

CURRICULUM VITAE

Nagia S. Tagiara

Dr. / Post-Doctoral Fellow
Theoretical and Physical Chemistry Institute
National Hellenic Research Foundation
48 Vassileos Constantinou Avenue
Athens 11635, Greece
Phone: +30 210 7273826
E-mail: ntayara@eie.gr
ORCID: 0000-0002-1347-8287



EDUCATION

- 2021: Ph.D. in Physics, title: 'Synthesis, structure and properties of pure TeO₂ glass, binary and ternary tellurite glasses', National Hellenic Research Foundation (NHRF) - Theoretical Physics and Chemistry Institute (TPCI), Athens, in collaboration with the School of Applied Mathematics and Physics, National Technical University of Athens (NTUA), Greece.
- 2014: M.Sc. in Microsystems and Nanodevices, Interdepartmental Program of Postgraduate Studies, School of Applied Mathematics and Physics, National Technical University of Athens, Greece.
- 2010: B.Sc. in Physics, Physics Department, National and Kapodistrian University of Athens (NKUA), Athens, Greece.

PROFESSIONAL EXPERIENCE AND APPOINTMENTS

01/2022 - present	Post-doctoral Fellow, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece.
2017 - 11/2021	Ph.D. candidate, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece.
2014 – 2016	Research Associate, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, Greece.

MAIN RESEARCH INTERESTS

- Glass synthesis and properties.
- Raman and infrared spectroscopy of glasses and ceramic materials.
- Thermal poling and Second Harmonic Generation (SHG) in glasses.
- Density Functional Theory (DFT).

EXTERNAL FUNDING

Participant in the following projects of TPCI-NHRF:

1. AMPERCEL (2019-2024), Hellenic Foundation for Research and Innovation (H.F.R.I.) under the "2nd Call for H.F.R.I. Research Projects to support Post-Doctoral Researchers" (Project Number: 450).
2. INNOVATION (2018-2022), 'National Infrastructure in Nanotechnology, Advanced Materials and Micro - / Nanoelectronics' (MIS 5002772), implemented under the Action 'Reinforcement of the Research and Innovation Infrastructure' funded by the Operational Programme 'Competitiveness, Entrepreneurship and Innovation' (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund).
3. KRISIS II (2017-2021), 'Advanced Materials and Devices' (MIS 5002409), implemented under the 'Action for the Strategic Development on the Research and Technological Sector', funded by the Operational Programme 'Competitiveness, Entrepreneurship and Innovation' (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund).
4. IKYDA (2014-2016), 'Non-linear optical properties induced by thermal polarization in glass containing high polarity ions', which was implemented in the framework of scientific collaboration between TPCI-NHRF and the Friedrich-Schiller University, Otto-Schott-Institute for Materials Research, Jena-Germany.
5. KRIPIS I (2013-2015), 'New multifunctional materials and devices – POLYNANO' (MIS 447963).

AWARDS AND DISTINCTIONS

1. **2022: The Norbert J. Kreidl Award for Young Scholars by the American Ceramic Society.**
2. 2021: Thomaidio award by the NTUA for high quality research for the publication "Network former mixing effects in alkali germanotellurite glasses: A vibrational spectroscopic study", J. Alloys Compd. 882 (2021) 16078.
3. 2020: Thomaidio award by the NTUA for high quality research for the publication "On the Absence of Doubly Bonded Te=O Groups in TeO₂ Glass", J. Phys. Chem. B 124 (2020) 5746–5753.
4. 2019: Thomaidio award for high quality research for the publication "Short-Range Structure, Thermal and Elastic Properties of Binary and Ternary Tellurite Glasses", J. Phys. Chem. B 123 (2019) 7905–7918.
5. 2017: Thomaidio award for high quality research for the publication "Synthesis, thermal and structural properties of pure TeO₂ glass and zinc-tellurite glasses", J. Non-Cryst Solids 457 (2017) 116–125.

CONFERENCES AND INVITED TALKS

11 international and 6 national conferences.

PUBLICATIONS

22 publications in refereed journals.

SELECTED PUBLICATIONS

N. S. Tagiara, D. Palles, E. D. Simandiras, V. Psycharis, A. Kyritsis, E. I. Kamitsos, Synthesis, thermal and structural properties of pure TeO₂ glass and zinc-tellurite glasses, *J. Non-Cryst Solids* 457 (2017) 116–125. August 2017-January 2022: this paper was marked by Web of Science as highly cited paper and was placed in the top 1% of the academic field of Physics. This publication received the Thomaidis Foundation Award for high quality scientific research (NTUA, 2017). <https://doi.org/10.1016/j.jnoncrsol.2016.11.033>

