

**СПИСЪК НА ТРУДОВЕ**  
**на д-р Стефан Пешев Лалковски**  
**ПРЕДСТАВЕНИ ЗА УЧАСТИЕ В КОНКУРСА**

**I. Публикации с водещо участие**

**I.A) В международни реферирани списания**

**I.A.1. Lalkovski, S.**, Kondev, F.G.

***Nuclear Data Sheets for A=112***

(2015) Nuclear Data Sheets, 124, pp. 157-412.

DOI: 10.1016/j.nds.2014.12.046

DOCUMENT TYPE: Article

SOURCE: Scopus

**I.A.2. Lalkovski, S.**, Ivanova, D., Stefanova, E.A., Korichi, A., Petkov, P., Kownacki, J., Kutsarova, T., Minkova, A., Bazzacco, D., Bergström, M., Görge, A., Herskind, B., Hübel, H., Jansen, A., Kisyov, S., Khoo, T.L., Kondev, F.G., Lopez-Martens, A., Podolyák, Z., Schönwasser, G., Yordanov, O.

***Coexisting structures in  $^{105}\text{Ru}$***

(2014) Physical Review C - Nuclear Physics, 89 (6), art. no. 064312, .

DOI: 10.1103/PhysRevC.89.064312

DOCUMENT TYPE: Article

SOURCE: Scopus

**I.A.3. Lalkovski, S.**, Bruce, A.M., Denis Bacelar, A.M., Górska, M., Pietri, S., Podolyák, Z., Bednarczyk, P., Caceres, L., Casarejos, E., Cullen, I.J., Doornenbal, P., Farrelly, G.F., Garnsworthy, A.B., Geissel, H., Gelletly, W., Gerl, J., Grebosz, J., Hinke, C., Ilie, G., Ivanova, D., Jaworski, G., Kisyov, S., Kojouharov, I., Kurz, N., Minkov, N., Myalski, S., Palacz, M., Petkov, P., Prokopowicz, W., Regan, P.H., Schaffner, H., Steer, S., Tashenov, S., Walker, P.M., Wollersheim, H.J.

***Submicrosecond isomer in  $^{117}\text{Rh}_{72}$  and the role of triaxiality in its electromagnetic decay rate***

(2013) Physical Review C - Nuclear Physics, 88 (2), art. no. 024302, .

DOI: 10.1103/PhysRevC.88.024302

DOCUMENT TYPE: Article

SOURCE: Scopus

**I.A.4. Lalkovski, S.**, Bruce, A.M., Jungclaus, A., Górska, M., Pfützner, M., Cáceres, L., Naqvi, F., Pietri, S., Podolyák, Zs., Simpson, G.S., Andgren, K., Bednarczyk, P., Beck, T., Benlliure, J., Benzoni, G., Casarejos, E., Cederwall, B., Crespi, F.C.L., Cuenca-García, J.J., Cullen, I.J., Denis Bacelar, A.M., Detistov, P., Doornenbal, P., Farrelly, G.F., Garnsworthy, A.B., Geissel, H., Gelletly, W., Gerl, J., Grebosz, J., Hadinia, B., Hellström, M., Hinke, C., Hoischen, R., Ilie, G., Jaworski, G., Jolie, J., Khaplanov, A., Kisyov, S., Kmiecik, M., Kojouharov, I., Kumar, R., Kurz, N., Maj, A., Mandal, S., Modamio, V., Montes, F., Myalski, S., Palacz, M., Prokopowicz, W., Reiter, P., Regan, P.H., Rudolph, D., Schaffner, H., Sohler, D., Steer, S.J., Tashenov, S., Walker, J., Walker, P.M., Weick, H., Werner-Malento, E., Wieland, O., Wollersheim, H.J., Zhekova, M.

***Core-coupled states and split proton-neutron quasiparticle multiplets in  $^{122-126}\text{Ag}$***

(2013) Physical Review C - Nuclear Physics, 87 (3), art. no. 034308, .

