MORDECHAI LANDO- List of Publications

Journal papers:

1."*Direct Measurement of the Electron Density in Electron Beam Irradiated Ar/F2 Gas Mixtures by Time Resolved Interferometry*", Z. Rozenberg, M. Lando and M. Rokni, Phys. Rev. A35,4151(1987).

2."*Drift Velocity and Electron Density Measurements in Electron Beam Irradiated Ar/F2 Gas Mixtures subjected to an external field*" , Z. Rozenberg, M. Lando, M. Rokni, Phys. Rev. A37,2569(1988).

3."*Direct Measurement of the Electron Density in Electron Beam Irradiated Ar/HCl Gas Mixtures by Time Resolved Interferometry*", M. Lando, Z. Rozenberg and M. Rokni, J. Appl. Phys. 68,2606(1990).

4."*Negative Differential Conductivity in Electron-Beam Irradiated Ar/HCl Mixtures*", M. Lando, Z. Rozenberg and M. Rokni, J. Appl. Phys. 61, 1667(1987).

5."*On the Possibility of Steady State Negative Mobility in Externally Ionized Gas Mixtures*", Z. Rozenberg, M. Lando and M. Rokni, J. Phys. D:Appl. Phys. 21,1593(1988).

6."*Stabilization of high power copper vapor laser*", S. Gabay, P. Blau, M. Lando, I. Druckman, Z. Horvitz, Y. Yfrah, I. Hen, E. Miron and I. Smilanski, Opt. and Quantum Elec. 23,5485(1991).

7. "*A rotatable parallel glass plate periscope for effective aperture magnification in metrology*", Haim Lotem, Zvi Horvitz, Zeev Avnet, Shlomo Hillel and Mordechai Lando. Rev. Sci. Instru. 66, 4467-4469, 1995.

8. "*Visible solar pumped lasers*", Mordechai Lando, Yehoshoa Shimony, Roth M.J. Benmair, Dov Abramovich, Vladimir Krupkin and Amnon Yogev. Optical Materials 13, 111-115 (1999).

9. "*Passive Q-switching of a solar pumped Nd:YAG laser*", M. Lando, Y. Shimony, Y .Noter, R.M.J. Benmair, A. Yogev, Appl. Opt., 39,1962-1965, (2000).

10. " *An astigmaic corrected target aligned solar concentartor*", M. Lando, J. Kagan, B. Linyekin, G. Pecheny, J. Achiam, Optics Communications, 180, 127-132(2000).

11. "A solar pumped Nd:YAG laser in the high collection efficiency regime", M. Lando, J. Kagan, B. Linyekin, V. Dobrusin, Optics Communications, 222, 371-381(2003).

Hebrew proprietary reports on the solar pumped laser project

12. " *Commercial justification of Rotem Industries participation in CONSOLAR*", M. Lando and E. Miron, January 1995.

13. "*Development of solar pumped laser components project -7/95-6/96 report*", M. Lando, 1996.

14. "*Development of solar pumped laser components project –7/96-3/98 report*", M. Lando, 1996.

15."*Development of solar pumped laser components project -4/98-12/98 report*", M. Lando, 1996.

16. "*Astigmatic corrected target aligned solar concentrator-conceptual and optical design*", M. Lando and J. Kagan., 1998.

17. "*Mechanical design of solar concentrator for solid state laser pumping*", J. Kagan, J. Shapira, , B. Linyekin, G. Pecheny, L. Sverdaluv, M. Lando, , 1998.

18. "*Construction and alignment of solar concentrator for solid state laser pumping*", M. Lando, J. Kagan, B. Linyekin, J. Shapira, G. Pecheny, F. Silizky, J. Achiam, 1998.

19. "*Development and construction of solar mirrors for Rotem solar concentrator*", M. Lando, J. Kagan, B. Linyekin, Z. Horviz, D. Sagie, 1999.

20. "*Solar tracking of astigmatic corrected target aligned solar concentrator",* M. Lando, 1999.

21. " *Sub-systems of Rotem solar concentrator", M.Lando, J. Kagan, B. Linyekin, G. Gelman, G. Pecheny, Y. Shimony,* 1999.

