

CURRICULUM VITAE

Eirini Siranidi

Post-Doctoral Researcher
Applied Spectroscopy Laboratory
Theoretical and Physical Chemistry Institute
National Hellenic Research Foundation
48 Vassileos Constantinou Ave.
Athens 11635, Greece

Phone: +30 210 7273836

E-mail: esiranidi@eie.com



EDUCATION

- Ph.D in Solid State Physics, Department of Physics, School of Applied Mathematical and Physical Sciences, National Technical University of Athens (2010).
- M.Sc in Solid State Physics, Department of Physics, National and Kapodistrian University of Athens (2005).
- Diploma of Physics, Department of Physics, Aristotle University of Thessaloniki (2003).

PROFESSIONAL EXPERIENCE AND APPOINTMENTS

- 6/2017-Present: Research Associate. Applied Spectroscopy Laboratory, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation.
- 9/2015-2/2016: Post-Doctoral Researcher. School of Chemical Engineering, NTUA.
- 9/2014-7/2015: Post-Doctoral Researcher. Institute of Nanoscience and Nanotechnology, NCSR "Demokritos".
- 9/2012-8/2014: Post-Doctoral Researcher. Physics Department of School of Applied Mathematical and Physical Sciences, NTUA.

MAIN RESEARCH INTERESTS

- Application of non-destructive spectroscopic techniques to industrial production monitoring and quality control.
- Structural /spectroscopic characterization (X-ray diffraction-Rietveld analysis, Raman and Infra-Red spectroscopy) of a variety of materials, such as: high T_c superconductors, perovskite compounds and perovskite solar cells, carbon nanotubes, graphene and graphite oxides as well as ionic liquids, clays and drugs.

AWARDS AND DISTINCTIONS

The article "*Pressure-induced lattice instabilities and superconductivity in $YBa_2Cu_4O_8$ and optimally doped $YBa_2Cu_3O_{7-\delta}$* ", Phys. Rev. B **80**, 214517 (2009). <http://prb.aps.org/abstract/PRB/v80/i21/e214517> **was selected** for "Virtual journal of Applications of Superconductivity", Vol. 18, Issue 1 (2010).

CONFERENCES

15 international and national conferences and workshops.

PUBLICATIONS

32 refereed publications in journals, 3 publications in conference proceedings, more than 670 citations.

SELECTED PUBLICATIONS

1. "*Kinetics of hydrogen isotope exchange in kaolinite and the prediction of δD signature retention over geological times*", A. Derkowski, A. Szreter, E. Siranidi and G. D. Chryssikos, *Geochimica et Cosmochimica Acta* **388**, 154-166 (2025).
2. "*Structure of tubular halloysite-(10 Å) and its transition to halloysite-(7 Å) by infrared spectroscopy and X-ray diffraction*", E. Siranidi, S. Hillier and G. D. Chryssikos, *Clays and Clay Minerals* **72**, e33, 1–14 (2024).
3. "*On the Unusual Temperature Dependence of Kaolinite Intercalation Capacity for N-methylformamide*", F. T. Andreou, E. Siranidi, A. Derkowski, G.D. Chryssikos, *Clays Clay Miner.* **70**, No. 5:796–807 (2022).
4. "*Intercalation of N-methylformamide in kaolinite: In situ monitoring by near-infrared spectroscopy and X-ray diffraction*", F. T. Andreou, B. Barylska, Z.

- Ciesielska, M. Szczerba, A. Derkowski, V. Gionis, E. Siranidi, G.D. Chryssikos, *Applied Clay Science* **212**, 106209 (2021).
5. "Copper nanowire coated carbon fibers as efficient substrates for detecting designer drugs using SERS", Halouzka V., Halouzkova, B., Jirovsky D., Hemzal D., Ondra P., Siranidi E., Kontos AG., Falaras P., Hrbac J, *Talanta* **165**, 384–390 (2017).
 6. "Structural stability, vibrational properties and photoluminescence in CsSnI₃ perovskite upon addition of SnF₂", A. Kontos, A. Kaltzoglou, E. Siranidi, D. Palles, G. Angeli, M. Arfanis, V. Psycharis, Y.S. Raptis, E.I. Kamitsos, P. Trikalitis, C. Stoumpos, M.G. Kanatzidis, and P. Falaras, *Inorg. Chem.* **56**(1), pp 84–91, (2017).
 7. "Optical-Vibrational Properties of the Cs₂SnX₆ (X = Cl, Br, I) Defect Perovskites and Hole-Transport Efficiency in Dye-Sensitized Solar Cells", A. Kaltzoglou, M. Antoniadou, A.G. Kontos, C.C. Stoumpos, D. Perganti, E. Siranidi, V. Raptis, K. Trohidou, V. Psycharis, M.G. Kanatzidis, P. Falaras, *J. Phys. Chem. C* **120** (22), pp 11777–11785 (2016).
 8. "Mixed-halide Cs₂SnI₃Br₃ perovskite as low resistance hole-transporting material in dye-sensitized solar cells", A. Kaltzoglou, M. Antoniadou, D. Perganti, E. Siranidi, V. Raptis, K. Trohidou, V. Psycharis, A. G. Kontos, P. Falaras, *Electrochimica Acta* **184**, 466-474 (2015).
 9. "Pressure induced phase separation in the Y123 superconductor", M. Calamiotou, A. Gantis, D. Lampakis, E. Siranidi, E. Liarokapis, I. Margiolaki, K. Conder, *EPL* **85**, 26004 (2009).
 10. "Phase separation, microstructure and superconductivity in the Y_{1-x}Pr_xBa₂Cu₃O_y compounds", M. Calamiotou, A. Gantis, I. Margiolaki, D. Palles, E. Siranidi, E. Liarokapis, *J. Phys.: Condens. Matter* **20**, 395224 (2008).