

V.V. Nesvizhevsky, A.Yu. Voronin, R. Cubitt, and K.V. Protasov (2010).
“Neutron whispering gallery.” **Nature Phys.** **6**: 114-117.

R. Cubitt, E.V. Lychagin, A.Yu. Muzychka, G.V. Nekhaev, V.V. Nesvizhevsky, G. Pignol, K.V. Protasov, and A.V. Strelkov (2010). *“Quasi-specular reflection of cold neutrons from nano-dispersed media at above-critical angles.”* **NIM A** **622**: 182-185.

C. Plonka-Spehr, A. Kraft, P. Iaydjiev, J. Klepp, V.V. Nesvizhevsky, P. Geltenbort, and Th. Lauer (2010). *“An optical device for ultra-cold neutrons – Investigation of systematic effects and applications.”* **NIM A** **618**: 239-247.

V.V. Nesvizhevsky, R. Cubitt, E.V. Lychagin, A.Yu. Muzychka, G.V. Nekhaev, G. Pignol, K.V. Protasov, and A.V. Strelkov (2010). *“Application of diamond nanoparticles in low-energy neutron physics.”* **Materials** **3**: 1768-1781.

R. Cubitt, V.V. Nesvizhevsky, A.K. Petukhov, A.Yu. Voronin, G. Pignol, K.V. Protasov, and P. Gurshijants (2009). *“Methods of observation of the centrifugal quantum states of neutrons.”* **NIM A** **611**: 322-325.

E.V. Lychagin, A.Yu. Muzychka, V.V. Nesvizhevsky, G.V. Nekhaev, G. Pignol, K.V. Protasov, and A.V. Strelkov (2009). *“Coherent scattering of slow neutrons at nanoparticles in particle physics experiments.”* **NIM A** **611**: 302-305.

V.A. Vesna, Yu.M. Gledenov, V.V. Nesvizhevsky, A.K. Petukhov, P.V. Sedyshev, and E.V. Shulgina (2009). *“Measurement of P-odd asymmetry of γ -quanta emission in the nuclear reaction* .” **NIM A** **611**: 244-247.

S. Arzumanov, L. Bondarenko, P. Geltenbort, V. Morozov, V.V. Nesvizhevsky, Yu. Panin, and A. Strepetov (2009). *“A new project to measure the neutron lifetime using storage of ultracold neutrons and detection of inelastically scattered neutrons.”* **NIM A 611**: 186-188.

S. Bäßler, V.V. Nesvizhevsky, G. Pignol, K.V. Protasov, and A.Yu. Voronin (2009). *“Constraints on spin-dependent short-range interactions using gravitational quantum levels of ultracold neutrons.”* **NIM A 611**: 149-152.

M. Kreuz, V.V. Nesvizhevsky, P. Schmidt-Wellenburg, T. Soldner, M. Thomas, H.G. Börner, F. Naraghi, G. Pignol, K.V. Protasov, D. Rebreyend, F. Vezzu, R. Flaminio, C. Michel, N. Morgado, L. Pinard, S. Bäßler, A.M. Gagarski, L.A. Grigorieva, T.M. Kuzmina, A.E. Meyerovich, L.P. Mezhov-Deglin, G.A. Petrov, A.V. Strelkov, and A.Yu. Voronin (2009). *“A method to measure the resonance transitions between the gravitationally bound quantum states of neutrons in the GRANIT spectrometer.”* **NIM A 611**: 326-330.

P. Schmidt-Wellenburg, K.H. Andersen, P. Courtois, M. Kreuz, S. Mironov, V.V. Nesvizhevsky, G. Pignol, K.V. Protasov, T. Soldner, F. Vezzu, and O. Zimmer (2009). *“Ultracold-neutron infrastructure for the gravitational spectrometer GRANIT.”* **NIM A 611**: 267-271.

V.V. Fedorov, M. Jentschel, I.A. Kuznetsov, E.G. Lapin, E. Lelievre-Berna, V.V. Nesvizhevsky, A. Petukhov, S.Yu. Semenikhin, T. Soldner, F. Tasset, V.V. Voronin, and Yu.P. Bragitzet (2009). *“Measurement of the neutron electric dipole moment by crystal diffraction.”* **NIM A 611**: 124-128.

