

# CURRICULUM VITAE

**ROSA VLASTOU**

**Professor**

**National Technical University of Athens (NTUA)**

## **1. PERSONAL DATA**

<b>FAMILY NAME</b>	:	<b>VLASTOU</b>
<b>FIRST NAME</b>	:	<b>ROSA</b>
<b>PLACE OF BIRTH</b>	:	<b>Athens</b>
<b>DATE OF BIRTH</b>	:	<b>13 January 1951</b>
<b>FAMILY STATUS</b>	:	<b>Married - Two children</b>
<b>WORK ADDRESS</b>	:	<b>Department of Physics, N.T.U.A., Zografou Campus, Athens 157 80, Greece, tel. 210 7723008, fax 210 7723025 e-mail: vlastou@central.ntua.gr</b>

## **2. EDUCATION AND PROFESSIONAL EXPERIENCE**

- 2.1** Professor - NTUA-Department of Physics (July 2007-today)
- 2.2** Associate Professor - NTUA-Department of Physics (June 1997-July 2007)
- 2.3** Assistant Professor - NTUA-Department of Physics (November 1988-June 1997)
- 2.4** Lecturer - NTUA-Department of Physics (July 1982-November 1988)
- 2.5** Research Assistant – NTUA-Department of Physics (March 1980-July 1982)
- 2.6** Ph.D in Nuclear Physics, Department of Physics, University of Birmingham, UK. July 1978 (Greek State Scholarship).
- 2.7** Master of Science by Research, Department of Physics, University of Birmingham, UK– June 1976 (Greek State Scholarship).
- 2.8** Bachelor, Department of Physics, University of Athens, March 1973

## **3. RESEARCH INTERESTS**

- 3.1** Light ion reactions with polarized beams (1974-1987)
- 3.2** Heavy ion reactions (1980-1993)
- 3.3** High spin gamma-ray spectroscopy (1988-1997)
- 3.4** Applications : Materials analysis with nuclear reaction techniques (1996-2006)
- 3.5** Applications: Radioactivity in the marine environment (2006- today)]
- 3.6** Neutron induced reactions (2003-today)
- 3.7** Deuteron induced reactions in light elements relevant to material analysis (2006-today)

## **4. THESIS SUPERVISION**

- 4.1** 7 PhD theses completed and 3 in progress
- 4.2** 3 MSc theses completed and 3 in progress
- 4.3** 35 Diploma theses completed and 2 in progress

## **5. TEACHING EXPERIENCE**

**5.1** Undergraduate Courses at the National Technical University of Athens for 30 years for the Departments of Physics, Electrical, Mechanical and Chemical Engineering on :

- Mechanics and Relativity
- Oscillations and Waves
- Optics
- Nuclear Physics and Applications

**5.2** Lab Courses at the National Technical University of Athens for 30 years for the Departments of Physics, Electrical, Mechanical and Chemical Engineering on :

- Physics I and II (Mechanics and Electromagnetism)
- Modern Physics
- Optics
- Atomic and Molecular Physics
- Nuclear and Elementary Particle Physics

**5.3** Postgraduate Course on Nuclear Physics and Applications

## **6. BOOKS**

- Co-author in 3 Physics Laboratory books as well as 1 Lab book for Nuclear and Elementary Particle Physics and 1 for Nuclear Physics and Applications.
- Co-editor in Conference Proceedings of 2 international and 2 Hellenic Nuclear Physics conferences

## **7. FUNDED RESEARCH PROGRAMS**

- EEC Fellowship for collaboration at Daresbury Laboratory, UK.
- IAEA research contract (3552/RB)
- STIMULATION (The ESSA-30 collaboration-ST2J-0205)
- SCIENCE (The EUROGAM collaboration-SCI-CT91-687)
- TMR and LSF with Legnaro N.L. (Italy) and Rossendorf Lab. (Germany)
- Bilateral Agreement with University of Munich, Germany
- ARCHIMIDIS, NTUA Basic Research Program
- THALIS, NTUA Basic Research Program
- EC 5<sup>th</sup> EURATOM F.P. (n\_TOF-NP-ADS project, FIKW-2000-00107)
- PROTAGORAS, NTUA Basic Research Program
- PEVE-2008, NTUA Basic Research Program
- HERAKLITOS, Ministry of Education Research Program
- PYTHAGORAS I, Ministry of Education Research Program
- PYTHAGORAS II, Ministry of Education Research Program
- HERAKLITOS, Ministry of Education PhD Research Program

## **8. CONFERENCES -TALKS**

- Participation in 52 International and Hellenic Nuclear Physics Conferences
- More than 30 invited talks in conferences, Universities, workshops, meetings, summer schools etc.

## **9. ADMINISTRATIVE DUTIES**

- Head of Physics Department of NTUA (1998-2000)
- Head of the Physics Department Committee for the Installation and Organization of Undergraduate Students Lab (1990-1998 , 2004-2006, 2010)
- Member of the Physics Department Committee for the Undergraduate Syllabus
- Responsible for the planning, financing and erection of the new Physics Building (1999-2006)
- Member of the University Committees for a) the University Campus Buildings, b) Internal Evaluation of NTUA, c) Entrance Examinations d) Open doors for High Schools
- Vice President of the Hellenic Nuclear Physics Society (2002-2004, 2010) and Secretary (2004-2006, 2010-today).
- Member of the Organizing Committee for 7 International and 2 Hellenic Nuclear Physics Conferences

## **10. PUBLICATIONS**

- **80** Publications in refereed Journals
- **95** Publications in International and Hellenic Conference Proceedings

## **11. LIST OF PUBLICATIONS**

### **Publications in refereed Journals**

1. Scattering of 33MeV polarized  $^3\text{He}$  particles by hydrogen and helium isotopes. O.Karban, A.K.Basak, C.O.Blyth, W.Dahme, J.B.A.England, J.M.Nelson, N.T.Okumusoglu, S.Roman, G.F.Shute and R.Vlastou, J.Phys.G:Nucl.Phys.3(1977)571.
2. small medium-pressure gas target system for use with polarized and unpolarized ion beams. J.B.A.England and R.Vlastou, Nucl.Instr.Meth.147(1977)443.
3. Scattering of polarized and unpolarized  $^3\text{He}$  by  $^3\text{H}$  and high excitation in  $^6\text{Li}$ . R.Vlastou, J.B.A.England, O.Karban, S.Baird, Nucl.Phys.A292(1977)29.
4. The elastic scattering of polarized and unpolarized  $^3\text{He}$  by  $^3\text{He}$  and excitation in the  $^6\text{Be}$  system. R.Vlastou, J.B.A.England, O.Karban S.Baird and Y.W. Lui, Nucl.Phys.A303(1978)368.
5. Fusion cross section of  $^{16}\text{O}+^{13}\text{C}$  reaction. C.T.Papadopoulos, R.Vlastou, E.N.Gazis, P.A.Assimakopoulos, C.A.Kalfas, S.Kossionides and A.C.Xenoulis. Phys.Rev.C34(1986)196.

