

Publications List – Itzhak Edry

Peer reviewed journals

1. M. Gelbstein, I. Edry, N. Froumin and N. Frage, Interfacial Chemical Interactions in the (Alumina/Graphite/Al Alloys) System: Thermodynamic Modeling and Experimental Results, *Metallurgical and Materials Transactions A*, V. 40A, pp. 932-936 (2009).
2. I. Edry, V. Erukhimovitch, A. Shoihet, Y. Mordekovitz, N. Frage, S. Hayun, Effect of Impurity Levels on the Structure of Solidified Aluminum Under Pulse Magneto-Oscillation (PMO), *J. Mater. Sci.* 48, 8438-8442 (2013).
3. A. Schwartz, N. Shamir, N. Froumin, S. Zalkind, I. Edry, A. Haim, M.H. Mintz, Initial oxidation of $TiFe_{1-x}Mn_x$ ($x=0-0.3$) by low dose exposures to H_2O and O_2 , *J. Alloys and Compounds*, 6, 610 (2014).
4. I. Edry, T. Mordechai, N. Frage and S. Hayun, Effects of treatment duration and cooling rates on pure Al solidification upon PMO treatment, *Metallurgical and Materials Transaction A*, 47, 1261-1267 (2016).
5. I. Edry, N. Frage and S. Hayun, The effect of pulse magneto-oscillation on the structure of aluminum solidified under controlled convection, *Materials Letters*, 182, 118-120 (2016).
6. A. Munitz, I. Edry, E. Brosh, N. Derimow, B. E. MacDonald, E. J. Lavernia, R. Abbaschian, Liquid phase separation in AlCrFeNiMo0.3 high entropy alloy, *Intermetallics*, 112, 106517 (2019)
7. L. Natovitz, I. Edry, L. Meshi, Novel AlCrFeNiNb0.3, high entropy alloy: Microstructure, properties and an unknown Nb-rich intermetallide, *Intermetallics*, 127, 106965 (2020).
8. I. Edry, A. Shoihet, S. Hayun, On the effects of electric current intensity and pulse frequency on the solidified structure of pure aluminum subjected to pulse magneto-oscillation, *Journal of Materials Processing Tech.*, 288, 116844 (2021).
9. T. Mordechai, N. U. Navi, S. Haroush, T. Sol, I. Edry, S. Hayun, The effect of pulse magneto oscillation treatment on the mechanical properties of pure aluminum, under revision.

Conference proceedings

10. Z. Dashevsky, Y. Gelbstein, I. Edry, I. Drabkin and M. P. Dariel, Optimization of Thermoelectric Efficiency in Graded Materials, Proceeding of the 22nd International Conference on Thermoelectrics, France, 2003.
11. I. Edry, Z. Dashevsky, I. Drabkin and M. P. Dariel, Calculation of Temperature Profile and Power Performance of Thermoelectric Energy Materials, Proceeding of the 2nd European Conference on Thermoelectrics of European Thermoelectric Society, Poland, Krakow, 2004.

12. A. Shoihet, M. Shvartsas, B. Gdaliahu, I. Edry, High current short pulse generator for PMO research, 2012 IEEE 26th Convention of Electrical and Electronics, 2012

Oral presentations

13. I. Edry, Z. Dashevsky and M. P. Dariel, Optimization of the Thermoelectric Efficiency in Graded Materials Based on *PbTe*, IMEC 2003, Technion, Haifa.
14. M. Gelbstein, I. Edry, N. Froumin and N. Frage, Stability of alumina/graphaite couple in molten aluminum alloys, IMEC13, December 2007, Technion Haifa
15. I. Edry, N. Frage, S. Hayun, Effect of impurity levels on the structure of solidified aluminum under pulse magneto-oscillation (PMO), Net-Shape Manufacturing Research (NSMR), Busan, South-Korea, 2013
16. I. Edry, V. Erukhimovitch, N. Frage, S. Hayun, The Effect of Impurity Levels on the Structure of Solidified Aluminum Under Pulse Magneto-Oscillation (PMO), IMEC 16, Technion, Haifa 2014
17. I. Edry, V. Erukhimovitch, T. Mordechai, N. Frage, S. Hayun, The Effect of Pulse Magneto-Oscillation (PMO) on the Structure of Solidified Aluminum Under various cooling rates, MMT-2014, Ariel University, July 2014.
18. I. Edry, T. Mordechai, N. Frage, S. Hayun, Effect of PMO treatment parameters on the structure of solidified Al, IMEC-17, Bar-Ilan University, Ramat-Gan 2016
19. I. Edry, T. Mordechai, N. Frage, S. Hayun, On the effect of electric current intensity, pulses frequency and inoculant addition on solidified structure of pure aluminum under pulse magneto-oscillation treatment, IMEC-18, Dead sea 2018.

Posters

20. Y. Snir, Y. Gelbstein, I. Edry and A. Landau, Aging kinetics in PH steels followed by TEP measurements, IMEC13, December 2007, Technion Haifa
21. S. Avraham, G. Moshe, Y. Snir, M. Shmulevitch, E. Kahana, I. Edry, The dissolution kinetics of Sn-Co master alloy in pure Sn, IMEC15, 2012.
22. T. Mordechai, N. Aharon, I. Edry, A. Shoihet, V. Erukhimovitch, S. Hayun, The effect of nucleation sites and cooling rate on the structure of solidified Al under PMO, IMEC 16, Technion, Haifa 2014
23. T. Mordechai, I. Edry and S. Hayun, Effects of the duration of treatment and cooling rate on solidification of Al under PMO technique, HTC-2015, Germany 2015.
24. T. Mordechai, N. Navi, S. Haroush, I. Edry, S. Hayun, The effect of pulse magneto oscillation (PMO) treatment on the mechanical properties of pure Al, IMEC-18, Dead sea 2018.

Peer-Review Referee:

- Journal of Materials Science
- International Journal of Materials Research