E.V. Lychagin, A.Yu. Muzychka, V.V. Nesvizhevsky, G. Pignol, K.V. Protasov, and A.V. Strelkov (2009). *“Storage of very cold neutrons in a trap with nano-structured walls.”* **Phys. Lett. B 679**: 186-190.

D. Bondoux, H.G. Börner, V. Ermilov, J.P. Gonzales, E. Kulagin, S. Kulikov, E. Lelievre-Berna, V. Melikhov, V.V. Nesvizhevsky, T. Soldner, F. Thomas, and E. Shabalin (2009). *“Investigation of the energy accumulation rate in solid deuterium irradiated with fast electrons.”* **NIM A 606**: 637-644.

V.A. Vesna, Yu.M. Gledenov, V.V. Nesvizhevsky, A.K. Petukhov, P.V. Sedyshev, T. Soldner, and E.V. Shulgina (2009). *“Measurement of the parity-violating asymmetry in the reactions of cold polarized neutrons and light nuclei ${}^6\text{Li}$ and ${}^{10}\text{B}$.”* **Nucl. Phys. A 827**: 425-427.

V.V. Fedorov, M. Jentschel, I.A. Kuznetsov, E.G. Lapin, E. Lelievre-Berna, V.V. Nesvizhevsky, A. Petukhov, S.Yu. Semenikhin, T. Soldner, V.V. Voronin, and Yu.P. Braginetz (2009). *“Perspectives for $n\text{EDM}$ search by crystal diffraction. Test experiment and results.”* **Nucl. Phys. A 827**: 538-540.

V.V. Nesvizhevsky, A.K. Petukhov, K.V. Protasov, and A.Yu. Voronin (2008). *“Centrifugal quantum states of neutrons.”* **Phys. Rev. A 78**: 033616.

V.V. Nesvizhevsky, G. Pignol, and K.V. Protasov (2008). *“Addendum to “Nanoparticles as a possible moderator for an ultracold neutron source.”* **Int. J. Nanoscience 7**: 179.

V.V. Nesvizhevsky, G. Pignol, and K.V. Protasov (2008). *“Neutron scattering and extra-short-range interactions.”* **Phys. Rev. D 77**: 034020(8).

V.V. Nesvizhevsky, E.V. Lychagin, A.Yu. Muzychka, A.V. Strelkov, G. Pignol, and K.V. Protasov (2008). *“The reflection of very cold neutrons from diamond powder nanoparticles.”* **NIM A 595**: 631-636.

V.V. Fedorov, E.G. Lapin, S.Yu. Semenikhin, V.V. Voronin, E. Lelievre-Berna, V.V. Nesvizhevsky, A. Petukhov, T. Soldner, F. Tasset (2008). *“First observation of the neutron spin rotation for Laue diffraction in a deformed noncentrosymmetric crystal.”* **Int. J. Mod. Phys. A** **23**(9): 1435-1445.

V.A. Vesna, Yu.M. Gledenov, V.V. Nesvizhevsky, A.K. Petukhov, P.V. Sedyshev, T. Soldner, O. Zimmer, and E.V. Shulgina (2008). *“Measurement of the parity-violating triton emission asymmetry in the reaction $^3\text{He}(\text{n}, \text{p})^3\text{H}$.”* **Phys. Rev. C** **77**(3): 035501(1-9).

J. Barnard, and V.V. Nesvizhevsky (2008). *“Analysis of a method for extracting angularly collimated UCNs from a volume without losing density inside.”* **NIM A** **591**: 431-435.

V.V. Nesvizhevsky, G. Pignol, K.V. Protasov, G. Quemener, D. Forest, P. Ganau, J.M. Mackowski, Ch. Michel, J.L. Montorio, N. Morgado, L. Pinard, and A. Remillieux (2007). *“Comparison of specularly reflecting mirrors for GRANIT.”* **NIM A** **578**(2): 435-438.

V.V. Nesvizhevsky, G. Pignol, and K.V. Protasov (2007). *“Nanoparticles as a possible moderator for an ultracold neutron source.”* **Int. J. Nanoscience** **6**(6): 485-499.

S. Bäßler, V.V. Nesvizhevsky, K.V. Protasov, and A.Yu. Voronin (2007). *“Constraint on the coupling of axionlike particles to matter via an ultracold neutron gravitational experiment.”* **Phys. Rev. D** **75**(7): 075006(1-4).

