

Chavdar STOYANOV

LIST OF PUBLICATIONS

December 26, 2023

1 Large review paper or MONOGRAPH

According to the status of the journal Physics Reports the following issue could be interpreted as monographic issue

1. S. Gales, **Ch. STOYANOV**, A. I. Vdovin.
Damping of High - Lying Single - Particle Modes in Spherical Nuclei.
Phys. Rep., **v. C166** (1988) pp. 125-193.

2 PROCEEDINGS

1. Editor **Ch. STOYANOV**,
Selected Topics on Nuclear Methods for Non-Nuclear Applications
Heron Press Science, Coronet Books Incorporated, 2007 ISBN 954580209X,
9789545802096 378
2. Editors **Ch. STOYANOV**, N. Janeva
XVIII International School on Nuclear Physics, Neutron Physics and Applications,
Varna 21 - 27 September, 2009
Journal of Physics: Conference Series, v. 205, 2010

3. Editors **Ch. STOYANOV**, S Dimitrova
XIX International School on Nuclear Physics, Neutron Physics and Applications, Varna 1925 September, 2011
 Journal of Physics: Conference Series v. 366 (2012)
4. Editors **Ch. STOYANOV**, S Dimitrova, V. Voronov
XX International School on Nuclear Physics, Neutron Physics and Applications,
 Varna 16-22 September, 2013
 Journal of Physics: Conference Series v. 533 (2014)
5. Editors **Ch. STOYANOV**, S Dimitrova, Yu. Penionzhkevich
XXI International School on Nuclear Physics, and Applications & International Symposium on Exotic Nuclei,
 Varna 6-12 September, 2015
 Journal of Physics: Conference Series v. 724 (2016)

3 REVIEW ARTICLES

1. A. I. Vdovin, V. V. Voronov, L. A. Malov, V. G. Soloviev, **Ch. STOYANOV**.
Semimicroscopic Description of the Level Density in Complex Nuclei.
 Sov. J. Particle and Nuclei, **v. 7** (1976) pp. 952-988.
2. A. I. Vdovin, V. V. Voronov, V. G. Soloviev, **Ch. STOYANOV**.
Quasiparticle - Phonon Nuclear Model. V. Odd Spherical Nuclei.
 Sov. J. Part. and Nucl., **v. 16** (1985) pp. 245-279.
3. M. Grinberg, **Ch. STOYANOV**, N. Tsoneva.
Interplay of collective and noncollective modes at low excitation energy in spherical nuclei.
 Rus. J. Part. and Nucl., **v. 29** (1998) pp 1456 - 1498.

4. N Lo Iudice, V Yu Ponomarev, **Ch. STOYANOV**, A V Sushkov and V V Voronov
Low-energy nuclear spectroscopy in a microscopic multiphonon approach
 J. Phys. G: Nucl. Part. Phys., **v. 39** (2012) 043101 (37pp)
5. **Ch. STOYANOV**
QUASIPARTICLES, PHONONS AND BEYOND (NUCLEAR STRUCTURE CALCULATIONS IN A LARGE DOMAIN OF EXCITATION ENERGIES)
 ROMANIAN JOURNAL OF PHYSICS Volume: 58 Issue: 9-10 Pages: 1096-1107 Published: 2013

4 ARTICLES

1. **Ch. STOYANOV**, L .Alexandrov, V. Gadjokov.
 J. Rad. Chem., **v. 10** (1972) pp. 75 - 81.
2. A. I. Vdovin, **Ch. STOYANOV**, N. Yu. Shirikova.
Low-Lying 2^+ - and 3^- States in Even-Even Spherical Nuclei.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 37** (1973) pp.1543-1550.
3. A. I. Vdovin, **Ch. STOYANOV**.
Coupling of Collective and Quasiparticle Excitations in Even - Even Spherical Nuclei.
 Sov. J. Izv. Akad. Nauk. (ser.fiz.) **v. 37** (1973) pp.1750-1760.
4. A. I. Vdovin, G. Kyrchev, **Ch. STOYANOV**.
Interaction of Two Quasiparticle and Phonon Excitations in Even-Even Nuclei.
 Sov. J. Theor. Math. Fiz., **v. 21** (1974) pp. 137-145.
5. A. I. Vdovin, V. V. Voronov, L. A. Malov, V. G. Soloviev,
Ch. STOYANOV.

- Mass Number Dependence of the Density of $1/2^+$ States in the Vicinity of Neutron Binding Energy.*
Sov. J. Nucl. Phys., **v. 19** (1974) pp. 516-520.
6. V. G. Soloviev, **Ch. STOYANOV**, A.I.Vdovin.
Semi-Microscopic Calculation of the Level Density in Spherical Nuclei.
Nucl. Phys., **v. A224** (1974) pp. 411-428.
7. A. I. Vdovin, **Ch. STOYANOV**.
Coupling of Vibrational and Two Quasiparticle Excitations in the Te, Sn and Cd Isotopes.
Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 38** (1974) pp. 2604-2690.
8. A. I. Vdovin, **Ch. STOYANOV**.
*Coupling of Vibrational and Two Quasiparticle Excitations in the Izo-
tones $N = 80, 82, 84$.*
Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 38** (1974) pp. 2593-2603.
9. A. I. Vdovin, V. G. Soloviev, **Ch. STOYANOV**.
Study of the Initial Stage of Fragmentation in Spherical Nuclei.
Sov. J. Nucl. Phys., **v. 20** (1974) pp. 1131-1138.
10. A. I. Vdovin, **Ch. STOYANOV**.
An Influence of the Quasiparticle-Phonon Interaction on the Structure of Excited States in Even-Even Semimagic Nuclei.
Nukleonika, **v. 19** (1974) pp. 717-719.
11. A. I. Vdovin, **Ch. STOYANOV**.
Coupling of Vibrational and Two Quasiparticle Excitations in Semimagic Nuclei $Z = 50$ and $N = 82$.
Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 39** (1975) pp. 1618-1623.

12. G. Kyrchev, V. G. Soloviev, **Ch. STOYANOV**.
Study of Anharmonicity of Vibrational States in Strongly Deformed Nuclei.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 39** (1975) pp. 2015-2019.
13. V. B. Telitsyn, **Ch. STOYANOV**, A. I. Vdovin.
Spin-Orbital Vibrations of Spherical Nuclei.
 Sov. J. Nucl. Phys., **v. 24** (1976) pp. 31-39.
14. D. Dambasuren, V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.
Semi-Microscopic Calculation of the Neutron Strength Function of Spherical Nuclei.
 J. Phys. G: Nucl.Phys., **v. 2** (1976) pp.25-31.
15. S. P. Ivanova, A.L. Komov, G. Kyrchev, V. G. Soloviev,
Ch. STOYANOV.
Study of Anharmonicity of Vibrational States with $K^\pi = 2^+ - , 0^- - , 1^- -$ and 2^- in Even Nuclei with $228 < A < 240$.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 40** (1976) pp. 750-755.
16. A. I. Vdovin, D. Dambasuren, V. G. Soloviev, **Ch. STOYANOV**.
Influence of Residual Interaction in the Particle- Particle Channel on the Properties of Low-Lying States in Spherical Nuclei.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 40** (1976) pp. 2183-2188.
17. V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.
Fragmentation of Giant Multipole Resonances over Two- Phonon States in Spherical Nuclei.
 Nucl. Phys., **v. A288** (1977) pp. 376-396.
18. R. A. Eramzhyan, S. I. Fedotov, V. P. Shpakov , **Ch. STOYANOV**,
 A. I. Vdovin.
Excitation of Collective States in Spherical Nuclei in High Energy Proton Interaction.
 Nucl. Phys., **v. A290** (1977) pp. 397-406.

19. V. V. Voronov, V. G. Soloviev, **Ch. STOYANOV**.
Calculation of E1 - Radiative Strength Function in Semimagic Nuclei.
 Sov. J. Pisma JETF, **v. 25** (1977) pp. 459-462.
20. A. I. Vdovin, D. Dambasuren, **Ch. STOYANOV**.
The Influence of the Residual Interaction in the Particle Particle Channel on the Properties of the Low-Lying States of Some Cd and Te Isotopes.
 Nukleonika, **v. 22** (1977) pp. 633-635.
21. V. G. Soloviev, **Ch. STOYANOV**, V. V. Voronov.
The Influence of the Giant Dipole Resonance on the Radiative Strength Functions in Spherical Nuclei.
 Nucl. Phys., **v. A304** (1978) pp. 503-519.
22. V. G. Soloviev, **Ch. STOYANOV**, V. V. Voronov.
On the Enhancement of M1 - Transitions from Neutron Resonances in the Ba and Ce Isotopes.
 Phys. Lett., **v. 79B** (1978) pp. 187-189.
23. **Ch. STOYANOV**.
Interaction Method for Solving the Equations of the Quasiparticle-Phonon Model in Spherical Nuclei.
 Sov. J. Theor. Math. Fiz., **v. 40** (1979) pp. 422-428.
24. I. Adam, S. Batsev, Ts. Vylov, M. Enikova, Zh. Zhelev, I. Penev, **Ch. STOYANOV**, M. Fominykh.
Properties of Nuclear States in the Transitional Region. Neutron Deficient Samarium Isotopes. IV. ^{148}Sm Levels Excited by ^{148}Eu Decay.
 Bulg. Phys. J., **v. V** (1978) pp. 32-49.
25. A. I. Vdovin, **Ch. STOYANOV**, I. P. Yudin.
The Distribution of M1 - Strength in Spherical Nuclei at High Excitation Energy.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 42** (1978) pp. 2004-2009.