DOI: 10.1103/PhysRevC.87.034308

DOCUMENT TYPE: Article

SOURCE: Scopus

**I.A.5. Lalkovski, S.**, Isacker, P.V.

***IBM-1 calculations towards the neutron-rich nucleus  $^{106}\text{Zr}$***

(2009) Physical Review C - Nuclear Physics, 79 (4), art. no. 044307, .

DOI: 10.1103/PhysRevC.79.044307

DOCUMENT TYPE: Article

SOURCE: Scopus

**I.A.6. Lalkovski, S.**, Ilieva, S., Minkova, A., Minkov, N., Kutsarova, T., Lopez-Martens, A., Korichi, A., Hübel, H., Görge, A., Jansen, A., Schönwasser, G., Herskind, B., Bergström, M., Podolyák, Zs.

***Octupole collectivity in  $^{98,100,102}\text{Mo}$***

(2007) Physical Review C - Nuclear Physics, 75 (1), art. no. 014314, .

**I.A.7. Lalkovski, S., Minkov, N.**

***Evolution of collectivity in a ground- $\gamma$ -band mixing scheme for even-even transitional nuclei***

(2005) Journal of Physics G: Nuclear and Particle Physics, 31 (5), pp. 427-444.

DOI: 10.1088/0954-3899/31/5/013  
DOCUMENT TYPE: Article  
SOURCE: Scopus

**I.A.8. Lalkovski, S., Minkova, A., Porquet, M.-G., Bauchet, A., Deloncle, I., Astier, A., Buforn, N., Donadille, L., Dorvaux, O., Gall, B.P.J., Lucas, R., Meyer, M., Prévost, A., Redon, N., Schulz, N., Stézowski, O.**

***Two-quasiparticle and collective excitations in transitional <sup>108,110</sup>Pd nuclei***

(2003) European Physical Journal A, 18 (4), pp. 589-596.

DOI: 10.1140/epja/i2003-10098-x  
DOCUMENT TYPE: Article  
SOURCE: Scopus

**I.Б) Материали от конференции, публикувани в международни реферирани списания**

**I.Б.1. Lalkovski, S., Podolyák, Zs., Bentley, M., Bruce, A.M., Lazarus, I., Lemmon, R., Regan, P.H., Simpson, J.**

***The UK NuSTAR project***

(2016) Acta Physica Polonica B, 47 (3), pp. 637-644.

DOI: 10.5506/APhysPolB.47.637  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus

**I.Б.2. Lalkovski, S., Bruce, A.M., Bacelar, A.M.D., Górska, M., Pietri, S., Podolyák, Zs., Bednarczyk, P., Caceres, L., Casarejos, E., Cullen, I.J., Doornenbal, P., Farrelly, G.F., Garnsworthy, A.B., Geissel, H., Gelletly, W., Gerl, J., Grębosz, J., Hinke, C., Ilie, G., Jaworski, G., Kisyov, S., Kojouharov, I., Kurz, N., Myalski, S., Palacz, M., Prokopowicz, W., Regan, P.H., Schaffner, H., Steer, S., Tashenov, S., Walker, P.M., Wollersheim, H.J., Zhekova, M.**

***Single-particle isomeric states in <sup>121</sup>Pd and <sup>117</sup>Ru***

(2012) Journal of Physics: Conference Series, 366 (1), art. no. 012029,

DOI: 10.1088/1742-6596/366/1/012029  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus

**I.В) Публикации в реферирани български списания**

**I.В.1. S.Lalkovski, A.M.Bruce, I.Burrows, D.M.Cullen, A.Grant, I.H.Lazarus, Zs.Podolyak, V.F.E.Pucknell, P.H.Regan, M.Rudigier, J.Simpson, J.F.Smith,**

***Construction of the UK DESPEC Array for Fast-Timing Measurements,***

(2015) Bulgarian Journal of Physics, 42, pp. 593-601

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**I.В.2. S.Lalkovski, S.Ilieva, A.Minkova, N.Minkov, T.Kutsarova, A.Lopez-Martens, F.Hanachi, H.Hubel, A.Goergen, A.Jensen, G.Schonwasser, B.Herskind, M.Bergstroem, T.L.Khoo, D.Bazzacco, and Zs. Podolyak,**

