</sup>, Malachi Noked<sup>1</sup>, Boris Markovsky<sup>1</sup>, Doron Aurbach<sup>1</sup>

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**P-53**

**TUNABLE MIE RESONANCE IN BAR- AND CUBE-LIKE GADOLINIUM NIOBATE: THEORY AND EXPERIMENT**

**Anastasiya Sedova**<sup>1</sup>, David Bermudez<sup>2</sup>, Miriam M. Tellez-Cruz<sup>3</sup>, Ciro Falcony<sup>2</sup>

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**P-54**

**GRAIN BOUNDARY MOBILITY OF ALUMINA AS A FUNCTION OF VARYING DOPANT CONCENTRATIONS**

**Yathreb Shalabi**, Rachel Marder, Wayne Kaplan

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**P-55**

**A CRYO-TEM STUDY OF THE COMPLEXATION OF DOTAP LIPOSOMES WITH DIFFERENT POLYELECTROLYTES**

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**P-56**

**HYBRID-PIXEL DETECTORS FOR TEM BY DECTRIS**

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**P-57 - CANCELLED**

**P-58**

**DYNAMICAL NATURE OF EXCITON-POLARITON COUPLING IN WS<sub>2</sub> NANOPARTICLES**

**Lena Yadgarov**<sup>1</sup>, Sudarson S. Sinha<sup>2</sup>, Bojana Višić<sup>3</sup>

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