26. A. I. Vdovin, **Ch. STOYANOV** , Chan Zui Khyong.
Fragmentation of Deep Hole States in Tin Isotopes.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 43** (1979) pp.999-1005.
27. S. V. Akulinichev, G. N. Afanasyev, A. I. Vdovin, **Ch. STOYANOV**,
 V. M. Shilov.
*Study of Giant Resonances in Nuclei by Means of Proton and Electron
 Scattering.*
 Sov. J. Nucl. Phys., **v. 28** (1978) pp. 883-890.
28. A. I. Vdovin, V. V. Voronov, V. Yu. Ponomarev, **Ch. STOYANOV**.
Two-Phonon Admixture Effect on M1 Resonance in Spherical Nuclei.
 Sov. J. Nucl. Phys., **v. 30** (1979) pp.923-932.
29. V. Yu. Ponomarev, V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.
Magnetic Quadrupole Resonance in Spherical Nuclei.
 Nucl. Phys., **v. A323** (1979) pp. 446-460.
30. V. G. Soloviev, O. Stoyanova, **Ch. STOYANOV**.
*Number of Quasiparticles in the Ground States of Spherical and Tran-
 sitional Nuclei.*
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 44** (1980) pp. 1938-1946.
31. V. G. Soloviev, **Ch. STOYANOV** , A. I. Vdovin.
*The Description of the Fragmentation of One Quasiparticle States in
 Spherical Nuclei.*
 Nucl. Phys., **v. A342** (1980) pp. 261-282.
32. V. Navrotska - Rybarska, O. Stoyanova, **Ch. STOYANOV**.
*Influence of Ground State Correlations on the Properties of the First
 2⁺ - and 3⁻ States in Some Sn Isotopes.*
 Sov. J. Nucl. Phys., **v. 33** (1981) pp. 1494- 1503.

33. **Ch. STOYANOV.**
Study of Deep - Lying Hole States in Odd Spherical Nuclei.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 45** (1981) pp. 1820-1826.
34. V. G. Soloviev, **Ch. STOYANOV.**
Radiative Strength Functions in Odd - A Spherical Nuclei.
 Nucl. Phys., **v. A382** (1982) pp. 206-220.
35. V. Yu. Ponomarev, **Ch. STOYANOV** , A. I. Vdovin.
High - Lying M1 - States of Spherical Nuclei.
 Z. Phys., v.308 **v. 308** (1982) pp. 157-164.
36. R. Reif, B. Weissbach, E. Betak, **Ch. STOYANOV** , A. I. Vdovin.
Direct Inelastic Proton Scattering from Odd - A Nuclei Within the Semimicroscopic Quasiparticle - Phonon Model.
 J. Phys. G: Nucl. Phys., **v. 8** (1982) pp. 257-273.
37. Nguyen Dinh Thao, **Ch. STOYANOV.**
The Influence of the Interaction in Particle-Particle Channel on the Properties of Highly-Excited States.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 46** (1982) pp. 2157-2162.
38. V. Yu. Ponomarev, **Ch. STOYANOV** , A. I. Vdovin.
Magnetic Dipole and Quadrupole States of ^{58}Ni .
 J. Phys. G: Nucl. Phys., **v. 8** (1982) pp. L77-L83.
39. Nguyen Dinh Thao, V. G. Soloviev, **Ch. STOYANOV** , A. I. Vdovin.
Fragmentation of Neutron Hole States in $^{111,115}\text{Sn}$.
 Sov. J. Nucl. Phys., **v. 37** (1983) pp. 43-51.
40. V. G. Soloviev, **Ch. STOYANOV** , R. Nikolaeva.
The Influence of Pauli Principle on the Two-Phonon States in Spherical Nuclei.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 47** (1983) pp. 2082-2088.

41. V. G. Soloviev, **Ch. STOYANOV**, V. V. Voronov.
Nuclear Properties in the Lead Region Within the Quasiparticle - Phonon Nuclear Model.
 Nucl. Phys., **v. A399** (1983) pp. 141-162.
42. **Ch. STOYANOV**, A. I. Vdovin.
High - Lying Single - Proton States in Spherical Nuclei.
 Phys. Lett., **v. 130B** (1983) pp.134-138.
43. A. I. Vdovin, Nguyen Dinh Thao, V. G. Soloviev, **Ch. STOYANOV**.
Fragmentation of the 1f Neutron - Hole Strength in ^{89}Zr and ^{91}Mo .
 J. Phys. G: Nucl.Phys., **v. 10** (1984) pp. 517-524.
44. V. V. Voronov, Nguyen Dinh Dang, V. Yu. Ponomarev, V. G. Soloviev, **Ch. STOYANOV**.
Description of Giant Multipole Resonances in Spherical Nuclei.
 Sov. J. Nucl. Phys., **v. 40** (1984) pp. 683-689.
45. L. A. Malov, Nguyen Dinh Vin, V. G. Soloviev, **Ch. STOYANOV**,
 A. I. Vdovin.
Fragmentation of Subshells in Spherical and Deformed Nuclei.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 49** (1985) pp. 834-841.
46. A. I. Vdovin, **Ch. STOYANOV**.
Damping of Highly - Excited Single - Particle States in Odd - A Nuclei Near ^{90}Zr .
 Sov. J. Nucl. Phys., **v. 41** (1985) pp. 1134-1140.
47. G. Wagner, A. Vdovin, P. Grabmayr, T. Kim, G. Mairle, V. Pugach,
 G. Sigert, **Ch. STOYANOV**.
Fragmentation of Deep Hole States in the Region $^{58}\text{Ni}(d, ^3\text{He})^{57}\text{Co}$ at Deuteron Energy 52MeV.
 Sov. J. Nucl. Phys., **v. 40** (1984) pp. 1396-1403.

48. A. I. Vdovin, **Ch. STOYANOV**, W. Andrejtscheff.
Core Polarization for M2 - Transitions in Odd - A Tin Isotopes.
 Nucl. Phys., **v. A440** (1985) pp. 437-444.
49. A. I. Vdovin, O. O. Rodrigues, W. Andrejtscheff, **Ch. STOYANOV**.
M2 - Transitions Between Low - Lying States in Odd Nuclei and Magnetic Core Polarization.
 Sov. J. Izv. Akad. Nauk (ser.fiz.) **v. 49** (1985) pp. 2173-2179.
50. V. V. Voronov, **Ch. STOYANOV**.
Neutron Strength Functions in $^{205,209}\text{Pb}$.
 J. Phys. G: Nucl. Phys., **v. 11** (1985) pp. L97-L100.
51. J. Adam, J. Dobes, J. Fer, B. Kracik, A. Kujler, Zh.Zhelev, I. Penev, **Ch. STOYANOV**.
Structure of the ^{145}Sm States from ^{145}Eu Decay.
 Czechosl. J. Phys., **v. B36** (1986) pp. 1143-1169.
52. V. Yu. Ponomarev, V. G. Soloviev, **Ch. STOYANOV**, A. I. Vdovin.
The Role of "Quasiparticle \otimes Phonon" Components in Gamma Decay of High - Lying States.
 Phys. Lett., **v. B183** (1987) pp. 237-241.
53. **Ch. STOYANOV**, Y. Sy Savane.
Description of $B(E2, 4_1^+ \Rightarrow 6_1^+)$ Values in the Light Tin Isotopes in the Quasiparticle - Phonon Nuclear Model.
 Bulg. J. Phys., **v. 14** (1987) pp. 310 - 316.
54. R. Nikolaeva, **Ch. STOYANOV**, A. I. Vdovin.
Microscopic Description of Low - Lying Izovector Quadrupole States in ^{56}Fe .
 Europhys. Lett., **v. 8** (1989) pp.117-121.

55. W. Andrejtscheff, L. K. Kostov, P. Petkov, Y. Sy Savane,
Ch. STOYANOV, P. von Brentano, J. Eberth, R. Reinhardt,
 K. O. Zell.
Electric Quadrupole Transition Strength of the Type $6_1^+ \Rightarrow 4_1^+$ in $^{106-112}\text{Sn}$.
 Nucl. Phys., **v. A505** (1989) pp. 397-416.
56. Nguyen Van Giai, **Ch. STOYANOV**.
Nucleon Escape Widths of Giant Dipole and Quadrupole Resonances.
 Phys. Lett., **v. B252** (1990) pp. 9-12.
57. M. Grinberg, O. Stoyanova, **Ch. STOYANOV**.
Interaction in Particle-Particle Channel and Anharmonicity of Surface Vibrations in Spherical Nuclei.
 Bulg. J. Phys. **v. 17** (1990) pp 311 - 316.
58. Nguyen Van Giai, **Ch. STOYANOV**.
Non-Statistical Neutron Decay of High-Lying States in Odd Nuclei.
 Phys. Lett. **v. B272** (1991) pp. 178 - 182.
59. Thai Khac Dinh, M. Grinberg , **Ch. STOYANOV**.
Interplay of Collective and Non-Collective Modes in Low-Lying Quadrupole States of ^{140}Ba , ^{142}Ce , ^{144}Nd and ^{146}Sm .
 J. Phys. G: Nucl. Part. Phys. **v. 18** (1992) pp. 329-337.
60. J.Adam, J.Dobes, B.Kracik, P.Navratil, P.Tlusty, S.Batsev,
 Thai Khac Dinh, M.Grinberg, O.Stoyanova, **Ch. STOYANOV**.
Structure of the ^{146}Sm States from ^{146}Eu Decay.
 Z. Phys. A **v. 343** (1992) pp. 381 - 395.
61. M. Grinberg, Thai Khac Dinh, Ch. Protochristov, I. Penev,
Ch. STOYANOV , W. Andrejtscheff.
Level Structure and Transition Probabilities in ^{140}Ce .
 J. Phys.G: Nucl.Phys. **v. 19** (1993) pp. 1179 - 1189.

