

Curriculum Vitae

Personal information

Surname(s) / First name(s) **LAZANU Ionel**
 Address(es) Str. Pascani 3, Bucharest, Romania
 Telephone(s) +40214574949/145
 Fax(es) +40214574521
 E-mail(s) ionel.lazanu@g.unibuc.ro, ionel.lazanu@cern.ch
 Nationality(-ies) Romanian
 Date of birth 24.05.1957

Workplace / Occupational field

**University of Bucharest, Faculty of Physics, Romania / Physics
Teaching and research.**

Research interests: Interactions of radiation in matter and detection techniques; Particle physics and cosmological aspects; Neutrino physics

International Collaborations: DUNE Collaboration, - Fermilab, leader of the University of Bucharest Team, NP02/DP (WA-105) Collaboration, deputy leader of the Romanian Team, CERN Project, (approved); LAGUNA-LBNO (member, FP-7 project, 2011-2014), LAGUNA (member, FP-7 project, 2008-2011), CBM (Compressed Baryonic Matter) experiment at FAIR (since 2005), CERN-RD50 (Radiation hard semiconductor devices for very high luminosity colliders, since 2002); Bucharest – Dubna – Torino (Interactions of pions with light nuclei, using streamer chambers, member, 1985 - 1992).

Work experience

Dates	2003 – present	1997 – 2003	1995 – 1997
Occupation or position held	Professor	Reader	Lecturer
Main activities and responsibilities	Teaching and research (experiment and phenomenology) in Nuclear and Particle Physics, Cosmology	Teaching and research (experiment and phenomenology) in Nuclear and Particle Physics, Cosmology	Teaching and research (experiment and phenomenology) in Nuclear and Particle Physics, Cosmology
Name and address of employer	Faculty of Physics Physics, Str. Atomistilor 405, Magurele	Faculty of Physics Physics, Str. Atomistilor 405, Magurele	Faculty of Physics Physics, Str. Atomistilor 405, Magurele
Dates	1993-1995	1984 – 1993	1981 – 1984
Occupation or position held	Assistant Professor	Physicist and researcher	Teacher (Physics)
Main activities and responsibilities	Teaching and research Nuclear and Particle Physics, Cosmology	Research in Nuclear and Atomic Physics (1990-1992 - JINR Dubna)	Teaching physics
Name and address of employer	Faculty of Physics Physics, Str. Atomistilor 405, Magurele	National Institute of Physics and Nuclear Engineering , Str. Atomistilor 407, Magurele	Ilfov

Education and training

Dates	1985-1992
Name and type of organisation providing education and training	University of Bucharest, Faculty of Physics
Title of qualification awarded	PhD
Principal subjects/occupational skills covered	PhD in Radiation Physics; Thesis title: 'Pions Absorption in He-3' Supervisor: Professor Alexandru Mhul
Dates	1980 – 1981
Name and type of organisation providing education and training	University of Bucharest, Faculty of Physics
Title of qualification awarded	MSc
Principal subjects/occupational skills covered	Atomic, Nuclear and Elementary Particle Physics
Dates	1976 – 1980
Name and type of organisation providing education and training	University of Bucharest, Faculty of Physics
Title of qualification awarded	Bachelor of Science
Principal subjects/occupational skills covered	Physics

Personal skills and competences

Mother tongue Romanian

Other language(s)

Self-assessment

European level (*)

English

French

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
Independent User	Independent User	Independent User	Independent User	Independent User
Independent User	Independent User	Independent User	Independent User	Independent User

(*) Common European Framework of Reference (CEF) level

List of research grant as project coordinator/
responsible partner team

- NEPHYLAro (modul 5.2 RO_CERN) 2017.
- Dubna contract 2015 (Anex to JINR Order no. 34/23-01-2015, poz. 72, contract 03-4-1104-2011/2016).
- Dubna contract 68/2014.
- Detection systems for cosmic radiation using new technologies (DETCOS) PNCDI II, Partnership 82-104/2008.
- GRID techniques in astrophysics with applications to modelling and processing space data, (GRAPH), PNCDI II, Partnership UB 82-077/2008.