R. Adhikari, Y. Cheng, A.E. Meyerovich, and V.V. Nesvizhevsky (2007). *“Quantum size effect and biased diffusion of gravitationally bound neutrons in a rough guide.”* **Phys. Rev. A** **75**(6): 063613.

P. Schmidt-Wellenburg, J. Barnard, P. Geltenbort, V.V. Nesvizhevsky, C. Plonka, T. Soldner, and O. Zimmer (2007). *“Efficient extraction of a collimated ultra-cold neutron beam using diffusive channels.”* **NIM A** **577**(3): 623-625.

L.P. Mezhov-Deglin, V.B. Efimov, A.V. Lokhov, A.A. Levchenko, G.V. Kolmakov, L.V. Abdurakhimov, M.Yu. Brazhnikov, E.V. Lebedeva, R. May, V.V. Nesvizhevsky, E.V. Lychagin, A.Yu. Muzychka, and A.V. Strelkov (2007). *“Neutron studies of impurity gels of heavy water and deuterium in superfluid He-II.”* **J. Low Temp. Phys.** **150**(3-4): 206-211.

L.P. Mezhov-Deglin, V.B. Efimov, A.V. Lokhov, E.V. Lychagin, A.Yu. Muzychka, V.V. Nesvizhevsky, and A.V. Strelkov (2007). *“Scattering of cold neutrons on gel samples formed by impurity clusters in super-fluid He-II.”* **J. Low Temp. Phys.** **148**(5-6): 833-837.

G. Pignol, K.V. Protasov, and V.V. Nesvizhevsky (2007). *“A note on spontaneous emission of gravitons by a quantum bouncer.”* **Class. Quant. Gravity** **24**(9): 2439-2441.

F. Gönnerwein, M. Mütterer, A. Gagarski, I. Guseva, G. Petrov, V. Sokolov, T. Zavarukhina, Yu. Gusev, J. von Kalben, V.V. Nesvizhevsky, and T. Soldner (2007). *“Rotation of the compound nucleus $^{236}\text{U}^*$ in the fission reaction $^{235}\text{U}(n,f)$ induced by cold polarized neutrons.”* **Phys. Lett. B** **652**(1): 13-20.

D.G. Kartashov, E.V. Lychagin, A.Yu. Muzychka, V.V. Nesvizhevsky, G.V. Nekhaev, and A.V. Strelkov (2007). *“An investigation into the origin of small*

energy changes ($\sim 10^{-7}$ eV) of ultracold neutrons in traps.” **Int. J. Nanoscience** **6**(6): 501-513.

A. Westphal, H. Abele, S. Bäßler, V.V. Nesvizhevsky, G.V. Nekhaev, and A.V. Strelkov (2007). *“A quantum mechanical description of the experiment on the observation of gravitationally bound states.”* **Europ. Phys. J. C** **51**(2): 367-375.

V.V. Nesvizhevsky, and K.V. Protasov (2006). *“Reply to “Comment on “Constraints on non-Newtonian gravity from the experiment on neutron quantum states in the earth’s gravitational field.”””* **Class. Quant. Gravity** **23**(20): 6081-6082.

V.V. Nesvizhevsky, and K.V. Protasov (2006). *Quantum states of neutrons in the earth’s gravitational field: state of the art, applications, perspectives.* Edited book on **Trends in quantum gravity research**. D.C. Moore. New York, NOVA science publishers: 65-107.

V.V. Nesvizhevsky (2006). *“Polished sapphire for ultracold neutron guides.”* **NIM A** **557**(2): 576-579.

M. Brown-Hayes, J.H. Brownell, D.A.R. Dalvit, W.J. Kim, A. Lambrecht, F.C. Lombardo, F.D. Mazzeitelli, S.M. Middleman, V.V. Nesvizhevsky, R. Onofrio, and S. Reynaud (2006). *“Thermal and dissipative effects in Casimir physics.”* **J. Phys. A** **39**(21): 6195-6208.

