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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 Sn1-xPbxO 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:SnO_2 nanowires grown by the vapor liquid solid mechanism on m-, r-and a-Al_2O_3", 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).