Curriculum Vitae

General Information

Name: Ariel Maniv

I.D. Number: 032073587

Date of Place: Israel

Date of Birth: December 16th, 1974

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Education

PhD in Physics

2000-2005 PhD student at Technion, Israel.

1995-1999 B. Sc. Physics student at Technion, Israel. Grad point average: 86 (Cum Laude).

1992 Graduated "Reali" high school at Haifa, Israel.

Working Experience

2006 Holds a research position at Nuclear Research Center – Negev, Israel.

2001-2005 Research assistant at Technion under the supervision of Professor Emil Polturak. Research topic; "Measurements of spontaneous generation of magnetic flux during a rapoid quench of superconducting thin films"; Lab instructor in Physics lab – first year, projects, and advanced lab for graduate students.

1991-2001 Part-time worker at Tower Semiconductors in the "Electrical Test" division.

List of Publications

1. "Observation of magnetic flux generated during a rapid quench of superconducting films", A. Maniv, E. Polturak and G. Koren, Phys. Rev. Lett. **91**, 197001 (2003).

2. "Spontaneous generation of magnetic flux in superconductors – testing the model", E. Polturak, A. Maniv and G. Koren, J. Low Temp. Phys. **136**, 379 (2004).

3. "Observation of a new mechanism of spontaneous generation of magnetic flux in a superconductor", A. Maniv, E. Polturak, G. Koren, Y. Bliokh, B. Biehler, B-U Runge, P. Leiderer, B. Ya Shapiro and I. Shapiro, Phys. Rev. Lett. **94**, 247005 (2005).

4. "Possible evidence of a two-gap structure for the Cu_xTiSe_2 superconductor", M. Zaberchik, K. Chashka, L. Patlgan, A. Maniv, C. Baines, P. King and A. Kanigel, Phys. Rev. B **81**, 220505(R) (2010).

5. "Damping of de Haas-van Alphen oscillations and vortex-lattice disorder in a peak-effect region of extreme type-II borocarbide superconductors", A. Maniv, T. Maniv, V. Zhuravlev, B. Bergk, J. Wosnitza, A. Köhler, G. Behr, P. C. Canfield and J. E. Sonier, Phys. Rev. B **83**, 104505 (2011).

6. "Order-disorder transition and magnetic quantum oscillations in the vortex state of strong type-II superconductors", A. Maniv, T. Maniv, V. Zhuravlev, B. Bergk, J. Wosnitza, A. Köhler, G. Behr, P. C. Canfield and J. E. Sonier, J. Phys.: Conf. Ser. **400**, 022065 (2012).

7. "Partially-ordered vortex lattice in the high-field low-temperature region mixed state of quasi two-dimensional organic superconductors", A. Maniv, V. Zhuravlev, T. Maniv, O. Ofer, R. Rommel, J. Muller and J. E. Sonier, Phys. Rev. B **91**, 134506 (2015).

8. "Microscopic evidence for Mn-induced long range magnetic ordering in MAX phase compounds", A. Maniv, A. P. Reyes, S. K. Ramakrishna, D. Graf, A. Huq, D. Potashnikov, O. Rivin, A. Pesach, Q. Tao, J. Rosen, I. Felner and E. N. Caspi, J. Phys. Cond. Mat. **33**, 025803 (2020).

9. "Half-magnetization plateau and the origin of threefold symmetry breaking in an electrically switchable triangular antiferromagnet", S. C. Haley, S. F. Weber, T. Cookmeyer, D. E. Parker, E. Maniv, N. Maksimovic, C. John, S. Doyle, A. Maniv, S. K. Ramakrishna, A. P. Reyes, J. Singleton, J. E. Moore, J. B. Neaton, and J. G. Analytis, Phys. Rev. Research **2**, 043020 (2020).

10. "Antiferromagnetic switching driven by the collective dynamics of a coexisting spin glass", E. Maniv, N. L. Nair, S. C. Haley, S. Doyle, C. John, S. Carbini, A.

Maniv, S. K. Ramakrishna, Y. -L. Tang, P. Ercius, R. Ramesh, Y. Tserkovnyak, A. P. Reyes, and J. G. Analytis, Sci. Adv. **7**, eabd8452 (2021). DOI: 10.1126/sciadv.abd8452

11. "Exchange bias due to coupling between coexisting antiferromagnetic and spin-glass orders", E. Maniv, R. A. Murphy, S. C. Haley, S. Doyle, C. John, A. Maniv, S. K. Ramakrishna, Y. -L. Tang, P. Ercius, R. Ramesh, A. P. Reyes, J. R. Long, and J. G. Analytis, Nat. Phys. (2021). https://doi.org/10.1038/s41567-020-01123-w