H. Abele, D. Dubbers, H. Häse, M. Klein, A. Knöpfler, M. Kreuz, T. Lauer, B. Märkisch, D. Mund, V.V. Nesvizhevsky, A. Petukhov, C. Schmidt, M. Schmann, and T. Soldner (2006). *“Characterization of a ballistic supermirror neutron guide.”* **NIM A** **562**(1): 407-417.

A.Yu. Voronin, H. Abele, S. Bäßler, V.V. Nesvizhevsky, A.K. Petukhov, K.V. Protasov, and A. Westphal (2006). *“Quantum motion of a neutron in a waveguide in the gravitational field.”* **Phys. Rev. D** **73**(4): 044029(1-19).

A.E. Meyerovich, and V.V. Nesvizhevsky (2006). *“Gravitational quantum states of neutrons in a rough waveguide.”* **Phys. Rev. A** **73**(6): 063616(1-18).

V.V. Nesvizhevsky (2005). *“Quantum states of neutrons in the earth’s gravitational field: Constraints for quasi-elastic reflections in the range of 10^{-12} - 10^{-9} eV.”* **Int. J. Mod. Phys. D** **14**(3-4): 511-519.

V.V. Nesvizhevsky, A.K. Petukhov, H.G. Börner, T.A. Baranova, A.M. Gagarski, G.A. Petrov, K.V. Protasov, A.Yu. Voronin, S. Bäßler, H. Abele, A. Westphal, L. Lucovac (2005). *“Investigation of the neutron quantum states in the earth’s gravitational field.”* **J. Res. Nat. Inst. Standards Tech.** **110**(3): 263-267.

V.V. Nesvizhevsky, and K.V. Protasov (2005). *“Constraints on non-Newtonian gravity from the experiment on neutron quantum states in the earth’s gravitational field.”* **J. Res. Nat. Inst. Standards Tech.** **110**(3): 269-272.

V.V. Nesvizhevsky, A.K. Petukhov, H.G. Börner, T.A. Baranova, A.M. Gagarski, G.A. Petrov, K.V. Protasov, A.Yu. Voronin, S. Bäßler, H. Abele, A. Westphal, and L. Lucovac (2005). *“Study of the neutron quantum states in the gravity field.”* **Europ. Phys. J. C** **40**(4): 479-491.

V.V. Fedorov, E.G. Lapin, E. Lelievre-Berna, V.V. Nesvizhevsky, A.K. Petukhov, S.Yu. Semenikhin, T. Soldner, F. Tasset, and V.V. Voronin (2005). *“The Laue*

diffraction method to search for a neutron EDM. Experimental test of the sensitivity.” **NIM B 227**(1-2): 11-15.

V.A. Vesna, Yu.M. Gledenov, V.V. Nesvizhevsky, A.K. Petukhov, P.V. Sedyshev, T. Soldner, O. Zimmer, and E.V. Shulgina (2005). *“Discovery of a P-odd effect in triton emission from the reaction ${}^6\text{Li}(n,\alpha){}^3\text{H}$.”* **JETP Lett.** **82**(8): 463-466.

P. Jesinger, Yu.N. Kopatch, M. Mütterer, F. Gönnenwein, A.M. Gagarski, J. von Kalben, V.V. Nesvizhevsky, G.A. Petrov, W.H. Trzaska, and H.J. Wollersheim (2005). *“New experimental studies on the quaternary fission of U^{233} , $U^{235}(n_{th},f)$ and $Cf^{252}(sf)$.”* **Europ. Phys. J. A** **24**(3): 379-388.

M. Kreuz, V.V. Nesvizhevsky, A.K. Petukhov, and T. Soldner (2005). *“The crossed geometry of two super-mirror polarizers – a new method for neutron beam polarization analysis.”* **NIM A** **547**: 583-591.

M. Kreuz, T. Soldner, S. Bäßler, B. Brand, F. Glück, U. Mayer, D. Mund, V.V. Nesvizhevsky, A. Petukhov, C. Plonka, J. Reich, C. Vogel, and H. Abele (2005). *“A measurement of the antineutrino asymmetry B in the free neutron decay.”* **Phys. Lett. B** **619**: 263-270.

A. Lambrecht, V.V. Nesvizhevsky, R. Onofrio, and S. Reynaud (2005). *“Development of a high-sensitivity torsion balance for the study of the Casimir force in the 1-10 micrometer range.”* **Class. Quant. Gravity** **22**(24): 5397-5406.