	- Advanced studies for obtaining semiconductor detectors able to operate in intense hadron and lepton fields, with energies up to hundreds of TeV, PNCDI I/ CERES 69/2004. - Modelling and engineering of defects in semiconductors, for obtaining radiation hard detectors for applications in the physics of particles and heavy ions produced in accelerators or by astrophysical sources, and industrial applications, PNCDI I/ MATNANTECH 219 (404)/2004, UB 219(404)/2004. - Kinetics of defects induced in semiconductors by irradiation with particles and ions of intermediate and high energies, PNCDI I /CERES 17/2001.
Other projects	- LAGUNA (project FP 7: Grant Agreement No. 212343): Design of a pan European infrastructure for Large Apparatus for Grand Unification and Neutrino Astrophysics; 2008-2011. - LAGUNA-LBNO (project FP 7): Design of a pan-European Infrastructure for Large Apparatus studying Grand Unification, Neutrino Astrophysics and Long Baseline Neutrino Oscillations; 2011-2014.
Co-Coordinator for study programs	- Interactii atomice, nucleare, particule elementare, astrofizica si aplicatii, IANPEAA (master, 2008-2013). - Fizica atomului, nucleului, particule elementare, astrofizica si aplicatii FANPEAA (master, since academic year 2013-2014). - Fizica (since academic year 2016-2017).
Organisational skills and competences	Elected Head of the Atomic and Nuclear Physics Chair (2008-2011) Elected member of the Council of the Faculty (2000-2011, 2015- present) Elected Member of the Dissemination Board WA105 Collaboration Member of the Romanian Physics Society, Secretary of the Section: Nuclear Physics, Elementary Particles, Astrophysics, Cosmology (2009-2013) and President of the Section (after 2018) Member of the European Physics Society
Computer skills and competences	Matlab, simulation codes

Lista de lucrări științifice

Capitole de carti in edituri internationale

Ionel Lazanu, Sorina Lazanu, Chapter 7: Silicon Detectors for High Energy Physics: Physical Models and Predictions for Degradation in Radiation Fields; **pp. 261-305**, in Trends in Experimental High Energy Physics, Editors: Stevens, Jacob R., Nova Publishers NY., 2005, ISBN: 1-59454-350-X

Lucrari didactice: cursuri universitare, îndrumătoare de laborator

Ionel Lazanu, Introducere in fizica acceleratorilor de particule (Note de curs), Ed. Univ. din Bucuresti, ISBN-973-575-185-2, 1997, 118 pagini

Ionel Lazanu, Spectroscopia hadronilor (note de curs)), Ed. Univ. din Bucuresti, ISBN-973-575-282-4, 1998, 145 pagini

Ionel Lazanu, Cosmologie si particule elementare, Ed. Univ. din Bucuresti, ISBN-973-575-364-2, 1999, 165 pagini

Ionel Lazanu, Alexandru Mihul, Particule elementare (partea I) Ed. Univ. din Bucuresti, ISBN-973-575-528-9, 2001, 222 pagini

Ionel Lazanu, Particule elementare – probleme rezolvate, Ed. Univ. din Bucuresti, ISBN-973-575-677-3, 2002, 201 pagini

Articole în reviste ISI

1. Some considerations about cosmogenic production of radioactive isotopes in Ar as target for the next neutrino experiments
Mihaela Pârvu, I. Lazanu. Dec 12, 2017.

Published in Radiat.Phys.Chem. 152 (2018) 129

2. A 4 tonne demonstrator for large-scale dual-phase liquid argon time projection chambers

B. Aimard (Annecy, LAPP) *et al.* Jun 8, 2018. 61 pp.

Published in JINST 13 (2018) no.11, P11003

3. Challenges in QCD matter physics -The scientific programme of the Compressed Baryonic Matter experiment at FAIR

Ablyazimov, T.; Abuhoza, A.; Adak, R. P.; et al.

