

Yehonadav Bekenstein

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Education

2004-2007 | **BA (at HU) Exact Sciences Program (Physics and Chemistry)**

2008-2009 | **MA (at HU) Physics;**

Thesis Topic: Electrical measurements through single DNA molecules.

Mentor Prof. Danny Porath

2010-Present | **PhD (at HU) Physics;**

Thesis Topic: Electrical properties of cage-like colloidal semiconductor/metallic hybrid quantum dots.

Mentors Prof. Uri Banin and Prof. Oded Millo.

Latest academic awards:

Schuller prize 2013– for Experimental physics

NanoIsrael 2012 International conferences – best poster award

HU faculty of science- 2012 best poster award

HU nano-center conference 2011 – best poster award

HU representation experiences

Selected talk at Prof Anthony Legget's class Global young scientist summit 2013 Singapore

Israel presidential conference 2012 & 2011

HU Scientific address to the public - Israel train 2010



experience

2009 – present | **Head of the physics programs in the youth educational division HU.**

Writing and developing educational programs suitable for the youth.

2008 – present | **Teaching assistant; Physics department HU.**

Instructor of bachelors third year physics lab.

12/2009-1/2010 | **Research collaboration at Columbia university with Prof Shalom Wind's group.**

Learning advanced nanoscale lithographic techniques.

7/2007-10/2007 | **Summer project at Soreq Applied Research Accelerator Facility(SARAF)-Soreq nuclear research center.**

Conducting simulations of beam profiles for accelerated particles.

2004-2005 | **Israel Aerospace Industries(IAI).Systems Missiles and Space Group.**

Member of research and development team.

1998-2004 | **Naval officer in the Israeli navy.**

Publications

1. Periodic negative differential conductance in a single metallic nanocage
Y Bekenstein, K Vinokurov, TJ Levy, E Rabani, U Banin, O Millo
Physical Review B 86 (8), 085431
2. Electronic properties of hybrid Cu₂S/Ru semiconductor/metallic-cage nanoparticles
Y Bekenstein, K Vinokurov, U Banin, O Millo
Nanotechnology 23 (50), 505710
3. Controlling Localized Surface Plasmon Resonances in GeTe Nanoparticles Using an Amorphous-to-Crystalline Phase Transition
Mark J. Polking, Prashant K. Jain, Yehonadav Bekenstein, Uri Banin, Oded Millo, Ramamoorthy Ramesh, and A. Paul Alivisatos
Physical Review Letters 111 (3), 037401
4. Colloidal Semiconductor Nanorod Couples Via Self-Limited Assembly
Guohua Jia, Amit Sitt, Gal B. Hitin, Ido Hadar, Yehonadav Bekenstein, Yorai Amit, Inna Popov, Uri Banin- submitted
5. Exceptional hazard in the inflation of heart shaped balloons
Brosh Koby MD, Bekenstein Yehonadav, Tamar Goldman, Israel Strassman MD,
Acta Ophthalmologica- 2013