V.V. Nesvizhevsky, and K.V. Protasov (2004). *“Constraints on non-Newtonian gravity from the experiment on neutron quantum states in the earth’s gravitational field.”* **Class. Quant. Gravity** **21**: 4557-4566.

V.V. Nesvizhevsky (2004). *“Investigation of quantum neutron states in the terrestrial gravitational field above mirror.”* **UFN** **47**(5): 515-522.

M. Mütterer, Yu.N. Kopatch, P. Jesinger, A.M. Gagarski, F. Gönnerwein, J. von Kalben, S.G. Khlebnikov, I. Kojouharov, E. Lubkiewics, Zh. Mezentseva, V.V. Nesvizhevsky, G.A. Petrov, H. Schaffner, H. Scharma, D. Schwalm, P. Thirolf, W.H. Trzaska, G.P. Tyurin, and H.-J. Wollersheim (2004). *“Recent experimental studies on particle-accompanied fission.”* **Nucl. Phys. A** **738**: 122-128.

V.A. Vesna, Yu.M. Gledenov, V.V. Nesvizhevsky, A.K. Petukhov, P.V. Sedyshev, T. Soldner, E.V. Shulgina, and O. Zimmer (2004). *“Recent results on the measurement of the P-odd asymmetry of emitted γ -quanta in the reaction with slow polarized neutrons.”* **Izvestija RAN** **67**(1): 118.

V.V. Nesvizhevsky, A.K. Petukhov, H.G. Börner, K.V. Protasov, A.Yu. Voronin, A. Westphal, S. Bäßler, H. Abele, A.M. Gagarski (2003). *“Reply to “Comment on “Measurement of quantum states of neutrons in the Earth’s gravitational field.””* **Phys. Rev. D** **68**: 108702(1-3).

V.V. Nesvizhevsky (2003). *“Quantum states of neutrons in a gravitational field and the interaction of neutrons with nanoparticles.”* **UFN** **46**(1): 93-97.

V.V. Nesvizhevsky, H.G. Börner, A.M. Gagarski, A.K. Petukhov, G.A. Petrov, H. Abele, S. Bäßler, G. Divkovic, F.J. Rueß, Th. Stöferle, A. Westphal, A.V. Strelkov, K.V. Protasov, and A.Yu. Voronin (2003). *“Measurement of quantum states of neutrons in the Earth’s gravitational field.”* **Phys. Rev. D** **67**: 102002(1-9).

P. Jesinger, F. Gönnenwein, M. Mütterer, A.M. Gagarski, G.A. Petrov, W.H. Trzaska, V.V. Nesvizhevsky, I.A. Kuznetsov, P. Geltenbort, S.V. Khlebnikov, G.P. Tiourine, and A. Evsenin (2003). *“Correlations in ternary fission.”* **Acta Phys. Hungarica**, new series – heavy ion physics **18**(2-4): 415-417.

L.P. Mezhov-Deglin, V.V. Nesvizhevsky, and A.V. Stepanov (2003). *“Joint scientific session of the Physical Sciences Division of the Russian Academy of Sciences and the Joint Physical Society of the Russian Federation (25 September 2002).”* **UFN** **46**(1): 89-93.

F. Gönnenwein, P. Jesinger, M. Mütterer, W.H. Trzaska, G.A. Petrov, A.M. Gagarski, V.V. Nesvizhevsky, and P. Geltenbort (2003). *“Quaternary fission.”* **Acta Phys. Hungarica**, new series – heavy ion physics **18**(2-4): 419-425.

V.V. Nesvizhevsky (2002). *“Interaction of neutrons with nano-particles.”* **Phys. At. Nucl.** **65**(3): 400-408.

V.V. Nesvizhevsky, H.G. Börner, A.K. Petukhov, H. Abele, S. Bäßler, F.J. Rueß, Th. Stöferle, A. Westphal, A.M. Gagarski, G.A. Petrov, and A.V. Strelkov (2002). *“Quantum states of neutrons in the Earth’s gravitational field.”* **Nature** **415**: 297-299.

V.K. Ignatovich, E.V. Lychagin, A.Yu. Muzychka, G.V. Nekhaev, V.V. Nesvizhevsky, and A.V. Strelkov (2002). *“Neutron transportation in a closed vessel.”* **Phys. At. Nucl.** **65**(3): 2029-2035.