62. M. Grinberg, **Ch. STOYANOV**.
Distribution of Two-Phonon Strength in Even $N = 82$ Nuclei.
 Nucl. Phys. **v. A573** (1994) pp. 231 - 244.

63. R. Georgii, P. von Neumann-Cosel, T. von Egidy, M. Grinberg,
 V. A. Khitrov, J. Ott, P. Prokofjevs, A. Richter, W. Schauer,
 C. Schlegel, R. Schulz, L. J. Simonova, **Ch. STOYANOV**,
 A. M. Sukhovej, A. I. Vojnov.
*Unusual Neutron-Capture Gamma-Ray Cascade in ^{124}Te : A Finger
 Print of Octupole-Coupled Multiphonon States.*
 Phys. Lett. **v. B351** (1995) pp. 82 - 86.

64. R. Georgii, T. von Egidy, J. Klora, H. Lindner, U. Mayerhofer,
 J. Ott, W. Schauer, P. von Neumann-Cosel, A. Richter, C. Schlegel,
 R. Schulz, V. A. Khitrov, A. M. Sukhovej, A. I. Vojnov, J. Berzins,
 V. Bondarenko, P. Prokofjevs, L. J. Simonova, M. Grinberg,
Ch. STOYANOV.
Complete Level Scheme of ^{124}Te up to 3 MeV.
 Nucl. Phys. **v. A592** (1995) pp. 307 - 337.

65. Nguyen Van Giai, **Ch. STOYANOV**, V. V. Voronov, S. Fortier.
*Neutron Decay of High Angular Momentum States Excited in Transfer
 Reactions.*
 Phys. Rev. **v. C53** (1996) pp. 730 - 739.

66. R. Schwengner, G. Winter, W. Schauer, M. Grinberg, F. Becker,
 P. von Brentano, J. Eberth, J. Enders, T. von Egidy, R.-D. Herzberg,
 N. Huxel, L. Kaubler, P. von Neumann-Cosel, N. Nicolay, J. Ott,
 N. Pietralla, H. Prade, S. Raman, J. Reif, A. Richter, C. Schlegel,
 H. Schnare, T. Servene, S. Skoda, T. Steinhardt, **Ch. STOYANOV**,
 H. G. Thomas, I. Weidenhover, A. Zilges.
*Two-Phonon $J = 1$ States in Even-Mass Te Isotopes with
 $A = 122 - 130$.*
 Nucl. Phys. **v. A620** (1997) pp. 122 - 130.

67. Nguyen Van Giai, **Ch. STOYANOV**, V. V. Voronov.
Finite Rank Approximation for Random Phase Approximation Calculations with Skyrme Interactions: An Application to Ar Isotopes.
 Phys. Rev. **v. C57** (1998) pp. 1204 - 1209.
68. V. Yu. Ponomarev, **Ch. STOYANOV**, N. Tsoneva, M. Grinberg.
Boson Forbidden Low-Energy E1-Transitions in Spherical Nuclei.
 Nucl. Phys. **v. A635** (1998) pp. 470 - 483.
69. N. Tsoneva, A. I. Vdovin, **Ch. STOYANOV**, M. Grinberg.
Magnetic Polarization ant Two-Phonon States.
 Phys. At. Nucl., **v. 61** (1998) pp. 734 - 738.
70. W. Schauer, C. Doll, T. von Egidy, R. Georgii, J. Ott, H.-F. Wirth, A. Gollwitzer, G. Graw, R. Hertenberger, B. Valnion, M. Grinberg, **Ch. STOYANOV**.
Study of ^{122}Te with charged particle reactions.
 Nucl. Phys. **v. A652** (1999) pp. 339 - 369.
71. **Ch. STOYANOV**, I. Rotter, N. Van Giai.
Trapping effect and high-lying single-particle modes.
 Phys. Rev. **v. C60** (1999) p. 064321 (9 pages).
72. N. Tsoneva, **Ch. STOYANOV**, Yu. P. Gangrsky, V. Yu. Ponomarev, N. P. Balabanov, A. P. Tonchev.
Population of isomers in the decay of the giant dipole resonance.
 Phys. Rev. **v. C61** (2000) p. 044303 (9 pages).
73. E. A. Stefanova, T. Kutsarova, I. Deloncle, M.-G. Porquet, M. Grinberg, E. Gueorgieva, T. S. Venkova, A. Minkova, F. Azaiez, S. Bouneau, C. Bourgeois, J. Duprat, B. J. P. Gall, C. Gautherin, F. Hoellinger, R. Lucas, H. Sergolle, N. Schulz, A. Wilson, **Ch. STOYANOV**.
High-spin states of $^{88}_{38}\text{Sr}_{50}$: breaking of the neutron core.
 Nucl. Phys. **v. A669** (2000) pp. 14 - 26.

74. Nguyen Van Giai, **Ch. STOYANOV**, V. V. Voronov.
Proton decay of high-lying states in odd nuclei.
 Nucl. Phys. **v. A672** (2000) pp. 141 - 152.
75. N. Lo Iudice, **Ch. STOYANOV**.
Microscopic description of newly discovered mixed symmetry states.
 Phys. Rev. C **v. 62** (2000) pp. 047302, 4p.
76. L. Kaubler, H. Schnare, R. Schwengner, P. von Brentano, F. Donau,
 J. Eberth, J. Enders, A. Fitzler, C. Fransen, M. Grinberg, E. Grosse,
 R.-D. Herzberg, H. Kaiser, P. von Neumann-Cosel, N. Pietralla,
 H. Prade, A. Richter, S. Skoda, **Ch. STOYANOV**, H. -G. Thomas,
 H. Tiesler, D. Weisshaar, I. Weidenhover.
Is the 4.742 MeV state in ^{88}Sr the 1^- two-phonon state ?
 Eur. Phys. J. A **v. 7** (2000) pp. 15 - 18.
77. A. G. Belov, Yu. P. Gangrsky, L. M. Melnykova, V. Yu. Ponomarev,
 N. Tsoneva, **Ch. STOYANOV**, A. Tonchev, N. Balabanov.
*Excitation of the Isomeric States $1h_{11/2}$ in the Nuclear Reactions with
 γ -Rays and at β -Decay.*
 Preprint Dubna, P15-2000-139,
 Phys. Atom. Nucl. **v. 64** (2001) pp. 1901 - 1908.
78. N. Lo Iudice, **Ch. STOYANOV**.
*Microscopic Structure of Low-Lying Positive Parity States in Nuclei
 near Shell Closure .*
 Phys. Rev. C **v. 65** (2002) pp. 064304, 9p.
79. A. P. Severyukhin, **Ch. STOYANOV**, V. V. Voronov, Nguyen Van
 Giai.
*Quasiparticle Random Phase Approximation with Finite Rank Approx-
 imation for Skyrme Interaction .*
 Phys. Rev. C **v. 66** (2002) pp. 034304, 7 p.

80. J. Kvasil, N. Lo Iudice, **Ch. STOYANOV**, P. Alexa.
Compressional and Toroidal Dipole modes in Nuclei.
J. Phys. G: Nucl. Part. Phys. **v. 29** (2003) pp. 753 - 767
81. A. P. Severyukhin, V. V. Voronov, **Ch. STOYANOV**, Nguyen Van Giai.
Separable Skyrme Interaction and Quasiparticle RPA.
Phys. Atomic Nuclei **v. 66** (2003) pp. 1434 - 1438.
82. A. P. Severyukhin, **Ch. STOYANOV**, V. V. Voronov, Nguyen Van Giai.
Quasiparticle Random Phase Approximation and the Structure of Low-Lying States in the Isotopes of Ar.
Russian J. Izv. Acad. Nauk (ser. fiz.) **v. 67** (2003) . 90 - 93
83. N. Tsoneva, H. Lenske, **Ch. STOYANOV**.
Probing the nuclear skin by low-energy dipole modes.
Phys. Lett. **v. B586** (2004) pp. 213 - 218
84. N. Lo Iudice, **Ch. STOYANOV**.
A Microscopic Study of the Proton-Neutron Symmetry and Phonon Structure of the Low-Lying States in ^{92}Zr .
Phys. Rev. C **v. 69** (2004) p. 044312, 6p.
85. **Ch. STOYANOV**, V. Zelevinsky.
High-lying single-particle modes, chaos, correlational entropy, and doubling phase transition.
Phys. Rev. C **v. 70** (2004) p. 014302, 7p.
86. M. Scheck, H. von Garret, N. Tsoneva, D. Belic, P. von Brentano, C. Fransen, A. Gade, J. Jolie, U. Kneissl, C. Kohstall, A. Linnemann, A. Nord, N. Pietralla, H. H. Pitz, F. Stedile, **Ch. STOYANOV** , V. Werner
Dipole strength distribution in the stable Ba isotopes $^{134-138}\text{Ba}$: A study in the mass region of a nuclear shape transition.

