



Europass Curriculum Vitae



Personal information

Surname(s) / First name(s) **BALABANSKI Dimiter Loukanov**

Address(es) Dragalevtsi, 501 Str. No.8, 1415 Sofia, Bulgaria (permanent)
Uranus 42D, bl. 4, ap. 13, 077125 Magurele, Romania (present)

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E-mail dimiter.balabanski@eli-np.ro

Nationality Bulgarian

Date of birth 29.10.1954

Gender Male

Work experience

Dates 2014 – present

Occupation or position held PhD Thesis adviser

Main activities and responsibilities nuclear physics and applications, γ -ray spectroscopy, nuclear fission

Name and address of employer Doctoral School in Engineering and Applications of Lasers and Accelerators (SDIALA), University Politehnica of Bucharest, 313 Splaiul Independenței, 060042 Bucharest, Romania

Type of business or sector State University

Dates 2013 – present

Occupation or position held Senior Researcher I, Head of the Gamma-Driven Experiments Department

Main activities and responsibilities nuclear physics and applications, γ -ray spectroscopy, nuclear fission

Name and address of employer Extreme Light Infrastructure – Nuclear Physics, IFIN-HH, 30 Reactorului Str., 077125 Magurele, Romania

Type of business or sector Research Institute

Dates 2007 – 2013

Occupation or position held Senior Researcher, Group Leader

Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	Institute for Nuclear Research and Nuclear Energy 72 Tsarigradsko Chaussee Blvd., 1415 Sofia, Bulgaria
Type of business or sector	Research Institute
Dates	2004 – 2007
Occupation or position held	Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	University of Camerino Via Madonna delle Carceri, 62032 Camerino (MC), Italy
Type of business or sector	State University
Dates	1996 – 2004
Occupation or position held	Associate Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	St. Kliment Ohridski University of Sofia, Bulgaria
Type of business or sector	State University
Dates	1999 – 2000
Occupation or position held	Visiting Associate Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	University of Tennessee Knoxville, TN, USA
Type of business or sector	State University
Dates	1995 – 2003
Occupation or position held	Visiting Scientist (in total five years)
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	University of Leuven, Belgium
Type of business or sector	State University
Dates	1985 – 1996
Occupation or position held	Assistant Professor
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	St. Kliment Ohridski University of Sofia, Bulgaria
Type of business or sector	State University
Dates	1987 – 1990
Occupation or position held	Visiting Scientist
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	Forschungszentrum Juelich, Germany
Type of business or sector	National Research Center
Dates	1980 – 1985
Occupation or position held	Research Associate
Main activities and responsibilities	γ -ray spectroscopy, nuclear physics and applications
Name and address of employer	St. Kliment Ohridski University of Sofia, Bulgaria
Type of business or sector	State University

Education and training

Dates 1996
 Title of qualification awarded Habilitation
 Principal subjects/occupational skills covered nuclear physics
 Name and type of organisation providing education and training St. Kliment Ohridski University of Sofia, Bulgaria State University

Dates 1993
 Title of qualification awarded PhD in Physics
 Principal subjects/occupational skills covered γ -ray spectroscopy, nuclear structure physics
 Name and type of organisation providing education and training St. Kliment Ohridski University of Sofia, Bulgaria State University

Dates 1975 – 1980
 Title of qualification awarded MS in Physics Engineering
 Principal subjects/occupational skills covered Nuclear Engineering
 Name and type of organisation providing education and training St. Kliment Ohridski University of Sofia, Bulgaria State University

Personal skills and competences

Mother tongue(s) **Bulgarian**

Other language(s) **English, German, Russian, Italian**

Self-assessment
European level ()*

English
German
Russian
Italian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
C1	Proficient user	C1	Proficient user	B2	Independent user	A2	Basic user	A2	Basic user
C2	Proficient user	C2	Proficient user	C1	Proficient user	B2	Independent user	B2	Independent user
B2	Independent user	B1	Independent user	A2	Basic user	A2	Basic user	A1	Basic user

(*) *Common European Framework of Reference for Languages*

Social skills and competences

- team spirit;
- good ability to adapt to multicultural environments, gained though my work experience abroad.