P. Jesinger, A. Kötzle, F. Gönnenwein, M. Mütterer, J. von Kalben, G.V. Danilyan, V.S. Pavlov, G.A. Petrov, A.M. Gagarski, W.H. Trzaska, S.M. Soloviev, V.V. Nesvizhevsky, and O. Zimmer (2002). *“Angular correlations in ternary fission induced by polarized neutrons.”* **Phys. At. Nucl.** **65**(4): 630-636.

H. Abele, M. Astruc Hoffmann, S. Bäßler, D. Dubbers, F. Glück, U. Müller, V.V. Nesvizhevsky, J. Reich, and O. Zimmer (2002). *“Is the unitarity of the quark-mixing CKM matrix violated in neutron β -decay?”* **Phys. Rev. Lett.** **88**(21): 211801(1-4).

E.V. Lychagin, D.G. Kartashov, A.Yu. Muzychka, V.V. Nesvizhevsky, G.V. Nekhaev, and A.V. Strelkov (2002). *“Mechanism of small variations in energy of ultracold neutrons interacting with surface.”* **Phys. At. Nucl.** **65**(11): 1996-1998.

Yu.A. Mostovoi, I.A. Kuznetsov, V.A. Solovei, A.P. Serebrov, I.V. Stepanenko, T.K. Baranova, A.V. Vasilyev, Yu.P. Rudnev, B.G. Yerozolimsky, M.S. Dewey, F. Wietfeldt, O. Zimmer, and V.V. Nesvizhevsky (2001). *“Experimental value of from a measurement of both P-odd correlations in free-neutron decay.”* **Phys. At. Nucl.** **64**(11): 1955-1960.

V.V. Nesvizhevsky, E.V. Lychagin, A.Yu. Muzychka, G.V. Nekhaev, and A.V. Strelkov (2000). *“About interpretation of experiments on small increase in energy of UCN in traps.”* **Phys. Lett. B** **479**(4): 353-357.

V.V. Nesvizhevsky, H.G. Börner, A.M. Gagarski, G.A. Petrov, A.K. Petukhov, H. Abele, S. Bäßler, Th. Stöferle, and S.M. Soloviev (2000). *“Search for quantum states of neutron in gravitational field.”* **NIM A** **440**(3): 754-759.

P. Jesinger, A. Kötzle, A.M. Gagarski, F. Gönnenwein, G. Danilyan, V.S. Pavlov, V.B. Shvatchkin, M. Mütterer, S.R. Neumaier, G.A. Petrov, V.I. Petrova, V.V. Nesvizhevsky, O. Zimmer, K. Schmidt, and E. Korobkina (2000). *“Observation of a triple correlation in ternary fission: is time reversal invariance violated?”* **NIM A** **440**(3): 618-625.

P. Hoghoj, H. Abele, M. Astruc Hoffman, S. Bäßler, J. Reich, V.V. Nesvizhevsky, and O. Zimmer (2000). *“Neutron long wavelength cut-off filter.”* **NIM B 160**(3): 431-434.

O. Zimmer, P. Hautle, W. Heil, D. Hofmann, H. Humblot, I. Krasnoschekova, M. Lasakov, T.M. Müller, V.V. Nesvizhevsky, J. Reich, A. Serebrov, Yu. Sobolev, and A. Vasilyev (2000). *“Spin filters and super-mirrors: a comparison study of two methods of high-precision neutron polarization analysis.”* **NIM A 440**(3): 764-771.

J. Reich, H. Abele, M.A. Hoffmann, S. Bäßler, P. von Büllow, D. Dubbers, V.V. Nesvizhevsky, U. Peschke, and O. Zimmer (2000). *“A measurement of the β -asymmetry in neutron decay with PERKEO-II.”* **NIM A 440**(3): 535-538.

G.V. Danilyan, A.M. Fedorov, A.M. Gagarski, F. Gönnerwein, P. Jesinger, J. von Kalben, A. Kötzle, E.I. Korobkina, I.A. Krasnoschekova, M. Mütterer, V.V. Nesvizhevsky, S.R. Neumaier, Yu.B. Novozhilov, V.S. Pavlov, G.A. Petrov, V.I. Petrova, S.M. Soloviev, W. Trzaska, and O. Zimmer (2000). *“Left-right asymmetry of long-range α -particles angular distribution in ternary fission of ^{235}U induced by cold polarized neutrons.”* **Phys. At. Nucl.** **63**(9): 1671-1672.