- Phys. Rev. C **v. 70** (2004) p. 044319, 18 p.
87. L. Käubler, H. Schnare, R. Schwengner, H. Prade, F. Dönau, P. von Brentano, J. Eberth, J. Enders, A. Fitzler, C. Fransen, M. Grinberg, R.-D. Herzberg, H. Kaiser, P. von Neumann-Cosel, N. Pietralla, A. Richter, G. Rusev, **Ch. STOYANOV** and I. Wiedenhöver
Dipole and quadrupole excitations in ^{88}Sr up to 6.8 MeV.
 Phys. Rev. C **v. 70** (2004) p. 064307, 10 p.
88. L. K. Kostov, N. Chankova-Bunzarova, L. G. Kostova, Ml. Mladenov, N. Nankov, Ch. Protopristov, **Ch. STOYANOV**
Investigation of radioactively contaminated terrains and soils.
 BgNS Transactions, **v. 10** (2005) pp 84 - 87.
89. A. P. Severyukhin, V. V. Voronov, Nguyen Van Giai, **Ch. STOYANOV**.
Nuclear Structure Calculations with Separable Approximation for Skyrme Interaction.
 Rom. Journ. Phys. **v. 50** (2005) pp. 391 - 400.
90. N. Lo Iudice, **Ch. STOYANOV**.
A Microscopic Study of collectivity and proton-neutron symmetry in ^{92}Zr .
 Phys. Rev. C **v. 73** (2006) p. 037305, 4p.
91. D. Tarpanov, **Ch. STOYANOV**, N. Van Giai, V. V. Voronov.
Low-Lying Electric Dipole Transitions in Tin Isotopic Chain within the RPA model
 Phys. Atomic Nuclei **v. 70** (2007), pp. 1447 - 1451.
92. N. Lo Iudice, **Ch. STOYANOV**, D. Tarpanov.
Fine structure of proton-neutron mixed symmetry states in some $N = 80$ isotones.
 Phys. Rev. C **v. 77** (2008) p. 044310, 7p.

93. D. Tarpanov, Haozhao Liang, N. Van Giai, **Ch. STOYANOV**.
Mean-field study of single-particle spectra evolution in $Z = 14$ and $N = 28$ chain.
 Phys. Rev. C **v. 77** (2008) p. 054316, 5p.
94. M. I. Krivopustov,.....S. Batzev, L. Kostov, Ch. Protochristov, **Ch. STOYANOV**, O. Yordanov, P. Zivkov.....,
Collaboration "Energy plus Transmutation"
First results studying the transmutation of ^{129}I , ^{237}Np , ^{238}Pu , and ^{239}Pu in the irradiation of an extended natU/Pb-assembly with 2.52 GeV neutrons
 J. Radioanalytical and Nuclear Chemistry, **v. 279 (2)** (2009) pp. 567-584 DOI:10.1007/s10967-007-7265-1
95. N. Lo Iudice, **Ch. STOYANOV**, N. Pietralla.
Splitting of the 2^+ mixed symmetry mode in the proximity of the $N = 82$ shell closure.
 Phys. Rev. C **v. 80** (2009) p. 024311, 7p.
96. N. Lo Iudice, **Ch. STOYANOV**, and D. Tarpanov
E2 transitions in Sn isotopes within the quasiparticle-phonon model
 PHYSICAL REVIEW C **v. 84**, (2011) p. 044314
97. Ruslan I. Kostov, Christo Protochristov, **Chavdar STOYANOV**, Lszl Csedreki, Alz Simon, Zita Szikszai, Imre Uzonyi, Bisserka Gaydarska and John Chapman
Micro-PIXE Geochemical Fingerprinting of Nephrite Neolithic Artifacts from Southwest Bulgaria
 Geoarchaeology, Manuscript ID: GEO-12-002.R2, John Wiley and Sons
98. C. Bauer, G. Rainovski, N. Pietralla, D. Bianco, A. Blazhev, T. Bloch, S. Bonig, A. Damyanova, M. Danchev, K. A. Gladnishki, T. Kroll, J. Leske, N. Lo Iudice, T. Moller, K. Moschner, J. Pakarinen, P. Reiter, M. Scheck, M. Seidlitz, B. Siebeck, C. Stahl, R. Stegmann, T. Stora,

- Ch. STOYANOV**, D. Tarpanov, M. J. Vermeulen, D. Voulot, N. Warr, F. Wenander, V. Werner, and H. De Witte
Local suppression of collectivity in the $N = 80$ isotones at the $Z = 58$ subshell closure
 PHYSICAL REVIEW C v. 88(2013) p. 021302(R)
99. F.Naqvi,V.Werner,P.Petkov,T.Ahn,N.Cooper,G.Ilie, D.Radeck,C.Bernards, M.P.Carpenter,C.J.Chiaara,R.V.F.Janssens, F.G.Kondev, T.Lauritsen, D.Seweryniak, **Ch. STOYANOV**,S.Zhu
Test of the $\pi g_{7/2}$ subshell closure at $Z = 58$
 Physics Letters B728 (2014)303307
100. N. Auerbach, **Ch. STOYANOV**, M. R. Anders and S. Shlomo
Isoscalar and isovector dipole strength distributions in nuclei and the Schiff moment
 PHYSICAL REVIEW C v. 89 (2014) 014335
101. **Ch. STOYANOV**
Quasiparticles, Phonons and Beyond. Nuclear Structure Calculations in a Large Domain of Excitation Energies
 Bulg. J. Phys. v. 42 (2014) 5164
 Dedicated to the memory of Christo Ya. Christov on the 100-th anniversary of his birth
102. Dimiter Tonev, Elena Geleva, Anna Damianova, Todor Grigorov, Nikolai Goutev, Hristo Protohristov, **Ch. STOYANOV**, Vladimir Bashev, Evgeni Popov, Ivanka Tringovska?, Dimitrina Kostova?
RADIOLOGICAL AND MICROANALYTICAL STUDIES OF FINE MELNIK WINES
 Comptes rendus de l'Academie bulgare des Sciences Tome 69, No 6, 2016
103. Alan A. Dzhioev, A. I. Vdovin, G. Martnez-Pinedo, J. Wambach, and **Ch. STOYANOV**

Thermal quasiparticle random-phase approximation with Skyrme interactions and supernova neutral-current neutrino-nucleus reactions
 PHYSICAL REVIEW C 94, 015805 (2016)

104. Latchesar Kostov, Roumen Kobilarov, Hristo Protohristov, **Chavdar STOYANOV**
CONCENTRATIONS OF ^{137}Cs AND ^{40}K RADIONUCLIDES IN SOIL SAMPLES FROM CENTRAL BALKAN NATIONAL PARK, BULGARIA
 Comptes rendus de l'Academie bulgare des Sciences Tome 69, No 9, (2016) pp 1121 - 1128
105. Alan A. Dzhioev, A. I. Vdovin, and **Ch STOYANOV**
 The Skyrme-Tqrrpa Calculations of Electron Capture on Hot Nuclei in Pre-Supernova Environment
 Physics of Atomic Nuclei, 2016, Vol. 79, No. 6, pp 1019 1029.
106. R.Stegmann, C.Stahl, G.Rainovski, N.Pietralla, **C. STOYANOV**, M.P.Carpenter, R.V.F.Janssens, M.Lettmann, T.Moller, O.Moller, V.Werner, S.Zhu
Identification of the one-quadrupole phonon $2+1$,msstate of ^{204}Hg
 Physics Letters B 770 (2017) pp 77 82
107. Petar Zhivkov, C. STOYANOV, Sergey Tyutyunnikov, Walter Furman, Valeriy Chilap, Dimitar Tarpanov
SPATIAL DISTRIBUTIONS OF $^{nat}\text{U}(n,f)$ AND $^{238}\text{U}(n,\gamma)$ REACTION RATES AND ENERGY DEPOSITION IN A MASSIVE URANIUM TARGET INDUCED BY HIGH ENERGY ION BEAMS
 Comptes rendus de l'Academie bulgare des Sciences Tome 70, No 6, 2017 pp 777 - 784
108. M. Thrauf, **Ch. STOYANOV**, M. Scheck, M. Jentschel, C. Bernards, A. Blanc, N. Cooper, G. De France, E. T. Gregor, C. Henrich, S. F. Hicks, J. Jolie, O. Kaleja, U. Kster, T. Krll, R. Leguillon, P. Mutti, D. O'Donnell, C. M. Petrache, G. S. Simpson, J. F. Smith, T. Soldner,

M. Tezgel, W. Urban, J. Vanhoy, M. Werner, V. Werner, K. O. Zell,
and T. Zerrouki

Low-lying octupole isovector excitation in ^{144}Nd

PHYSICAL REVIEW C 99, 011304(R) (2019)

109. Alan A. Dzhioev A. I. Vdovin, and **Ch. STOYANOV**

Thermal quasiparticle random-phase approximation calculations of stellar electron capture rates with the Skyrme effective interaction

PHYSICAL REVIEW C 100, 025801 (2019)

110. Alan A. Dzhioev , K. Langanke, G. Martnez-Pinedo, A. I. Vdovin, and
Ch. STOYANOV

Unblocking of stellar electron capture for neutron-rich $N = 50$ nuclei at finite temperature

PHYSICAL REVIEW C 101, 025805 (2020)

5 INVITED TALKS ON THE INTERNATIONAL MEETINGS AND SCHOOLS

1. V. G. Soloviev, **Ch. STOYANOV**.

A Few Quasiparticle Components of Nuclear States at High Excitation Energies.

"Neutron Capture Gamma - Ray Spectroscopy", ed. by R. E. Chrien and W. Kane, Plenum Press, N. Y. 1979, pp. 145-161.

2. **Ch. STOYANOV**.

The Distribution of the Strength of a few Quasiparticle Components at High Excitation Energies.

