

Europass Curriculum Vitae



Personal information

Surname(s) / First name(s) **Ioan URSU**

Address(es) 8 Protopopescu Str., 011727 Bucharest, Romania

Telephone(s) +40-21-4042303 Mobile: +40-740-104 286

Fax(es) +40-21-4574210

E-mail ursui@ifin.nipne.ro; ioan.ursu@eli-np.ro

Nationality Romanian

Date and place of birth September 5, 1957, Cluj

Occupational field **Nuclear Physics**

Work experience

Dates	April 2005 - present
Occupation or position held	Scientific Secretary
Main activities and responsibilities	International scientific cooperation, national and international project management, organization of scientific events, image promotion of IFIN-HH.
Name and address of employer	Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH) 30 Reactorului Str., 077125 Magurele, jud. Ilfov, Romania
Type of business or sector	Scientific Research
Dates	January 2013 - present
Occupation or position held	Responsible for Technological Transfer and Clusters (part time)
Main activities and responsibilities	Information and publicity, organization and promotion of ELI-NP scientific events, initiation of ELI-NP's TTO and of clusters around ELI-NP
Name and address of employer	Extreme Light Infrastructure – Nuclear Physics (ELI-NP) / Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH) 30 Reactorului Str., 077125 Magurele, jud. Ilfov, Romania
Type of business or sector	project management
Dates	July 2008 – June 2009, December 2011 – June 2012
Occupation or position held	Scientific Director
Main activities and responsibilities	Coordination of the scientific strategy and of the international scientific collaborations of IFIN-HH
Name and address of employer	Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH) 30 Reactorului Str., 077125 Magurele, jud. Ilfov, Romania

Type of business or sector Scientific Research

Dates September 1999 – June 2003

Occupation or position held Physics Teacher (part time)

Main activities and responsibilities Physics teaching (in German)

Name and address of employer “Goethe” German College, 17 Cihoski Str., Bucharest, Romania

Type of business or sector Education

Dates September 1982 onwards

Occupation or position held Scientific Reseacher

Main activities and responsibilities Research in Theoretical Nuclear Physics

Name and address of employer Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH)
30 Reactorului Str., 077125 Magurele, jud. Ilfov, Romania

Type of business or sector Scientific Research

Education and training

Dates Sept 1985 – April 1989

Title of qualification awarded PhD in Nuclear Physics

Principal subjects/occupational skills covered Contributions to the phenomenological and microscopic description of the nuclear collective M1 states

Name and type of organisation providing education and training Horia Hulubei National Institute of Physics and Nuclear Engineering (IFIN-HH)
30 Reactorului Str., 077125 Magurele, jud. Ilfov, Romania

Level in national or international classification IFIN-HH is the largest R&D institute in Romania – in terms of assets and personnel, covering almost 10% of the national scientific output.

Dates Sept 1977 – July 1982

Title of qualification awarded Bachelor of Science

Principal subjects/occupational skills covered Nuclear Physics

Name and type of organisation providing education and training Faculty of Physics, University of Bucharest, 407 Atomistilor Str., 077125 Magurele, jud. Ilfov, Romania

Dates Sept 1972 – July 1976

Title of qualification awarded Abitur

Principal subjects/occupational skills covered Basic Sciences, Mathematics

Name and type of organisation providing education and training “Goethe” German College, 17 Cihoski Str., Bucharest, Romania

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (*)

English

German

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C2	C2	C2	C2	C2
C1	C1	C1	C1	C1

(*) Common European Framework of Reference for Languages

Organisational skills and competences	Experience in project management, scientific cooperation, science communication, organization and promotion of scientific events; national expert at EC H2020: member of the Consultative Committee EURATOM – Fission (2007-2013) and of the EURATOM Scientific and Technical Committee – STC (2007-2013 and 2014-2019); Romanian representative at NuPECC - expert committee of ESF in Nuclear Physics (2014-2017); member of the Scientific Advisory Committee (SAC) for the European Physical Journal (EPJ) a.o. Magurele High Tech Cluster – President (2014-); Magurele Science Park – Vice-President (2015 -)
Computer skills and competences	Informatics (competent with Fortran, HTML, Microsoft Office programmes, Adobe, Corel a.o.)
Driving licence	Holder of a Romanian driving licence, category B vehicle.
Additional information	Upon request
Annexes	List of scientific publications (A1) http://www.nipne.ro/management/cv/ss.pdf