Organisational skills and competences

- leadership (currently responsible for a team of more than 40 people);
- sense of organization (experience in leading different research projects);
- good experience in project management.

Technical skills and competences

- excellent experience with nuclear spectroscopic equipment

Computer skills and competences

- good experience with different operational systems;
- programming skills in C++ and FORTRAN;
- good command with different applications (text, graphic and data base handling).

Driving license

Category B

References

Prof. Muhsin Harakeh, University of Groningen, The Netherlands
Prof. Gerda Neyens, University of Leuven, Belgium and ISOLDE, CERN
Prof. Rick Casten, Yale University, New Haven, CT, USA
Prof. Sydney Gales, IFIN-HH, ELI-NP, Magurele, Romania

Additional Information

Positions as visiting scientist:

2009 – 2015: University Paris-Sud, France, Visiting Professor (in total ½ year)
2007: CSNSM, Orsay, France, CNRS Visiting Research Professor (three months)
1999 – 2002: University of Tennessee, Knoxville and ORNL, Oak Ridge, TN, USA, Guest Professor (in total 1 ½ years)
1995 – 2003: University of Leuven, Belgium, Visiting Scholar (fellowships of EC: HPRI-1999-CT50001, NATO, the Ministry of Science and Technologies of Belgium and the Flemish Science Foundation; in total 5 years)
1994 – 1996: University of Milano and INFN-Milano, Italy, Visiting Scientist (INFN fellowships, total ½ year)
1987 – 1993: Visiting Scientist, Forschungszentrum Juelich, Germany (fellowships of IAEA, Vienna and FZ-Juelich, in total 3 ½ years)

Research activities:

Photonuclear processes and nuclear photonics
Photo-fission
ISOL technique
Structure of atomic nuclei at high angular momenta
Structure of atomic nuclei away from the stability line
Dynamic symmetries in atomic nuclei
Design of multi-detector systems for nuclear spectroscopy
Isotope glaciology (1988 – 2000)
Moessbauer spectroscopy (1980 – 1987)
Applied nuclear physics (1980 – 1987)

Scientific projects:

since 2023: Research trainer within the IRTG “Nuclear Photonics”, project IGK 2891
2020 – 2022: PI of PNCDI III project “Frontier research of the interaction of photons with matter with extreme helical light” with the Romanian Research Fund (PN-III-P4-ID-PPCF-2016-0164, contract no. 8.2018)
2011 – 2013: coordinator of bilateral projects with the Bulgarian National Science Fund (France DRILA-01/8 and Germany DNTS/GERMANY-01/7)
2010 – 2014: FP7 I3 ENSAR (262010) project (European Nuclear Science and Applications Research), coordinator of the Bulgarian team, work package leader (JRA06 EWIRA – East-West Integrated Research Activity), member of the Scientific Council and of the Program Coordination Committee
2009 – 2013: projects with the Bulgarian National Science Fund (DRNF-02/5 – coordinator, DID-02/16 and DNTS-02/21 – team member)
2007 – 2011: Spirral2 Preparatory Phase project: EC FP7 Spiral2PP (212692); head of the Bulgarian team and member of the Steering Committee of the PARIS project to construct a 4π scintillator array
2003 – 2009: nuclear data evaluation; IAEA Research Contract No. 12482 (2005 – 2008)
2003 – 2012: leader of the Bulgarian team and member of the Steering Committee of the AGATA project to construct an European gamma-ray tracking array; EC FP6 project RII3 – EURONS: 506065
2002 – 2004: co-chair of a NATO CLG “New dynamic symmetries in atomic nuclei” (joint research project of the St. Kliment Ohridski University of Sofia, Bulgaria, the Istanbul and the Bosphoros Universities, Istanbul, Turkey, Yale University, New Haven, USA, NCSR “Demokritos”, Athens, Greece and IFIN-HH, Bucharest, Romania)
since 1995: team leader of *more than 25* experimental projects to study the structure and the symmetries in atomic nuclei: at the INFN LNL laboratory in Legnaro, Italy (three), the National Accelerator Center iThemba labs, Cape Town, South Africa (three), Yale University, New Haven, USA (four), the ORNL National Laboratory, Oak Ridge, USA (one), the State University of Florida, Tallahassee, USA (one), the CYCLONE accelerator laboratory, Louvain-le-Neuve, Belgium (two), the Australian National University, Canberra, (one), the Tandem laboratory, Orsay, France (six), GSI, Darmstadt, Germany (one), ILL, Grenoble, France (five), GANIL, France (three), the Institute of Modern Physics, Lanzhou, China (one), the Tandem Laboratory, Bucharest, Romania (three), ATOMKI, Debrecen, Hungary (one) and ISOLDE at CERN (one).
1995 – 1998: head of the Bulgarian Antarctic Glaciological Program, field work during the 1995, 1996 and 1998

