

CURRICULUM VITAE

C. Mathioudakis

Updated: September 2, 2008

Personal Data

Address: 11 Damaskinou str., (home)
71305, Heraklion, Crete, Greece
Department of Materials Science and
Technology, P. O. Box 2208, (office)
710 03, Heraklion, Crete, Greece
Tel: +30 2810 394168 (office)
+30 6944876527 (mobile)
Fax: +30 2810 394273
E-mail: chrn@materials.uoc.gr
chrn@physics.uoc.gr
URL: <http://theory.materials.uoc.gr/>
<http://kypros.physics.uoc.gr/>

Date and Place of birth: May 13, 1977; Athens, Greece.
Citizenship: Greek
Marital Status: Married
Military Service: Nov. 2006 – Nov. 2007

Education

University of Crete, Heraklion, Greece
Department of Materials Science & Technology
PhD in Materials Science, 2008

University of Crete, Heraklion, Greece
Department of Physics
M.Sc. in Physics, 2001

University of Crete, Heraklion, Greece
Department of Physics
B.Sc. in Physics (specialization in Computation Physics), 1999

Research Interests

- Computational Materials Science / Physics
- Condensed Matter Physics

Positions

University of Crete, Heraklion, Greece
Department of Materials Science & Technology
Visiting Professor (ΠΔ 407), Sept. 2008 – present
Teaching Assistant (as PhD candidate), 2004 – 2007

Aristotle University of Thessaloniki, Thessaloniki, Greece
Department of Physics
Research Assistant, 2002 – 2003

University of Crete, Heraklion, Greece
Department of Physics
Teaching Assistant (as post-graduate student), 1999 – 2001

Teaching Experience

University Crete, Department of Materials Science and Technology, Heraklion, Greece

- Introduction to Computers (linux, unix, office suites, scientific plotting programs), Fall 2008

University Crete, Department of Physics & Materials Science and Technology, Heraklion, Greece

Teaching Assistant for the following courses taught:

- Computers I, II (fortran, numerical computations, numerical integration, numerical solution of differential equations)
- Computational Physics I, II (differential equations, monte carlo method, metropolis algorithm, molecular dynamics, tight-binding, ising model)

Honors

National Scholarships Foundation, Greece

Undergraduate Scholarship for academic excellence, 1995-1997.

University of Crete, Greece

Scholarship of “MARIA M. MANASSAKI” Bequest, 2007.

Publications

1. “Softening of elastic moduli of amorphous semiconductors”, C. Mathioudakis and P. C. Kelires, *Journal of Non-Crystalline Solids*, **266-269**, 161 (2000).
2. “Nanomechanical properties of multilayered amorphous carbon structures”, C. Mathioudakis, P. C. Kelires, Y. Panagiotatos, P. Patsalas, C. Charitidis and S. Logothetidis, *Physical Review B* **65**, 205203 (2002).
3. “Physical trends in amorphous carbon: a tight-binding molecular dynamics study”, C. Mathioudakis, G. Kopidakis, P. C. Kelires, C. Z. Wang, and K. M. Ho, *Physical Review B* **70**, 125202 (2004).
4. “Electronic and optical properties of a-C from tight-binding molecular dynamics simulations”, C. Mathioudakis, G. Kopidakis, P. C. Kelires, M. Gioti, P. Patsalas, and S. Logothetidis, *Thin Solid Films* **482**, 151 (2005).

5. "Structure, stability and stress properties of amorphous and nanostructured carbon films", M. G. Fyta, C. Mathioudakis, G. Kopidakis, and P. C. Kelires, *Thin Solid Films* **482**, 56 (2005).
6. "Disorder and optical properties of amorphous carbon", C. Mathioudakis, G. Kopidakis, P. Patsalas, and P. C. Kelires, *Diamond and Related Materials* **16**, 1788 (2007).
7. "Structure, elastic properties and strength of amorphous and nanocomposite carbon", I. N. Remediakis, M. G. Fyta, C. Mathioudakis, G. Kopidakis, and P. C. Kelires, *Diamond and Related Materials* **16**, 1835 (2007).