Annexe 1 List of scientific publications

- I.I. Ursu** : Classical limit in the Lipkin model; *Rev. Roum. Phys. Tome 29, No.1, 33-53 (1984)*.
- A.A. Raduta, **I.I. Ursu** and D.S. Delion : The description of the (e,e') form-factor and the BM1 probability for the magnetic state 1^+ within the Generalised Coherent State Model; *Rev. Roum. Phys. Tome 31, No. 8, 799-811 (1986)*.
- A.A. Raduta, **I.I. Ursu** and D.S. Delion : Simultaneous G.C.S.M. description of the M1 state and the major collective bands ; *Nucl. Phys. A 475 439-467(1987)*.
- A.A. Raduta, **I.I. Ursu** and J. Suhonen : The description of the magnetic state 1^+ in terms of quadrupole and octupole interacting bosons ; *Rev. Roum. Phys. Tome 32, No. 10, 1045-1053 (1987)*.
- A.A. Raduta, **I.I. Ursu** and A. Faessler : The R.P.A. treatment of the collective magnetic state 1^+ ; *preprint I.F.A.-FT-330-1988*.
- A.A. Raduta and **I.I. Ursu** : On some phenomenological and microscopic features of the collective magnetic state 1^+ in the even-even deformed nuclei ; *Rev. Roum. Phys. Tome 33, No. 4-6, 853-858 (1988)*.
- A.A. Raduta, **I.I. Ursu** and A. Faessler : The description of the $K^\pi = 1^+$ isovector M1 state within a boson expansion formalism ; *Nucl. Phys. A 489 20-44 (1988)*.
- A.A. Raduta, **I.I. Ursu**, J. Suhonen and N. Lo Iudice : Low-lying positive-parity dipole states from a quadrupole-octupole boson hamiltonian; *Nuovo Cimento Vol. 101A, No. 6, 1037-1044 (1989)*.
- I.I. Ursu** : Contributions to the phenomenological and microscopic description of the nuclear collective M1 states 1^+ in even-even deformed nuclei; Ph.D Thesis (in Romanian) 1989.