EUROPEAN PHYSICAL JOURNAL A Vol. 53, Issue: 3, Article number: 60, 2017

4. Contribution of the electron-phonon interaction to Lindhard energy partition at low energy in Ge and Si detectors for astroparticle physics applications

Lazanu Ionel, Lazanu, Sorina

ASTROPARTICLE PHYSICS Vol. 75 Pages: 44-54, 2016

5. MODEL OF ENERGY EXCHANGE THROUGH ELECTRON-PHONON COUPLING DURING TRANSIENT PHENOMENA IN MATERIALS FOR DETECTORS

Lazanu, S.; Lazanu Ionel

ROMANIAN REPORTS IN PHYSICS Vol. 68 Issue: 3 Pages: 1015-1023, 2016

6. HYDRODYNAMIC FLOW AND PHASE TRANSITIONS IN RELATIVISTIC NUCLEAR COLLISIONS REFLECTED BY HUBBLE TYPE FIREBALL EVOLUTION

Ristea, C.; Jipa, A.; Ristea, O.; et al.

ROMANIAN REPORTS IN PHYSICS Vol. 68 Issue: 3 Pages: 1060-1068, 2016

7. MODIFICATION OF LINDHARD ENERGY PARTITION FOR LOW ENERGY RECOILS IN GERMANIUM AND SILICON FOR DETECTORS DUE TO ELECTRON PHONON COUPLING

Lazanu, S.; Lazanu I..

ROMANIAN REPORTS IN PHYSICS Vol. 68 Issue: 2 Pages: 594-603, 2016

8. The mass-hierarchy and CP-violation discovery reach of the LBNO long-baseline neutrino experiment

Agarwalla, S. K.; Agostino, L.; Aittola, M.; et al.

Group Author(s): LAGUNA-LBNO Collaboration

JOURNAL OF HIGH ENERGY PHYSICS Issue: 5 Article Num.: 094, 2014

9. THERMAL EFFECTS PRODUCED AT CRYOGENIC TEMPERATURES IN MATERIALS USED AS BOLOMETRIC DETECTORS FOR DARK MATTER

Lazanu, I.; Lazanu, S.

ROMANIAN REPORTS IN PHYSICS Vol. 66 Issue: 4 Pages: 963-972, 2014 2

10. Studies of radio emission from neutrino induced showers generated in rock salt

Saftoiu, A.; Sima, O.; Rebel, H.; et al.

