

RESUME: SHLOMI LIGHTMAN

Date of birth: 28/12/80

I.D:040456576

Phone number: 050-7905590

E-mail: shlomi.litman@gmail.com

EDUCATION

2013-2017: Ph.D in Electrical Engineering, Tel-Aviv University, Israel

2010-2013: M.Sc in Physics. Nanotechnology center, Bar-Ilan University, Israel

2005-2010: B.Sc. In Physics. Technion, Israel Institute of Technology, Israel

2005-2010: B.Sc. In Materials Engineering. Technion, Israel Institute of Technology, Israel

2004-2005: Graduate of a Pre-academic studies. Technion, Israel Institute of Technology, Israel

ACADEMIC EXCELLENCE AND AWARDS

2013/14: Outstanding student research Fellowship of the Nanotechnology center for students of advanced degrees.

2017: Pazy award for outstanding students (during PhD)

TEACHING EXPERIENCE

2010-2013: Teaching Assistant at the physics department of several courses:

2010-2013: Classical mechanics (frontal), Nanotechnology (frontal + lab), Physics labs.

PROFESSIONAL / RESEARCH EXPERIENCE

2013-present: PhD student position at NRC- Soreq. The research focuses on Beam manipulations by using 3D- direct laser writing lithography. Tailoring complex beams by fabrication of miniature phase elements which are be integrated in various optical devices.

2010-2013: Master student in Bar-Ilan Uni. Research of physical phenomena of advanced materials in the Nano-scale, exploring the behavior of materials that possess phase transition (electric, magnetic). Creation of Nano-devices using different fabrication methods (physical vapor deposition), mainly by epitaxial growth. High ability of growing and fabrication different advanced materials. During the research gained high expertise on different Characterization methods. Thesis: "The Proximity Effect between highly correlation Electron systems and Self Assembled Monolayers (SAM)".

2009-2010: A member in a physical chemistry group at the Technion that explores surface dynamics processes. The group developed a unique measurement system: **Spin Echo Spectroscopy** which yields surface analysis of extremely high resolution. The research involved ultra-high vacuum systems, developing electric and magnetic devices for different purposes of system, numeric calculation and complex physical simulations.

2008: Student position in a control and supervision group (OCC) at **Intel**.

Fabrication techniques: high level operation and maintenance of: Plasma Magnetron Sputtering, Pulsed-Laser Deposition (PLD), and 3D-Direct Laser Lithography (3D-DLW).

Characterization and analysis methods:

Thin film X-Ray Diffraction (XRD) operator, XPS, Scanning\Transmission Electron Microscopy (SEM\TEM), Atomic Force Microscopy (AFM), magnetic and electrical measurements (Transport\magneto-resistance, I-V), White-Light Interferometry.

Computer calculation and simulation: High proficiency in COMSOL Multiphysics and MATLAB.

Military service 1999-2002: Duvdevan and Oketz

LANGUAGES

Hebrew: Native language \ English: Proficient