polar campaigns
1993 – 1994: projects for computerization of the Physics Library of the University of Sofia and setting of a LAN and internet connection of the Faculty of Physics of the University of Sofia, projects with the Open Society Fund (Soros Foundation), Sofia, Bulgaria

Scientific papers and conference reports:

Review papers: 7
Papers in refereed international journals: >180
Conference papers in refereed international journals: >100
Papers in conference proceedings: >100
Papers in Bulgarian journals: >10
Papers in Laboratory Annual Reports: >50
Invited seminars: >20
Invited talks at conferences: >50
Plenary talks at conferences and workshops: >60
Citations (SCI): > 5000
h-index: 37 (SCI), 36 (Scopus)

Lecture courses:

- (a) St. Kliment Ohridsky University of Sofia
1995/96: Atomic and Nuclear Physics (for B.A. Physics students)
1994/95, 1995/96: Atomic and Nuclear Physics (for M.S. Geology students)
1995/96, 1996/97, 1997/98, 2002/03: Nuclear structure (for M.S. students in Nuclear Physics)
- (b) University of Camerino, Italy
2003/04, 2004/05: Nuclear spectroscopy (for M.S. students)
- (c) University Politehnica Bucharest
2015/16, 2016/17, 2017/2018, 2018/2019, 2019/2020, 2021/2022: Research Opportunities at ELI-NP (M.S. students in Laser and Accelerator Technologies)

Diploma and Ph.D students:

- since 2015: adviser of *ten* students at SDIALA, University Politehnica Bucharest
2023: defended Andreea Gherghe, at present Research Assistant at ELI-NP, IFIN-HH
2022: defended Anamaria Spataru, at present Research Assistant at ELI-NP, IFIN-HH
2022: defended Dragos Nichita, at present Research Assistant at ELI-NP, IFIN-HH
2022: defended Alexandru State, at present Research Assistant at ELI-NP, IFIN-HH
2020: defended Doru Dinescu, at present Civil Servant
- 2005 - 2010: consultant of *three* Ph.D. students at the University of Sofia (two), at the University of Istanbul (one).
2018: defended Liliya Atanasova (U. Sofia) at present Assist. Professor, Medical University Sofia
2009: defended Lidya Susam (University of Istanbul) at present Assoc. Professor, U. Istanbul
- 1996 - 2006: adviser of *seven* Ph.D. students at the University of Sofia
2005: defended Andrej Blazhev, at present Lecturer, U. Koeln
2005: defended Radomira Lozeva, at present Researcher at CSNSM, Orsay
2001: defended Georgi Rainovski, at present Professor and Dean of Physics, U. Sofia
2004: defended Kalin Gladnishki, at present Assoc. Professor, U. Sofia
2003: defended Miroslav Danchev, Assoc. Professor, U. Sofia (2009-2015), now in IT company
- 1996 – 2018: referee (jury member) of 15 Ph.D. theses in Bulgaria, Belgium, Germany, Australia, India, France and Romania
- 1991 – 2013: adviser of 12 M.S. theses at the University of Sofia, one at the University of Camerino and one at the Southwestern University of Blagoevgrad

Serving the scientific community:

- 2011 – 2014: member of the Board of the Bulgarian Union of Physicists
2010 – 2017: member of the International PAC of the Tandem-ALTO Laboratory at Orsay, Paris, France
2009 – 2015: member of the Nuclear Physics Board of the European Physical Society
2009 – 2016: member of the International PAC of the Heavy Ion Laboratory, Warsaw University, Poland
2009 – 2021: member of the International PAC of the Tandem Laboratory, IFIN-HH, Bucharest, Romania
2008 – 2013: member of the International PAC of the FP7-REGPOT-2008-1 LIBRA 210123 project at NCSR “Demokritos”, Athens, Greece
2008 – 2012: chair of the South-Eastern European Nuclear Physics Network (2002 – 2008 vice-chair)
2008 – 2012: co-chair of the European Network of NSDD evaluators (since 2002 IAEA NSDD expert)
2007 – 2014: member of the Steering Committee of the PARIS project for the construction of a 4 π spectrometer of LaBr₃:Ce detectors

- 2006 – 2012: co-chair of an Working Party to study nuclear electromagnetic moments within the SPIRAL2 project, Caen, France
- 2004 – 2012: coordinator of an Working Group to study nuclear electromagnetic moments and member of the Technical Board of the HiSpec/DeSpec project within the NUSTAR collaboration (project FAIR)
- 2003 – 2012: member of the Steering Committee of the AGATA project for the construction of a 4π spectrometer of segmented HPGe detectors
- since 2002: referee of Physical Review Letters, Physical Review C, Journal of Physics G, European Physical Journal A, Physics Letters A and B, New Journal of Physics, Review of Scientific Instruments, Europhysics Letters and Annals of Nuclear Energy
- 2000 – 2003: coordinator of an Working Group for ground-state properties and fundamental interactions within the EURISOL preliminary design study, EC FP5 project HPRI-1999-CT50001
- 1999 – 2011: Bulgarian correspondent of Nuclear Physics News Magazine of NuPECC
- 1998 – 2008: chair or member of the Organizing/Program Committee of more than *ten* international conferences and workshops
- 1998 – 2002: founder and chair/member of the Organizing Committee of the Balkan workshop on Nuclear Physics and Applications (Tsigov Chark, Bulgaria – 1999, Edirne, Turkey – 2001, Tirgoviste, Romania – 2002); now Balkan Workshop on Applied Physics which is held annually in Constanta, Romania
- 1997 - 2013: co-founder and member of the Board of Directors of the Balkan School on Nuclear Physics (Istanbul, Turkey – 1998, Bodrum, Turkey – 2000, Thessaloniki, Greece – 2002, Bodrum, Turkey – 2004, Brasov, Romania – 2006, Troyan, Bulgaria – 2008; Adrasan, Antalya, Turkey – 2010; Blagoevgrad, Bulgaria – 2012)

Membership in scientific organizations

- European Physical Society – individual member
- Bulgarian Union of Physicists
- Bulgarian Antarctic Institute

Prizes and Awards

- 2020: Horia Hulubei Prize of the Romanian Academy of Sciences
- 2013: The rocky peak rising to 833 m located at 66°31'40"S 63°50'25"W in Bigla Ridge on Foyn Coast, Antarctic Peninsula was named 'Balabanski Crag'
- 2009: Pythagoras Prize of the Bulgarian Ministry of Education, Youth and Science for an Established Scientist in the field of Natural Sciences and Mathematics
- 2003 – 2007: Professor within the 'Rientro dei Cerveli' program of the Italian Ministry of Education
- 1998: Fellow of the Belgian Ministry of Science and Technology
- 1997: NATO Research Fellow
- 1996: Fellow of the Flemish Science Foundation
- 1994: INFN Research Fellow
- 1987: IAEA Research Fellow

LIST OF PAPERS

2024

Review papers

1. D.L. Balabanski, W. Luo
Nuclear photonics and nuclear isomers
Eur. Phys. J. ST (2024) printed online
2. D.L. Balabanski, P. Constantin
80 years of photofission experimental research
Eur. Phys. J. A 60, 39 (2024)
3. Georgi Georgiev, Dimiter L. Balabanski, Andrew E. Stuchbery, Hideki Ueno
Nuclear electromagnetic moments in the new millennium – spin-precession methods for nuclear moment studies: Progress and outlook
Eur. Phys. J. A (2023) in preparation