E.V. Lychagin, A.Yu. Muzychka, V.V. Nesvizhevsky, G.V. Nekhaev, and A.V. Strelkov (2000). *“Experimental estimation of the possible sub-barrier penetration of ultracold neutrons through vacuum-tight foils.”* **JETP Lett.** **71**(11): 447-450.

E.V. Lychagin, A.Yu. Muzychka, V.V. Nesvizhevsky, G.V. Nekhaev, R.R. Tal'daev, and A.V. Strelkov (2000). *“Temperature dependence of inelastic*

ultracold-neutron scattering at low energy transfer.” **Phys. At. Nucl.** **63**(4): 548-550.

A.V. Strelkov, V.V. Nesvizhevsky, P. Geltenbort, D.G. Kartashov, A.G. Kharitonov, E.V. Lychagin, A.Yu. Muzychka, J.M. Pendlebury, K. Schreckenbach, V.N. Shvetsov, A.P. Serebrov, R.R. Tal'daev, and P.S. Iaydjiev (2000). *“Identification of a new escape channel for UCN from traps.”* **NIM A** **440**(3): 695-703.

A. Pichlmaier, J. Butterworth, P. Geltenbort, H. Nagel, V.V. Nesvizhevsky, S. Neumaier, K. Schreckenbach, E. Steichele, and V. Varlamov (2000). *“Mambo II: Neutron lifetime measurement with storage of ultracold neutrons.”* **NIM A** **440**(3): 517-521.

A. Kötzle, P. Jesinger, F. Gönnerwein, G.A. Petrov, V.I. Petrova, A.M. Gagarski, G. Danilyan, O. Zimmer, and V.V. Nesvizhevsky (2000). *“Parity non-conservation in nuclear fission. Does it depend on fragment mass/energy?”* **NIM A** **440**(3): 750-753.

V.V. Nesvizhevsky, A.V. Strelkov, P. Geltenbort, and P.S. Iaydjiev (1999). *“Observation of new mechanism of ultracold neutron losses in traps.”* **Europ. Phys. J. Appl. Phys.** **6**(2): 151-154.

P. Jesinger, G.V. Danilyan, A.M. Gagarski, P. Geltenbort, F. Gönnerwein, A. Kötzle, E.I. Korobkina, M. Mütterer, V.V. Nesvizhevsky, S.R. Neumaier, V.S. Pavlov, G.A. Petrov, V.I. Petrova, K. Schmidt, V.B. Shvatchkin, and O. Zimmer (1999). *“Interference effect in angular distribution of outgoing particles in ternary fission induced by cold polarized neutrons.”* **Phys. At. Nucl.** **62**(9): 1608-1610.

P. Geltenbort, V.V. Nesvizhevsky, D.G. Kartashov, E.V. Lychagin, A.Yu. Muzychka, G.V. Nekhaev, V.N. Shvetsov, A.V. Strelkov, A.G. Kharitonov, A.P. Serebrov, R.R. Tal'daev, and J.M. Pendlebury (1999). "[A new escape channel for ultracold neutrons in traps.](#)" **JETP Lett.** **70**(3): 170-175.

T. Bestle, P. Geltenbort, H. Just, Y. Kawabata, S.S. Malik, V.V. Nesvizhevsky, S. Neumaier, K. Okumura, A. Steyerl, and M. Utsuro (1998). "[Search for a spectral change of an ultracold neutron gas in a trap.](#)" **Phys. Lett. A** **244**(4): 217-221.

V.E. Varlamov, P. Geltenbort, V.V. Nesvizhevsky, T.T. Panteleev, J.M. Pendlebury, A.P. Serebrov, A.V. Strelkov, R.R. Tal'daev, A.G. Kharitonov, V.N. Shvetsov, and K. Schreckenbach (1997). "[Studies of ultracold neutron upscattering on beryllium surface.](#)" **JETP Lett.** **66**: 336.