"Highly Excited States in Nuclear Reactions", ed. by H. Ikegami and M. Muraoka, RCNP, Osaka Univ., 1980, pp. 350-370.

3. **Ch. STOYANOV**.

Quasiparticle - Phonon Model and Description of the Radiative Strength Functions.

IV School on Neutron Physics, ed. by Y. P. Popov, Dubna 1982, **D3-82-704**, pp. 87 - 104.

4. **Ch. STOYANOV**, A. I. Vdovin, V. V. Voronov.

Single - Particle Motion in Spherical Nuclei at High Excitation Energies.

Intern. School on Nuclear Structure, ed. by V. G. Soloviev and Y. P. Popov, Dubna 1985, **D4-85-851**, pp. 27 - 50.

5. **Ch. STOYANOV**.

Giant and Single - Particle Resonances.

Nucl. Phys., Neutron Phys. and Nucl. Energy.Proc. of IX Intern. School, Varna 1989, ed. by W. Andrejtscheff and D. Elenkov, World Scient. 1990, pp. 153-170.

6. M. Grinberg, **Ch. STOYANOV**.
Distribution of Two-Phonon Strength in Even $N = 82$ Nuclei.
 "Capture gamma-ray spectroscopy and related topics",
 ed. by J. Kern, World Scientific 1994. pp. 380 - 382.
7. Nguyen Van Giai, **Ch. STOYANOV** , V. V. Voronov.
Particle Decay of High Angular Momentum Excited States.
 "Selected topics in nuclear structure", Dubna , 1994, **E4-94-370**,
 pp. 263 - 268.
8. M. Grinberg, **Ch. STOYANOV**.
Enlargment of the Collective Basis of the Quasiparticle- Phonon Model.
 "Frontiers in nuclear physics", D4-95-308, **D4-95-308**, Dubna 1995,
 pp. 104 - 119.
9. Nguyen Van Giai, **Ch. STOYANOV** , V. V. Voronov.
Particle Decay of High-Lying States in Odd Nuclei.
 Nucl. Phys. **v. A599** (1996) pp. 271c - 276c.
10. R. Schwengner, W. Schauer, G. Winter, P. von Brentano, J. Eberth,
 J. Enders, T. von Egidy, M. Grinberg, R.-D. Herzberg, N. Huxel,
 L. Kaubler, P. von Neumann-Cosel, N. Nicolay, J. Ott, N. Pietralla,
 H. Prade, S. Raman, J. Reif, A. Richter, C. Schlegel, H. Schnare,
 T. Servene, **Ch. STOYANOV**, H. G. Thomas, I. Weidenhover,
 A. Zilges.
Dipole Excitations in ^{122}Te , ^{126}Te and ^{130}Te .
 Z. Phys. **v. A358** (1997) pp. 197 - 198 .
11. N. Tsoneva, M. Grinberg, **Ch. STOYANOV**.
Two-Phonon 1^- state in Even-Even $N = 84$ Isotones.
 "Capture gamma-ray spectroscopy and related topics",
 ed. by G. L. Molnar, T. Belgia and Zs. Revay, Springer, Budapest
 1997, pp.76 - 79.

12. **Ch. STOYANOV**, N. Tsoneva, M. Grinberg.
Examples of coupling between isoscalar and isovector modes in atomic nuclei.
 "Nuclear Structure and Related Topics", Dubna 1997, pp. 184 - 190.
13. N. Van Giai, **Ch. STOYANOV**, V. V. Voronov, S. Fortier.
Neutron Decay of High Angular Momentum States.
 "Heavy Ion Physics", ed. by Yu. Ts. Oganessian and R. Kalpakchieva, World Scientific, 1997, pp 530 - 537.
14. **Ch. STOYANOV**, V. Yu. Ponomarev, N. Tsoneva, M. Grinberg.
The influence of the GDR on the low-energy E1 transitions in spherical nuclei.
 Nucl. Phys. **v. A649** (1999) pp. 93c - 96c.
15. N. Van Giai, **Ch. STOYANOV**, V. V. Voronov.
Finite rank approximation for calculations with Skyrme interaction.
 "Highlights of Modern Nuclear Structure", ed. by A. Covello, World Scientific, 1998, pp 433 - 441.
16. **Ch. STOYANOV**, V. V. Voronov, N. Van Giai.
Particle Decay of High-Lying States Excited in One-Nucleon Transfer Reactions.
 "Neutron Spectroscopy, Nuclear Structure, Related Topics", E-98-212, Dubna 1998, pp. 102 - 109.
17. E. A. Stefanova, T. Kutsarova, M. Grinberg, Ts. Venkova, **Ch. STOYANOV**, M.-G. Porquet, I. Deloncle, A. Wilson, A. Minkova, B. J. P. Gall, F. Hoellinger, N. Schulz, H. Sergolle, J. Duprat, F. Azaiez, S. Bouneau, C. Bourgeois, C. Gautherin, R. Lucas.
Study of the high-spin structure in ^{88}Sr and some neighbouring isotopes produced by heavy-ion induced fission.
 Balkan Phys. Lett. (1998) pp. 203 - 206.

18. **Ch. STOYANOV.**

Quasiparticle, Phonons and Beyond (Enlargement the basis of Quasiparticle-Phonon Model).

"Quasiparticle and Phonons Excitations in Nuclei (Soloviev99)", ed. by N. Dinh Dang and A. Arima, World Scientific, Singapore 2000, pp. 245 - 254.

19. N. Tsoneva, **Ch. STOYANOV**, Yu. P. Gangrsky, V. Yu. Ponomarev, N. P. Balabanov, A. P. Tonchev.

Isomeric Ratios in Odd $N = 81$ Isotones.

"Capture gamma-ray spectroscopy and related topics", ed. by S. Wender, AIP Conference Proceedings, NY 2000, v. 592, pp. 753 - 756

20. **Ch. STOYANOV**, N. Lo Iudice, N. Tsoneva, M. Grinberg.

Properties of the Low-Lying States in Even-Even Nuclei around Closed Shell $N = 82$.

Atom. Nucl. **v. 64** (2001) pp. 1223 - 1227.

21. N. Tsoneva, A. B. Larionov, **Ch. STOYANOV**, S. Marinova.

Investigations on the Preequilibrium Neutron Emission and Fragments Production in the Reaction $p(0.800\text{GeV}) + \text{Pb}$.

BgNS Transactions, **v. 6** (2001) pp. 56 - 57.

22. N. Lo Iudice, J. Kvasil, **Ch. STOYANOV**, A. V. Sushkov, N. Yu. Shirikova.

Orbital and Spin Excitation in Heavy Nuclei.

"Challenges of Nuclear Structure, ed. by A. Covello, W. Scientific, Singapore 2002, pp 465 -474.

23. **Ch. STOYANOV**, N. Van Giai.

Finite Rank Approximation for RPA Calculations with Skyrme Interactions: An Application to Deformed Nuclei.

"Challenges of Nuclear Structure, ed. by A. Covello, W. Scientific, Singapore 2002, pp 489 -494.

24. A. P. Severyukhin, **Ch. STOYANOV**, V. V. Voronov, Nguyen Van Giai.
Finite Rank Approximation for Skyrme Interaction and Qquasiparticle RPA .
 Perspectives of Nuclear Structure and Nuclear Reactions (collection of papers dedicated to the 60th anniversary of the birthday of Rostislav Jolos), JINR - Dubna, E4-2002-66, pp. 77 - 85.
25. **Ch. STOYANOV**.
Boson Forbidden Transitions and their Manifestation in Spherical Nuclei.
 "Proceedings of XIV International School on Nuclear Physics, Neutron Physics and Nuclear Energy, BgNS Transactions, **7** (2002) No 1, pp 25 - 32.
26. **Ch. STOYANOV, N. Lo Iudice**.
Mixed-Symmetry States in Nuclei Near Shell Closure.
 "Proceedings of the XXI International Workshop on Nuclear Theory, ed. by V. Nikolaev, Heron Press, Sofia 2002, pp 274 - 289.
27. A. P. Severyukhin, V. V. Voronov, **Ch. STOYANOV**, Nguyen Van Giai.
Nuclear Structure Calculations with a Separable Approximation for Skyrme Interaction.
 Nucl. Phys. **v. A722** (2003) pp. 123c - 128c.
28. **Ch. STOYANOV, N. Lo Iudice**.
Low-Lying Positive Parity Modes in Heavy Spherical Nuclei.
 Capture Gamma-Ray and Related Topics, ed. by J. Kvasil, P. Cejnar and M. Krtička, World Scientific 2003, pp. 90 - 96.