Original papers

4. A. Kusoglu, D.L. Balabanski, R.Z. Hu, S.Q. Fan, F.R. Xu, P. Constantin, P.-A. Soderstrom, M. Cuciuc, S. Aogaki, R.S. Ban, R. Borcea, R. Corbu, C. Costache, A. Covali, I. Dinescu, N.M. Florea, V. Iancu, A. Ionescu, N.M. Marginean, C. Mihai, R.E. Mihai, C. Nedelcu, A. Coman, H. Pai, A. Pappalardo, O.A. Sirbu, L. Stan, C.O. Sotty, A.N. State, D.A. Testov, T. Tozar, A. Turturica, G. Turturica, S. Ujenic, C.A. Ur, V. Vasilca, and F. Zhu
Direct Observation of Competing M1 and M3 Transitions in ^{10}B
Phys. Rev. Lett. (2024) submitted
5. Yi Xu, D.L. Balabanski, V. Baran, C. Iorga, C. Matei
Prospective nuclear structure studies with vortex –beams
Phys. Lett. B (2024) submitted
6. T. Petruse, G.L. Guardo, D. Lattuada, M. La Cognata, D.L. Balabanski, E. Aciksoz, L. Acosta, L. Capponi, D. Carbone, S. Cherubini, D. Choudhury, G. D'Agata, A. Di Pietro, P. Figuera, M. Gulino, A. I. Kilik, M.La Commara, L. Lamia, C. Matei, S. Palmerini, R.G. Pizzone, S. Romano, P.-A. Soderstrom, R. Sparta, A. Tumino, S. Vinales Onses
Direct measurement of the $^{19}\text{F}(\text{p},\alpha)^{16}\text{O}$ reaction using the LHASA detector array
Eur. Phys. J. A (2023) in preparation
7. H. Pai, T. Petruse, Sk M. Ali, G.L. Guardo, D. Lattuada, C. Matei, Y. Xu, S. Aogaki, D. L. Balabanski, R. S. Ban, A. Cassisa, M. La Cognata, R. Corbu, M. Cuciuc, G. D'Agata, N. Deshmukh, A. Dhal, J. P. Fernandez, E. C. García, M. Gulino, D. Kahl, I. Kuncser, A. Kusoglu, L. Lamia, J. Lubian, A. Lupoae, A. Nurmukhanbetova, A. Pappalardo, R. G. Pizzone, A. Rotaru, P.-A. Söderström, N. T. Szegedi, D. Testov, T. Tozar, and A. Tumino
Measurement of elastic scattering for the $^{19}\text{F} + ^{12}\text{C}$ system below the Coulomb barrier
Phys. Rev. C (2023) submitted
8. J.W. Zhao, D. Amanbayev, T. Dickel, I. Miskun, W. R. Plass, N. Tortorelli, S. Ayet San Andres, S. Beck, J. Bergmann, Z. Brencic, P. Constantin, H. Geissel, F. Greiner, L. Grof, C. Hornung, N. Kuzminzuk, G. Kripko-Koncz, I. Mardor, I. Pohjalainen, C. Scheidenberger, P. G. Thirolf, S. Bagchi, E. Haettner, E. Kazantseva, D. Kostyleva, A. Oberstedt, S. Pietri, M. P. Reiter, Y. K. Tanaka, M. Wada, D. L. Balabanski, D. Benyamin, M. Harakeh, N. Hubbard, N. Kalantar-Nayestanaki, A. Mollaebrahimi, I. Mukha, M. Narang, T. Niwase, Z. Patyk, S. Purushothaman, A. Rotaru, A. Spataru, G. Stanic, M. Vencelj, H. Weick, J. Yu and the Super-FRS experiment collaboration
Rate capability of the cryogenic stopping cell at the FRS Ion Catcher
Nucl. Instrum. Meth. Phys. Res. B 574, 165175 (2024)

Conference papers (peer refereed journals)