ASTROPARTICLE PHYSICS Volume: 46 Pages: 1-13, 2013

11. Analysis of defect formation in semiconductor cryogenic bolometric detectors created by heavy dark matter
Lazanu, Ionel; Ciurea, Magdalena Lidia; Lazanu, Sorina
ASTROPARTICLE PHYSICS Volume: 44 Pages: 9-14, 2013
12. FROM LITTLE BANGS TO BIG BANG
Ristea, C.; Jipa, A.; Lazanu, I.; et al.
ROMANIAN REPORTS IN PHYSICS Vol. 65 Issue: 4 Pag.: 1321-1327, 2013
13. The next-generation liquid-scintillator neutrino observatory LENA
Wurm, Michael; Beacom, John F.; Bezrukov, Leonid B.; et al.
ASTROPARTICLE PHYSICS Volume: 35 Issue: 11 Pages: 685-732, 2012
14. Interactions of exotic particles with ordinary matter
Lazanu, Ionel; Lazanu, Sorina
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: 278 Pages: 70-77, 2012
15. SUPERHEATED DROPLET DETECTORS: THEORETICAL MODEL AND TESTS TO NEUTRON FIELD
Lazanu, Ionel; Chilug, Alexandra
ROMANIAN REPORTS IN PHYSICS Vol. 64 Issue: 4 Pages: 977-985, 2012
16. PRELIMINARY RESULTS OF NEUTRINO INTERACTIONS STUDY USING GENIE EVENT GENERATOR
Chesneanu, D.; Jipa, A.; Lazanu, I.; et al.
ROMANIAN REPORTS IN PHYSICS Vol. 64 Issue: 3 Pages: 695-701, 2012
17. ON THE PARTICLE CORRELATIONS IN RELATIVISTIC NUCLEAR COLLISIONS
Velica, Stefania; Jipa, A.; Besliu, C.; et al.
ROMANIAN REPORTS IN PHYSICS Vol. 64 Issue: 3 Pages: 702-714, 2012
18. CONSIDERATIONS ON A LARGE SCALE NEUTRINO DETECTOR IN A SALT DOME
Badescu, A. M.; Petrescu, T.; Saftoiu, A.; et al.
ROMANIAN REPORTS IN PHYSICS Vol.64 Issue: 3 Pages: 815-824, 2012
19. THE STUDY OF NEUTRINO-NUCLEUS INTERACTIONS USING A MONTE CARLO EVENT GENERATOR
Chesneanu, Daniela; Jipa, Alexandru; Lazanu, Ionel
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS
Vol.74 Issue: 2 Pages: 161-167, 2012
20. ABOUT THE POSSIBILITY TO MEASURE SOME STANDARD MODEL PARAMETERS AND SEARCH FOR NEW PHYSICS WITH LOW ENERGY NEUTRINOS
Lazanu, I.; Apostu, A.; Brancus, I.; et al.
ROMANIAN REPORTS IN PHYSICS Vol. 64 Issue: 1 Pages: 24-32, 2012
21. RADIO TECHNIQUE FOR INVESTIGATING HIGH ENERGY COSMIC NEUTRINOS
Badescu, A. M.; Saftoiu, A.; Fratu, O.; et al.
ROMANIAN REPORTS IN PHYSICS Volume: 64 Issue: 1 Pages: 281-293 Published: 2012
22. SIMULATION OF ELECTROMAGNETIC SHOWERS IN SALT PERFORMED WITH GEANT4
Saftoiu, A.; Sima, O.; Lazanu, I.; et al.
ROMANIAN REPORTS IN PHYSICS Vol.64 Issue: 1 Pages: 314-324, 2012
23. Silicon detectors for the sLHC
Affolder, A.; Aleev, A.; Allport, P. P.; et al.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 658 Issue: 1 Pages: 11-16, 2011
24. A mobile detector for measurements of the atmospheric muon flux in underground sites
Mitrica, Bogdan; Margineanu, Romul; Stoica, Sabin; et al.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 654 Issue: 1 Pages: 176-183, 2011
25. Transient thermal effects in solid noble gases as materials for the detection of Dark Matter

26. Modelling the transient processes produced under heavy particle irradiation

Lazanu, Sorina; Lazanu, Ionel; Ciobanu, Gheorghe

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: 269 Issue: 4 Pages: 498-503, 2011

27. MODELLING TRANSIENT PROCESSES IN THE COMPETITIVE PHENOMENA INDUCED BY HEAVY PROJECTILES IN MATERIALS FOR DETECTORS

Lazanu, Ionel; Lazanu, Sorina

ROMANIAN REPORTS IN PHYSICS Volume: 63 Issue: 3 Pages: 707-716 Published: 2011

28. RESULTS OF UNDERGROUND DOSE RATES USING TL DETECTORS AND PRELIMINARY TL CHARACTERISTICS OF IRRADIATED SALT ROCK

Apostu, Ana Maria; Chiroasca, A. L.; Gomoiu, Claudia; et al.

ROMANIAN REPORTS IN PHYSICS Vol. 63 Issue: 1 Pages: 220-225, 2011

29. Common ways in the description of the "classical" plasma and quark-gluon plasma

Jipa, Alexandru; Covlea, Vania; Besliu, Calin; et al.