10. A.A. Raduta, **I.I. Ursu**, J. Suhonen and N. Lo Iudice : Electromagnetic properties of some positive parity dipole states described in terms of quadrupole and octupole interacting bosons *Phys. Rev. C Vol. 41, No. 5, 2358-2369 (1990)*.
11. A.A. Raduta and **I.I. Ursu** : Some microscopic features of the magnetic dipole states induced by the quadrupole-octupole boson correlations ; *Rev. Roum. Phys. Tome 35, No. 1, 53-57 (1990)*.
12. A.A. Raduta, **I.I. Ursu**, D.S. Delion and N. Lo Iudice : Semiclassical description of the alpha clustering in heavy nuclei ; *Phys. Rev. C Vol. 44, No. 5 1929-1943 (1991)*.
13. A.A. Raduta, **I.I. Ursu** and N. Lo Iudice : Low-lying bands as alpha-like dipole excitations of a coherent quadrupole boson state ; *Nuovo Cimento Vol. 105A, No. 5, 663-675 (1992)*.
14. A.A. Raduta, **I.I. Ursu** and N. Lo Iudice : Description of collective spin excitations in deformed nuclei within a projected single particle basis; *Phys. Rev. C Vol. 46, No. 5, 1782-1789 (1992)*.
15. A.A. Raduta, N. Lo Iudice and **I.I. Ursu** : Description of the orbital and spin excitation within a projected single particle basis; *Nucl. Phys. A 584 84-102 (1995)*.
16. A.A. Raduta, N. Lo Iudice and **I.I. Ursu** : Low-lying octupole bands in the Coherent State Model; *Nucl. Phys. A608 11-31 (1996)*.
17. A.A. Raduta, N. Lo Iudice and **I.I. Ursu** : Description of the $K^\pi = 0^+, 1^-, 2^-$ octupole bands in the Coherent State Model; *Nuovo Cimento 109A 1669 (1996)*.
18. A.A. Raduta, C.M. Raduta and **I.I. Ursu** : A fully self-consistent R.P.A. description of the $2\nu\beta\beta$ decay; *Rom. J. of Phys. Vol. 43 1-2 507 (1998)*.
19. A.A. Raduta, D. Ionescu and **I.I. Ursu** : Energy displacement function as a signature for octupole deformations in excited states; *Rom. J. of Phys. Vol. 48 1-2 suppl. (2003)*.
20. A.A. Raduta, D. Ionescu, **I.I. Ursu** and A. Faessler: New features of positive and negative parity rotational bands in ^{226}Ra ; *Nucl. Phys. A 720 43 (2003)*.
21. A.A. Raduta, F.D.Aaron and **I.I. Ursu**: Semiclassical description of a sixth order quadrupole boson Hamiltonian, *Nucl. Phys. A 772, 20-54 (2006)*.
22. I. Baran, C. Ganea, **I.I. Ursu**, F. Musumeci, A. Scordino, S. Tudisco, S. Privitera, L. Lanzano, E. Katona, V. Baran, G.A.P. Cirrone, G. Cuttone, L. Raffaele, L. Valastro : Effects of nocodazole and ionizing radiation on cell proliferation and delayed luminescence; *Rom. J. of Phys, Vol. 54, Nos. 5-6, 557-567 (2009)*.
23. V. Barresi, I. Baran, C. Ganea, E. Katona, N. Musso, C. Capizzi, M.-M. Mocanu, **I.I. Ursu**, V. Baran, G. Cuttone, G.A.P. Cirrone, S. Tudisco, D.F. Condorelli: High resolution genome-wide analysis of genetic markers and retrospective biological dosimetry of absorbed radiation. *Activity Report Istituto Nazionale di Fisica Nucleare Laboratori Nazionali del Sud, pp. 236-240, Edit. Arti Grafiche Le Ciminiere Catania, Italia; ISSN: 1827-1561, nov. 2009*.
24. A. A. Raduta, P. Buganu, D. Bucurescu and **I.I. Ursu**: A phenomenological interpretation of the multiplets 4^+ and 6^+ ; *Rom. J. of Phys 1050-1064 (2010)*.
25. I. Baran, C. Ganea, A. Scordino, F. Musumeci, V. Barresi, S. Tudisco, S. Privitera, R. Grasso, D. F. Condorelli, **I. I. Ursu**, V. Baran, E. Katona, M.M. Mocanu, M. Gulino, R. Ungureanu, M. Surcel, C. Ursaciuc: Effects of Menadione, Hydrogen Peroxide and Quercitine on Apoptosis and Delayed Luminescence of Human Leukemia Jurkat T-Cells. *Cell Biochemistry and Biophysics (2010)*.