6. Structure of  $^{96}\text{Ru}$ . E.Adamides, J.Sinatkas, L.D.Skouras, A.C.Xenoulis, E.N.Gazis, C.T.Papadopoulos and R.Vlastou, Phys.Rev.C34(1986)791.
7. pn to d and opn to ad emission ratios in heavy ion induced reactions. E.N.Gazis, C.T.Papadopoulos, R.Vlastou and A.C.Xenoulis, Phys.Rev.C34(1986)872.
8. Apparent violation of isospin symmetry in the  $^3\text{H}(^3\text{He}, ^2\text{H})^4\text{He}$  reaction. G.Rai, C.O.Blyth, J.B.A.England, A.Farooq, O.Karban, E.Rawas, S.Roman and R.Vlastou, Phys.Rev.C38(1988)2036.
9. High-spin properties of  $^{173}\text{Re}$ . L.Hildingsson, W.Klamra, Th.Lindblad, C.G.Linden, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, J.Gizon, D.Klarke, F.Kasaie and J.N.Mo, Nucl.Phys.A513(1990)394.
10. The competition between p2n,dn and t emission in heavy ion induced reactions. A.C.Xenoulis, A.E.Aravandinos, G.P.Eleftheriades, C.T.Papadopoulos, E.N.Vlastou and R.Vlastou. Nucl.Phys.A516(1990)108.
11. Study of high spins in  $^{173}\text{Os}$ . C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, L.Hildingsson, W.Klamra, Th.Linden, R.Wiess, J.Gizon, S.Juutinen, R.Chapman, D.Clarke, F.Kasaie, J.C.Lisle and J.N.Mo. Nucl.Phys.A526(1991)205.2.
12. High spin phenomena in  $^{174}\text{Os}$ . L.Hildingsson, W.Klamra, Th.Lindblad, C.G.Linden, B.Cederwall, W.Satula, R.Wiess, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, J.Gizon, D.Klarke, F.Kasaie and J.N.Mo, Nucl.Phys.A545(1992)871.
13. First measurement of magnetic properties in a superdeformed nucleus. M.J.Joyce, J.F.Sharpey-Schafer, P.J.Twin, C.W.Beausang, D.M.Cullen, M.A.Riley, R.M.Clark, P.J.Dagnal, J.Duprat, P.Fallon, P.D.Forsyth, N.Fotiades, S.J.Gale, B.Gall, F.Hannachi, S.Harissopoulos, K.Hauschild, P.M.Jones, C.A.Kalfas, A.Korichi, Y.LeCoz, M.Mayer, E.S.Paul, M.G.Porquet, N.Redon, C.Schuck, J.Simpson, R.Vlastou and R.Wadsworth, Phys.Rev.Lett.71(1993)2176.
14. Investigation on some  $^{16}\text{O} + ^{12}\text{C}$  resonances by the pn to d competition ratio technique. E.N.Gazis, R.Vlastou, C.T.Papadopoulos, A.E.Aravantinos, E.Adamides, A.C.Xenoulis, U.Lenzen, K.E.G.Lobner, K.Rudolph, S.J.Scorka, H.G.Thies, Nucl.Phys. A569(1994)603.
15. High-spin structure of  $^{155}\text{Dy}$ . R.Vlastou, C.T.Papadopoulos, M.Serris, C.A.Kalfas, N.Fotiades, S.Harissopoulos, S.Kossionides, J.F.Sharpey-Schafer, E.S.Paul, P.D.Forsyth, P.J.Nolan, N.D.Ward, M.A.Riley, J.Simpson, J.C.Lisle, P.M.Walker, M.Guttormsen and J.Rekstad, Nucl.Phys. A580(1994)133.
16. The N=7 unfavoured superdeformed band in  $^{193}\text{Hg}$ ; Coriolis splitting and neutron shell structure at extreme deformation. M.J.Joyce, J.F.Sharpey-Schafer, M.A.Riley, D.M.Cullen, F.Azaiez, C.W.Beausang, R.M.Clark, P.J.Dagnal, I.Deloncle, J.Duprat, P.Fallon, P.D.Forsyth, N.Fotiades, S.J.Gale, B.Gall, F.Hannachi, S.Harissopoulos, K.Hauschild, P.M.Jones, C.A.Kalfas, A.Korichi, Y.Le Coz, M.Mayer, E.S.Paul, M.J.Paul, M.G.Porquet, N.Redon, C.Schuck, J.Simpson, R.Vlastou, R.Wadsworth and W.Nazrewicz, Phys.Lett. B340(1994)150.
17. Highly excited  $\Delta I=1$  structures in  $^{193}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, M.Serris, M.Meyer, N.Redon, R.Duffait, Y.LeCoz, L.Ducroux, F.Hannachi, I.Delongle, B.Gall, M.G.Porquet, C.Schuck, F.Azaiez, J.Duprat, A.Korichi, J.F.Sharpey-Schafer, M.J.Joyce, C.W.Beausang, P.J.Dagnall, P.D.Forsyth, S.J.Gale, P.M.Jones, E.S.Paul, J.Simpson, R.M.Clark, K.Hauschild and R.Wadsworth, J.Phys.G : Nucl. Part. Phys. 21(1995)911.
18. High spin levels in  $^{119}\text{Te}$ . C.T.Papadopoulos, R.Vlastou, M.Serris, N.Fotiades, H.G.Hartas, C.A.Calfas, S.Harissopoulos, S.Kossionides, J.Simpson, E.S.Paul, S.Araddad, C.W.Beausang, M.A.Bentley, M.J.Joyce and J.F.Sharpey-Schafer, Z.Phys. A352(1995)243.

19. High spin structure in  $^{194}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, M.Serris, J.F.Sharpey-Schafer, M.J.Joyce, C.W.Beausang, P.J.Dagnal, P.D.Forsyth, S.J.Gale, P.M.Jones, E.S.Paul, P.J.Twin, J.Simpson, D.M.Cullen, P.Fallon, M.A.Riley, R.M.Clark, K.Hauschild and R.Wadsworth, Z.Phys. A354(1996)169.
20. An IBA and Raman study of irradiated thin films of YBaCuO superconductor. R.Vlastou, E.N.Gazis, C.T.Papadopoulos, E.Liarokapis, D.Palles, S.Kossionides, M.Kokkoris, M.Pilakouta, W.Assmann and H.Huber, Nucl.Instr.Meth. B113(1996)253.
21. High spin structures of  $^{122}\text{Xe}$ . M.Serris, C.T.Papadopoulos, R.Vlastou, C.A.Kalfas, S.Kossionides, N.Fotiades, S.Harissopoulos, C.W.Beausang, M.J.Joyce, E.S.Paul, M.A.Bentley, S.Araddad, J.Simpson and J.F. Sharpey-Schafer, Z.Phys. A358(1997)37.
22. Dipole structures in  $^{122}\text{Xe}$ . M.Serris, C.T.Papadopoulos, R.Vlastou, C.A.Kalfas, S.Kossionides, N.Fotiades, S.Harissopoulos, C.W.Beausang, M.J.Joyce, E.S.Paul, M.A.Bentley, J.Simpson and J.F. Scarpey-Schafer, Z.Phys. A358(1997)135.
23. Void formation in Ge induced by high energy heavy ion irradiation. H.Huber, W.Assmann, S.A.Karamian, A.Mucklich, W.Prusseit, E.N.Gazis, R.Groetschel, M.Kokkoris, S.Kossionides, H.D.Mieskes and R.Vlastou, Nucl.Instr. Meth. Phys.Res.B122(1997)542.
24. A method of determining the stopping power of light ions in crystal channels in the backscattering geometry. M.Kokkoris, S.Kossionides, X.Aslanoglou, G.Kaliambakos, T.Paradellis, S.Harissopoulos, E.N.Gazis, R.Vlastou, C.T.Papadopoulos and R.Groetschel, Nucl.Instr. Meth. Phys.Res.B 136-138(1998)137.
25. Radiation damage of  $\text{YBa}_2\text{Cu}_3\text{O}_7$  superconductors. R.Vlastou, E.N.Gazis, C.T.Papadopoulos, E.Liarokapis, D.Palles, N.Poulakis, S.Kossionides, M.Kokkoris, G.Kaliambakos, W.Assmann and P.Berbeich, Nucl.Instr. Meth. Phys.Res.B136-138(1998)1286.
26. Heavy-ion induced damage of crystalline Ge and W in the 0.5-8A MeV range. H.Huber, W.Assmann, S.A.Karamian, H.D.Mieskes, H.Nolte, E.N.Gazis, M.Kokkoris, S.Kossionides, R.Vlastou, R.Groetschel, A.Muecklich and W.Prusseit, Nucl.Instr. Meth. Phys.Res.B146(1998)309.
27. Ion irradiation induced defects in epitaxial GaAs layers. N.Arbatzanis, R.Vlastou, G.Konstandinidis, W.Assmann, M.Papastamatiou, E.N.Gazis, and G.J.Papaioannou, Solid State Electronics 42(1998)277.
28. Characterization of optical UV filters using Rutherford backscattering spectroscopy. R.Vlastou, E.Fokitis, S.Maltezos, G.Kallimbakos, M.Kokkoris and S.Kossionides, Nucl.Instr. Meth. Phys.Res.B161-163(2000)590.
29. Simulations and comparisons of channeling spectra in the  $\text{p}+^{28}\text{Si}$  system in the backscattering geometry. X.A.Aslanoglou, A.Karydas, M.Kokkoris, E.Kossionides, Th.Paradellis, G.Souliotis and R.Vlastou, Nucl.Instr. Meth. Phys.Res.B161-163(2000)524.
30. Fusion cross section of the  $^7\text{Li}+^{11}\text{B}$  reaction. R.Vlastou, C.T.Papadopoulos, C.Tsabarlis, P.A.Assimakopoulos, A.A.Pakou, G.Doukellis, C.A.Kalfas and A.C.Xenoulis, Eur.Phys.J. A8(2000)361.
31. Fusion cross section limitation of the  $^7\text{Li}+^{11}\text{B}$  reaction. C.Tsabarlis, C.T.Papadopoulos, R.Vlastou, P.A.Assimakopoulos, A.A.Pakou, E.Adamides, C.A.Kalfas and A.C.Xenoulis, Physica Scripta T88(2000)131.
32. Determination of sulphur and copper depth distributions in patina layers using nuclear reaction techniques. G.Kaliambakos, S.Kossionides, P.Misailides, C.T.Papadopoulos and R.Vlastou, Nucl.Instr. Meth. Phys.Res.B170-(2000)467.