INDIAN JOURNAL OF PHYSICS Volume: 85 Issue: 1 Pages: 167-175, 2011

30. TRANSVERSE MOMENTUM-LONGITUDINAL MOMENTUM CORRELATIONS, THERMALIZATION AND HYDRODYNAMIC FLOW IN RELATIVISTIC NUCLEAR COLLISIONS

Jipa, Alexandru; Grigorie, Claudian; Besliu, Calin; et al.

ROMANIAN REPORTS IN PHYSICS Volume: 63 Supplement: S Pages: 1215-1235, 2011

31. Transient processes induced by heavy projectiles in silicon

Lazanu, Ionel; Lazanu, Sorina

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: 268 Issue: 13 Pages: 2241-2245, 2010

32. ROLE OF PHASE AND GROUP VELOCITIES IN CERENKOV RADIATION AND APPLICATIONS IN HEP EXPERIMENTS

Badea, Madalina; Lazanu, Ionel

ROMANIAN REPORTS IN PHYSICS Volume: 62 Issue: 2 Pages: 298-308, 2010

33. KINETICS OF DEFECTS IN LOW TEMPERATURE SEMICONDUCTOR DETECTORS AND DIRECT DARK MATTER SEARCH

Lazanu, Ionel; Lazanu, Sorina

ROMANIAN REPORTS IN PHYSICS Volume: 62 Issue: 2 Pages: 309-318 Published: 2010

34. STUDIES OF THE HIGH ENERGY MUON FLUX IN UNIREA SALT MINE FROM SLANIC PRAHOVA

Mitrica, B.; Margineanu, R.; Brancus, I. M.; et al.

ROMANIAN REPORTS IN PHYSICS Vol. 62 Issue: 4 Pages: 750-757, 2010

35. Semiconductor detectors for high radiation fields: microscopic processes in materials and the control of device parameters

Lazanu, S.; Ciurea, M. L.; Lazanu, I.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 11 Issue: 12 Pages: 2150-2154, 2009

36. FROM NUCLEAR MATTER TO STRANGE QUARK MATTER - SOME CHARACTERISTICS OF THE INTERACTIONS IN ORDINARY MATTER

Lazanu, I.; Chera, M.; Iordanescu, R.; et al.

ROMANIAN REPORTS IN PHYSICS Vol. 61 Issue: 2 Pages: 215-221, 2009

37. ENERGY DEPOSITED BY RADIATION IN SOLIDS: REGISTRATION PHYSICS

Lazanu, I.; Lazanu, S.

ROMANIAN REPORTS IN PHYSICS Vol.61 Issue: 4 Pages: 689-699, 2009

38. Analytical approximations of the NIEL in semiconductor detectors for HEP

Lazanu, I.; Lazanu, S.

ROMANIAN REPORTS IN PHYSICS Vol.60 Issue: 1 Pages: 71-78, 2008

39. Correlation between ionization and displacement damage in silicon detectors for energies of interest in astroparticle and particle physics applications

Lazanu, I.; Lazanu, S.

40. Modelling spatial distribution of defects and estimation of electrical degradation of silicon detectors in radiation fields at high luminosity
Lazanu, S.; Lazanu, I.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 583 Issue: 1 Special Issue: SI Pages: 165-168, 2007

41. Correlation between radiation processes in silicon and long-time degradation of detectors for high-energy physics experiments
Lazanu, Sorina; Lazanu, Ionel

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 580 Issue: 1 Pages: 46-49, 2007

42. New aspects of the contribution of primary defects of silicon to long-time degradation of detectors operating in high fields of radiation
Lazanu, S.; Lazanu, I.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 9 Issue: 6 Pages: 1839-1842, 2007

43. Primary defects in silicon: existence, characteristics, and their role after high fluence irradiation

Lazanu, S.; Lazanu, I.; Ciupina, V.; et al.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 9 Issue: 4 Pages: 814-817, 2007

44. Silicon detectors: Damage, modelling and expected long-time behaviour in physics experiments at ultra high energy

Lazanu, Ionel; Lazanu, Sorina

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 572 Issue: 1 Pages: 297-299, 2007

45. The role of primary point defects in the degradation of silicon detectors due to hadron and lepton irradiation

Lazanu, I.; Lazanu, S.