26. I. Baran, C. Ganea, A. Scordino, V. Barresi, F. Musumeci, S. Tudisco, S. Privitera, R. Grasso, D. F. Condorelli, **I.I. Ursu**, V. Baran, E. Katona, M. M. Mocanu, R. Ungureanu, N. Musso, M. Gulino, G. A. Pablo Cirrone, G. Cuttone, L. M. Valastro: Apoptosis, Cell Cycle and Delayed Luminescence of Human Leukemia Jurkatt T-Cells under Proton-Irradiation and Oxidative Stress Conditions. *Activity Report Istituto Nazionale di Fisica Nucleare Laboratori Nazionali del Sud*, pp. 246-249; ISSN: 1827-1561, 2010.
27. I. Baran, C. Ganea, **I. Ursu**, V. Baran, O. Calinescu, A. Iftimie, R. Ungureanu, I.T. Tofolean: Fluorescence Properties of Quercetin in Human Leukemia Jurkat T-cells; *Rom. J. of Phys.* 3-4, 388-398 (2011)
28. A.A. Raduta, C.M. Raduta and **I.I. Ursu**: New results for double beta decay within a fully renormalized pnQRPA with gauge restored symmetry; *Rom. J. of Phys.* Vol. 56, Nos. 7-8, 894-909 (2011).
29. I. Baran, C. Ganea, **I. Ursu**, V. Baran, O. Calinescu, A. Iftime, R. Ungureanu, I.T. Tofolean,: Fluorescence properties of quercetin in human leukemia Jurkat T-cells; *European Biophysics Journal with Biophysics Letters* Vol. 40, Suppl. 1, 69, (2011).
30. I. Patrascu, D. Nicolae, V. Lungu, **I. Ursu**, M. Iiescu, C. Tuta, A. Antohe: The purification and the quality control of (68)Ga eluates from (68)Ge / Ga generator; *Rom. Rep. in Phys.*, Vol. 63, No. 4, 988-996 (2011)
31. Raduta C. M.; Raduta A. A., **Ursu I. I.**: New theoretical results for 2 nu beta beta decay within a fully renormalized proton-neutron random-phase approximation approach with the gauge symmetry restored; *Phys. Rev. C* Vol. 84 Issue: 6 (2011).
32. I. Baran, C. Ganea, S. Privitera, A. Scordino, V. Barresi, F. Musumeci, M. M. Mocanu, D. F. Condorelli, **I. Ursu**, R. Grasso, M. Gulino, A. Garaiman, N. Musso, G. Cirrone and G. Cuttone: Detailed analysis of apoptosis and delayed luminescence of human leukemia Jurkat T-cells after proton-irradiation and treatments with oxidant agents and flavonoids; *Oxidative Medicine and Cellular Longevity* Volume 2012, Art. ID 498914, 14 pages (2012).
33. **I. Ursu** and N.V. Zamfir: Novel Research Opportunities in IFIN-HH, at a Glance, *Rom. Rep. in Phys.*, Vol.65, No. 3, 693 (2013).
34. **I. Ursu**, L. Craciun, D. Niculae, N.V. Zamfir: The Radiopharmaceuticals Reseach Center (CCR) of IFIN-HH at Start: *Rom. J. of Physics*, Vol. 58, No. 9-10, 1327 (2013).
35. Balabanski, DL, Cata-Danil, G, Filipescu, D , Gales, S , Tesileanu, O , Ur, CA, **Ursu, I** , Zamfir, NV.: The Extreme Light Infrastructure Nuclear Physics Facility: Towards Experiments With Brilliant Gamma-Ray Beams ; *ACTA PHYSICA POLONICA B* , Volume: 45 , Issue: 2 , Pages: 483-490 , DOI: 10.5506/APhysPolB.45.483 Published: FEB 2014; Conference: 33rd Mazurian Lakes Conference on Physics , Piaski, Poland, Sept. 01-07, 2013
36. Verga, N.; **Ursu, I.**; Craciun, L; Mirea, D. A.; Vasilescu, R. ; Cata-Danil, Gh ; Groza, Andreea ; Ganciu, M.; Scarlat, F. ; Stan, C. A. ; Zarma, S. F.: Eye Protontherapy: Proposed Feasibility Plan ; *Rom. Rep. in Phys.* Volume: 66 Issue: 1 Pages: 223-246 (2014).
37. D. L. Balabanski, G. Cata-Danil, D. Filipescu, S. Gales, F. Negoita, O. Teliseanu, C. A. Ur, **I. Ursu**, N. V. Zamfir, and the ELI-NP Team: Towards experiments at the new ELI-NP facility; *EPJ Web of Conferences* **78**, 06001 (2014); <http://dx.doi.org/10.1051/epjconf/20147806001>.
38. C.A. Ur, D. Balabanski, G. Cata-Danil, S. Gales, I. Morjan, O. Tesileanu, D. Ursescu, **I. Ursu**, N.V. Zamfir: New Frontiers In Nuclear Physics Research At ELI–NP; *Acta Physica Polonica B* No 3, Vol. 46; 743-752 (2015).

39. I. Burducea, M. Straticiuc, D. G. Ghita, D. V. Mosu, C. I. Calinescu, **I. Ursu**, N. V. Zamfir, N.C. Podaru, D.J.W. Mous: A New Ion Beam Facility Based on a 3 MV Tandetron™ at IFIN-HH, Romania; *Nuclear Instruments and Methods B359 12-19 (2015)*.
40. C.A. Ur, D. Balabanski, G. Cata-Danil, S. Gales, I. Morjan, O. Tesileanu, D. Ursescu, **I. Ursu**, N.V. Zamfir: The ELI-NP facility for nuclear physics; *Nuclear Instruments & Methods In Physics Research Section B-Beam Interactions With Materials And Atoms Volume: 355 Pages: 198-202 (2015)*
41. D. Filipescu, A. Anzalone, D.L. Balabanski, S.S. Belyshev, F. Camera, M. La Cognata, P. Constantin, L. Csige, P.V. Cuong, M. Cwiok, V. Derya, W. Dominik, M. Gai, S. Gales, I. Gheorghe, B.S. Ishkhanov, A. Krasznahorkay, A.A. Kuznetsov, C. Mazzocchi, V.N. Orlin, N. Pietralla, M. Sin, C. Spitaleri, K.A. Stopani, O. Tesileanu, C.A. Ur, I. Ursu, H. Utsunomiya, V.V. Varlamov, H.R. Weller, N.V. Zamfir, and A. Zilges: Perspectives for photonuclear research at the Extreme Light Infrastructure - Nuclear Physics (ELI-NP) facility; *Eur. Phys. J. A (2015) 51: 185*; <http://dx.doi.org/10.1140/epja/i2015-15185-9>.