V.E. Varlamov, V.V. Nesvizhevsky, A.P. Serebrov, R.R. Tal'daev, A.G. Kharitonov, P. Geltenbort, J.M. Pendlebury, A.V. Strelkov, V.N. Shvetsov, and K. Schreckenbach (1997). "[Observation of penetration of subbarrier ultracold neutrons through beryllium foils and coatings.](#)" **JETP Lett.** **66**: 343.

H. Abele, S. Bäßler, D. Dubbers, J. Last, U. Mayerhofer, C. Metz, T.M. Müller, V.V. Nesvizhevsky, C. Raven, O. Schärpf, and O. Zimmer (1997). "[A measurement of the \$\beta\$ -asymmetry \$A\$ in the decay of free neutrons.](#)" **Phys. Lett. B** **407**(3-4): 212-218.

A. Steyerl, S.S. Malik, P. Geltenbort, S. Neumaier, V.V. Nesvizhevsky, M. Utsuro, and Y. Kawabata (1997). "[Spectral evolution during ultracold neutron storage.](#)" **J. Phys. III** **7**(10): 1941-1954.

V.V. Nesvizhevsky (1996). *“On an experiment related to the observation of a neutron in a gravitational field.”* Preprint ILL 96NE14T.

A.P. Serebrov, V.A. Mityukhlyaev, A.A. Zakharov, A.G. Kharitonov, V.V. Nesvizhevsky, M.S. Lasakov, R.R. Tal'daev, A.V. Alduschenkov, V.E. Varlamov, A.V. Vasilyev, G. Greene, and T. Bowles (1995). *“Experimental study of solid-deuterium source of ultracold neutrons.”* **JETP Lett.** **62**(10): 785-790.

A.P. Serebrov, V.A. Mityukhlyaev, A.A. Zakharov, V.V. Nesvizhevsky, and A.G. Kharitonov (1994). *“Is it possible to produce next generation of UCN sources with density 10^3 - 10^4 cm⁻³?”* **JETP Lett.** **59**(11): 757-762.

V.P. Alfimenkov, A.G. Kharitonov, V.V. Nesvizhevsky, A.P. Serebrov, V.N. Shvetsov, A.V. Strelkov, and R.R. Tal'daev (1993). *“Method for calibration of losses in neutron lifetime experiments with UCN.”* **NIIM A** **324**(3): 496-500.

V.V. Nesvizhevsky, A.P. Serebrov, R.R. Tal'daev, A.G. Kharitonov, V.P. Alfimenkov, A.V. Strelkov, and V.N. Shvetsov (1992). *“Measurement of neutron lifetime in a gravitational trap and analysis of experimental errors.”* **JETP** **75**(3):405-412.

V.P. Alfimenkov, A.V. Strelkov, V.N. Shvetsov, V.V. Nesvizhevsky, A.P. Serebrov, R.R. Tal'daev, and A.G. Kharitonov (1992). *“Anomalous interaction of ultracold neutrons with surface of beryllium trap.”* **JETP Lett.** **55**(2): 84-87.

V.P. Alfimenkov, V.E. Varlamov, A.V. Vasilyev, V.P. Gudkov, V.I. Luschikov, V.V. Nesvizhevsky, A.P. Serebrov, A.V. Strelkov, S.O. Sumbaev, R.R. Tal'daev, A.G. Kharitonov, and V.N. Shvetsov (1990). *“Measurement of neutron lifetime with a gravitational trap for ultracold neutrons.”* **JETP Lett.** **52**(7): 373-378.

A.G. Kharitonov, V.V. Nesvizhevsky, A.P. Serebrov, R.R. Tal'daev, V.E. Varlamov, A.V. Vasilyev, V.P. Alfimenkov, V.I. Luschikov, V.N. Shvetsov, and A.V. Strelkov (1989). *"Preliminary results of neutron lifetime measurement with gravitational UCN trap."* **NIM A 284**: 98-100.

Yu.V. Borisov, N.V. Borovikova, A.V. Vasilyev, L.A. Grigorieva, S.N. Ivanov, N.T. Kashukeev, V.V. Nesvizhevsky, A.P. Serebrov, P.S. Iaydjiev (1988). *"Study of potential applications of ultracold neutrons for measuring the neutron electric charge."* **J. Tech. Phys.** **58**(5): 951-958.