***Alternating Parity structures in 98,100,102Mo***

(2006) Nuclear Theory 25, p.149-160

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**I.В.3. S.Lalkovski, A.Minkova, S.Ilieva**

***Gamma-ray spectroscopy of some Pd isotopes produced in induced fission reactions***

(2005) Annuaire de l'Universite "St. Kl. Ohridski" 98, pp. 39-56

DOCUMENT TYPE: Annual report  
SOURCE: Personal Archive

**I.В.4. S.Lalkovski and N.Minkov,**

***Ground-gamma band mixing and odd-even staggering in 40<Z<50 region,***

(2004) BgNS Transactions 9, pp. 221-230

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**I.B.5. S.Lalkovski, A.Minkova, S.Ilieva**

***Analysis of the Cluster response function and EUROBALL efficiency***

(2003) Annuaire de l'Universite "St. Kl. Ohridski" 96, pp. 19-48

DOCUMENT TYPE: Annual report  
SOURCE: Personal Archive

**I.B.6. S.Lalkovski, D.Yordanov, A.Minkova**

***High-Spin states in <sup>108,109,110,111</sup>Pd nuclei: Part I: Evidence for deviation from axial symmetry?***

(2003) Meetings in Physics at the University of Sofia, vol 4., pp. 103-108

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**I.B.7. S. Lalkovski and N.Minkov**

***Ground- $\gamma$  band mixing and odd-even staggering beyond the well deformed nuclei***

(2003) Nuclear Theory 22, p.313

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**I.B.8. S.Lalkovski, A.Minkova, M.-G.Porquet, T.Kutsarova, A.Bauchet, I.Deloncle, A.Astier, N.Bufoarn, L.Donadille, O.Dorvaux, B.P.J.Gall, R.Lucas, M.Meyer, A.Prevost, N.Redon, N.Schulz, O.Stezowski,**

***High-spin structures in <sup>108,110</sup>Pd produced in fussion/fission reactions***

(2002) BgNS Transactions 7, p. 204

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

## I.Г) Други документи

**I.Г.1. С.Лалковски**

(2016) BBC Знание 80, pp.50-55

DOCUMENT TYPE: Interview  
SOURCE: Personal Archive

## II. Публикации със съществен принос

### II.A) В международни реферирани списания

**II.A.1 Stefanova, E.A., Lalkovski, S., Korichi, A., Kutsarova, T., Lopez-Martens, A., Xu, F.R., Liu, H.L., Kisyov, S., Minkova, A., Bazzacco, D., Bergström, M., Görden, A., Hannachi, F., Herskind, B., Hübel, H., Jansen, A., Khoo, T.L., Podolyák, Z., Schönwasser, G.**

***Observation of positive-parity bands in <sup>109</sup>Pd and <sup>111</sup>Pd: Enhanced  $\gamma$  softness***

(2012) Physical Review C - Nuclear Physics, 86 (4), art. no. 044302

DOI: 10.1103/PhysRevC.86.044302  
DOCUMENT TYPE: Article  
SOURCE: Scopus

**II.A.2 Kisyov, S., Lalkovski, S., Marginean, N., Bucurescu, D., Atanasova, L., Balabanski, D.L., Cta-Danil, G., Cta-Danil, I., Daugas, J.-M., Deleanu, D., Detistov, P., Filipescu, D., Georgiev, G., Ghiț, D., Glodariu, T., Jolie, J., Judson, D.S., Lozeva, R., Marginean, R., Mihai, C., Negret, A., Pascu, S., Radulov, D., Régis, J.-M., Rudigier, M., Sava, T., Stroe, L., Suliman, G., Zamfir, N.V., Zell, K.O., Zhekova, M.**

***In-beam fast-timing measurements in <sup>103,105,107</sup>Cd***

(2011) Physical Review C - Nuclear Physics, 84 (1), art. no. 014324,

DOI: 10.1103/PhysRevC.84.014324  
DOCUMENT TYPE: Article  
SOURCE: Scopus

**II.A.3 Kondev, F.G., Lalkovski, S.**

***Nuclear Data Sheets for A = 207***

(2011) Nuclear Data Sheets, 112 (3), pp. 707-853.