22. " *Diode pumped Nd:YAG oscillator solar pumped Nd:YAG amplifier*",V. Dobrusin, M. Lando, J. Kagan, Y. Kalisky, L. Kravchik, September 1999.

23. "*Development of solar pumped laser components project –final report*", M. Lando, July 2000.

24. "*Development of solar pumped laser components project –1/2000-6/2000 semiannual report*", M. Lando, 2001.

25. " *Photochemical applications of solar pumped laser – O^{18} water enrichment and other processes*" , M. Lando, D. Levron, S. Frier, March 1999.

26. " *Technical and economical feasibility of O^{18} water enrichment by selective decomposition of Formaldehyde under UV laser illumination*", G. Bialolanker, R. David, and M. Lando, September 2000.

Conference papers

27."*Direct Measurement of the Electron Density in Electron Beam Irradiated Ar/F2 Gas Mixtures by Time Resolved Interferometry*", Z. Rozenberg, M. Lando, and M. Rokni, Bull. of IPS(Israel Physical Society), Annual Meeting (1986).

28."*Direct Measurement of the Electron Density in the Active Medium of E-Beam Pumped Argon Fluoride Laser*", Z. Rozenberg, M. Lando, M. Rokni, Sixth International Symposium on Gas Flow and Chemical Lasers, Jerusalem, Israel, (1986).

29."*Drift Velocity Measurements in Electron Beam Irradiated Ar/F2 Mixtures*", Z. Rozenberg M. Lando and M. Rokni, Bull. of IPS, Annual Meeting (1987).

30."*Direct Measurement of the Electron Density in Electron Beam Irradiated Ar/HCl Gas Mixtures using Time Resolved Interferometry*", M. Lando, Z. Rozenberg and M. Rokni, Bull. of IPS, Annual Meeting(1987).
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32."*Drift Velocity Measurements in Electron Beam Irradiated Ar/F2 gas Mixtures*", Z. Rozenberg, M. Lando and M. Rokni, XVIII International Conference on Phenomena in Ionized Gases, Swansea, U.K., (1987).

33."*Drift Velocity and Electron Density Calculations in Electron Beam Irradiated Ar/HCl Gas Mixtures Subjected to an External Electric Field*" M. Lando, Z. Rozenberg and M. Rokni, in Modeling and Simulation of Laser Systems, Donald L. Bullock, editor, Proc. SPIE. 1045, 185(1989).

34."*Negative Differential Conductivity in Electron-Beam Irradiated Ar/HCl Mixtures*", M. Lando, Z. Rozenberg and M. Rokni, Bull. of IPS(Israel Physical Society), Annual Meeting (1986).

35."*The Prediction of Negative Mobility in Electron-Beam Irradiated Argon-Fluoride Ionized Gas Mixtures*", Z. Rozenberg, M. Lando and M. Rokni, Bull. of IPS, Annual Meeting (1988).

36."*A High Power Gold Vapor Laser*" S. Gabay, I. Hen and M. Lando, in High Power Gas Lasers, Petras V. Avizonis, Charles Freed, Jin J. Kim, Frank K. Tittel, Editors, Proc. SPIE. 1225, 260(1990).

37."*A modified off-axis unstable resonator for copper vapor laser*", M. Lando, D. Belker, A. Lerrer, H. Lotem, A. Dikman, G. Bialolanker, S. Lavi and S. Gabay, in Gas and Metal Vapor Lasers and Applications, Jin J. Kim. and Frank K. Tittel, Editors, Proc. SPIE. 1412,19,1991.

38."*Pointing stability of copper vapor laser with novel off-axis unstable resonator*", M. Lando, S. Belker, A. Lerrer, H. Lotem, A. Dikman, G. Bialolanker, S. Lavi and S. Gabay, in 7-th meeting in Israel on Optical Engineering, Moshe Oron and Itzhak Shladov, Editors, Proc. SPIE. 1442,172(1991).