29. A. P. Severyukhin, V. V. Voronov, **Ch. STOYANOV**, Nguyen Van Giai.
Nuclear Structure Calculations with Finite Rank Approximation for Skyrme Interaction.
 Capture Gamma-Ray and Related Topics, ed. by J. Kvasil, P. Cejnar and M. Krticka, World Scientific 2003, pp. 813 - 816.
30. N. Tsoneva, H. Lenske, **Ch. STOYANOV**.
Pygmy Dipole Resonances as a Manifestation of the Structure of the Neutron Rich Nuclei .
 Nucl. Phys. **v. A731** (2004) pp. 273 - 280
31. **Ch. STOYANOV**, N. Lo Iudice.
Microscopic Description of Mixed-Symmetry States in Nearly Spherical Nuclei.
 Russian J. Atom. Nucl. **v. 67** (2004) pp. 1672 - 1676.
 Phys. At. Nucl. (american ed.), **v. 67** (2004) pp. 1645 - 1649.
32. A. P. Severyukhin, V. V. Voronov, **Ch. STOYANOV**, Nguyen Van Giai.
Low-Lying States and Separabelized Skyrme Interaction.
 Russian J. Atom. Nucl. **v. 67** (2004) pp. 1783 - 1786.
33. N. Tsoneva, H. Lenske, **Ch. STOYANOV**.
Low-Energy Dipole Excitation as a Signature for Neutron Skin .
 Probing Nuclei and Nicleons with Electrons and Photons, Proceedings of the International Workshop XXXII on Gross Properties of Nuclei and Nuclear Excitations, Hirschegg, Austria, January 11 - 17, 2004, Edited by M. Buballa, J. Knoll, W. Nörenberg, B.-J. Schaefer, J. Wambach, GSI, Darmstadt, pp. 171-176.
34. **Ch. STOYANOV**, N. Lo Iudice.
Microscopic Study of Low-Lying States in ^{92}Zr .
 "Key Topics in Nuclear Structure", ed. by A. Covello, W. Scientific, Singapore 2005, pp. 513 - 520.

35. **Ch. STOYANOV**, V. Zelevinsky.
Correlation Entropy and the Complexity of High-Lying Single-Particle Modes - Doubling Phase Transition.
 "Nuclear Theory", Proceedings of the XXIII International Workshop on Nuclear Theory, ed. by S. Dimitrova, Heron Press Ltd, Sofia 2004, pp. 295 - 310.
36. **Ch. STOYANOV**, V. Zelevinsky.
The Correlation Entropy as a Measure of the Complexity of High-Lying Single-Particle Modes.
 "Exotic Nuclear Systems", Proceedings of the International Symposium on Exotic Nuclear Systems ENS'05, ed. by Z. Gacsi, Zs. Dombradi, A. Krasznahorkay, American Institute of Physics, AIP Conference Proceedings, Melville, New York, 2005, volume 802, pp. 133 - 136.
37. A. P. Severyukhin, V. V. Voronov, **Ch. STOYANOV**, Nguyen Van Giai.
Quasiparticle-Phonon Model with a Separable Approximation for Skyrme Interaction.
 BgNS Transactions **v. 10** (2005) pp. 3 - 9
38. **Chavdar STOYANOV**, Vladimir Zelevinsky .
The Correlation Entropy as a Measure of the Complexity of High-Lying Single-Particle Modes.
 BgNS Transactions **v. 10** (2005) pp. 67 - 69
39. D. Tarpanov, **Ch. STOYANOV**, V. V. Voronov.
Dipole Excitations in Tin Isotopes within Finite Approximation of Skyrme-type Interaction.
 BgNS Transactions **v. 10** (2005) pp. 285 - 290

40. L. K. Kostov, R. Kobilarov, L. G. Kostova, Ml. Mladenov, Ch. Pro-
tochristov, **Ch. STOYANOV**.
*Systematical Investigations of ^{137}Cs Concentration in Soils in Bansko-
Razlog Region.*
BgNS Transactions **v. 10** (2005) pp. 176 - 179
41. D. Tarpanov, **Ch. STOYANOV**, Nguyen Van Giai, V. V. Voronov.
Pygmy Resonances in Tin Isotopes.
"Nuclear Theory", Proceedings of the XXV International Workshop on
Nuclear Theory, ed. by S. Dimitrova, Dio Mira, Sofia 2006, pp. 133 -
138.
42. Collaboration ENERGY plus TRANSMUTATION.....**Ch. STOY-
ANOV**.....
*About the first experiment at JINR nuclotron deuteron beam with en-
ergy 2.52 GeV on investigation of transmutation of I-129, Np-237, Pu-
238 and Pu-239 in the field of neutrons generated in Pb-target with
U-blanket.*
Relativistic Nuclear Physics and Quantum Chromodynamics, Proceed-
ings of the XVIII International Baldin Seminar on High Energy Physics
Problems "Baldin ISHEPP XVII, Dubna JINR 2006, p. 112.
43. **Ch. STOYANOV**, N. Lo Iudice.
*Microscopic description of mixed-symmetry states in nearly spherical
nuclei.*
Proceedings of 5th Conference on Nuclear and Particle Physics, NUP-
PAC'05, ed. by M. N. Comsan and K. M. Hanna, Atomic Energy
Authority, Egipt 2006. pp. 351 - 360.

44. L. K. Kostov, R. G. Kobilarov, L. G. Kostova, Ml. I. Mladenov, Ch. N. Protophristov, and **Ch. STOYANOV**
Systematical Investigations of Cs - 137 Concentration in Soils in Bansko - Razlog Region.
 CP899, Sixth International Conference of the Balkan Physical Union, edited by S. A. Cetin and I. Hikmet, 2007 American Institute of Physics 978-0-7354-0404-5/07, p 540
45. **Ch. STOYANOV**, D. Tarpanov.
Nuclear Structure Calculations in a Large Domain of Excitation Energy.
 "Changing Facet of Nuclear Structure", ed. by A. Covello, W. Scientific, Singapore 2008, pp. 427 - 435.
46. **Ch. STOYANOV**, N. Lo Iudice, D. Tarpanov.
Fine Structure of Proton-Neutron Mixed Symmetry States in Some N=80 Isotones.
 "Nuclear Theory", Proceedings of the 27 International Workshop on Nuclear Theory, ed. by S. Dimitrova, BM Trade Ltd., Sofia 2008, pp. 40 - 45.
47. D. Tarpanov, **Ch. STOYANOV**, Nguyen Van Giai.
The Effect of Tensor Term on the Single-Particle Spectrum.
 "Nuclear Theory", Proceedings of the 27 International Workshop on Nuclear Theory, ed. by S. Dimitrova, BM Trade Ltd., Sofia 2008, pp. 27 - 38.
48. O. Yordanov, J. Adam, S. Batzev, K. Katovski, L. Kostov, M.I. Krivopustov, A.D. Kovalenko, I.I. Mariin, A.F. Elishev, M. Majerle, A.A. Solnyshkin, **Ch. STOYANOV**, V.M. Tsupko-Sitnikov, P. Zhivkov
Isotope production rates in the lead target of the "Energy plus transmutation" setup in the reaction D+Pb at 2.52 GeV
 "Relativistic Nuclear Physics and Quantum Chromodynamics", Proceedings of the XIX International Baldin Seminar on High Energy Physics Problems, ed. by A.N. Sissakian, V.V. Burov, A.I. Malakhov, S.G. Bondarenko, E.B. Plekhanov, Dubna, 2008, pp 142 - 147

49. **Ch. STOYANOV**, N. Lo Iudice, D. Tarpanov.
Fine Strucdture of Proton-Neutron Mixed Symmetry States in Some $N=80$ Isotones.
 "Capture gamma-ray spectroscopy and related topics", Proceedings of the 13 International Symposium, ed. by S. A. Blazhev, J. Jolie, N. Warr, and A. Zilges, AIP Conference Proceedings, NY 2009, v. 1090, pp. 258 - 262.
50. A. Polanski, P. Zhivkov, **Ch. STOYANOV**
Simulation of Energy Deposition and Neutron Spectrum of Subcritical Assembly Irradiated with Proton Beam with MCNPX Transport Code
 "Progress in High Physics and Nuclear Safety", Proceedings NATO Advanced Research Workshop program "Science for Peace and Security Series", ed. by V. Begun, L. Jenkovszky and A. Polanski, Springer Science+Business Media B. V, 2009, pp 333 - 341
51. D Tarpanov, **Ch STOYANOV**, N Lo Iudice, Nguyen Van Giai, V Voronov
Structure of the low-lying states in some $N=80$ isotones
 XVIII International School on Nuclear Physics, Neutron Physics and Applications, IOP Publishing Journal of Physics: Conference Series **205** (2010) 012029, 7 p.
52. Yordanov, S Batzev, L Kostov, **Ch STOYANOV**, P Zhivkov, J Adam, V D Kovalenko, M I Krivopustov, A A Solnyshkin, V M Tsoupko-Sitnikov, K Katovsky and M Majerle
Isotope production rates in a thick lead target in the reaction $d+Pb$ at 2,52 GeV
 XVIII International School on Nuclear Physics, Neutron Physics and Applications, IOP Publishing Journal of Physics: Conference Series **205** (2010) 012052, 6 p.