DOI: 10.1016/j.nds.2011.02.002

**II.A.4** Mărginean, N., Balabanski, D.L., Bucurescu, D., **Lalkovski, S.**, Atanasova, L., Căta-Danil, G., Căta-Danil, I., Daugas, J.M., Deleanu, D., Detistov, P., Deyanova, G., Filipescu, D., Georgiev, G., Ghiță, D., Gladnishki, K.A., Lozeva, R., Glodariu, T., Ivașcu, M., Kisyov, S., Mihai, C., Mărginean, R., Negret, A., Pascu, S., Radulov, D., Sava, T., Stroe, L., Suliman, G., Zamfir, N.V.  
***In-beam measurements of sub-nanosecond nuclear lifetimes with a mixed array of HPGe and LaBr<sub>3</sub>:Ce detectors***

(2010) European Physical Journal A, 46 (3), pp. 329-336.

DOI: 10.1140/epja/i2010-11052-7  
DOCUMENT TYPE: Article  
SOURCE: Scopus

**II.A.5** Bruce, A.M., **Lalkovski, S.**, Denis Bacelar, A.M., Górska, M., Pietri, S., Podolyák, Zs., Shi, Y., Walker, P.M., Xu, F.R., Bednarczyk, P., Cáceres, L., Casarejos, E., Cullen, I.J., Doornenbal, P., Farrelly, G.F., Garnsworthy, A.B., Geissel, H., Gelletly, W., Gerl, J., Grębosz, J., Hinke, C., Ilie, G., Jaworski, G., Kojouharov, I., Kurz, N., Myalski, S., Palacz, M., Prokopowicz, W., Regan, P.H., Schaffner, H., Steer, S., Tasheno, S., Wollersheim, H.J.

***Shape coexistence and isomeric states in neutron-rich <sup>112</sup>Tc and <sup>113</sup>Tc***

(2010) Physical Review C - Nuclear Physics, 82 (4), art. no. 044312, .

DOI: 10.1103/PhysRevC.82.044312  
DOCUMENT TYPE: Article  
SOURCE: Scopus

**II.A.6** Kondev, F.G., **Lalkovski, S.**

***Nuclear Data Sheets for A = 200***

(2007) Nuclear Data Sheets, 108 (7), pp. 1471-1582.

DOI: 10.1016/j.nds.2007.06.002  
DOCUMENT TYPE: Article  
SOURCE: Scopus

## **II.Б) Материали от конференции, публикувани в международни реферирани списания**

**II.Б.1** Stefanova, E.A., **Lalkovski, S.**, Korichi, A., Kutsarova, T., Lopez-Martens, A., Xu, F.R., Liu, H.L., Kisyov, S., Minkova, A., Bazzaco, D., Bergström, M., Górgen, A., Hannachi, F., Herskind, B., Hübel, H., Jansen, A., Khoo, T.L., Podolyák, Zs., Schönwasser, G.

***Observation of the ground state bands in <sup>109</sup>Pd and <sup>111</sup>Pd***

(2014) Journal of Physics: Conference Series, 533 (1), art. no. 012035,

DOI: 10.1088/1742-6596/533/1/012035  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus

**II.Б.2** Kisyov, S., **Lalkovski, S.**, Mărginean, N., Bucurescu, D., Atanasova, L., Balabanski, D., Căta-Danil, Gh., Căta-Danil, I., Deleanu, D., Detistov, P., Filipescu, D., Ghiță, D., Glodariu, T., Mărginean, R., Mihai, C., Negret, A., Pascu, S., Sava, T., Stroe, L., Suliman, G., Zamfir, N.V., Zhekova, M.