Publications in Conference Proceedings

1. A.A. Raduta, **I.I. Ursu**, D.S. Delion and N. Lo Iudice : Semiclassical description of the alpha clustering in heavy nuclei ; *Predeal International Summer School, World Scientific (1991)*.
2. Ioana Patrascu, Iuliana Gruia, Rodica Anghel, Valeria Lungu, Florin Constantin, Viorel Fugaru, Dana Niculae, **Ioan Ursu**, Tiberiu Esanu: BNCT and Targeted Radiotherapy (TRT) Development in Romania; BgNS Conference Nuclear Power for the People, Veliko Turnovo, Bulgaria, Noiembrie 11-14, 2009; *Science and Technology Journal BgNS Transactions, Vol. 14, No. 1, 29-33, June 2010*.
3. Ursescu, D, Tesileanu, O, Balabanski, D, Cata-Danil, G, Ivan, C, **Ursu, I**, Gales, S, Zamfir, NV: Extreme Light Infrastructure Nuclear Physics (ELI-NP): present status and perspectives; High-Power, High-Energy, And High-Intensity Laser Technology; And Research Using Extreme Light: Entering New Frontiers With Petawatt-Class Lasers. Edited by:Hein, J; Korn, G; Silva, LO; Book Series: Proceedings of SPIE , Volume: 8780 , Article Number: UNSP 87801H , DOI: 10.1117/12.2021776 Published: 2013 , Conference: Conference on High-Power, High-Energy, and High-Intensity Laser Technology; and Research Using Extreme Light - Entering New Frontiers with Petawatt-Class Lasers Location: Prague, CZECH REPUBLIC ,Date: APR 15-17, 2013

Editor of Proceedings

1. Predeal International Summer School "New Trends in Theoretical and Experimental Nuclear Physics" August 26 - September 7, 1991; Editors: A.A. Raduta, D.S. Delion and **I.I. Ursu** ; *World Scientific 1-545 (1991)*.
2. Predeal International Summer School "Collective Motion and Nuclear Dynamics" August 28 - September 9, 1995; Editors: A.A. Raduta, D.S. Delion and **I.I. Ursu**; *World Scientific 1 – 565 (1995)*.
3. Predeal International Summer School "Structure and Stability of Nucleon and Nuclear Dynamics" August 24 - September 5, 1998; Invited Lectures. Editors: A.A. Raduta, S. Stoica and **I.I. Ursu** ; *World Scientific, 1 - 571 (1998)*.
4. Predeal International Summer School "Structure and Stability of Nucleon and Nuclear Dynamics" August 24 - September 5, 1998; Contributions. Editors: A.A. Raduta, S. Stoica and **I.I. Ursu** ; *Rom. J. of Physics 44, (1999)*.

5. Predeal International Summer School " Collective Motion and Phase Transitions in Nuclear Systems", 28 august-9 septembrie 2006; Invited Lectures. Editors: A.A. Raduta, V. Baran, A.C. Gheorghe and **I.I. Ursu** ; *World Scientific* 1-672 (2007).

6. Predeal International Summer School " Collective Motion and Phase Transitions in Nuclear Systems", 28 august-9 septembrie 2006; Contributions. Editors: A.A. Raduta, V. Baran, A.C. Gheorghe and **I.I. Ursu**; *Rom. J. of Physics* vol. 52, no. 8-10, 769-978 (2007).

Science Policy

1. N.V. Zamfir, **I.I. Ursu**, I.A. Dorobantu and P.T. Frangopol: Laboratorul National de Fizica – O noua forma organizatorica pentru Romania; Proceedings al Workshop-ului “Pentru Excelenta in Stiinta Romaneasca”, Bucuresti, 26 martie 2008, , *Casa Cartii de Stiinta, Cluj-Napoca*, 284-289 (2008). ISBN 978-973-133-405-9.

2. I.A. Dorobantu, **I.I. Ursu**: *Știința Secolului 21 – Exerciții de Predicție* ISBN 978-973-0-09155-7, pag. 104, (2010).

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