PERSONAL INFORMATION

Turturică Valter-Gabriel

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Sex M | Date of birth 19/08/1990 | Nationality Romanian

WORK EXPERIENCE

24.06.2021 – present	**- Research scientist at Horia Hulubei National Institute of Physics and Nuclear Engineering, ELI-NP**
01.10.2020 – 24.06.2021	**- Physicist at Horia Hulubei National Institute of Physics and Nuclear Engineering, ELI-NP**
01.10.2015 – 01.10.2020	**- Doctoral research assistant at Horia Hulubei National Institute of Physics and Nuclear Engineering, ELI-NP**
01.01.2014 –01.10.2015	**- Research assistant at University Politehnica of Bucharest:** THERMOSOLAR– PN II 54/2012 – cod UPB CH391208
01.10.2013 – 01.10.2015	**- Research assistant at University Politehnica of Bucharest:** Hidrogeluri compozite termosensibile injectabile pe baza de tribloc copolimeri degradabili poli(N-Izopropilacrilamidă)-polietilenglicol - PN II ID-PCE-2012-4-0082- cod UPB CH391305
15.06.2012 – 15.08.2012	**- Internship at S.C. Institutul de Cercetări pentru Acoperiri Avansate S.A.**

EDUCATION AND TRAINING

2015 – 2020	**- Doctoral student:** Doctoral School - Engineering and Application of Lasers and Accelerators, Applied Science, University Politehnica of Bucharest
2014 – 2016	**- Master's degree:** Engineering and Application of Lasers and Accelerators, Applied Science, University Politehnica of Bucharest
2013 – 2015	**- Master's degree:** Polymer Science and Engineering, Applied Chemistry and Material Science, University Politehnica of Bucharest
2009 - 2013	**- Bachelor's degree:** Applied Chemistry and Material Science, University Politehnica of Bucharest, Polymer Science and Engineering
2005 - 2009	**- High school graduation diploma:** Spiru Haret College, Ploiesti

PERSONAL SKILLS

Mother tongue(s)   romanian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Listening	Reading
C2	C2	C2	C2	C2

English

Job-related skills	■ Experienced in experimental nuclear physics, gamma-ray detectors (scintillator detectors and semiconductor detectors), digital and analog data acquisition systems, signal processing, control systems, particle transport simulation codes, and artificial neural networks
Computer skills	1. Programmig languages: C++, python, html, javascript 2. Data analysis toolkit: root 3. Particle transport simulation toolkit: Geant4 4. Distributed control systems: EPICS 5. Microsoft Office - Certificate – obtained at Spiru Haret College
Driving licence	A, B, C

Publications

1. G. V. Turturica, V. Iancu, and C. A. Ur, A neural-network based approach to cargo inspection using photon spectroscopy, Nucl. Instr. and Meth. A **1010**, 165553 (2021).

2. G. V. Turturica, V. Iancu, A. Pappalardo, P.-A. Söderström, E. Açıksöz, D. L. Balabanski, L. Capponi, P. Constantin, V. Fugaru, G. L. Guardo, M. Ilie, S.Ilie, M. Iovea, D. Lattuada, D. Nichita, T. Petruse, A. Spataru, and C. A. Ur, Effective Z evaluation using monoenergetic gamma rays and neural networks, EPJ Plus **135**, 140 (2020).

3. M. Munch, C. Matei, S. D. Pain, M. T. Febbraro, K. A. Chipps, H. J. Karwowski, C. Aa. Diget, A. Pappalardo, S. Chesnevskaya, G. L. Guardo, D. Walter, D. L. Balabanski, F. D. Becchetti, C. R. Brune, K. Y. Chae, J. Frost-Schenk, M. J. Kim, M. S. Kwag, M. La Cognata, D. Lattuada, R. G. Pizzone, G. G. Rapisarda, G. V. Turturica, C. A. Ur, and Y. Xu, Measurement of the $^7Li(\gamma,t)^4He$ ground-state cross section between E_γ=4.4 and 10 MeV, Phys. Rev. C **101**, 055801 (2020).

4. K. Ali, H. Ohgaki, H. Zen, T. Kii, T. Hayakawa, T. Shizuma, H. Toyokawa, Y. Taira, V. Iancu, G. Turturica, C. A. Ur, M. Fujimoto, and M. Katoh, Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method, Accepted for IEEE Trans. Nucl. Sci. (2020).

5. M. Boromiza, C. Borcea, P. Dessagne, D. Ghita, T. Glodariu, G. Henning, M. Kerveno, N. Marginean, C. Mihai, R. Mihai, A. Negret, C. Nita, M. Nyman, A. Olacel, A. Oprea, A. J. M. Plompen, C. Sotty, G. Suliman, R. Suvaila, L. Stan, A. Turturica, and G. V. Turturica, Nucleon inelastic scattering crosssections on ^{16}O and ^{28}Si, Phys. Rev. C **101**, 024604 (2020).