33. Characterization of RF-magnetron deposited thin film TiN for use as a metal electrode on TiN/SiO<sub>2</sub>/Si MOS devices. M. Kokkoris', R. Vlastou, X. A. Aslanoglou, E. Kossionides, R. Grötzschel, and Th. Paradellis, Journal of Applied Physics 88, 7192 (2000).
34. Determination of the stopping power of channeled protons in SiO<sub>2</sub> in the backscattering geometry. M.Kokkoris, R.Vlastou, X.Aslanoglou, S.Kossionides, R.Groetzschel and T.Paradellis, Nucl.Instr. Meth. Phys.Res.B 173(2001)411.
35. Determination of Parameters for Channeling of Protons in SiC Polytype Crystals in the Backscattering Geometry. M. Kokkoris, S. Kossionides, R. Vlastou, X. A. Aslanoglou, R. Grötzschel, B. Nsouli, A. Kuznetsov, S. Petrovic, and Th. Paradellis, NIM B184(2001)319.
36. Study of the irradiation damage in SiC by ion channeling. M.Kokkoris, S.Kossionides, A.Kyriakis, K.Zachariadou, G.Fanourakis, R.Vlastou and Th. Paradellis,. Nucl. Instr. Meth. Phys.Res. B188(2002)78.
37. RBS and HIRBS studies of nanostructured AgSiO<sub>2</sub> Sol-Gel thin coatings. M.Kokkoris, C.C.Trapalis, S.Kossionides, R.Vlastou, B.Nsouli, R.Grotzschel, S.Spartalis, G.Kordas and Th.Paradellis. Nucl. Instr. Meth. Phys.Res.B188(2002)67.
38. Neutron cross measurements in the Th-U cycle by the activation method. D.Karamanis, S.Andriamonje, P.A.Assimakopoulos, G.Doukelis, D.A.Karademos, A.Karydas, M.Kokkoris, S.Kossionides, N.G.Nicolis, C.Papachristodoulou, C.T.Papadopoulos, N.Patronis, P.Pavlopoulos, G.Perdikakis, R.Vlastou, The n-TOF collaboration. Nucl.Instr. Meth. Phys.Res.A505(2003)381.
39. Investigation of deep implanted fluorine channeling profiles in silicon using resonant NRA. M.Kokkoris, G.Perdikakis, R.Vlastou, C.T.Papadopoulos, X.A.Aslanoglou, M.Posselt, R.Groetzschel, S.Harissopoulos, S.Kossionides, Nucl. Instr. Meth. Phys.Res. B201(2003)623.
40. Dielectric properties of CVD grown SiON thin films on Si for MOS microelectronic devices. N.Konofaos, E.K.Evangelou, X.Aslanoglou, M.Kokkoris and R.Vlastou, Semicond.Sci.Technol.18(2003)1.
41. A study of the dechanneling of protons in SiC polytype crystals in the energy range Ep=400-650keV. M.Kokkoris, G.Perdikakis, S.Kossionides, S.Petrovic, R.Vlastou and R.Groetzschel, Nucl. Instr. Meth. Phys.Res. B219-220(2004)226.
42. Laser cleaning on Roman coins. E.Drakaki, A.G.Karydas, B.Klinkenberg, M.Kokkoris, A.A.Serafetinides, E.Stavrou, R.Vlastou and Ch.Zarkadas, Appl.Phys.A79(2004)1111.
43. New experimental validation of the pulse height weighting technique for capture cross section measurements. U.Abbondanno, ....R.Vlastou...and the n\_TOF collaboration). Nucl.Instr. Meth. Phys.Res. A521(2004)454.
44. Measurement of the n\_TOF beam profile with a micromegas detector. J.Pancin ...R.Vlastou... and the n\_TOF collaboration. Nucl.Instr. Meth. Phys.Res. A524(2004)102.
45. The data acquisition system of the neutron time of flight facility n\_TOF at CERN. U.Abbondanno, ...R.Vlastou ... and the n\_TOF collaboration). Nucl.Instr. Meth. Phys.Res. A538(2005)692.
46. High spin structure of <sup>34</sup>S and the proton-neutron coupling of intruder states. P.Mason, ...R.Vlastou et al. Phys. Rev. C71(2005)014316.
47. On the radiation damage effects in semiconductors beyond the end of range of implanted protons at high energies and fluences, M.Kokkoris, A.Spyrou, G.Perdikakis, R.Vlastou, C.T.Papadopoulos, A.Lagoyannis, E.Symoen and S.Kossionides, Nucl. Instr. Meth. Phys.Res 240(2005)168.
48. High spin structure and intruder configurations in <sup>31</sup>P. M.Ionescu-Bujor, ...R.Vlastou et al. Phys.Rev. C73(2006)024310.

49. Time-energy relation of the n\_TOF neutron beam: energy standards revisited. G.Lorusso, N.Colonna, ... R.Vlastou ...and the n\_TOF collaboration. Nucl.Instr. Meth. Phys.Res. A532(2004)622.
50. Set up and application of an Underwater  $\gamma$ - ray spectrometer for radioactivity Measurements. C.Tsabaris, D. S. Vlachos, C.T.Papadopoulos, R.Vlastou and C. A. Kalfas, Mediterranean marine Science (MS 194) 6(2006)35.
51. Monte Carlo simulation of  $\gamma$ -ray spectra from natural radionuclides recorded by a NaI detector in the marine environment. R.Vlastou, I.Th.Ntziou, M.Kokkoris, C.T.Papadopoulos and C.Tsabaris, Applied Radiation and Isotopes 64(2006)116.
52. Neutron induced reactions at the Athens Tandem Accelerator NCSR “Demokritos”. R.Vlastou, C.T.Papadopoulos, M.Kokkoris, G.Perdikakis, S.Galanopoulos, M.Serris, A.Lagoyannis and S.Harissopoulos, Journal of Radioanalytical & Nuclear Chemistry, 272(2007)219.
53. Study of the  $^{241}\text{Am}(n,2n)^{240}\text{Am}$  reaction cross section in the energy range En=8.8-11.1MeV. G.Perdikakis, C.T.Papadopoulos, M.Kokkoris, R.Vlastou, S.Galanopoulos, A.Lagoyannis, A.Spyrou, Y.Kalyva and N.Patronis, Journal of Radioanalytical & Nuclear Chemistry, 272(2007)223.
54. A Detailed Study of the  $^{nat}\text{C}(\text{d},\text{d}_0)$  Reaction at Detector Angles between  $145^\circ$  and  $170^\circ$ , for the Energy Range  $E_{d, lab} = 900-2000$  keV. M. Kokkoris', P.Misailides, S.Kossionides, A.Lagoyannis, Ch.Zarkadas, R.Vlastou, C.T.Papadopoulos, A.Kontos, Nucl. Instr. Meth. Phys.ResB249(2006)81.
55. Measurement of the  $^{241}\text{Am}(n,2n)^{240}\text{Am}$  reaction cross section by the activation method. G.Perdikakis, C.T.Papadopoulos, R.Vlastou, A.Lagoyannis, A.Spyrou, M.Kokkoris, S.Galanopoulos, N.Patronis, D. Karamanis, Ch. Zarkadas, G. Kalyva and S. Kossionides, Phys. Rev. C73(2006)067601.
56. A Detailed Study of the  $^{12}\text{C}(\text{d},\text{p}_0)^{13}\text{C}$  Reaction at Detector Angles between  $135^\circ$  and  $170^\circ$ , for the Energy Range  $E_{d, lab} = 900-2000$  keV M. Kokkoris', P.Misailides, S.Kossionides, A.Lagoyannis, Ch.Zarkadas, R.Vlastou, C.T.Papadopoulos, A.Kontos, Nucl. Instr. Meth. Phys.ResB249(2006)77.
57. Radioactivity levels of recent sediments in the Butrint Lagoon and the adjacent coast of Albania. C.Tsabaris, G. Eleftheriou, V. Kapsimalis, C. Anagnostou, R. Vlastou, C. Durmishi, M. Kedhi, and C. A. Kalfas, Applied Radiation and Isotopes, accepted.
58. Differential Cross Section Measurements of the  $^{12}\text{C}(\text{d},\text{p}_{1,2,3})^{13}\text{C}$  Reaction, in the Energy Range  $E_{d, lab} = 900-2000$  keV, Suitable for NRA. M. Kokkoris', P.Misailides, A.Kontos, A.Lagoyannis, S.Harissopoulos, R.Vlastou, C.T.Papadopoulos, Nucl. Instr. Meth. Phys.Res, accepted.
59. Neutron Capture cross section of  $^{232}\text{Th}$  measured at the n\_TOF facility at CERN in the unresolved resonance region up to 1MeV. G.Aerts.... R.Vlastou ...and the n\_TOF collaboration. Phys.Rev.C73(2006)054610.
60. New measurement of neutron capture resonances in  $^{209}\text{Bi}$ . C.Domingo-Prado ,... R.Vlastou ...and the n\_TOF collaboration. Phys.Rev.C74(2006)025807.
61. Resonance capture cross section of  $^{207}\text{Pb}$ . C.Domingo-Prado ,... R.Vlastou ...and the n\_TOF collaboration. Submitted to Phys.Rev.C.
62. Study of the (n,2n) cross section measurement of the  $^{174}\text{Hf}$  isotope. M.Serris, S.Galanopoulos, M.Kokkoris, A.Lagoyannis, C.A.Kalfas, C.T.Papadopoulos, N.Patronis, G.Perdikakis and R.Vlastou. Nucl. Instr. Meth. Phys.Res, accepted.
63. Experimental and theoretical studies of (n,p) reactions on Ge isotopes. S.Galanopoulos, R.Vlastou, C.T.Papadopoulos, P.Demetriou, M.Kokkoris, G.Perdikakis and M.Serris. Nucl. Instr. Meth. Phys.Res, accepted.
64. Activation cross section and isomeric cross section ratio for the (n,2n) reaction on  $^{191}\text{Ir}$ . N.Patronis, C.T.Papadopoulos, S.Galanopoulos, S.harissopoulos, A.Lagoyannis, M.Kokkoris, G.Perdikakis and R.Vlastou. Submitted to Phys.Rev.C.

