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EDUCATION

- PhD in Physics, Physics Department, University of Crete (1997)
- Masters in Condensed Matter Physics, Physics Dept., University of Crete (1993)
- Diploma in Physics, Physics Department, University of Crete (1990)

RESEARCH AND TEACHING APPOINTMENTS

2020-: Director of Research (A), TCPI/NHRF
11/2014-11/2015: Visiting Researcher, Max Planck Institut für Mikrostrukturphysik, Halle, Germany (on sabbatical)
2013-2020: Senior Researcher (B), TCPI/NHRF
2007-2012: Associate Researcher (C), TCPI/NHRF
2001-2007: Postdoctoral Researcher, Fachbereich Physik, Freie Universität, Berlin, Germany
2000-2001: Postdoctoral Researcher, Institut für Theoretische Physik, Universität Würzburg, Germany
1997-2000: Postdoctoral Researcher, H. H. Wills Physics Lab., Univ. of Bristol, U.K.

MAIN RESEARCH INTERESTS

- Theoretical Materials Science, Electronic Structure
- Density Functional Theory, Density Matrix Functional Theory
- DFT for Superconductors
- Structural, Mechanical, Electronic and magnetic properties of finite and periodic systems
- Time Dependent - DFT, optical spectrum of molecular systems
- Structural, elastic and electronic properties of 2D materials

HONORS – AWARDS - FUNDING

- GATES, “nanoporous GrAphene membrane made without TransfEr for gas Separation”, graphene FLAG-ERA (recommended for funding), PI for the NHRF node (2018-2020).
- NSRF 2014-2020, “Advanced Materials and Devices”, Coordinator of the theory research subproject (2017-2020).
- “National Infrastructure in Nanotechnology, Advanced Materials and Micro-Nanoelectronics”, Member of NHRF research group (2017-2020).
- Cost Action MP1306 (EUSpec): “Modern Tools for Spectroscopy on Advanced Materials”, Member of the Management Committee (2015-2018).
- Enabling Excellence, European Training Network (ETN): “Graphene-based nanomaterials for touchscreen technologies”, Member of NHRF team (2015-2019).
- GSRT-Kripis: “Novel Multifunctional Nanostructured Materials and Devices”, POLYNANO – 447963, Coordinator of the theory research subproject (2012-2015).
- Thales, GRAPHENECOMP, member of the research team, 1-2-2012/31-8-2015
- Deutsche Forschungsgemeinschaft, SPP-1145 (2003-2005) and (2005-2007)
- TMR-Network, Post-doctoral Fellow (1997-2000) and (2000-2003)

PUBLICATIONS - PRESENTATIONS

- 73 articles in refereed journals, 3 articles in conference proceedings, 1967 citations, h-index: 25 (Sep 2020); ResearcherID: [C-5647-2008](#)
- 68 presentations, 52 talks, 28 invited talks (Sep 2020).

SELECTED RECENT PUBLICATIONS

1. “Electronic properties of the Sn_{1-x}Pb_xO alloy and band alignment of the SnO/PbO system: a DFT study”, N. Kelaidis, S. Bousiadi, M. Zervos, A. Chroneos, and N. N. Lathiotakis, [Sci. Rep. 10, 16828 \(2020\)](#).
2. “Density-inversion method for the Kohn-Sham potential: role of the screening density”, T. J. Callow, N. N. Lathiotakis, and N. I. Gidopoulos, [J. Chem. Phys. 152, 164114 \(2020\)](#).
3. “Epitaxial highly ordered Sb:SnO₂ nanowires grown by the vapor liquid solid mechanism on m-, r- and a-Al₂O₃”, M. Zervos, N. N. Lathiotakis, N. Kelaidis, A. Othonos, E. Tanasa, E. Vasile, [Nanoscale Advances 1, 1980 \(2019\)](#).
4. “Structure of the first order reduced density matrix in three electron systems: A generalized Pauli constraints assisted study”, I. Theophilou, N. N. Lathiotakis, N. Helbig, [J. Chem. Phys. 148, 114108 \(2018\)](#).

5. "Atomistic potential for graphene and other sp² carbon systems", Z. G. Fthenakis, G. Kalosakas, G. D. Chatzidakis, C. Galiotis, K. Papagelis, and N. N. Lathiotakis, [Phys. Chem. Chem. Phys. 19, 30925 \(2017\)](#).
6. "Structural prediction of two-dimensional materials under strain", P. Borlido, C. Steigemann, N. N. Lathiotakis, M. A. L. Marques and S. Botti, [2D Materials 4, 045009 \(2017\)](#).
7. "Towards a formal definition of static and dynamic electronic correlations", C. L. Benavides-Riveros, N. N. Lathiotakis, M. A. L. Marques, [Phys. Chem. Chem. Phys. 19, 12655 \(2017\)](#).
8. "Electron transfer through organic molecular wires: A theoretical study", N. N. Lathiotakis, G. Theodorakopoulos, I. D. Petsalakis, [Chem. Phys. Lett. 667, 45 \(2017\)](#).
9. "Conditions for Describing Triplet States in Reduced Density Matrix Functional Theory", I. Theophilou, N. N. Lathiotakis, N. Helbig, [J. Chem. Theory Comput. 12, 2668 \(2016\)](#).
10. "Graphene allotropes under extreme uniaxial strain: an ab initio theoretical study", Z. G. Fthenakis, N. N. Lathiotakis, [Phys. Chem. Chem. Phys. 17, 16418 \(2015\)](#).
11. "Spectrum for Nonmagnetic Mott Insulators from Power Functional within Reduced Density Matrix Functional Theory", Y. Shinohara, S. Sharma, S. Shallcross, N. N. Lathiotakis, E. K. U. Gross, [J. Chem. Theory Comput. 11, 4895 \(2015\)](#).
12. "Local reduced-density-matrix-functional theory: Incorporating static correlation effects in Kohn-Sham equations", N. N. Lathiotakis, N. Helbig, A. Rubio, N. I. Gidopoulos, [Phys. Rev. A 90, 032511 \(2014\)](#).