N. S. Tagiara, E. Moayedi, A. Kyritsis, L. Wondraczek, E. I. Kamitsos, Short-range structure, thermal and elastic properties of binary and ternary tellurite glasses, *J. Phys. Chem. B* 123 (2019) 7905–7918. This publication received the Thomaidis Foundation Award for high quality scientific research (NTUA, 2019). <https://doi.org/10.1021/acs.jpcc.9b04617>

N. A. Wójcika, S. Ali, D. Möncke, **N. S. Tagiara**, E. I. Kamitsos, H. Segawa, M. Eriksson, B. Jonson, The influence of Be addition on the structure and thermal properties of alkali-silicate glasses, *J. Non-Cryst. Solids* 521 (2019) 119532. <https://doi.org/10.1016/j.jnoncrsol.2019.119532>

A. Papadopoulos, **N. S. Tagiara**, E. D. Simandiras, E. I. Kamitsos, On the Absence of Doubly Bonded Te=O Groups in TeO₂ Glass, *J. Phys. Chem. B* 124 (2020) 5746–5753. <https://doi.org/10.1021/acs.jpcc.0c02499>

K. I. Chatzipanagis, **N. S. Tagiara**, D. Möncke, S. Kundu, A. C. M. Rodrigues, E. I. Kamitsos, Vibrational study of lithium borotellurite glasses, *J. Non-Cryst. Solids* 540 (2020) 120011. <https://doi.org/10.1016/j.jnoncrsol.2020.120011>

N. S. Tagiara, K. I. Chatzipanagis, H. Bradtmüller, A.C.M. Rodrigues, D. Möncke, E.I. Kamitsos, Network former mixing effects in alkali germanotellurite glasses: A vibrational spectroscopic study, *J. Alloys Compd.* 882 (2021) 16078. <https://doi.org/10.1016/j.jallcom.2021.160782>

N. A. Wójcik, **N. S. Tagiara**, S. Ali, K. Górnicka, H. Segawa, T. Klimczuk, B. Jonson, D. Möncke, E. I. Kamitsos, Structure and magnetic properties of BeO-Fe₂O₃-Al₂O₃-

TeO₂ glass-ceramic composites, *J. Eur. Ceram. Soc.* 41 (2021) 5214.

<https://doi.org/10.1016/j.jeurceramsoc.2021.04.005>

A. Ruckman, G. Beckler, W. Guthrie, M. Jesuit, M. Boyd, I. Slagle, R. Wilson, N. Barrow, **N. S. Tagiara**, E. I. Kamitsos, S. Feller, C. B. Bragatto, Lithium-ion sites and their contribution to the ionic conductivity of RLi₂O-B₂O₃ glasses with R ≤ 1.85, *Solid State Ionics* 359 (2021) 115530.

<https://doi.org/10.1016/j.ssi.2020.115530>

B. Topper, **N. S. Tagiara**, A. Herrmann, E. I. Kamitsos, D. Möncke, Yttrium and rare-earth modified lithium orthoborates: Glass formation and vibrational activity, *J. Non-Cryst. Solids* 575 (2022) 121152.

<https://doi.org/10.1016/j.jnoncrysol.2021.121152>

N. A. Wójcik, **N. S. Tagiara**, D. Möncke, E. I. Kamitsos, S. Ali, J. Ryl, R. J. Barczyński, Mechanism of hopping conduction in Be-Fe-Al-Te-O semiconducting glasses and glass-ceramics, *J. Mater. Sci.* 57 (2022) 1633–1647.

<https://doi.org/10.1007/s10853-021-06834-w>

K. I. Chatzipanagis, **N. S. Tagiara**, E. I. Kamitsos, N. Barrow, I. Slagle, R. Wilson, T. Greiner, M. Jesuit, N. Leonard, A. Phillips, B. Reynolds, B. Royle, K. Ameku, and S. Feller, Structure of lead borate glasses by Raman, ¹¹B MAS, and ²⁰⁷Pb NMR spectroscopies, *J. Non-Cryst. Solids* in press (2022).

B. Topper, **N. S. Tagiara**, D. Palles, F. Lind, M. T. Soltani, L. Wondraczek, D. Möncke, E. I. Kamitsos, Second harmonic generation and structural rearrangement in multicomponent antimonate glasses via thermal poling, *J Am Ceram Soc.* 106 (7) (2023) 4163-4180. <https://doi.org/10.1111/jace.19073>

A. Papadopoulos, **N. S. Tagiara**, E. Stavrou, E. I. Kamitsos, Raman study of pure TeO₂ glass under pressure: interplay between glass network transformations and electronic transitions, *J. Phys. Chem. Lett.* 14 (2023) 387–394.

<https://doi.org/10.1021/acs.jpcllett.2c03612>

N. S. Tagiara, V. Psycharis, A. Kaltzoglou, Synthesis, crystal structure and luminescence of [(CH₃)₃S]₂ZrCl₆, *J. Coord. Chem.* (2024).

<https://doi.org/10.1080/00958972.2024.2312456>