65. Measurement of the neutron capture cross section of the s-only isotope  $^{204}\text{Pb}$  from 1eV to 440keV. C.Domingo-Prado ,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Phys.Rev.C77(2007)015806.
66. Aspects of GEANT4 Monte-Carlo calculations of the BC501A neutron detector. N.Patronis, M.Kokkoris, D.Giantsoudi, G.Perdikakis, C.T.Papadopoulos and R.Vlastou. Nucl. Instr. Meth. Phys.Res A578(2007)351.
67. Proton radiation tolerance of nanocrystal memories. Verrelli, E., Anastassiadis, I., Tsoukalas, D., Kokkoris, M., Vlastou, R., Dimitrakis, P., Normand, P., Physica E: Low-Dimensional Systems and Nanostructures 38 (1-2) (2007)67.
68. Measurement of the radiative neutron capture cross section of  $^{206}\text{Pb}$  and its astrophysical implications. C.Domingo-Prado ,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Phys.Rev.C76(2007)045805.
69. A detailed study of the d+10B system, for nuclear reaction analysis. Part A: The  $^{10}\text{B}(\text{d},\text{p})^{11}\text{B}$  reaction in the energy region 900-2000keV. M.Kokkoris, V.Foteinou, G.Provatas, A.Kontos, N.Patronis, C.T.Papadopoulos, R.Vlastou, P.Misaelides, A.Lagoyannis, S.Harissopoulos. Nucl. Instr. Meth. Phys.Res B263(2007)357.
70. A detailed study of the d+10B system, for nuclear reaction analysis. Part B: The  $^{10}\text{B}(\text{d},\text{a}_0)^{11}\text{B}$  reaction in the energy region 900-2000keV. M.Kokkoris, V.Foteinou, G.Provatas, C.T.Papadopoulos, R.Vlastou, P.Misaelides, A.Lagoyannis, S.Harissopoulos. Nucl. Instr. Meth. Phys.Res B263(2007)369.
71. Neutron reactions and nuclear cosmo-chronology. M.Mosconi,.. R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Prog.Part.Nucl.Phys.59(2007)165.
72. The  $^{139}\text{La}(\text{n},\gamma)$  cross section: Key of the onset of the s-process. R.Terlizzi, ,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Phys.Rev.C75(2007)035807.
73. Nuclear Physics for the Re/Os clock. M.Mosconi,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. J.Phys.G:Nucl.Part.Phys. 35(2008)014015.
74. The measurement of the  $^{206}\text{Pb}(\text{n},\gamma)$  cross section and stellar implications. C.Domingo-Prado,... R.Vlastou, C.T.Papadopoulos...and the n\_TOF collaboration. J.Phys.G:Nucl.Part.Phys. 35(2008)014020.
75. High-accuracy  $^{233}\text{U}(\text{n},\text{f})$  cross section measurement at the white neutron source n-TOF from near thermal to 1 MeV neutron energy. M.Calviani, ,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Phys.Rev.C80(2009)44604.
76. Study of the d+11B system differential cross sections for NRA purposes. M.Kokkoris, M.Diakaki, P.Misaelides, X.Aslanoglou, A.Lagoyannis, C.Raepsaet, V.Foteinou, S.Harissopoulos, R.Vlastou and C.T.Papadopoulos. Nucl.Instr.Meth.Phys.Res. B267(2009)1740.
77. Study of selected differential cross sections of the  $^{28}\text{Si}(\text{d}, \text{p}0, \text{p}1, \text{p}2, \text{p}3)$  reactions for NRA purposes. M.Kokkoris, K.Michalakis, P.Misaelides, A.Lagoyannis, S.Harissopoulos, R.Vlastou and C.T.Papadopoulos. Nucl.Instr.Meth.Phys.Res. B267(2009)1744.
78. Analysis of the FIC detector data at the n\_TOF facility. D.Karadimos. R.Vlastou, K.Ioannides, P.Assimakopoulos, N.tsagas, P.Pavlopoulos, D.Karamanis, K.Stamoulis, V.Vlachoudis, P.Gennini, V.Ketlerov and V.Konovalov, Nucl.Instr.Meth. B268(2010)2556.
79. Neutron-induced fission cross section of  $^{234}\text{U}$  and  $^{237}\text{Np}$  measured at the CERN Neutron Time-of-Flight (n TOF) facility. C. Paradela,..., R.Vlastou,..., C.T.Papadopoulos...and the n\_TOF collaboration. Phys.Rev. C82(2010) 034601.
80. Determination of marine gamma activity and study of the minimum detectable activity (MDA) in  $4\pi$  geometry based on Monte Carlo simulations. C.Bagatelas, C.tsabarlis, M.Kokkoris, C.T.Papadopoulos and R.Vlastou, Environ.Monit.Assess.165(2010)159.
81. The  $^{197}\text{Au}(\text{n},\gamma)$  cross section in the resonance region. C.Massimi, C.Domingo-Prado ,... R.Vlastou, C.T.Papadopoulos...and the n\_TOF collaboration, Phys.Rev.C81

(1010)044616.

82. Isomeric cross section of the  $^{197}\text{Au}(\text{n},2\text{n})$  reaction. A.Tsinganis, M.Diakaki, M.Kokkoris, A.Lagoyannis, E.Mara, C.T.Papadopoulos and R.Vlastou, submitted to Phys.Rev.C (2010).
83. Neutron measurements for advanced nuclear systems: the n\_TOF project at CERN.
84. N.Colonna, .. M.Diakaki, ...R.Vlastou, ...A.Tsnganis...and the n\_TOF collaboration, submitted to Nucl.Instr.Meth. (2010).
85. Measurement of the neutron induced  $^{233}\text{U}$  fission cross section in the energy range  $0.5 < \text{En} < 20$  MeV. F.Belloni,... R. Vlastou, ...C.T.Papadopoulos...and the n\_TOF collaboration, submitted to EPJ (2010).
86. Characterization of the neutron flux distribution at the Athens Tandem Accelerator NCSR “Demokritos”. R.Vlastou, M.Kokkoris, M.Diakaki, Ch.Constantinou, C.A.Kalfas, A.Kotrotsou, A.Lagoyannis, M.Lambrou, V.Loizou, E.Mara, V.Paneta, G.Provatas and A.Tsinganis, submitted to Nucl.Instr.Meth. (2010).