PHYSICA SCRIPTA Volume: 74 Issue: 2 Pages: 201-207 Published: AUG 2006

46. Recent advancements in the development of radiation hard semiconductor detectors for S-LHC

Fretwurst, E; Adey, J; Al-Ajili, A; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 552 Issue: 1-2 Pages: 7-19, 2005

47. Development of radiation tolerant semiconductor detectors for the Super-LHC

Moll, M; Adey, J; Al-Ajili, A; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 546 Issue: 1-2 Pages: 99-107, 2005

48. Radiation-hard semiconductor detectors for SuperLHC

Bruzzi, M; Adey, J; Al-Ajili, A; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 541 Issue: 1-2 Pages: 189-201, 2005

49. Scenarios about the long-time damage of silicon as material and detectors operating beyond LHC collider conditions

Lazanu, I; Lazanu, S

PHYSICA SCRIPTA Volume: 71 Issue: 1 Pages: 31-38, 2005

50. Systematic study related to the role of initial impurities and irradiation rates in the formation and evolution of complex defects in silicon for detectors in HEP experiments

Lazanu, S; Lazanu, I

PHYSICA SCRIPTA Volume: 69 Issue: 5 Pages: 376-384, 2004

51. Microscopic modelling of defects production and their annealing after irradiation in silicon for HEP particle detectors

Lazanu, S; Lazanu, I; Bruzzi, M

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 514 Issue: 1-3 Pages: 9-17, 2003

52. Role of oxygen and carbon impurities in the radiation resistance of silicon detectors

Lazanu, S; Lazanu, I

53. Long-term damage induced by hadrons in silicon detectors for uses at the LHC-accelerator and in space missions

Lazanu, I; Lazanu, S

PHYSICA SCRIPTA Volume: 67 Issue: 5 Pages: 388-394, 2003

54. The influence of initial impurities and irradiation conditions on defect production and annealing in silicon for particle detectors

Lazanu, I; Lazanu, S

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: 201 Issue: 3 Pages: 491-502, 2003

55. Radiation defects in silicon due to hadrons and leptons, their annealing and influence on detector performance

Lazanu, I; Lazanu, S

PHYSICA SCRIPTA Volume: 66 Issue: 2 Pages: 125-132, 2002

56. Theoretical calculations of the primary defects induced by pions and protons in SiC

Lazanu, S; Lazanu, I; Borch, E; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 485 Issue: 3 Pages: 768-773 Article Number: PII S0168-9002(01)02147-7, 2002

57. Annealing of radiation-induced defects in silicon in a simplified phenomenological model

Lazanu, S; Lazanu, I

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS Volume: 183 Issue: 3-4 Pages: 383-390, 2001

58. Analytical approximations of the Lindhard equations describing radiation effects

Lazanu, S; Lazanu, I

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 462 Issue: 3 Pages: 530-535, 2001

59. Comparative energy dependence of proton and pion degradation in diamond

Lazanu, I; Lazanu, S

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 432 Issue: 2-3 Pages: 374-378, 1999

60. Diamond degradation in hadron fields

Lazanu, S; Lazanu, I; Borch, E

NUCLEAR PHYSICS B-PROCEEDINGS SUPPLEMENTS Volume: 78 Pages: 683-688, 1999

61. Si, GaAs and diamond damage in pion fields with application to LHC

Lazanu, S; Lazanu, I

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 419 Issue: 2-3 Pages: 570-576, 1998

62. Theoretical study of pion damage in A(3)B(5) compounds

Lazanu, S; Lazanu, I; Biggeri, U; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 413 Issue: 2-3 Pages: 242-248, 1998

63. Theoretical calculation of diamond damage by π^+/π^- mesons in the $\Delta(33)$ resonance energy range

Lazanu, I; Lazanu, S; Borch, E; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 406 Issue: 2 Pages: 259-266, 1998

64. Non-ionising energy deposition of pions in GaAs and Si for radiation damage studies

Lazanu, S; Lazanu, I; Biggeri, U; et al.