6. G. V. Turturica, C. Matei, A. Pappalardo, D. L. Balabanski, S. Chesnevskaya, V. Iancu, C. A. Ur, H. J. Karwowski, K. A. Chipps, M. T. Febbraro, S. D. Pain, D. Walter, C. Aa. Diget, J. Frost-Schenk, M. Munch, G. L. Guardo, M. La Cognata, R. G. Pizzone, G. G. Rapisarda, K. Y. Chae, M. J. Kim, and M. S. Kwag, Investigation of Compton scattering for gamma beam intensity measurements and perspectives at ELI-NP, Nucl. Instr. and Meth. A **921**, 27 (2019).

7. P.-A. Söderström, L. Capponi, E. Açıksöz, D. L. Balabanski, G. L. Guardo, D. Lattuada, C. Matei, D. Ninchita, A. Pappalardo, T. Petruse, and G. V. Turturica, Source commissioning of the ELIGANT-GG setup for γ-ray coincidence measurements at ELI-NP, Rom. Rep. Phys. **71**, 206 (2019).

8. P.-A. Söderström, L. Capponi, V. Iancu, D. Lattuada, A. Pappalardo, G. V. Turturica, E. Açıksöz, D. L. Balabanski, P. Constantin, G. L. Guardo, M. Ilie, S. Ilie, C. Matei, D. Nichita, T. Petruse, and A. Spataru, Unfolding of sparse high-energy γ-ray spectra from LaBr3:Ce detectors, J. Instrum. **14**, T11007 (2019).

9. P.-A. Söderström, G. Suliman, C. A. Ur, D. Balabanski, T. Beck, L. Capponi, A. Dhal, V. Iancu, S. Ilie, M. Iovea, A. Kuşoğlu, C. Petcu, N. Pietralla, G. V. Turturica, E. Udup, J. Wilhelmy, and A. Zilges, High-resolution gamma-rays spectroscopy with ELIADE at the Extreme Light Infrastructure, Acta. Phys. Pol. B **50**, 3 (2019).

10. P.-A. Söderström, G. Suliman, C. A. Ur, D. Balabanski, L. Capponi, A .Dhal, V. Iancu, S. Ilie, A. Kuşoğlu, C. Petcu, G. V. Turturica, and E. Udup, Photonuclear spectroscopy with the ELIADE array at ELI-NP, Nuovo Cim. C **42**, 73 (2019).

11. K. Ali, H. Ohgaki, H. Zen, T. Kii, T. Hayakawa, T. Shizuma, H. Toyokawa, Y. Taira, V. Iancu, G. V. Turturica, C. A. Ur, M. Fujimoto, and M. Katoh, Experimental Demonstration of Selective Isotope CT-Imaging Based on Nuclear Resonance Fluorescence Absorption Method, IEEE NSS/MIC (2019).

12. G. V. Turturica, V. Iancu, G. Suliman, and C. A. Ur, Implementation of photon elastic scattering in GEANT4, Nucl. Instr. and Meth. B **436**, 68 (2018).

13. M. Boromiza, C. Borcea, P. Dessagne, D. Ghita, T. Glodariu, G. Henning, M. Kerveno, N. Marginean, C. Mihai, A. Negret, C. Nita, M. Nyman, A. Olacel, A. Oprea, A. Plompen, C. Sotty, G. Suliman, R. Suvaila, L. Stan, A. Turturica and G. V. Turturica, Proton inelastic scattering cross section measurements on ^{16}O and ^{28}Si, EPJ Web Conf. **146**, 11015 (2017).

14. G. V. Turturica, M. Andrei, P. Stanescu, C. Draghici, D. Vuluga, A. Zaharia, A. Sarbu, and M. Teodorescu, Colloid Polym. Sci. **294**, 743 (2016).

15. M. Andrei, G. Turturica, P. Stanescu, and M. Teodorescu, Soft Mater. **14**, 162 (2016).

16. G. V. Turturica, G. Suliman, and C. A. Ur, Monte Carlo simulations for a large volume HPGE detector, U.P.B. Sci. Bull. A **78**, 285 (2016).

17. V. Iancu, G. Suliman, G. V. Turturica, M. Iovea, I. Daito, H. Ohgaki, C. Matei, C. A. Ur, and D. L. Balabanski, Brilliant gamma beams for industrial applications: new opportunities, new challenges, J. Phys. Conf. Ser. **763**, 012003 (2016).

18. M. Teodorescu, M. Andrei, G. V. Turturica, P. Stanescu, A. Zaharia, and A. Sarbu, Int. J. Polym. Mater. **64**, 771 (2015).

19. P. Stanescu, G. V. Turturica, M. Andrei, C. Draghici, D. Vuluga, A. Zaharia, A. Sarbu, and M. Teodorescu, Mater. Plast. **52**, 193 (2015).