Presentations at Conferences

1. "Softening of elastic moduli of amorphous semiconductors", C. Mathioudakis and P. C. Kelires, ICAMS18 – 18th International Conference on Amorphous and Microcrystalline Semiconductors August 22-27, 1999, Snowbird, Utah (Poster presentation).
2. "Rigidity studies in amorphous semiconductors", C. Mathioudakis and P. C. Kelires, *Wave Propagation and Electronic Structure in Disordered Systems*, June 15-17, 2000, FORTH, Heraklion, Crete, Greece (Poster presentation).
3. "Rigidity studies in amorphous carbon networks", C. Mathioudakis, G. Kopidakis, and P. C. Kelires, XVI Panhellenic Conference of Solid State Physics and Materials Science, September 17-20, 2000, Nauplio, Greece (Poster presentation).
4. "Nanomechanical properties of multilayered amorphous carbon structures", C. Mathioudakis, P. C. Kelires, Y. Panagiotatos, P. Patsalas, C. Charitidis and S. Logothetidis, XVIII Panhellenic Conference of Solid State Physics and Materials Science, September 15-28, 2002, Heraklion, Greece (Poster presentation).
5. "Tight-binding studies of amorphous carbon phases", C. Mathioudakis, G. Kopidakis, and P. C. Kelires, XVIII Panhellenic Conference of Solid State Physics and Materials Science, September 15-28, 2002, Heraklion, Greece (Poster presentation).
6. "Tight-binding molecular dynamics simulations of amorphous carbon networks", C. Mathioudakis, G. Kopidakis, P. C. Kelires, and S. Logothetidis, XIX Panhellenic Conference of Solid State Physics and Materials Science, September 21-24, 2003, Thessaloniki, Greece (Poster presentation).
7. "Electronic and optical properties of a-C from tight-binding molecular dynamics simulations", C. Mathioudakis, G. Kopidakis, P. C. Kelires, M. Gioti, P. Patsalas, and S. Logothetidis, E-MRS 2004 Spring Meeting, May 24-28, 2004, Strasbourg, France (Oral presentation).
8. "Electronic and optical properties of a-C", C. Mathioudakis,

- G. Kopidakis, P. C. Kelires, M. Gioti, P. Patsalas, and S. Logothetidis, XX Panhellenic Conference of Solid State Physics and Materials Science, September 26-29, 2004, Ioannina, Greece (Poster presentation).
9. "Optical properties of amorphous carbon studied with tight binding molecular dynamics simulations", C. Mathioudakis, G. Kopidakis, and P. C. Kelires, XXI Panhellenic Conference of Solid State Physics and Materials Science, August 28-31, 2005, Nicosia, Cyprus (Oral presentation).
 10. "Mechanical and optoelectronic properties of amorphous carbon from tight-binding molecular dynamics simulations", C. Mathioudakis, G. Kopidakis, and P. C. Kelires, 6th Specialist Meeting on Amorphous Carbon (SMAC), September 10-13, 2006, Heraclion, Crete, Greece (Poster presentation).
 11. "Tight-binding studies of nanodiamond carbon", C. Mathioudakis, G. Kopidakis, M. G. Fyta, and P. C. Kelires, 6th Specialist Meeting on Amorphous Carbon (SMAC), September 10-13, 2006, Heraclion, Crete, Greece (Poster presentation).
 12. "Tight-binding studies of nanodiamond carbon", C. Mathioudakis, G. Kopidakis, M. G. Fyta, and P. C. Kelires, XXII Panhellenic Conference of Solid State Physics and Materials Science, September 24-27, 2006, Patra, Greece (Poster presentation).
 13. "Structure and electronic properties of crystalline-amorphous carbon interfaces", G. Kopidakis, C. Mathioudakis, I. N. Remediakis, M. G. Fyta, and P. C. Kelires, XXII Panhellenic Conference of Solid State Physics and Materials Science, September 24-27, 2006, Patra, Greece (Poster presentation).
 14. "Optoelectronic properties of nanodiamond carbon: a tight-binding study", C. Mathioudakis, G. Kopidakis, and P. C. Kelires, E-MRS 2008 Spring Meeting, May 26-30, 2008, Strasbourg, France (Oral presentation).
 15. "Optoelectronic properties of diamond carbon nanocomposites", C. Mathioudakis, G. Kopidakis, and P. C. Kelires, 5th International Conference on Nanosciences & Nanotechnologies-NN08, July 14-16, 2008, Thessaloniki, Greece (Oral presentation).