9. S. Zhamkochyan, V. Kakoyan, S. Abrahamyan, H. Elbakyan, G. Ayvazyan, R. Ayvazyan, A. Ghalumyan, A. Kakoyan, S. Mayilyan, A. Papyan, A. Piloyan, H. Rostomyan, A. Safaryan, G. Sughyan, H. Vardanyan, H. Zohrabyan, J. Annand, K. Livingston, R. Montgomery, P. Achenbach, J. Pochodzalla, D.L. Balabanski, S.N. Nakamura, A. Aprahamian, M. Brodeur, V. Sharyy, D. Yvon and A. Margaryan
Advanced picosecond precision Radio Frequency Timer
16th Topical Seminar on Innovative Particle and Radiation Detectors, September 22nd–29th, 2023, Siena, Italy
JINST 19, CO2014 (2024)
10. O. Wieland, A. Bracco, F. Camera, S. Aogaki, D. L. Balabanski, E. Boicu, R. Borcea, M. Boromiza, I. Burducea, Ş. Calinescu, A. Coman, P. Constantin, C. Costache, M. Ciemała, Gh. Ciocan, C. Clisu, F. C. L. Crespi, M. Cuciuc, A. Dhal, N. Djourelou, N. M. Florea, I. Gheorghe, A. Giaz, D. Iancu, D. M. Kahl, M. Kmiecik, A. Kuşoğlu, R. Lica, N. Mvarginean, A. Maj, R. Marginean, C. Mihai, R. E. Mihai, B. Million, C. Neacsu, D. Nichita, C. Niţva, H. Pai, A. Pappalardo, T. Petruse, A. Rotaru, A. B. Serban, P.-A. Söderström, C. O. Sotty, L. Stan, A. N. State, I. Stiru, A. Stoica, D. A. Testov, S. Toma, T. Tozar, A. Turturică, G. V. Turturică, S. Ujeniuc, V. Vasilca, Y. Xu
Extra yield in hot Ni isotopes below the Giant Dipole Resonance
Proceeding of the 7th International Conference on Collective Motion in Nuclei under Extreme Conditions (COMEX7), Catania, Italy, June 11th-16th, 2023
Nuovo Cim 47C, 24 (2024)
11. A. Kusoglu, P. Constantin, P.-A. Söderström, D.L. Balabanski, M. Cuciuc, S. Aogaki, R.S. Ban, R. Borcea, R. Corbu, C. Costache, A. Covali, I. Dinescu, N.M. Florea, V. Iancu, A. Ionescu, N.M. Marginean, C. Mihai, R.E. Mihai, C. Nedelcu, A. Coman, H. Pai, A. Pappalardo, O. Sirbu, L. Stan, C. Sotty, D.A. Testov, T. Tozar, A. Turturica, G. Turturica, S. Ujeniuc, C.A. Ur, V. Vasilca, and F. Zhu
Ground-Breaking Developments in ¹⁰B with inelastic proton scattering
Proceeding of the 7th International Conference on Collective Motion in Nuclei under Extreme Conditions (COMEX7), Catania, Italy, June 11th-16th, 2023
Nuovo Cim. 47C, 47 (2024)
12. D. A. Testov, A. Dhal, C. Petcu, S. Aogaki, D. L. Balabanski, M. Brezeanu, V. Lelasseux, R. Miron, O. Morris, F. Ramirez, G. Suliman, C. Teacu, G. Turturica, C. Ur, F. Zhu
Status of the ELIADe γ -ray spectrometer for NRF Experiments at ELI-NP
Nuovo Cim. 47C, 60 (2024)
13. P.-A. Söderström, A. Kuşoğlu, D. L. Balabanski, M. Brezeanu, D. Choudhury, A. Gavrilescu, R. A. Gutoiu, S. Ioannidis, G. Lorusso, M. Markova, R. Roy, D. Testov, S. Adachi, S. Aogaki, R. Borcea, F. Camera, P. Constantin, C. Costache, M. Cuciuc, F. C. L. Crespi, N. M. Florea, Y. Fujikawa, T. Furuno, E. Gamba, T. Kawabata, C. Mihai, R. E. Mihai, B. Million, D. Nichita, R. Niina, S. Okamoto, K. Sakanashi, L. Stan, A. Tamii, A. Turturică, S. Ujeniuc, O. Wieland, R. S. Ban, M. Ciemała, Gh. Ciocan, C. Clisu, I. Dinescu, A. Giaz, M. Kmiecik, V. Lelasseux, R. Lica, H. Pai, P. Pârlea, A. Rotaru, C. O. Sotty, A. Spătaru, A. State, S. Toma, T. Tozar, G. V. Turturică
From implementation to operation and the first measurements with the ELIGANT detectors from ELI-NP
Proceeding of the 7th International Conference on Collective Motion in Nuclei under Extreme Conditions (COMEX7), Catania, Italy, June 11th-16th, 2023
Nuovo Cim. 47C, 58 (2024)
14. P. Constantin, T. Dickel, A.V. Karpov, D. Amanbayev, D. Balabanski, H. Geissel, K. Mahajan, I. Mardor, A. Mollaebrahimi, W. R. Plass, A. Rotaru, V.V. Saiko, C. Scheidenberger, A. Spataru, A. State, J. Zhao and the Super-FRS Collaboration
In-cell multi-nucleon transfer reactions at the FRS Ion Catcher
Proceedings of the International Workshop "Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects" (SDANCA-23), Sofia, Bulgaria, September 21st-23rd, 2023