***Fast-timing measurements in <sup>95,96</sup>Mo***

(2012) Journal of Physics: Conference Series, 366 (1), art. no. 012027,

DOI: 10.1088/1742-6596/366/1/012027  
DOCUMENT TYPE: Conference Paper  
SOURCE: Scopus

## **II.В) Публикации в реферирани български списания**

**II.В.1.** S. Kisyov, **S. Lalkovski**, D. Ivanova, N. Mărginean, D. Bucurescu, Gh. Căta-Danil, I. Căta-Danil, D. Deleanu, N. Florea, D. Ghiță, T. Glodariu, R. Lica, R. Mărginean, C. Mihai, A. Negret, C. Nița, A. Olacel, S. Pascu, P. Petkov, T. Sava, E.A. Stefanova, R. Suvaila, S. Toma, O. Yordanov, N.V. Zamfir,

***Triaxial Isomer in <sup>103</sup>Ru***,

(2016) Bulgarian Journal of Physics 43, pp195-202

DOCUMENT TYPE: Article  
SOURCE: Personal Archive

**II.В.2.** S.Kisyov, **S.Lalkovski**, D.Ivanova, N.Marginean, D.Bucurescu, Ch. Cata-Danil, I.Cata-Danil, D.Deleanu, D.G.Ghita, T.Glodariu, E.Lica, R.Marginean, C.Mihai, A.Negret, C.R.Nita, S.Pascu, P.Petkov, T.Sava, E.Stefanova, R.Suvaila, S.Toma, O.Yordanov, N.V.Zamfir,

**Structure of Low-Lying Positive-Parity states in <sup>99,101,103</sup>Ru from In-beam Fast-timing Measurements,**

(2015) Bulgarian Journal of Physics 42, pp583-592

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**II.B.3.** Stefanova, E.A., **Lalkovski, S.**, Korichi, A., Kutsarova, T., Lopez-Martens, A., Xu, F.R., Liu, H.L., Kisyov, S., Minkova, A., Bazzaco, D., Bergström, M., Görge, A., Hannachi, F., Herskind, B., Hübel, H., Jansen, A., Khoo, T.L., Podolyák, Zs., Schönwasser, G.

**Observation of positive-parity bands in <sup>109</sup>Pd and <sup>111</sup>Pd**

(2012) Nuclear Theory 31, pp58-67

**II.B.4.** S.Kisyov, **S.Lalkovski**, N.Marginean, D.Bucurescu, L.Atanasova, D.L.Balabanski, Ch. Cata-Danil, I.Cata-Danil, j.-M. Daugas, D.Deleanu, P.Detistov, D.Filipescu, G.Georgiev, D.G.Ghita, T.Glodariu, J.Jolie, D.Judson, R.Lozeva, R.Marginean, C.Mihai, A.Negret, S.Pascu, D.Radulov, J-M.Regis, M.Rudigier, T.Sava, L.Stroe, G.Suliman, N.V.Zamfir, M.Zhekova

**Fast-timing measurements in <sup>103,105,107</sup>Cd**

(2010) Nuclear Theory 29, pp240-256

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

**II.B.5.** D.Yordanov, **S.Lalkovski**, A.Minkova

**High-Spin states in <sup>108,109,110,111</sup>Pd nuclei: Part II: Interpretation of the Excited states in <sup>109,111</sup>Pd**

(2003) Meetings in Physics at the University of Sofia, vol 4., pp. 109-114

DOCUMENT TYPE: Conference Paper  
SOURCE: Personal Archive

## II.Г) Други документи

**II.Г.1.** L.M.Fraile, **S.Lalkovski**, V.Vedia, O.Roberts, J.Jolie, J.M.Regis, C.Mihai, A.Bruce  
Technical Report for the Design, Construction and Commissioning of FATIMA, the Fast TIMing Array

(2015) Report submitted and approved by the FAIR ECE (Expert Committee Experiments) for construction of the FATIMA multidetector array, pp. 1-35

DOCUMENT TYPE: Technical Design report  
SOURCE: Personal Archive