53. N. Arhangelova, K. Berovski, D. Dikov, L. Kostov, M. Mladenov, I. Penev, H. Protohristov, Ch STOYANOV, S. Todorov, H. Hristov, V. Velez, S. Ushev, N. Uzunov
NATURAL RADIONUCLIDES ABUNDANCE IN THE REGION OF BUHOVO URANIUM-MINES
 PROCEEDINGS - INTERNATIONAL SCIENTIFIC CONFERENCE
 19, 20 November 2010, GABROVO III-397 - III-401
54. N. Lo Iudice, **Ch STOYANOV**
Valence shell excitations in even-even spherical nuclei within a microscopic model
 10th International Spring Seminar on Nuclear Physics: New Quests in Nuclear Structure, IOP Publishing Journal of Physics: Conference Series **267** (2011) 012045, 6 p.
55. D Tarpanov, **Ch STOYANOV**, N Lo Iudice
Pairing and collectivity of the first 2^+ state in light Sn isotopes
 Many-body correlations from dilute to dense nuclear systems (MBC 2011), IOP Publishing, Journal of Physics: Conference Series **321** (2011) 012051, 3 p.
56. P Zhivkov, A Polanski, **Ch STOYANOV**, O Yordanov, N Gutev
Comparison of models of neutron and residue production in targets heavy elements irradiated by relativistic proton and deuteron beams
 Journal of Physics:ConferenceSeries 366 (2012) 012053
57. D Tarpanov, **Ch STOYANOV**
Quasiparticle random phase approximation - application towards the $N = 80$ and $N = 84$ isotonic chain
 Innovative approaches to physical investigations, International Workshop, Bachinovo, April 15-20, 2010
58. P. Zhivkov, W. Furman **Ch STOYANOV**
 Calculations of ADS with deep subcritical uranium active cores comparison with experiments and predictions

Journal of Physics: Conference Series 533 (2014) 012053

59. Zhivkov P., Baznat M., Chilap V., Furman W., **Ch STOYANOV**, Tutunnikov S

Influence of High Energy Tail of Neutron Spectrum Formed within the Quasi-Infinite Active Target Assembly BURAN Irradiated by Relativistic Protons or Deutrons on Beam Energy Release

ISINN-22 Neutron Spectroscopy, Nuclear Structure, Related Topics, XXII International Seminar on Interaction of Neutrons with Nuclei, Dubna, May 27 - 30, 2014, Proceedings p.370 JINR 2015, ISBN 978-59530-0403-9

60. **Ch STOYANOV**

Nuclear Structure Calculations in a Large Domain of Excitation Energy

Proceedings of the International Symposium on EXOTIC NUCLEI, ed. Yu. Penionzhkevich, Yu. Sobolev, World Scientific 2015, ISBN 978-981-4699-45-7, p. 349

61. **Ch STOYANOV**, N. Pietralla

Quasiparticle-phonon model and quadrupole mixed-symmetry states of ^{96}Ru

EPJ Web of Conferences 107, 03001 (2016)

62. P Zhivkov, **Ch STOYANOV**, S Tyutyunnikov, W Furman

Influence of different data tables on neutron induced reactions in quasi-infinite ^{238}U and ^{232}Th targets irradiated by protons with relativistic energy

Journal of Physics: Conference Series 724 (2016) 012058

63. **Ch. Stoyanov**

Two-Phonon Mixed-Symmetry States in the Domain $N = 52$

In Exotic Nuclei: EXON-2016 Proceedings of the International Symposium on Exotic Nuclei, ed. by Yu E Penionzhkevich, Yu G Sobolev, World Scientific, 2017, pp 119 - 124.

64. **Ch. Stoyanov**

The structure of mixed symmetry states within microscopic multiphonon approach

AIP Conference Proceedings 1912 020017 (2017)

65. Furman, W.I., Adam, J., Baldin, A., Berlev, A., Gundorin, N., Hushvaktov, Zh., Kadykov, M., Kopatch, Yu., Kostyukhov, E., Kudashkin, Makan'kin, A., Mar'in, I., Polansky, A., Pronskikh, V., Rogov, A., Schegolev, V., Solnyshkin, A., Tsupko-Sitnikov, V., Tyutyunnikov, S., Vishnevsky, A., Vladimirova, N., Wojciechowski, A., Zavorka, L., Chilap, V., Chinenov, A., Dubinkin, B., Fonarev, B., Galanin, M., Kolesnikov, V., Solodchenkova, S., Artyushenko, M., Sotnikov, V., Voronko, V., Khilmanovich, A., Mart-synkevich, B., Kislitsin, S., Kvochkina, T., Zhdanov, S., Husak, K., Korneev, S., Potapenko, A., Safronova, A., Zhuk, I., Suchopar, M., Svoboda, O., Vrzalova, J., Wagner, V., Kostov, L., **Stoyanov, Ch.**, Zhivkov, P., Bielewicz, M., Kilim, S., Strugalska-Gola, E., Szuta, M., Westmeier, W., Manolopoulou, M., Hashemi-Nezhad, S.R.

Recent results of the study of ADS with 500 kg natural uranium target assembly QUINTA irradiated by deuterons with energies from 1 to 8 GeV at JINR NUCLOTRON (Conference Paper)

Proceedings of Science Volume 2012-January, 2012, Article number 08621st International Baldin Seminar on High Energy Physics Problems, ISHEPP 2012; Dubna; Russian Federation, 10 September 2012 through 15 September 2012, Code 117673

66. Tonev, D., Geleva, E., Goutev, N., Protohristov, H., **STOYANOV, Ch.**, Bashev, V.

Nuclear and analytical methods for investigation of high quality wines.

Journal of Physics: Conference Series, 1023, IOP Publishing, 2018, DOI:10.1088/1742-6596/1023/1/012034,

67. Zhivkov P, **Stoyanov C**, Furman V.

Accelerator driven system for transmutation and energy production.

EPJ Web of Conferences, 194, 08002, EDP Sciences, 2018, ISSN:2101-6275, DOI:10.1051/epjconf/201819408002

68. L. Kostov, R. G. Kobilarov, H. Protohristov, and **STOYANOV, Ch**
Radiological Risk Due to the Terrestrial Gamma Exposure in Soil Samples from Central Balkan National Park, Bulgaria.
AIP Conference Proceedings 2075, 130024 (2019); <https://doi.org/10.1063/1.5091309>
10th Jubilee International Conference of the Balkan Physical Union
69. A.I. Vdovin, A.A. Dzhioev, **STOYANOV, Ch**
Thermal Quasiparticle Random-Phase Approximation Calculations of Electron Capture on Neutron-Rich Nuclei in Pre-Supernova Environment with the Skyrme Effective Interaction.
NUCLEAR THEORY, Vol. 38 (2019)pp 162 - 171 eds. M. Gaidarov, N. Minkov, Heron Press, Sofia
70. P.K. Zhivkov, **STOYANOV, Ch**, S.I. Tyutyunnikov
Neutron induced reactions in massive spallation targets
Journal of Physics: Conference Series 1555 (2020) 012034 IOP Publishing

6 PREPRINTS (Internal reports)

1. V. Gadjokov, L .Alexandrov, **Ch. STOYANOV**.
On the Solution of a Non-Linear Problem of Gamma Ray Spectroscopy by Newton Method Using Smoothing of Linear Step.
Preprint JINR, **P10-5043**, Dubna 1970, pp. 1-10.
2. D. Dambasuren, A. I. Vdovin, **Ch. STOYANOV**.
On the Problem of 0^+ State Structure in Even-Even Spherical Nuclei.
Preprint JINR, **P4-8778**, Dubna 1975, pp. 1-14.
3. **Ch. STOYANOV**, A. I. Vdovin.
Low-Lying States in Hg.
Preprint JINR, **E4-9747**, Dubna 1976, pp. 1-10.
4. A. I. Vdovin, D. Dambasuren, **Ch. STOYANOV**.
Quadrupole Pairing and Interaction of Quasiparticles with Phonons.
Preprint JINR, **P4-10546**, Dubna 1977, pp. 1-16.
5. **Ch. STOYANOV**, I. P. Yudin.
Program for Calculating the Structure and Electromagnetic Characteristics of Excited States of Even-Even Spherical Nuclei in Random Phase Approximation.
Preprint JINR, **P4-11076**, Dubna 1977, pp. 1-16.
6. A. I. Vdovin, **Ch. STOYANOV**, I. P. Yudin.
Single Phonon 1^+ States in Spherical Nuclei.
Preprint JINR, **P4-11081**, Dubna 1977, pp. 1-16.
7. G. N. Afanasiev, A. I. Vdovin, **Ch. STOYANOV**, V. M. Shilov.
Electroexcitation of Giant Multipole Resonances in ^{90}Zr .
Preprint JINR, **E4-11164**, Dubna 1978, pp. 1-11.

8. H. K. Kamburov, S. R. Avramov, **Ch. STOYANOV**, V. Gadjokov.
On the Asymmetry of the Peak of Full Absorption in Scintillation γ -Spectra.
 Bulg. J. Nuclear Energy, **v. 5**(1977) pp. 102 - 107.
9. **Ch. STOYANOV**, Chan Zuj Khuong.
Calculation of Excited State Energies and Structures and Probabilities for Electromagnetic Transitions in Odd Spherical Nuclei.
 Preprint JINR, **P4-81-234**, Dubna 1981, pp. 1-14.
10. V. G. Soloviev, **Ch. STOYANOV** , V. V. Voronov.
Substructures in Photo - Absorption Cross - Sections of $^{206,208}\text{Pb}$.
 Preprint JINR, **E4-81-422**, Dubna 1981, pp. 1-6.
11. V. Yu. Ponomarev, O. Stoyanova, **Ch. STOYANOV**.
Calculation of Some Characteristics of Excited States of the Even-Even Nuclei with the Wave Function Containing One- and Two-Phonon Components.
 Preprint JINR, **P4-81-704**, Dubna 1981, pp. 1-12.
12. V. G. Soloviev, **Ch. STOYANOV** , V. V. Voronov.
Fragmentation of Few - Quasiparticle Components of Highly Excited States in $^{206,208}\text{Pb}$.
 Preprint JINR, **E4-82-389**, Dubna 1982, pp. 1-12.
13. V. V. Voronov, V. G. Soloviev, **Ch. STOYANOV**.
Fragmentation of Deeply-Bound Hole States in ^{207}Pb . and $^{203,205,207}\text{Tl}$.
 Preprint JINR, **P4-82-358**, Dubna 1982, pp. 1-7.
14. A. I. Vdovin, W. Andrejtscheff, **Ch. STOYANOV**.
M2- Transitions in Odd Tin Isotopes.
 Preprint JINR, **P4-83-654**, Dubna 1983, pp. 1-8.