## Publications in conference proceedings

1. Kossionides, N.Fotiades, P.Fallon, S.M.Mullins, M.A.Riley and J.F.Scharpey-Schafer, Conference on A study of the  $^3\text{He}+^3\text{H}$  system using polarized and unpolarized beams in the 19 to 33 MeV energy range. R.Vlastou, J.B.A.England, O.Karban and S.Baird, Conference on Nuclear Physics, University of Surrey, England, 1977.
2. A study of the  $^3\text{He}+^3\text{He}$  system using polarized and unpolarized beams in the 18 to 33 MeV energy range. S.Baird, R.Vlastou, O.Karban and J.B.A.England, Conference on Nuclear Physics, University of Surrey, England, 1977.
3. Optical Model analysis of 25MeV  $\alpha$  particles elastic scattering from 25 nuclei in the range 51V to 80Se. J.B.A.England, R.Vlastou, S.Baird, J.Alabav, E.Casal and T.Picaso, Conference on Nuclear Physics, University of Surrey, England, 1977.
4. New members of the negative parity band in  $^{121}\text{Te}$ . T.Paradellis, R.Vlastou, C.T.Papadopoulos and E.N.Gazis, 5th Capture  $\gamma$ -ray Symposium, Louvain, Belgium, August 1987.
5. Study of the reaction  $^7\text{Li}+^{11}\text{B}$  at energies from one to four times the Coulomb Barrier. R.Vlastou, C.T.papadopoulos, E.N.Gazis, A.Pakou, P.A.Assimakopoulos, G.Doukelis, G.P.Eleftheriades, C.A.Kalfas and A.C.Xenoulis. International Conference on heavy ion interactions around the Coulomb Barrier, Padova, Italy, June 1988.
6. Competition between p2n, dn and t emission in compound nuclear and direct heavy ion reactions. G.P.Eleftheriades, C.T.papadopoulos, E.N.Gazis and R.Vlastou, International Conference on heavy ion interactions around the Coulomb Barrier, Padova, Italy, June 1988.
7. Neutron-proton i13/2 alignments in  $^{174}\text{Os}$ . L.Hildingsson, W.Klamra, Th.Lindblad, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou and J.Gizon. International Conference on the Spectroscopy of Heavy Nuclei, Crete, Greece, June 1989.
8. Neutron alignments in  $^{195}\text{Hg}$ . R.Vlastou, C.T.Papadopoulos, C.A.Kalfas, S.Harissopoulos, SNew Nuclear Physics with Advanced Techniques, Crete, Greece 1991.
9. Spectroscopy in a rotating deformed nucleus. C.T.Papadopoulos and R.Vlastou. 2nd Hellenic Symposium on Nuclear Physics, NCSR “Demokritos”, Athens 1991.
10. High spin structure of  $^{173}\text{Os}$ . R.Vlastou, C.T.Papadopoulos, C.A.Kalfas, S.Kossionides, L.Hildingsson, W.Klamra, Th.Lindblad and J.Gizon. 2nd Hellenic Symposium on Nuclear Physics, NCSR “Demokritos”, Athens 1991.
11. High spin states in  $^{195}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, M.Serris, C.T.Papadopoulos, R.Vlastou, P.Fallon, S.M.Mullins, M.A.Riley and

- J.F.Scharpey-Schafer, 3rd Hellenic Symposium on Nuclear Physics, NTUA, Athens 1992.
12. High spin structure of  $^{155}\text{Dy}$ . C.T.Papadopoulos, R.Vlastou, M.Serris, C.A.Kalfas, N.Fotiades, S.Harissopoulos, S.Kossionides, J.F.Scharpey-Schafer, E.S.Paul, M.A.Riley, J.Simpson, 3rd Hellenic Symposium on Nuclear Physics, NTUA, Athens 1992.
  13. High spin structure of  $^{155}\text{Dy}$ . R.Vlastou, C.T.Papadopoulos, M.Serris, C.A.Kalfas, N.Fotiades, S.Harissopoulos, S.Kossionides, J.F.Scharpey-Schafer, E.S.Paul, M.A.Riley, J.Simpson, International Conference on the future of Nuclear Spectroscopy, Crete, Greece 1993.
  14. High spin structure of  $^{193}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, R.Vlastou, C.T.Papadopoulos, M.Serris, M.J.Joyce, J.F.Scharpey-Schafer, C.W.Beausang, D.M.Cullen, M.A.Riley, R.M.Clark, P.J.Dagnall, J.Duprat, P.Fallon, P.D.Forsyth, S.J.Gale, B.Gall, F.Hannachi, K.Hauschild, P.M.Jones, A.Korichi, Y.LeCoz, M.Meyer, E.S.Paul, M.G.Porquet, N.Redon, C.Schuck, J.Simpson and R.Wadsworth, International Conference on the future of Nuclear Spectroscopy, Crete, Greece 1993.
  15. High spin structure of  $^{193}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, R.Vlastou, C.T.Papadopoulos, M.Serris, M.J.Joyce, J.F.Scharpey-Schafer, C.W.Beausang, D.M.Cullen, M.A.Riley, P.Fallon, P.D.Forsyth, S.J.Gale, P.M.Jones, E.S.Paul and J.Simpson. 4th Hellenic Symposium on Nuclear Physics, University of Ioannina, Ioannina 1993.
  16. On some interesting aspects of heavy ion reactions studied with  $^{7}\text{Li}+^{11}\text{B}$  and  $^{9}\text{Be}+^{9}\text{Be}$ . E.Adamides, C.T.Papadopoulos, R.Vlastou, E.N.Gazis, A.A.Pakou, R.A.Assimakopoulos, G.Doukelis, C.A.Kalfas and A.C.Xenoulis. 4th Hellenic Symposium on Nuclear Physics, University of Ioannina, Ioannina 1993.
  17. Observations of dipole transitions between superdeformed bands in  $^{193}\text{Hg}$ . M.J.Joyce, J.F.Scharpey-Schafer, P.J.Twin, C.W.Beausang, D.M.Cullen, M.A.Riley, R.M.Clark, P.J.Dagnal, I.Deloncle, J.Duprat, P.Fallon, P.D.Forsyth, N.Fotiades, S.J.Gale, B.Gall, F.Hannachi, S.Harissopoulos, K.Hauschild, P.M.Jones, C.A.Kalfas, A.Korichi, Y.LeCoz, M.Mayer, E.S.Paul, M.G.Porquet, N.Redon, C.Schuck, J.Simpson, R.Vlastou and R.Wadsworth. International Conference on the future of Nuclear Spectroscopy, Crete, Greece 1993.
  18. M1 transitions between superdeformed states in  $^{194,195}\text{Tl}$  : the fingerprint of the  $i_{13/2}$  proton intruder orbital. J.Duprat, F.Azaiez, J.F.Scharpey-Schafer, Aiche, G.Bastin, C.W.Beausang, C.Bourgeois, R.M.Clark, D.M.Cullen, P.J.Dagnal, I.Deloncle, P.Fallon, P.D.Forsyth, N.Fotiades, S.J.Gale, B.Gall, F.Hannachi, S.Harissopoulos, K.Hauschild, I.Hibbert, P.M.Jones, M.J.Joyce, A.Kaci, C.A.Kalfas, W.H.Kelly, A.Korichi, Y.LeCoz, M.Meyer, E.S.Paul, N.Perrin, N.Pffe, M.G.Porquet, N.Redon, M.A.Rilley, H.Sergolle, C.Schuck, J.Simpson, P.Twin, R.Vlastou, R.Wadsworth. Conference on physics from large  $\gamma$ -ray detector arrays. Berkeley, California, August 1994.
  19. Magnetic properties of superdeformed  $^{193}\text{Hg}$  and  $^{195}\text{Tl}$  nuclei. F.Azaiez, J.Duprat, J.F.Scharpey-Schafer, Aiche, G.Bastin, C.W.Beausang, C.Bourgeois, R.M.Clark, D.M.Cullen, P.J.Dagnal, I.Deloncle, P.Fallon, P.D.Forsyth, N.Fotiades, S.J.Gale, B.Gall, F.Hannachi, S.Harissopoulos, K.Hauschild, I.Hibbert, P.M.Jones, M.J.Joyce, A.Kaci, C.A.Kalfas, W.H.Kelly, A.Korichi, Y.LeCoz, M.Meyer, E.S.Paul, N.Perrin, N.Pffe, M.G.Porquet, N.Redon, M.A.Rilley, H.Sergolle, C.Schuck, J.Simpson, P.Twin, R.Vlastou, R.Wadsworth. Proceedings of the XXXIIInd International Winter meeting on Nuclear Physics, Bormio, Italy, January 1994.
  20. High spin levels in  $^{119}\text{Te}$ . C.T.Papadopoulos, R.Vlastou, M.Serris, N.Fotiades, H.G.Hartas, S.Harissopoulos, C.A.Kalfas, S.Kossionides, J.Simpson, E.S.Paul, S.Araddad, C.W.Beausang, M.Bentley, M.J.Joyce and J.F.Scharpey-Schafer, 6th Hellenic Symposium on Nuclear Physics, TEI Pireus, May 1995.

