JANUARY, 2007

Curriculum Vitae

1. PERSONAL DETAILS

Name:	Lior Miller
ID No:	031978414
Date of Birth:	December 27, 1974.
Place of Birth:	Haifa, Israel.
Citizenship:	Israeli
Marital status:	Married, one daughter.
Home address:	18a Ha'emek Street, Kiryat Tivon, 36084, Israel
Telephone:	04-9534810 (home) 04-8294290 (work) (Israel)
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2. ACADEMIC DEGREES

2007- PhD. student, Purdue

Supervisor: Prof. Alex King

2004-2006 Technion-Israel Institute of Technology, Department of Materials Engineering, M.Sc. Research topic: "Processing and Microstructure of Aluminum Oxynitride (AlON)".

Supervisor: Assoc. Prof. Wayne D. Kaplan

1999-2004 Technion-Israel Institute of Technology, Double Major: B.Sc. in Materials Engineering *and* B.A in Chemistry. Cum Laude

3. TEACHING EXPERIENCE:

Teaching assistant in the Department of Materials Engineering, for the following courses:

1. Microstructural Characterization of Materials.
2. Introduction to Materials Engineering.
3. Advanced laboratory for Materials Engineering – Scanning Electron Microscopy.

4. PROFESSIONAL BACKGROUND

2006- Do Coop Technologies, Consultant for Materials Engineering and Electron Microscopy.

2001-3/2004 Lab assistant, Ceramic Laboratory, Department of Materials Engineering, Prof. Wayne D. Kaplan, Technion, Haifa, Israel.

1999-2001 Security officer in the "Internal General Security Service of Israel"

1997-1999 Bodyguard of senior public officials in the "Internal General Security Service of Israel" (Shabak).

5. CONFERENCES

1. Lior Miller and Wayne D. Kaplan, “Solubility Limits of La and Y in Aluminum Oxynitride (AlON) at 1870°C”, Presented at the 40th Annual Meeting - Israel society for Microscopy (ISM), May 10-11 2006, Kibbutz HaGoshrim, Israel
2. Lior Miller and Wayne D. Kaplan, “Solubility Limits of La and Y in Aluminum Oxynitride (AlON) at 1870°C”, oral presentation at the 12th Israel Materials Engineering Conference (IMEC-12), March 1-2, 2006, Beer Sheva, Israel
3. Lior Miller and Wayne D. Kaplan, “Processing Aluminum Oxynitride”, Presented at the 107th annual meeting of the American Ceramic Society, April 10-13 2005, Baltimore, U.S.A.
4. Lior Miller, Amir Avishi and Wayne D. Kaplan, “Direct Measurements of PPM-Level Solubility Limits in Polycrystalline Ceramics: *MgO in Al_2O_3*”, Presented at the 107th annual meeting of the American Ceramic Society, April 10-13 2005, Baltimore, U.S.A
5. Lior Miller, Amir Avishai and Wayne D. Kaplan, "A New Approach to Measuring Solubility Limits of ppm Levels in Polycrystalline Ceramics: MgO in Al_2O_3", Presented at the 38th Annual Meeting - Israel society for Microscopy (ISM), May 11 2004, Hebrew University of Jerusalem, Jerusalem, Israel.
6. Lior Miller, Mike Lieberthal and Wayne D. Kaplan, “Processing Aluminum Oxynitride”, Presented at the 11th Israel Materials Engineering Conference (IMEC-11), December 24 - 25, 2003, Technion - Israel Institute of Technology, Technion City, Haifa, Israel.

6. PUBLICATIONS:

1. L. Miller, A. Avishai and W.D. Kaplan, *Solubility Limit of MgO in Al_2O_3 at 1600°C,* Journal of the American Ceramic Society, **89**[1]: 350-353, 2006.
2. Y. Katsir[*], L. Miller[*], Y. Aharonov and E. Ben Jacob, *The effect of rf-irradiation on electrochemical deposition and its stabilization by nanoparticle doping*, accepted to the Journal of the Electrochemical Society.

   [*] - These authors have equal contribution

3. L. Miller and W. D. Kaplan, *Water-based Method For Processing Aluminum Oxynitride (AlON),* in preparation.
4. L. Miller and W. D. Kaplan, *Solubility Limits of La and Y in AlON at 1870°C,* in preparation.

7. EXPERIMENTAL METHODS:

1. Scanning Electron Microscope (FEI XL30, FEI Quanta 200) combined with Energy Dispersive Spectroscopy (EDS, Oxford Instruments) and Wavelength Dispersive Spectroscopy (WDS, Oxford Instruments).
2. X-Ray diffractometer (Philips PW-3020).
3. Transmission Electron Microscope (JEOL FX 2000, FEI Tecnai T20).
4. High Resolution Transmission Electron Microscope (JEOL 3010UHR).
5. High Resolution Scanning Electron Microscope (LEO Gemini 982)
6. Computerized Optical Microscope + Advanced Image Analysis toolbox (AnalySIS).

8. MILITARY SERVICE

1995-1996 Special combat unit: "Sayaret Egoz"

1993-1995 Special combat unit: "Sayeret Matkal"