NUCLEAR PHYSICS B Supplement: 61B Pages: 409-414, 1998

65. Model predictions for the NIEL of high energy pions in Si and GaAs

Lazanu, S; Lazanu, I; Biggeri, U; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 394 Issue: 1-2 Pages: 232-234, 1997

66. Non-ionising energy loss of pions in thin silicon samples

Lazanu, I; Lazanu, S; Biggeri, U; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
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67. RADIATION HARDNESS STUDIES ON SILICON DETECTORS IN FAST-NEUTRON FIELDS

ANGELESCU, T; CHEREMUKHIN, AE; GHETE, VM; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
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68. A NEUTRON-IRRADIATION FACILITY FOR DAMAGE STUDIES

ANGELESCU, T; GHETE, VM; LAZANU, I; et al.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
DETECTORS AND ASSOCIATED EQUIPMENT Volume: 345 Issue: 2 Pages: 303-307, 1994

69. INELASTIC $\pi^+(\pi^-)$ HE-3 INTERACTION AT 100, 120 AND 145 MEV

MIHUL, A; ANGELESCU, T; IONICA, R; et al.

NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA A-NUCLEI PARTICLES AND FIELDS Volume: 105 Issue: 11 Pages: 1637-1647, 1992

70. PION ABSORPTION IN HE-3 AT 100, 120, AND 145MEV

ANGELESCU, T; MIHUL, A; PASCU, L; et al.

NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA A-NUCLEI PARTICLES AND FIELDS Volume: 103 Issue: 1 Pages: 93-104, 1990

71. INELASTIC $\pi^+\pi^-$ HE-3 INTERACTION AT 180 MEV

ANGELESCU, T; MIHUL, A; PASCU, L; et al.

NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA A-NUCLEI PARTICLES AND FIELDS Volume: 100 Issue: 3 Pages: 381-395, 1988

72. PION ABSORPTION ON LIGHT-NUCLEI

MIHUL, A; ANGELESCU, T; PREDA, T; et al.

REVUE ROUMAINE DE PHYSIQUE Volume: 33 Issue: 4-6 Pages: 751-755, 1988

73. GEOMETRICAL RECONSTRUCTION AND SELECTION CRITERIA OF $\pi^+\pi^-$ HE INELASTIC EVENTS DETECTED IN A HIGH-PRESSURE STREAMER CHAMBER

ANGELESCU, T; MIHUL, A; PASCU, L; et al.

REVUE ROUMAINE DE PHYSIQUE Volume: 31 Issue: 2 Pages: 125-137, 1986

74. INELASTIC $\pi^+\pi^-$ HE-3 INTERACTION AT 145 MEV

ANGELESCU, T; LAZANU, I; MIHUL, A; et al.

NUOVO CIMENTO DELLA SOCIETA ITALIANA DI FISICA A-NUCLEI PARTICLES AND FIELDS Volume: 89 Issue: 2 Pages: 162-176, 1985

Lucrări in extenso (cel puțin 3 pag.) publicate în Proc. Indexate ISI

1) Re-analysis of some bubble chamber data on N-anti(N) annihilations

I. Lazanu, M. Rujoiu

Baryons'98, Proc. Of the 8th International Conference on the Structure of Baryons, Bonn, 22-26 September 1998, pages 121-126, Editors: D. W. Menze, B. Metsch, Word Scientific, ISBN 981-02-3865-7, (5 pages)

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