21. Nuclear Shape coexistence in  $^{193}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, M.Serris, J.F.Sharpey-Schafer, M.J.Joyce, C.W.Beausang, P.J.Dagnal, P.D.Forsyth, S.J.Gale, P.M.Jones, E.S.Paul, P.J.Twin, J.Simpson, D.M.Cullen, P.Fallon, M.A.Riley, R.M.Clark, K.Hauschild and R.Wadsworth, 6th Hellenic Symposium on Nuclear Physics, TEI Pireus, May 1995.
22. High spin structures of  $^{122}\text{Xe}$ . M.Serris, C.T.Papadopoulos, R.Vlastou, C.A.Kalfas, S.Kossionides, N.Fotiades, S.Harissopoulos, C.W.Beausang, M.J.Joyce, M.A.Bentley, J.F. Scarpey-Schafer, E.S.Paul and J.Simpson, 6th Hellenic Symposium on Nuclear Physics, TEI Pireus, May 1995.
23. Ατέλειες που εισάγονται στο GaAs , με ακτινοβολίες βαρέων ιόντων. N.Αρμπατζάνης, Γ.Ι.Παπαιωάννου, Ρ.Βλαστού, Ε.Ν.Γαζής, Γ.Κωνσταντινίδης και Ζ.Χατζόπουλος, 11ο Πανελλήνιο Συνέδριο Φυσικής Στερεάς Καταστάσεως, Ξάνθη, Σεπτέμβριος 1995.
24. Radiation damage of thin films of YBaCuO superconductors. R.Vlastou, E.N.Gazis, C.T.Papadopoulos, E.Liarocapis, D.Palles, S.Kossionides, M..Pilakouta, W.Assmann and H.Huber, 6th Hellenic Symposium on Nuclear Physics, Pireus, May 1995.
25. Double energy-angle differential and total yield cross section data of  $^{58}\text{Ni}(n,\alpha)^{55}\text{Fe}$  reaction. C.Tsabarlis, R.Vlastou, C.T.Papadopoulos, C.A.Kalfas, E.Wattecamp and G.Rollin, 6th Hellenic Symposium on Nuclear Physics, Pireus, May 1995.
26. Ion irradiation induced defects in epitaxial GaAs layers. N.Arbatzianis, R.Vlastou, E.N.Gazis, G.Konstantinidis, M.Papastamatiou and G.J.Papaioannou, International Conference on Advanced Semiconductor Devices and Microsystems, Slovakia, 1996.
27. Nuclear Shape coexistence in  $^{194}\text{Hg}$ . N.Fotiades, S.Harissopoulos, C.A.Kalfas, S.Kossionides, C.T.Papadopoulos, R.Vlastou, M.Serris, J.F.Sharpey-Schafer, M.J.Joyce, C.W.Beausang, P.J.Dagnal, P.D.Forsyth, S.J.Gale, P.M.Jones, E.S.Paul, P.J.Twin, J.Simpson, D.M.Cullen, P.Fallon, M.A.Riley, R.M.Clark, K.Hauschild and R.Wadsworth, 6th Hellenic Symposium on Nuclear Physics, TEI of Athens, May 1996.
28. A Method of Determining Channeling Parameters in Backscattering Geometry. M.Kokkoris, S.Kossionides, T.Paradellis, Ch.Zarkadas, E.N.Gazis, C.T.Papadopoulos, R.Vlastou, X.Aslanoglou, 6th Hellenic Symposium on Nuclear Physics, TEI of Athens, May 1996.
29. Dipole structures in the high spin region of deformed nuclei, R.Vlastou. European Conference on Advances in Nuclear Physics and related areas, Thessaloniki, July 1997.
30. Study of the irradiation damage in simple crystals by channeling. M.Kokkoris, H.Huber, S.Kossionides, T.Paradellis, Ch.Zarkadas, E.N.Gazis, R.Vlastou, X.Aslanoglou, W.Assmann and S.Karamian, CP392, 14th International Conference of Accelerators in research and Industry, Denton, Texas, USA, November 1996.
31. Heavy ion induced damage of crystalline Ge and W at 0.5 to 8 A.MeV range. H.Huber, W.Assmann, S.A.Karamian, H.D.Mieskes, H.Nolte, E.N.Gazis, M.Kokkoris, S.Kossionides, R.Vlastou, R.Groetzschel, A.Muecklich and W.Prusseit, Proceedings of SHIM-98 Symposium, Berlin,Germany, May 1998.
32. Superdeformation in  $^{144}\text{Gd}$  studied at EUROBALL. S.Lunardi, D.Bazzacco, W.Krolas, R.Menegazzo, P.Pavan, C.M.Petrche, C.Rossi Alvarez, C.A.Ur, Venturelli, G.Viesti, G. de Angelis, M.De Poli, A.Cadea, D.R.Napoli, Zs.Podolyak, W.Gast, A.Georgiev, H.J.Jensen, R.M.Lieder, T.Rzaca-Urban, Z.Pytel, W.Urban, M.Augsburg, C.A.Kalfas, C.T.Papadopoulos and R.Vlastou, International Nuclear Physics Conference 98, Paris, France, August 1998.
33. Study of the reactions  $^{7}\text{Li}+^{11}\text{B}$  and  $^{9}\text{Be}+^{9}\text{Be}$  at energies around and above the Coulomb Barrier, R.Vlastou, C.T.Papadopoulos, E.N.Gazis, C.Tsabarlis, E.Adamides, A.A.Pakou, P.a.Assimakopoulos, G.Doukelis, C.A.Kalfas and A.C.Xenoulis, International Nuclear Physics Conference 98, Paris, France, August 1998.
34. Statistical Model Calculations of the  $^{7}\text{Li}+^{11}\text{B}$  reaction. C.Tsabarlis, C.T.Papadopoulos, R.Vlastou, P.A.Assimakopoulos, A.A.Pakou, E.Adamides, C.A.Kalfas and