Phys. Scr. (2024) submitted

15. A. Spataru, G. Kripko-Koncz, D. Amanbayev, S. Ayet San Andres, D. L. Balabanski, S. Beck, J. Bergmann, P. Constantin, T. Dickel, H. Geissel, C. Hornung, N. Kalantar-Nayestanaki, I. Mardor, N. Minkov, A. Mollaebrahimi, W. R. Plass, C. Scheidenberger, Wasserhess, J. Zhao
Studying shape phase transition in even-proton nuclei via mass measurements
Proceedings of the International Workshop "Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects" (SDANCA-23), Sofia, Bulgaria, September 21st-23rd, 2023
Phys. Scr. (2024) submitted

2023

Review papers

16. A. Kusoglu and D.L. Balabanski
Renewed interest in spectroscopy of the lightest doubly-odd $N = Z$ nuclei
Quantum Beam Sci. 7, 28 (2023)

Original papers

17. A. Dhal, D. Testov, F. Ramirez, S. Aogaki, G. Turturică, G. Suliman, C. Petcu, B. Tatulea, C.A. Ur and D.L. Balabanski
The annealing setup and associated monitoring system of the ELIADe HPGe clover detectors at ELI-NP
JINST 18, P11024 (2023)
18. S. Aogaki, D. L. Balabanski, R. Borcea, P. Constantin, C. Costache, M. Cuciuc, A. Kusoglu, C. Mihai, R. E. Mihai, L. Stan, P.-A. Söderström, D. Testov, A. Turturica, S. Ujeniuc, S. Adachi, F. Camera, Gh. Ciocan, F. C. L. Crespi, N. M. Florea, Y. Fujikawa, T. Furuno, E. Gamba, R. A. Gutoiu, T. Kawabata, N. M. Marginean, B. Million, C. Neascu, D. Nichita, R. Niina, S. Okamoto, H. Pai, A. Pappalardo, K. Sakanashi, A. Tamii, C. A. Ur, O. Wieland
A setup for high-energy γ -ray spectroscopy with the ELI-NP large-volume $LaBr_3:Ce$ and $CeBr_3$ detectors at the 9 MV Tandem accelerator at IFIN-HH
Nucl. Instrum. Meth. Phys. Res. A 1056, 168628 (2023)
19. Kazuo Tanaka, Sydney Gales, Calin A. Ur, Constantin Ivan, Ion Dancus, Catalin Matei, Domenico Doria, Dimitre L. Balabanski, Ovidiu Tesileanu, Theodor Asavei, Septimiu Balascuta, Andrei Berceanu, Mihail Cernaianu, Catalin Chiochiu, Mihai Cuciuc, Bogdan Diaconescu, Petru Ghenuche, Dan Ghita, Marius Gugiu, Alexandru Magureanu, Iani Mitu, Yoshihide Nakamiya, Viorel Nastasa, Liviu Neagu, Florin Negoita, Jian F. Ong, Vanessa R. M. Rodrigues, Madalin Rosu, Nicoleta Safca, Deepak Sangwan, Keidai Seto, Klaus M. Spohr, Dan Stutman, Maria Talposi, Catalin Ticos, Paolo Tomassini, Lucian Tudor, Daniel Ursescu, Kensuke Honma
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150. V. Iancu, G. Suliman, G. V. Turturica, M. Iovea, I. Daito, H. Ohgaki, C. Matei, C. A. Ur, D. L. Balabanski