15. V. V. Voronov, **Ch. STOYANOV**.
On Spin-Orbital Splitting of Neutron 3p-Strength Functions in Sn Isotopes.
JINR Rapid Communicatins, **v. 9**, Dubna 1985, pp. 35-38.
16. A. I. Vdovin, **Ch. STOYANOV**.
Strength Functions of High-Lying Single-Neutron States.
Preprint JINR, **E4-85-352**, Dubna 1985, pp. 1-11.
17. A. I. Vdovin, E. M. Galinskij, **Ch. STOYANOV**.
High-Lying Single-Particle States in Tin Isotopes.
Preprint JINR, **P4-86-194**, Dubna 1986, pp. 1-7.
18. A. I. Vdovin, **Ch. STOYANOV**.
Isotopic Dependence of the Damping of Highly-Exited Single-Particle Modes.
Preprint JINR, **P4-86-81**, Dubna 1986, pp. 1-18.
19. W. Andrejtscheff, **Ch. STOYANOV**, A. I. Vdovin.
Core Polarization for Magnetic Transitions ($L = 1, 2, 4$).
"Weak and Electromagnetic Interaction in Nuclei", ed. by
H. V. Klapdor, Springer - Verlag (1986) p. 31-38.
20. M. Grinberg, V. Ponomarev, **Ch. STOYANOV**.
The Influence of Complex Configuration on the Properties of Low - Lying States.
Preprint JINR, **E4-90-210**, Dubna 1990, pp. 1-7.
21. J. Speth, **Ch. STOYANOV**, A. I. Vdovin.
Calculation of Giant Resonances in ^{208}Pb Using Large Two-phonon Space.
Annual Report 1993, **KFA-Jülich**, Jülich 1994, p. 156.

22. M.I.Krivopustov*), A.V.Pavliouk, A.I.Malakhov, A.D.Kovalenko, I.I.Mariin, A.F.Elishev, J.Adam, A.Kovalik, Yu.A.Batusov, V.G.Kalinnikov, V.B.Brudanin, P.Chaloun, V.M.Tsoupko-Sitnikov, A.A.Solnyshkin, V.I.Stegailov, Sh.Gerbish Joint Institute for Nuclear Research, Dubna, Russia O.Svoboda, Z.Dubnicka, M.Kala, M.Kloc, A.Krasa, A.Kugler, M.Majerle, V.Wagner Nuclear Physics Institute, Rez near Praha, Czech Republic R.Brandt, W.Westmeier, H.Robotham, K.Simon Kernchemie Institute, Philipps-University, Marburg, Germany M.Bielewicz, S.Kilim, M.Szuta, E.Strugalska-Gola, A.Wojeciechowski Institute of Atomic Energy, Otwock-Swierk near Warszawa, Poland M.Manolopoulou, M.Fragopolou, S.Stoulos, M.Zamani-Valasiadou Aristotle University, Thessaloniki, Greece S.Jokic Vinca Institute of Nuclear Sciences, Belgrad, Serbia S.R.Hashemi-Nezhad University, Department of High Energy Physics, Sydney, Australia K.Katovsky, O.Schastny Czech Technical University in Praha, Czech Republic I.V.Zhuk, A.S.Potapenko, A.A.Ternova, Zh.A.Lukashevich Joint Institute of Power and Nuclear Research, Sosny near Minsk, Belarus V.A.Voronko, V.V.Sotnikov, V.V.Sidorenko Kharkov Institute of Physics and Technology, Kharkov, Ukraine W.Ensinger, D.Severin Technical University, Darmstadt, Germany S.Batzev, L.Kostov, **Ch. STOYANOV**, O.Yordanov, P.K.Zhivkov Institute Nuclear Research and Nuclear Energy, Sofia, Bulgaria V.Kumar, M.Sharma University of Rajasthan, Jaipur, India A.M.Khilmanovich, B.A.Marcinkevich, S.V.Korneev Stepanov Institute of Physics, Minsk, Belarus Ts.Damdinsuren, G.Gansorig, Ts.Togoo National University, Ulan-Bator, Mongolia H.Kumawat Bhabha Atomic Research Centre, Mumbai, India

The "ENERGY plus TRANSMUTATION" collaboration

About the first experiment on investigation transmutation I-129, Np-237, Pu-238 and Pu-239 at deuteron beam nuclotron JINR (Dubna) in field neutrons generated in natU/Pb-assembly "Energy plus transmutation" setup by energy 2.52 GeV .

Preprint JINR, **E1-2007-7**, Dubna 2007, pp. 1-26.

23. "E & T RAW" Collaboration

STUDY OF DEEP SUBCRITICAL ELECTRONUCLEAR SYSTEMS AND FEASIBILITY OF THEIR APPLICATION FOR ENERGY PRODUCTION AND RADIOACTIVE WASTE TRANSMUTATION

Preprint JINR, **E1-2010-61**, Dubna 2010, pp. 1-18.

7 Papers in scientific journals for large audience

7.1 Nauka (SCIENCE) Journal of the Union of Scientists in Bulgaria

1. **Chavdar Stoyanov**, Hristo Protohristov
Nuclear Physics at BAS Results and Perspectives
Nauka 4, (2019) pp 88-95
ISSN 0861 3362, ISSN 2603-3623
2. Lachezar Kostov, Chavdar Stoyanov
(THE JOINT INSTITUTE FOR NUCLEAR RESEARCH (JINR) IN DUBNA - 65TH ANNIVERSARY OF THE FOUNDATION)
Nauka 6, (2021) pp 72-76

7.2 Priroda (BAS)

3. **Ch. STOYANOV**, D. Tonev, D. Dinev
Contemporary applications of nuclear methods for medicine
Priroda (BAS) 2, (2016) pp 54-63
4. **Ch. STOYANOV**, D. Dinev
Exotic Nuclear Systems
Priroda (BAS) 4, (2018) pp 54-61
5. H. Protohristov, **Ch. STOYANOV**
TRANSMUTATION - GREEN LIGHT FOR NUCLEAR ENERGY (HORISONT OF THE SCIENCE)
Priroda (BAS) 3, (2023), pp 4 - 16

7.3 Journal of the Bulgarian Academy of Sciences, (Spisanie na BAN)

6. **Ch. STOYANOV**, D. Tonev, D. Dinev
Contemporary applications of nuclear methods for medicine
Journal of the Bulgarian Academy of Sciences, (Spisanie na BAN) 2, (2014) pp 56-62
7. **Ch. STOYANOV**, D. Tonev, D. Dinev
INRNE,BAS and new projects of Joint Institute for Nuclear Research, Dubna
Journal of the Bulgarian Academy of Sciences, (Spisanie na BAN) 1, (2017) pp 78-83
8. **Ch. Stoyanov**, L. Kostov
65 years of Joint Institute for Nuclear Research - Dubna
Journal of the Bulgarian Academy of Sciences, (Spisanie na BAN) 5, (2021) pp 3-6
9. D. Dinev, **Ch. Stoyanov**
The new projects of the Laboratory for Nuclear Reactions of JINR-Dubna in the field of super heavy element and exotic nuclei
Journal of the Bulgarian Academy of Sciences, (Spisanie na BAN) 5, (2021) pp 29-34

7.4 The World of Physics, (Svetat na fizikata)

10. **Ch. STOYANOV**, Chr. Protochristov
Disorder in ordered
The World of Physics, (Svetat na fizikata) 4, (1991) pp 197-204
11. **Ch. STOYANOV**
The models of atomic nuclei - a step towards the solving of the multi-particle problem

- The World of Physics, (Svetat na fizikata) 2, (1998) pp 82-90
12. **Ch. STOYANOV**, Hr. Protohristov
XIV International school on nuclear physics,neutron physics and nuclear energy
 The World of Physics, (Svetat na fizikata) 1, (2002) pp 68-73
 13. **Ch. STOYANOV**, P. Petkov, L. Kostov
Electromagnetic transitions in atomic nuclei- a means for the study of nuclear structure
 The World of Physics, (Svetat na fizikata) 2, (2003) pp 108-120
 14. **Ch. STOYANOV**,N. Janeva, Hr. Protohristov
15-th International school on nuclear physics,neutron physics and nuclear energy
 The World of Physics, (Svetat na fizikata) 1, (2004) pp 71-73
 15. **Ch. STOYANOV**
Uranium and its fission
 The World of Physics, (Svetat na fizikata) 3, (2005) pp 343-345
 16. **Ch. STOYANOV**
Dipole transitions in atomic nuclei
 The World of Physics, (Svetat na fizikata) 1, (2012) pp 1-6
 17. **Ch. STOYANOV**
60 years Joint Institute for Nuclear Research Dubna
 The World of Physics, (Svetat na fizikata) 3/4, (2016) pp 88-93
 18. H. Protohristov, **Ch. STOYANOV**, P. Zhivkov
Transmutation - a step toward a more efficient and clean nuclear energy
 The World of Physics, (Svetat na fizikata) 1, (2018) pp 1-5

19. **Ch. STOYANOV**, D. Dinev
Exotic Nuclei
The World of Physics, (Svetat na fizikata) 2, (2020) pp 99-113
20. Chavdar Stoyanov, Lachezar Kostov
Participation of Bulgarian physicists in the scientific program of JINR
The World of Physics, (Svetat na fizikata) 4, (2021) pp 310-317
21. **Ch. STOYANOV**, H. Protohristov, D. Dinev
BOOK Nuclear physics in everyday life - translation from NuPECC
The World of Physics, (Svetat na fizikata) (2023) pp 1-147