- A.C.Xenoulis, 10th Hellenic Symposium on Nuclear Physics, Athens, May 1999.
35. Characterization of optical filters using Rutherford Backscattering Spectroscopy. R.Vlastou, E.Fokitis, G.Kalliabakos, M.Kokkoris and S.Kossionides, 10th Hellenic Symposium on Nuclear Physics, Athens, May 1999.
  36. Determination of Sulfur and Copper Profile with nuclear reactions. S.Kossionides, G.Kaliambakos, R.Vlastou and C.T.Papadopoulos. 10th Hellenic Symposium on Nuclear Physics, Athens, May 1999.
  37. Simulations and comparisons of channeling spectra in the p+28Si system in the backscattering geometry. M.Kokkoris, X.A.Aslanoglou, A.Karydas, E.Kossionides, Th.Paradellis, G.Souliotis and R.Vlastou. 10th Hellenic Symposium on Nuclear Physics, Athens, May 1999.
  38. Determination of Stopping Power of channeled  $\alpha$ -particles in SiO<sub>2</sub> in the backscattering Geometry. M.Kokkoris, S.Kossionides, R.Vlastou, X.Aslanoglou, R.Groetzschel and Th.Paradellis, 16th International Conference of Accelerators in research and Industry, Denton, Texas, USA, November 2000. AIP Conference Proceedings, Vol. 576(2001) p.7.
  39. Characterization of multilayer thin film optical filters using RBS. R.Vlastou, E.Fokitis, M.Kokkoris, S.Kossionides, G Koubouras and R.Groetzschel, 16th International Conference of Accelerators in research and Industry, Denton, Texas, USA, November 2000. AIP Conference Proceedings, Vol. 576(2001) p.436.
  40. Application of an underwater  $\gamma$ -ray spectrometer for radioactivity measurements. C.Tsabarlis, D.S.Vlachos, C.T.Papadopoulos, R.Vlastou and C.A.Kalfas, North Aegean System Functioning and Interregional Pollution, Kavala, Greece, May 2001.
  41. Software development for the calculation of the response function of an underwater  $\gamma$ -ray NaI spectrometer. D.S.Vlachos, C.Tsabarlis, C.T.Papadopoulos, R.Vlastou and C.A.Kalfas, International Conference on Radioactivity in the Environment, Monaco, 1-5 September 2002.
  42. Neutron capture measurements at the CERN n\_TOF facility for ADS applications. U.Abbondanno,...R.Vlastou and the n\_TOF collaboration. 11th International Symposium on Capture gamma-ray spectroscopy and related topics. Prague, September 2002. World Scientific, Singapore 2002.
  43. Measurements of energy loss of charged particles traveling in crystalline materials along the channeling direction, M.Kokkoris, R.Vlastou, C.T.Papadopoulos, X.A.Aslanoglou, S.Kossionides and R.Groetzschel, 13th Hellenic Symposium on Nuclear Physics. Ioannina, May 2003.
  44. The neutron facility at NCSR “Demokritos” – Implementation in the case of the  $^{232}\text{Th}(n,2n)$  reaction. R.Vlastou, C.T.Papadopoulos, G.Perdikakis, M.Kokkoris, C.A.Kalfas, S.Kossionides, D.Karamanis and P.A.Assimakopoulos, Proceedings of the International Conference on the Labyrinth in Nuclear Structure, Crete, 13-19 July 2003. AIP Conference Proceedings, Vol. 701(2004) p.324.
  45. High Spin Spectroscopy in Rotating Deformed Nuclei. R.Vlastou, XV International School on Nuclear Physics, Varna, Bulgaria, 9-13 September 2003. BgNS Transactions Vol.9 (2004)p.98.
  46. Rainfall induced  $^{137}\text{Cs}$  radioactivity in the Aegean sea. C. Tsabarlis, D. Ballas, C. T. Papadopoulos, R. Vlastou and C.A. Kalfas. 14th Hellenic Symposium on Nuclear Physics, Athens, May 2004.
  47. The Neutron Facility at NCSR “Demokritos”- Implementation in the Case of the  $^{232}\text{Th}(n,2n)$  and  $^{241}\text{Am}(n,2n)$  Reactions. R.Vlastou, C.T. Papadopoulos, G. Perdikakis, M. Kokkoris, S. Kossionides, D. Karamanis and P.A. Assimakopoulos, 14th Hellenic Symposium on Nuclear Physics, Athens, May 2004.
  48. Measurement of the  $^{241}\text{Am}(n,2n)^{240}\text{Am}$  reaction cross section by the activation method. G.Perdikakis, C.T.Papadopoulos, R.Vlastou, A.Lagoyannis, A.Spyrou, M.Kokkoris, N.Patronis, 14th Hellenic Symposium on Nuclear Physics, Athens, May

2004.

49. Neutron induced reactions at the Athens Tandem Accelerator NCSR “Demokritos”. R.Vlastou, C.T.Papadopoulos, M.Kokkoris, G.Perdikakis, S.Galanopoulos, M.Serris, D.Giantsoudi, G.Argyropoulos, S.Kossionides and S.Harissopoulos, 15th Hellenic Symposium on Nuclear Physics, Thessaloniki, May 2005.
50. Theoretical calculations for the reaction  $^{241}\text{Am}(\text{n},2\text{n})$  in the framework of the Hauser-Feshbach model. G.Perdikakis, C.T.Papadopoulos, R.Vlastou, and M.Kokkoris, 15th Hellenic Symposium on Nuclear Physics, Thessaloniki, May 2005.
51. Cross section measurements on isotopes of Ge and Hf using the activation technique. S.Galanopoulos, M.Serris, G.Perdikakis, M.Kokkoris, C.T.Papadopoulos, R.Vlastou, A.Lagoyannis, A.Spyrou, Y. Kalyva, S.Harissopoulos, Ch. Zarkadas and S. Kossionides, 15th Hellenic Symposium on Nuclear Physics, Thessaloniki, May 2005.
52. A detailed study of the  $^{12}\text{C}(\text{d},\text{p})$  reaction at detector angles between 135 and 170 degrees for the energy range 900-2000keV. M.Kokkoris, P.Misaelides, S.Kossionides, Ch.Zarkadas, A.Lagoyannis, R.Vlastou, C.T.Papadopoulos, A.Kontos, 15th Hellenic Symposium on Nuclear Physics, Thessaloniki, May 2005.
53. Measurements at n\_TOF of the neutron capture cross section of minor actinides relevant to the nuclear waste transmutation. D.Canno-Ott...R.Vlastou and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.1442.
54. Measurement of capture cross-sections of  $^{90,91,92,94,96}\text{Zr}$  isotopes at n\_TOF. C.Moreau,...R.Vlastou,...and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.880.
55. The n\_TOF facility at CERN: Performances and first physics results. U.Abbondanno, ...R.Vlastou,...and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.724.
56. Neutron Capture cross sections for the Re/Os clock. M.Mosconi, ...R.Vlastou, ...and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.1335.
57. New measurements of the Capture Cross Section of Bismuth and Lead Isotopes. C.Domingo-Pardo,... R.Vlastou, ...and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.1521.
58. Measurement of the  $^{232}\text{Th}$  neutron capture cross section at the CERN n\_TOF facility. G.Aerts,... R.Vlastou, ...and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.1470.
59. High resolution study of the  $^{237}\text{Np}$  fission cross section from 5eV to 1MeV. W.Furman, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference on Nuclear Data for Science and Technology, Santa Fe, New Mexico, AIP Conference Proceedings, Vol. 769 (2005) p.1039.
60. Measurement of  $^{139}\text{La}(\text{n},\gamma)$  cross section. R.Terlizzi, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference on Capture  $\gamma$ -ray spectroscopy and related topics, Notre Dame, IN, September 2005. AIP Conference Proceedings, Vol.819(2006)283.
61. Measurement of the resonance capture cross section of  $^{204,206}\text{Pb}$  and termination of the s-process. C.Domingo-Pardo,... R.Vlastou, ...and the n\_TOF collaboration. International Conference on Capture  $\gamma$ -ray spectroscopy and related topics, Notre Dame, IN, September 2005. AIP Conference Proceedings, Vol.819(2006)288.
62. Neutron induced reactions at the Athens Tandem Accelerator NCSR “Demokritos”.

