

Dr. Yair Tamar

Mobile: 054-3377251, Age:40, Email: yair.tamar@gmail.com

Work Experience:

2014-Current: Rafael ltd: R&D Lead

Leading a team of 5 engineers developing 2 products, two of them are commercial secrets.

- ✓ Leading a R&D program from scratch to TRL 5 within 2 years.
- ✓ Responsible of executing the R&D program from all aspects. (motivating employees, time tables...).

2010-2014: Siemens CST: R&D researcher.

- ✓ Development of phase change material based energy storage system.
 - ✓ Development of new optical coating system.
-

Education:

- ✓ PhD at HUJI. Research topic: “*Topics in Research and Development of Anti- Reflective Coatings for Solar Technology*”. Year of graduation 2016.
 - ✓ M.Sc in an excellence program of Physics and Chemistry at HUJI. Research topic: “*Magnesium Corrosion inhibition using Sol-Gel Coatings*”. Year of graduation 2009. Final Grade: 90.30.
Expertise: Electrochemistry.
 - ✓ B.Sc. in an excellence program of Physics and Chemistry at HUJI. Year of graduation 2006.
Final Grade: 86.87.
-

Additional Information:

- ✓ Full military service at the artillery corp.(1999-2002). Last Function: Non-Commissioned Officer.
- ✓ Fluent English.

Publications:

- Y.Tamar, D.Mandler, "Corrosion inhibition of magnesium by combined zirconia silica sol-gel films", *Electrochimica Acta*, Vol. 16, p. 5118-5127, 2008.
- A.Nahor, O.Berger, Y. Bardavid, G.Toker, Y.Tamar, L.Reiss, M. Asscher, S.Yitzchaik, A.Sa'ar, "Hybrid structures of porous silicon and conjugated polymers for photovoltaic applications". *Current Topics in Solid State Physics*, Vol. 9, P. 1908-1912, 2010.
- Y.Tamar, Y.Sasson, "Examination of the regime controlling sol-gel based colloidal silica aggregation", *Journal of Non-Crystalline Solids*, Vol. 380, P.35-41, 2013.
- Y.Tamar, M.Kahanov, M.Tzabari, Y.Sasson, " Estimation of the porosity and refractive index of sol-gel silica films using high resolution electron microscopy", *Solar Energy Materials and Solar Cells*, Vol. 130, p.246-256, 2014.
- Y.Tamar, M.Kahanov, C.Haspel, Y.Sasson, " Size selectivity during dip coating of sol-gel silica-based antireflective coatings and its effect on the porosity of the coatings", *Journal of Coatings Technology and Research*, Vol. 13, p.1103-1113, 2016.
- Y.Tamar, S.Binyamini, M.Ubler, "Heat storage medium useful for thermal energy storage of a solar thermal power plant, comprises mixture of inorganic sulfate and/or carbonate, and inorganic nanoparticles", DE102012211917A1, 2012.
- Y.Tamar, " Heat exchange system of a solar thermal power plant and use of the heat exchange system", PCT/EP2013/053934, 2013.
- Y.Tamar, V.Levin, " Glass tube with an antireflective layer with a composite material, method for manufacturing the glass tube, heat receiver tube with the glass tube and solar collector with the heat receiver tube", WO 2014/131441 PCT/EP2013/053910, 2013.