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42." *Universal presentation of laser gain saturation laws*" M. Lando, S.Eisenbach, S. Gabay, Laser Resonators and Coherent Optics: Modeling, Technology, and Applications, Anup Bhowmik; Ed. Proc. SPIE Vol. 1868, p. 143-148.1993.

43. "*A rotatable parallel glass plate periscope for effective aperture magnification in metrology*", Z. Avnet , Z. Horvitz, , S. Hillel , H.Lotem and M. Lando, presented in the 26-th Israel conference on Mechanical Engineering, held in Haifa, 1996.

44. "*Angular dispersion of Littrow and of double-diffraction grazing –incidence spectroscope*", H. Lotem and M. Lando, Bull. of IPS Annual Meeting (1995), p. 53.

45. "*Angular dispersion of double-diffraction grazing-incidence spectrograph*" H.Lotem, M. Lando, A. Lorber, D. Manor, 10th Meeting on Optical Engineering in srael, Itzhak Shladov, Stanley R. Rotman; Eds. , Proc. SPIE Vol. 3110, p. 559-565 , 1997.

46. "*Ultra-high flux experiments*", A. Lewandoski, C. Fields, R. Pitts, C. Bingham, D. Jenkins, H. Bernstein, M. Lando, R. Winston and J. O'Gallagher. Presented in the 7-th Int'l Symp. On Solar Thermal Concentration Technology, Moscow, September 1994.

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M. Lando, D. G. Jenkins, H. Bernstein, J. O'Gallagher,
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50. "A *solar pumped Nd:YAG laser with a record efficiency of 4.7watt/m^2 of primary mirror area*", D. Jenkins, M. Lando, J. O'Gallagher, R. Winston, A. Lewandowski, C. Bingham and R. Pitts , Bull. of IPS(1996), P. 101.

51. "*Development of application oriented solar pumped lasers*", M. Lando, J. Kagan, A. Ben-Amar Baranga, J. Achiam, presented in SUNDAY symposium on Concentrated Solar Energy, Rehovot, April 1996.

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53. *" Progress of the Solar Pumped Lasers Program*", M. Lando, Bull. of IPS Annual Meeting (1997), P. 76.

54. "*7.5 kW Solar Cassagrainian Concentrator on Equatorial Mount*", M. Lando, J. Kagan, Z. Horvitz, presented in the 8-th Sde Boker Symposium on Solar Electricity Production, Sde-Boker, November 1997.

55. "*Passive Q-switching of high power solar-pumped Nd:YAG laser*", I. Pe'er, D. Abramovic, Y. Noter, A. Yogev, M. Lando and Y. Shimony. In XI international Symposium on Gas Flow and Chemical lasers and High power lasers, Howard J. Baker, Ed., Proc. SPIE 3092, 273-276, 1996.

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57. "*Intracavity second harmonic generation in solar-pumped laser*", M. Lando, Y. Shimony, R.M.J. Benmair, I. Vishnevetsky, A. Yogev, Presented in the 5-th French Israeli Conference on Non-Linear and Quantum Optics(FRISNO5), Eilat, December 1997.

58. " *Second Harmonic generation in solar-pumped laser*", M. Lando, Y. Shimony, R.M.J. Benmair, I. Vishnevetsky, A. Yogev, presented in CLEO'98, Conference on Lasers and Electro-optics, San-Francisco, May 1998 (p. 326).

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60. "*38 Watt Nd:YAG laser pumped by a 6.85m^2 target aligned solar concentrator*" M. Lando, J. Kagan, B. Linyekin, V. Dobrusin, presented in the 11-th Int'l Meeting on Electro-optics and Microelectronics in Israel, Tel-Aviv , November 1999.

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63**.** "*3D-CPC internal surface preparation: A study comparing diamond turning with polished silver coatin*g" J. Kagan, M. Lando, Proc. of the 12th Sede Boqer Symposium on Solar Electricity Production , February 23, 2004.

64. "*Conversion of an astigmatic corrected target aligned solar concentrator into an educational demonstration facility*", M. Lando, J. Kagan, E. Kalmanzon, C. de Lange, Proc. of the 12th Sede Boqer Symposium on Solar Electricity Production February 23, 2004.