- R.Vlastou, C.T.Papadopoulos, M.Kokkoris, G.Perdikakis, S.Galanopoulos, M.Serris, D.Giantsoudi, S.Kossionides, S.Harissopoulos, D.Karamanis and P.A.Assimakopoulos. International Conference FINUSTAR, Kos, September 2005. AIP, Conf. Proceedings, Vol. 831 (2006) in press.
63. Measurement of the  $^{241}\text{Am}(\text{n},\text{2n})^{240}\text{Am}$  reaction cross section by the activation method. G.Perdikakis, C.T.Papadopoulos, R.Vlastou, A.Lagoyannis, A.Spyrou, M.Kokkoris, S.Galanopoulos and N.Patronis, International Conference FINUSTAR, Kos, September 2005. AIP, Conf. Proceedings, Vol. 831 (2006) in press.
64. Neutron activation measurements on natural Ge and Hf. S.Galanopoulos, M.Serris, G.Perdikakis, M.Kokkoris, C.T.Papadopoulos, R.Vlastou, A.Lagoyannis, A.Spyrou, Y. Kalyva, S.Harissopoulos, Ch. Zarkadas and S. Kossionides, International Conference FINUSTAR, Kos, September 2005. AIP Conference Proceedings, Vol. 831 (2006) in press.
65. Plunger lifetime measurements in  $^{102}\text{Pd}$ . G.Kalyva, A.Spyrou, M.Axiotis, S.Harissopoulos, A.Dewald, A.Fitzler, B.Saha, A.Liennemann, R.Vlastou, D.R.Napoli, N.Marginean, C.Rusu, G.de Angelis, C.Ur, D.Bazzacco, E.Farnea, D.L.Balabanski and R.Julin. International Conference FINUSTAR, Kos, September 2005. AIP Conference Proceedings, Vol. 831 (2006) in press.
66. Astrophysical Implications of the  $^{139}\text{La}(\text{n},\gamma)$  and  $^{151}\text{Sm}(\text{n},\gamma)$  cross section mesured at n\_TOF. S.Marrone,... R.Vlastou, ...and the n\_TOF collaboration. International Conference "Nuclei in the Cosmos-IX", CERN, June 2006. Proceedings of Science.
67. Neutron capture measurements on the s-process termination isotopes lead and bismouth. Cesar Domingo-Prado, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference "Nuclei in the Cosmos-IX", CERN, June 2006. Proceedings of Science.
68. Experimental challenges for the Re/Os clock. Marita Mosconi, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference "Nuclei in the Cosmos-IX", CERN, June 2006. Proceedings of Science.
69. Neutron capture cross section measurements for nuclear astrophysics at n\_TOF. Michael Heil ... R.Vlastou, ...and the n\_TOF collaboration. International Conference "Nuclei in the Cosmos-IX", CERN, June 2006. Proceedings of Science.
70. Measurements of the  $^{90,91,92,94,96}\text{Zr}$  neutron capture cross section at n\_TOF. U.Abbondanno, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference "Nuclei in the Cosmos-IX", CERN, June 2006. Proceedings of Science.
71. Measurement at n\_TOF of the  $^{237}\text{Np}(\text{n},\gamma)$  and  $^{240}\text{Pu}(\text{n},\gamma)$  cross sections for the transmutation of nuclear waste. C.Guerrero, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference PHYSOR-2006, Vancouver, September 2006.
72. Measurement of the neutron capture cross section of  $^{236}\text{U}$ . F.Gunsing ... R.Vlastou, ...and the n\_TOF collaboration. International Conference PHYSOR-2006, Vancouver, September 2006.
73. Measurement of the neutron capture cross section of  $^{234}\text{U}$  in the n\_TOF at CERN. W.Dridi, ... R.Vlastou, ...and the n\_TOF collaboration. International Conference PHYSOR-2006, Vancouver, September 2006.
74. Study of the  $^{191}\text{Ir}(\text{n},\text{2n})^{190}\text{Ir}$  reaction cross section. N.Patronis, C.T.Papadopoulos, S.Galanopoulos, S.harissopoulos, A.Lagoyannis, M.Kokkoris, G.Perdikakis and R.Vlastou. 16th Hellenic Symposium on Nuclear Physics, Athens, May 2006.
75. Proton radiation effects on nanocrystal non-volatile memories. E.Verelli, D.Tsoukalas, M.Kokkoris, R.Vlastou, P.Dimitrakis and P.Normand, RADECS2006 workshop, Athens, September 2006.
76. Statistical Model Calculations of  $^{72,73}\text{Ge}(\text{n},\text{p})$  and  $^{72,74}\text{Ge}(\text{n},\alpha)$  reactions on natural Ge. S.Galanopoulos, R.Vlastou, P.Demetriou, M.Kokkoris, C.T.Papadopoulos G.Perdikakis and M.Serris. 16th Hellenic Symposium on Nuclear Physics, Athens, May 2006.
77. Study of the (n,2n) reaction cross section on  $^{174,176}\text{Hf}$  isotopes. M.Serris,

- S.Galanopoulos, M.Kokkoris, A.Lagoyannis, C.A.Kalfas, C.T.Papadopoulos, N.Patronis, G.Perdikakis and R.Vlastou. 16th Hellenic Symposium on Nuclear Physics, Athens, May 2006.
78. Isomeric cross sections of neutron induced reactions on Ge and Ir isotopes. R.Vlastou, C.T.Papadopoulos, M.Kokkoris, G.Perdikakis, S.Galanopoulos, M.Serris, N.Patronis, S.Harissopoulos and P.Demetriou. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  79. Measurement of neutron induced fission of  $^{235}\text{U}$ ,  $^{233}\text{U}$  and  $^{245}\text{Cm}$  with the FIC detector at the CERN nTOF facility. M.Calviani,... R.Vlastou, C.T.Papadopoulos, ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  80. Neutron resonance spectroscopy at nTOF at CERN. F.Gunsing,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  81. The  $^{234}\text{U}$  neutron capture cross section measurements at the nTOF facility. C.Lampoudis,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  82. Capture cross section measurements of  $^{186,187,188}\text{Os}$  at nTOF: the resolved resonance region. K.Fuji,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  83. The neutron capture cross sections of  $^{237}\text{Np}(n,\gamma)$  and  $^{240}\text{Pu}(n,\gamma)$  and its relevance in the transmutation of nuclear waste. C.Guerrero,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  84. The measurement of  $^{197}\text{Au}(n,g)$  cross section at nTOF: towards a new standard. C.Massimi ,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  85. Measurement of the  $^{90,91,92,93,94,96}\text{Zr}(n,\gamma)$  and  $^{139}\text{La}(n,\gamma)$  cross sections at nTOF. G.Tagliente,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  86. Improved lead and bismuth  $(n,\gamma)$  cross sections and their astrophysical impact. C.Domingo-Prado,... R.Vlastou, C.T.Papadopoulos ...and the n\_TOF collaboration. Proceedings of Inter. Conf. on Nuclear Data for Science and Technology 2007, Nice, France.
  87. Isomeric cross section study of Neutron induced reactions on Ge. R.Vlastou, S.Galanopoulos, C.T.Papadopoulos, M.Kokkoris, A.Lagoyannis and P.Demetriou. 17th Hellenic Symposium on Nuclear Physics, University of Ioannina, May 2008.
  88.  $^{234}\text{U}(n,f)$  cross section with the FIC detector at CERN nTOF. D.Karadimos, R.Vlastou, K.Ioannides, P.Assimakopoulos, N.Tsagas, P.Pavlopoulos, D.Karamanis, K.Stamoulis, V.Vlachoudis, P.Cennini, V.Ketlerov, V.Konovalov. 17th Hellenic Symposium on Nuclear Physics, University of Ioannina, May 2008.
  89. A review on recent developments in deuteron induced reactions enhancing NRA capabilities. M.Kokkoris, P.Misailides, A.Lagoyannis, R.Vlastou, C.T.Papadopoulos and S.Harissopoulos. 17th Hellenic Symposium on Nuclear Physics, University of Ioannina, May 2008.
  90. Isomeric cross section study of Neutron induced reactions on Ge. R.Vlastou, S.Galanopoulos, C.T.Papadopoulos, M.Kokkoris, A.Lagoyannis and P.Demetriou. Proceedings of Inter. Conf. on Capture gamma-ray spectroscopy and related topics. Koln,

Germany, August 2008.

91. Neutron cross section analysis of Np-237 and Pu-240 between 1 eV and 2 keV. C. Guerrero, and The n\_TOF Collaboration. Proceedings of the NEMEA-4 workshop, 2008.
92. Nuclear physics for the Re/Os clock. M Mosconi and the n\_TOF Collaboration Proceedings of the European Conference on Nuclear Physics in Astrophysics (NPA-III), 2008.
93. Cross section measurements of  $^{197}\text{Au}(n,2n)$  reaction. A.Tsiganis, E.Mara, M.Kokkoris, A.Lagoyannis, R.Vlastou and C.T.Papadopoulos. 18th Hellenic Symposium on Nuclear Physics, NCSR “Demokritos”, Athens, May 2008.
94. Cross section measurements of the d+11B system. M.Diakaki, M.Kokkoris, P.Misaelides, X.Aslanoglou, A.Lagoyannis, C.Raepsaet, V.Foteinou, S.Harissopoulos, R.Vlastou and C.T.Papadopoulos. 18th Hellenic Symposium on Nuclear Physics, NCSR “Demokritos”, Athens, May 2008.
95. The  $^{237}\text{Np}(n,f)$  cross section at the CERN n-TOF facility, D.Karadimos, R.Vlastou, ... and the nTOF collaboration, International Conference FINUSTAR-3, Rodos, August 2010, AIP Conference Proceedings, in press.