Brilliant gamma beams for industrial applications: New opportunities, new challenges

Proceedings of the Workshop on Applications of Novel Scintillators for Research and Industry 2016 (ANSRI 2016), Dublin, Ireland

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151. B.M. Nyako, J. Timar, M. Csatlos, Zs. Dombradi, A. Krasznahorkay, I. Kuti, D. Sohler, T.G. Tornyai, M. Czerwinski, T. Rzaca-Urban, W. Urban, P. Baczyk, L. Atanasova, D.L. Balabanski, K. Sieja, A. Blanc, M. Jentschel, U. Koster, P. Mutti, T. Soldner, G. de France, G.S. Simpson, C.A. Ur

Medium-spin states of the neutron-rich $^{87,89}\text{Br}$ isotopes: configurations and shapes

Proceedings of the XXI International School on Nuclear Physics and Applications & International Symposium on Exotic Nuclei (ISEN-2015), Varna, Bulgaria

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Book chapters

152. D.L. Balabanski, B. Blümich, N. Gelli, V. Iancu, M. Iovea, A. Kriznar, M. Massi, A. Mazzinghi, I. Ortega-Feliu, M.A. Respaldiza, C. Ruberto, S. Scricano, G. Suliman, Z. Szőkefalvi-Nagy, C.A. Ur, W. Zia

Complementary methods: γ -beam techniques, X-ray fluorescence (XRF) and nuclear magnetic resonance (NMR)

Nuclear Physics for Cultural Heritage, eds. Anna Macková, Douglas MacGregor, Faiçal Azaiez, Johan Nyberg, and Eli Piassetzky (EDP Sciences, Mulhouse, 2016) pp. 37-53

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153. Y. Ichikawa, H. Nishibata, Y. Tsunoda, A. Takamine, K. Imamura, T. Fujita, T. Sato, S. Momiyama, Y. Shimizu, D. S. Ahn, K. Asahi, H. Baba, D. L. Balabanski, F. Boulay, J. M. Daugas, T. Egami, N. Fukuda, C. Funayama, T. Furukawa, G. Georgiev, A. Gladkov, N. Inabe, Y. Ishibashi, T. Kawaguchi, T. Kawamura, Y. Kobayashi, S. Kojima, A. Kusoglu, I. Mukul, M. Niikura, T. Nishizaka, A. Odahara, Y. Ohtomo, T. Otsuka, D. Ralet, G. S. Simpson, T. Sumikama, H. Suzuki, H. Takeda, L. C. Tao, Y. Togano, D. Tominaga, H. Ueno, H. Yamazaki, and X. F. Yang

Magnetic moment measurement of the isomeric state in ^{75}Cu

RIKEN Accel. Prog. Rep. 49, 4 (2016)

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Magnetic moment measurement of isomeric state in ^{99}Zr and characterization of the abrasion-fission mechanism

RIKEN Accel. Prog. Rep. 49, 54 (2016)

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155. 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

Proceedings of the 2nd Int. Workshop on Perspectives on Nuclear Data for the Next Decade “P(ND)²-2”, Oct. 14-17, 2014, Bruyeres-la-Chatel, France

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164. Yuichi Ichikawa, Hideki Ueno, Yuji Ishii, Takeshi Furukawa, Akihiro Yoshimi, Daisuke Kameda, Hiroshi Watanabe, Nori Aoi, Koichiro Asahi, Dimiter L. Balabanski, Raphael Chevrier, Jean-Michel Daugas, Naoki Fukuda, Georgi Georgiev, Hironori Hayashi, Hiroaki Iijima, Naoto Inabe, Takeshi Inoue, Masayasu Ishihara, Toshiyuki Kubo, Tsubasa Nanao, Tetsuya Ohnishi, Mustafa M. Rajabali, Kunifumi Suzuki, Hiroyuki Takeda and Masato Tsuchiya
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Nuclear moments of μ -second isomeric fragments at BigRIPS

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Extreme light infrastructure nuclear physics (ELI-NP): present status and future perspectives

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